Since its founding, NASA has been dedicated to the advancement of aeronautics and space science. The NASA Scientific and Technical Information (STI) Program Office plays a key part in helping NASA maintain this important role.

The NASA STI Program Office is operated by Langley Research Center, the lead center for NASA's scientific and technical information. The NASA STI Program Office provides access to the NASA STI Database, the largest collection of aeronautical and space science STI in the world. The Program Office is also NASA's institutional mechanism for disseminating the results of its research and development activities. These results are published by NASA in the NASA STI Report Series, which includes the following report types:

- **TECHNICAL PUBLICATION.** Reports of completed research or a major significant phase of research that present the results of NASA programs and include extensive data or theoretical analysis. Includes compilations of significant scientific and technical data and information deemed to be of continuing reference value. NASA's counterpart of peer-reviewed formal professional papers but has less stringent limitations on manuscript length and extent of graphic presentations.

- **TECHNICAL MEMORANDUM.** Scientific and technical findings that are preliminary or of specialized interest, e.g., quick release reports, working papers, and bibliographies that contain minimal annotation. Does not contain extensive analysis.

- **CONTRACTOR REPORT.** Scientific and technical findings by NASA-sponsored contractors and grantees.

- **CONFERENCE PUBLICATION.** Collected papers from scientific and technical conferences, symposia, seminars, or other meetings sponsored or cosponsored by NASA.

- **SPECIAL PUBLICATION.** Scientific, technical, or historical information from NASA programs, projects, and missions, often concerned with subjects having substantial public interest.

- **TECHNICAL TRANSLATION.** English-language translations of foreign scientific and technical material pertinent to NASA's mission.

Specialized services that complement the STI Program Office's diverse offerings include creating custom thesauri, building customized databases, organizing and publishing research results . . . even providing videos.

For more information about the NASA STI Program Office, see the following:

- E-mail your question via the Internet to help@sti.nasa.gov
- Fax your question to the NASA STI Help Desk at (301) 621-0134
- Telephone the NASA STI Help Desk at (301) 621-0390
- Write to:
  NASA STI Help Desk
  NASA Center for AeroSpace Information
  7121 Standard Drive
  Hanover, MD 21076-1320
Introduction

This issue of the NASA Video Catalog cites video productions listed in the NASA STI Database.

The videos listed have been developed by the NASA centers, covering Shuttle mission press conferences; fly-bys of planets; aircraft design, testing and performance; environmental pollution; lunar and planetary exploration; and many other categories related to manned and unmanned space exploration.

Each entry in the publication consists of a standard bibliographic citation accompanied by an abstract. The listing of the entries is arranged by STAR categories. A complete Table of Contents describes the scope of each category.

For users with specific information, a Title Index is available. A Subject Term Index, based on the NASA Thesaurus, is also included.

Guidelines for usage of NASA audio/visual material, ordering information, and order forms are also available.
# Table of Contents

<table>
<thead>
<tr>
<th>Category</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>01</strong> Aeronautics (General)</td>
<td>1</td>
</tr>
<tr>
<td>Includes general research topics related to manned and unmanned aircraft and the problems of flight within the Earth’s atmosphere. Also includes manufacturing, maintenance, and repair of aircraft. For specific topics in aeronautics see categories 02 through 09. For information related to space vehicles see 12 Astronautics.</td>
<td></td>
</tr>
<tr>
<td><strong>02</strong> Aerodynamics</td>
<td>1</td>
</tr>
<tr>
<td>Includes aerodynamics of flight vehicles, test bodies, airframe components and combinations, wings, and control surfaces. Also includes aerodynamics of rotors, stators, fans and other elements of turbomachinery. For related information, see also 34 Fluid Mechanics and Heat Transfer.</td>
<td></td>
</tr>
<tr>
<td><strong>03</strong> Air Transportation and Safety</td>
<td>2</td>
</tr>
<tr>
<td>Includes passenger and cargo air transport operations; aircraft ground operations; flight safety and hazards; and aircraft accidents. Systems and hardware specific to ground operations of aircraft and to airport construction are covered in 09 Research and Support Facilities (Air). Air traffic control is covered in 04 Aircraft Communications and Navigation. For related information see also 16 Space Transportation and Safety; and 85 Technology Utilization and Surface Transportation.</td>
<td></td>
</tr>
<tr>
<td><strong>04</strong> Aircraft Communications and Navigation</td>
<td>3</td>
</tr>
<tr>
<td>Includes all modes of communication with and between aircraft; air navigation systems (satellite and ground based); and air traffic control. For related information see also 06 Avionics and Aircraft Instrumentation; 17 Space Communications; Spacecraft Communications, Command and Tracking, and 32 Communications and Radar.</td>
<td></td>
</tr>
<tr>
<td><strong>05</strong> Aircraft Design, Testing and Performance</td>
<td>3</td>
</tr>
<tr>
<td>Includes all stages of design of aircraft and aircraft structures and systems. Also includes aircraft testing, performance, and evaluation, and aircraft and flight simulation technology. For related information, see also 18 Spacecraft Design, Testing and Performance and 39 Structural Mechanics. For land transportation vehicles, see 85 Technology Utilization and Surface Transportation.</td>
<td></td>
</tr>
<tr>
<td><strong>07</strong> Aircraft Propulsion and Power</td>
<td>5</td>
</tr>
<tr>
<td>Includes prime propulsion systems and systems components, e.g., gas turbine engines and compressors; and onboard auxiliary power plants for aircraft. For related information see also 20 Spacecraft Propulsion and Power, 28 Propellants and Fuels, and 44 Energy Production and Conversion.</td>
<td></td>
</tr>
<tr>
<td><strong>08</strong> Aircraft Stability and Control</td>
<td>5</td>
</tr>
<tr>
<td>Includes flight dynamics, aircraft handling qualities; piloting; flight controls; and autopilots. For related information, see also 05 Aircraft Design, Testing and Performance and 06 Avionics and Aircraft Instrumentation.</td>
<td></td>
</tr>
</tbody>
</table>
09 Research and Support Facilities (Air)
Includes airports, runways, hangars, and aircraft repair and overhaul facilities; wind tunnels, water tunnels, and shock tubes; flight simulators; and aircraft engine test stands. Also includes airport ground equipment and systems. For airport ground operations see 03 Air Transportation and Safety. For astronautical facilities see 14 Ground Support Systems and Facilities (Space).

12 Astronautics (General)
Includes general research topics related to space flight and manned and unmanned space vehicles, platforms or objects launched into, or assembled in, outer space; and related components and equipment. Also includes manufacturing and maintenance of such vehicles or platforms. For specific topics in astronautics see categories 13 through 20. For extraterrestrial exploration, see 91 Lunar and Planetary Science and Exploration.

13 Astrodynamics
Includes powered and free-flight trajectories; and orbital and launching dynamics.

14 Ground Support Systems and Facilities (Space)
Includes launch complexes, research and production facilities; ground support equipment, e.g., mobile transporters; and test chambers and simulators. Also includes extraterrestrial bases and supporting equipment. For related information see also 09 Research and Support Facilities (Air).

15 Launch Vehicles and Launch Operations
Includes all classes of launch vehicles, launch/space vehicle systems, and boosters; and launch operations. For related information see also 18 Spacecraft Design, Testing, and Performance; and 20 Spacecraft Propulsion and Power.

16 Space Transportation and Safety
Includes passenger and cargo space transportation, e.g., shuttle operations; and space rescue techniques. For related information, see also 03 Air Transportation and Safety and 15 Launch Vehicles and Launch Vehicles, and 18 Spacecraft Design, Testing and Performance. For space suits, see 54 Man/System Technology and Life Support.

18 Spacecraft Design, Testing and Performance
Includes satellites; space platforms; space stations; spacecraft systems and components such as thermal and environmental controls; and spacecraft control and stability characteristics. For life support systems, see 54 Man/System Technology and Life Support. For related information, see also 05 Aircraft Design, Testing and Performance, 39 Structural Mechanics, and 16 Space Transportation and Safety.

19 Spacecraft Instrumentation and Astronics
Includes the design, manufacture, or use of devices for the purpose of measuring, detecting, controlling, computing, recording, or processing data related to the operation of space vehicles or platforms. For related information, see also 06 Aircraft Instrumentation and Avionics; For spaceborne instruments not integral to the vehicle itself see 35 Instrumentation and Photography; For spaceborne telescopes and other
astronomical instruments see 89 Astronomy, Instrumentation and Photography; For spaceborne telescopes and other astronomical instruments see 89 Astronomy.

20 Spacecraft Propulsion and Power 185
Includes main propulsion systems and components, e.g., rocket engines; and spacecraft auxiliary power sources. For related information, see also 07 Aircraft Propulsion and Power; 28 Propellants and Fuels; 15 Launch Vehicles and Launch Operations; and 44 Energy Production and Conversion.

24 Composite Materials 186
Includes physical, chemical, and mechanical properties of laminates and other composite materials. For ceramic materials see 27 Nonmetallic Materials.

25 Inorganic, Organic, and Physical Chemistry 187
Includes the analysis, synthesis, and use inorganic and organic compounds; combustion theory; electrochemistry; and photochemistry. For related information see also 34 Fluid Dynamics and Thermodynamics, For astrochemistry see category 90 Astrophysics.

26 Metals and Metallic Materials 187
Includes physical, chemical, and mechanical properties of metals, e.g., corrosion; and metallurgy.

27 Nonmetallic Materials 187
Includes physical, chemical, and mechanical properties of plastics, elastomers, lubricants, polymers, textiles, adhesives, and ceramic materials. For composite materials see 24 Composite Materials.

29 Space Processing 187
Includes space-based development of materials, compounds, and processes for research or commercial application. Also includes the development of materials and compounds in simulated reduced-gravity environments. For legal aspects of space commercialization see 84 Law, Political Science and Space Policy.

31 Engineering (General) 189
Includes general research topics to engineering and applied physics, and particular areas of vacuum technology, industrial engineering, cryogenics, and fire prevention. For specific topics in engineering see categories 32 through 39.

32 Communications and Radar 189
Includes radar; radio, wire, and optical communications; land and global communications; communications theory. For related information see also 04 Aircraft Communications and Navigation; and 17 Space Communications, Spacecraft Communications, Command and Tracking; for search and rescue see 03 Air Transportation and Safety, and 16 Space Transportation and Safety.
33 Electronics and Electrical Engineering
Includes development, performance, and maintainability of electrical/electronic devices and components; related test equipment, and microelectronics and integrated circuitry. For related information see also 60 Computer Operations and Hardware; and 76 Solid-State Physics. For communications equipment and devices see 32 Communications and Radar.

34 Fluid Mechanics and Thermodynamics
Includes fluid dynamics and kinematics and all forms of heat transfer; boundary layer flow; hydrodynamics; hydraulics; fluidics; mass transfer and ablation cooling. For related information see also 02 Aerodynamics.

35 Instrumentation and Photography
Includes remote sensors; measuring instruments and gauges; detectors; cameras and photographic supplies; and holography. For aerial photography see 43 Earth Resources and Remote Sensing. For related information see also 06 Aircraft Instrumentation and 19 Spacecraft Instrumentation.

37 Mechanical Engineering
Includes mechanical devices and equipment; machine elements and processes. For cases where the application of a device or the host vehicle is emphasized see also the specific category where the application or vehicle is treated. For robotics see 63 Cybernetics, Artificial Intelligence, and Robotics; and 54 Man/System Technology and Life Support.

38 Quality Assurance and Reliability
Includes approaches to, and methods for reliability analysis and control, inspection, maintainability, and standardization.

39 Structural Mechanics
Includes structural element design, analysis and testing; dynamic responses of structures; weight analysis; fatigue and other structural properties; and mechanical and thermal stresses in structure. For applications see 05 Aircraft Design, Testing and Performance and 18 Spacecraft Design, Testing and Performance.

43 Earth Resources and Remote Sensing
Includes remote sensing of earth features, phenomena and resources by aircraft, balloon, rocket, and spacecraft; analysis or remote sensing data and imagery; development of remote sensing products; photogrammetry; and aerial photographs. For instrumentation see 35 Instrumentation and Photography.

44 Energy Production and Conversion
Includes specific energy conversion systems, e.g., fuel cells; and solar, geothermal, windpower, and waterwave conversion systems; energy storage; and traditional power generators. For technologies related to nuclear energy production see 73 Nuclear Physics. For related information see also 07 Aircraft Propulsion and Power; 20 Spacecraft Propulsion and Power, and 28 Propellants and Fuels.
45  Environment Pollution  195
Includes atmospheric, water, soil, noise, and thermal pollution.

46  Geophysics  197
Includes earth structure and dynamics, aeronomy; upper and lower atmosphere studies; ionospheric and magnetospheric physics; and geomagnetism. For related information see 47 Meteorology and Climatology; and 93 Space Radiation.

47  Meteorology and Climatology  198
Includes weather observation forecasting and modification.

48  Oceanography  199
Includes the physical, chemical and biological aspects of oceans and seas; ocean dynamics, and marine resources. For related information see also 43 Earth Resources and Remote Sensing.

51  Life Sciences (General)  199
Includes general research topics related to plant and animal biology (non–human); ecology; microbiology; and also the origin, development, structure, and maintenance, of animals and plants in space and related environmental conditions. For specific topics in life sciences see categories 52 through 55.

52  Aerospace Medicine  200
Includes the biological and physiological effects of atmospheric and space flight (weightlessness, space radiation, acceleration, and altitude stress) on the human being; and the prevention of adverse effects on those environments. For psychological and behavioral effects of aerospace environments see 53 Behavioral Science. For the effects of space on animals and plants see 51 Life Sciences.

53  Behavioral Sciences  201
Includes psychological factors; individual and group behavior; crew training and evaluation; and psychiatric research.

54  Man/System Technology and Life Support  201
Includes human factors engineering; bionics, man–machine, life support, space suits and protective clothing. For related information see also 16 Space Transportation and 52 Aerospace Medicine.

55  Exobiology  205
Includes astrobiology; planetary biology; and extraterrestrial life. For the biological effects of aerospace environments on humans see 52 Aerospace medicine; on animals and plants see 51 Life Sciences. For psychological and behavioral effects of aerospace environments see 53 Behavioral Science.
<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td><strong>Computer Operations and Hardware</strong> 206</td>
</tr>
<tr>
<td></td>
<td>Includes hardware for computer graphics, firmware and data processing. For components see 33 Electronics and Electrical Engineering. For computer vision see 63 Cybernetics, Artificial Intelligence and Robotics.</td>
</tr>
<tr>
<td>61</td>
<td><strong>Computer Programming and Software</strong> 206</td>
</tr>
<tr>
<td></td>
<td>Includes software engineering, computer programs, routines, algorithms, and specific applications, e.g., CAD/CAM. For computer software applied to specific applications, see also the associated category: 63 Cybernetics, Artificial Intelligence and Robotics.</td>
</tr>
<tr>
<td>63</td>
<td><strong>Cybernetics, Artificial Intelligence and Robotics</strong> 207</td>
</tr>
<tr>
<td></td>
<td>Includes feedback and control theory, information theory, machine learning, and expert systems. For related information see also 54 Man/System Technology and Life Support.</td>
</tr>
<tr>
<td>64</td>
<td><strong>Numerical Analysis</strong> 207</td>
</tr>
<tr>
<td></td>
<td>Includes iteration, differential and difference equations, and numerical approximation.</td>
</tr>
<tr>
<td>66</td>
<td><strong>Systems Analysis and Operations Research</strong> 208</td>
</tr>
<tr>
<td></td>
<td>Includes mathematical modeling of systems; network analysis; mathematical programming; decision theory; and game theory.</td>
</tr>
<tr>
<td>70</td>
<td><strong>Physics (General)</strong> 208</td>
</tr>
<tr>
<td></td>
<td>Includes general research topics related to mechanics, kinetics, magnetism, and electrodynamics. For specific areas of physics see categories 71 through 77. For related instrumentation see 35 Instrumentation and Photography; for geophysics, astrophysics or solar physics see 46 Geophysics, 90 Astrophysics, or 92 Solar Physics.</td>
</tr>
<tr>
<td>71</td>
<td><strong>Acoustics</strong> 208</td>
</tr>
<tr>
<td></td>
<td>Includes sound generation, transmission, and attenuation. For noise pollution see 45 Environment Pollution. For aircraft noise see also 02 Aerodynamics and 07 Aircraft Propulsion Propulsion and Power.</td>
</tr>
<tr>
<td>74</td>
<td><strong>Optics</strong> 209</td>
</tr>
<tr>
<td></td>
<td>Includes light phenomena and the theory of optical devices. For lasers see 36 Lasers and Masers.</td>
</tr>
<tr>
<td>80</td>
<td><strong>Social and Information Sciences (General)</strong> 209</td>
</tr>
<tr>
<td></td>
<td>Includes general research topics related to sociology; educational programs and curricula.</td>
</tr>
<tr>
<td>81</td>
<td><strong>Administration and Management</strong> 211</td>
</tr>
<tr>
<td></td>
<td>Includes management planning and research.</td>
</tr>
<tr>
<td>82</td>
<td><strong>Documentation and Information Science</strong> 212</td>
</tr>
<tr>
<td></td>
<td>Includes information management; information storage and retrieval technology; technical writing; graphic arts; and micrography. For computer documentation see 61 Computer Programming and Software.</td>
</tr>
</tbody>
</table>
85 Technology Utilization and Surface Transportation 213
Includes aerospace technology transfer; urban technology; surface and mass transportation. For related information see 03 Air Transportation and Safety, 16 Space Transportation and Safety, and 44 Energy Production and Conversion. For specific technology transfer applications see also the category where the subject is treated.

88 Space Sciences (General) 214
Includes general research topics related to the natural space sciences. For specific topics in Space Sciences see categories 89 through 93.

89 Astronomy 214
Includes observations of celestial bodies, astronomical instruments and techniques; radio, gamma-ray, x-ray, ultraviolet, and infrared astronomy; and astrometry.

90 Astrophysics 217
Includes cosmology; celestial mechanics; space plasmas; and interstellar and interplanetary gases and dust.

91 Lunar and Planetary Science and Exploration 219
Includes planetology; selenology; meteorites; comets; and manned and unmanned planetary and lunar flights. For spacecraft design or space stations see 18 Spacecraft Design, Testing and Performance.

92 Solar Physics 231
Includes solar activity, solar flares, solar radiation and sunspots. For related information see also 93 Space Radiation.

93 Space Radiation 231
Includes cosmic radiation; and inner and outer Earth radiation belts. For biological effects of radiation on plants and animals see 52 Aerospace Medicine. For theory see 73 Nuclear Physics.

99 General 232
Includes aeronautical, astronautical, and space science related histories, biographies, and pertinent reports too broad for categorization; histories or broad overviews of NASA programs such as Apollo, Gemini, and Mercury spacecraft, Earth Resources Technology Satellite (ERTS), and Skylab; NASA appropriations hearings.

Title Index T-1
Subject Term Index ST-1
### NASA CASI Price Tables — Effective October 1, 2001

Prices are subject to change without notice

#### Video Prices (Betacam SP) NTSC

<table>
<thead>
<tr>
<th>Code</th>
<th>NASA</th>
<th>U.S.*</th>
<th>International*</th>
</tr>
</thead>
<tbody>
<tr>
<td>B01</td>
<td>$71.50</td>
<td>$85.00</td>
<td>$170.00</td>
</tr>
<tr>
<td>B02</td>
<td>$75.50</td>
<td>$90.00</td>
<td>$180.00</td>
</tr>
<tr>
<td>B03</td>
<td>$83.50</td>
<td>$100.00</td>
<td>$200.00</td>
</tr>
<tr>
<td>B04</td>
<td>$119.50</td>
<td>$145.00</td>
<td>$290.00</td>
</tr>
<tr>
<td>B05</td>
<td>$135.50</td>
<td>$165.00</td>
<td>$330.00</td>
</tr>
<tr>
<td>B06</td>
<td>$171.50</td>
<td>$210.00</td>
<td>$420.00</td>
</tr>
<tr>
<td>B07</td>
<td>$207.50</td>
<td>$255.00</td>
<td>$510.00</td>
</tr>
<tr>
<td>B08</td>
<td>$243.50</td>
<td>$300.00</td>
<td>$600.00</td>
</tr>
</tbody>
</table>

#### Video Prices (Betacam SP) PAL

<table>
<thead>
<tr>
<th>Code</th>
<th>NASA</th>
<th>U.S.*</th>
<th>International*</th>
</tr>
</thead>
<tbody>
<tr>
<td>B01</td>
<td>$98.50</td>
<td>$119.00</td>
<td>$238.00</td>
</tr>
<tr>
<td>B02</td>
<td>$164.50</td>
<td>$201.00</td>
<td>$402.00</td>
</tr>
<tr>
<td>B03</td>
<td>$186.50</td>
<td>$229.00</td>
<td>$458.00</td>
</tr>
<tr>
<td>B04</td>
<td>$223.50</td>
<td>$275.00</td>
<td>$550.00</td>
</tr>
<tr>
<td>B05</td>
<td>$230.50</td>
<td>$284.00</td>
<td>$568.00</td>
</tr>
<tr>
<td>B06</td>
<td>$237.50</td>
<td>$293.00</td>
<td>$586.00</td>
</tr>
<tr>
<td>B07</td>
<td>$244.50</td>
<td>$302.00</td>
<td>$604.00</td>
</tr>
<tr>
<td>B08</td>
<td>$252.50</td>
<td>$312.00</td>
<td>$624.00</td>
</tr>
</tbody>
</table>

#### Video Prices (VHS)

<table>
<thead>
<tr>
<th>Code</th>
<th>NASA</th>
<th>U.S.*</th>
<th>International*</th>
</tr>
</thead>
<tbody>
<tr>
<td>V01</td>
<td>$19.50</td>
<td>$20.00</td>
<td>$40.00</td>
</tr>
<tr>
<td>V02</td>
<td>$23.50</td>
<td>$25.00</td>
<td>$50.00</td>
</tr>
<tr>
<td>V03</td>
<td>$31.50</td>
<td>$35.00</td>
<td>$70.00</td>
</tr>
<tr>
<td>V04</td>
<td>$39.50</td>
<td>$45.00</td>
<td>$90.00</td>
</tr>
<tr>
<td>V05</td>
<td>$47.50</td>
<td>$55.00</td>
<td>$110.00</td>
</tr>
<tr>
<td>V06</td>
<td>$55.50</td>
<td>$65.00</td>
<td>$130.00</td>
</tr>
<tr>
<td>V07</td>
<td>$63.50</td>
<td>$75.00</td>
<td>$150.00</td>
</tr>
<tr>
<td>V08</td>
<td>$71.50</td>
<td>$85.00</td>
<td>$170.00</td>
</tr>
</tbody>
</table>

#### CD-ROM Prices

<table>
<thead>
<tr>
<th>Code</th>
<th>NASA</th>
<th>U.S.*</th>
<th>International*</th>
</tr>
</thead>
<tbody>
<tr>
<td>C01</td>
<td>$28.00</td>
<td>$33.00</td>
<td>$66.00</td>
</tr>
<tr>
<td>C02</td>
<td>$36.50</td>
<td>$44.00</td>
<td>$88.00</td>
</tr>
<tr>
<td>C03</td>
<td>$46.50</td>
<td>$56.00</td>
<td>$112.00</td>
</tr>
<tr>
<td>C04</td>
<td>$54.00</td>
<td>$66.00</td>
<td>$132.00</td>
</tr>
<tr>
<td>C05</td>
<td>$63.00</td>
<td>$77.00</td>
<td>$154.00</td>
</tr>
<tr>
<td>C06</td>
<td>$72.00</td>
<td>$88.00</td>
<td>$176.00</td>
</tr>
<tr>
<td>C07</td>
<td>$80.50</td>
<td>$99.00</td>
<td>$198.00</td>
</tr>
<tr>
<td>C08</td>
<td>$90.50</td>
<td>$111.00</td>
<td>$222.00</td>
</tr>
<tr>
<td>C09</td>
<td>$99.00</td>
<td>$122.00</td>
<td>$244.00</td>
</tr>
<tr>
<td>C10</td>
<td>$108.00</td>
<td>$133.00</td>
<td>$266.00</td>
</tr>
</tbody>
</table>

#### NASA Prices:

For NASA libraries, NASA Employees & NASA contractors registered at NASA CASI.

#### U.S. Prices:

For users within the U.S.

#### International Prices:

For users outside the U.S. and International Embassies within the U.S.

### Processing

- Standard N/A
- (most orders are processed within three (3) business days, then shipped)

#### Rush

- $10.00 per item
- (orders are processed within one (1) business day, then shipped)

#### Shipping & Handling Fees: per item

- **Standard (USPS Priority)**
  - $2.00 U.S.
  - (delivered within 2-3 business days)
  - $7.00 International
  - (delivered within 4-7 business days)

- **USPS Express (U.S. only)**
  - $13.00
  - (1-day delivery service to most destinations)

- **Fax (Up to 30 pages)**
  - $16.50 U.S.
  - $24.00 International

- **Federal Express**
  - User’s Account Only

---

*Prices are subject to change without notice.*
GUIDELINES

Use of NASA Photography and Audio/Visual Recordings

General Conditions

NASA material may not be used to state or imply the endorsement by NASA or by any NASA employee of a commercial product, service or activity, or used in any other manner that might mislead.

NASA should be acknowledged as the source of its material.

It is unlawful to falsely claim copyright or other rights in NASA material.

NASA shall in no way be liable for any costs, expenses, claims or demands arising out of use of NASA’s cassettes and photographs by a recipient or a recipient’s distributees.

NASA personnel are not authorized to sign indemnity or holed harmless statements, releases from copyright infringement, or documents granting exclusive use rights.

Photography

Photographs are not protected by copyright unless noted. If copyrighted, permission should be obtained from the copyright owner prior to use. If not copyrighted, photographs may be reproduced and distributed without further permission from NASA. If a recognizable person appears in a photograph, use for commercial purposes may infringe on a right of privacy or publicity and permission should be obtained from the recognizable person.

Audio Recordings

Audiotape recordings are not protected by copyright unless noted. A cassette may be reproduced and distributed, without further permission from NASA. However, use of a portion or segment of an audiotape, such as talent, narration or music, may infringe on a right of publicity of copyright, and permission should be obtained from the source.

Video and Motion Picture Recordings

Videotape and motion picture recordings are not protected by copyright unless noted. A recording may be reproduced and distributed, without further permission from NASA. Copyrighted music or footage, which is incorporated in a production, may not be used unless permission is obtained from the copyright owner. While in most instances using non-copyrighted segments is permitted, use for a commercial purpose of a portion or segment containing talent or a recognizable person may infringe on a right of publicity and permission should be obtained from the talent or recognizable person. These guidelines also apply to NASA’s “live television” satellite broadcasts.
Please Read These Instructions Carefully Before Completing Form

ORDERING INSTRUCTIONS

Customer Name and Address
Please give your name, organization, phone number, fax number, and complete shipping address including number and street.

Videotape Standards
All videos are distributed in the U.S. Standard, NTSC. To receive videos in a broadcast standard outside of the United States (PAL or SECAM), please contact the NASA STI Help Desk by phone at (301) 621-0390 for foreign standards pricing.

Formats
All videos are formatted in VHS and Betacam SP. Requests for other consumer formats such as SVHS and Hi8, as well as other professional formats can be accommodated. Special handling, however, will result in an increased cost to the requester. Please contact the NASA STI Help Desk by phone at (301) 621-0390 for special format requests.

Videos Requested
Please list each quantity, accession number, title, and playing time requested on a separate line. Please include the full title since many of the videos have similar titles. If you are requesting more than six titles, please use an additional form.

Video Program Allocation
Video titles are purchased separately. You may receive each title on a separate videotape, or you may request that several titles ordered go on a single video cassette, if space allows.

Method of Payment
Payment should be made at time of order by check, credit card, or Customer ID number.

Processing
Standard service means that most video requests are processed in-house within three business days, then shipped. Rush service is also available for an additional fee, whereby orders are processed within one business day, then shipped.

Shipping
A standard shipping and handling fee of $2.00 for U.S. addresses and $7.00 for international addresses is charged for each item. Standard shipping is through the USPS Priority Mail service with delivery expected within 2–3 days to most U.S. destinations and 4–7 days to most international destinations. USPS Express Mail service is available for $13.00 per item within the U.S. only. Express Mail service provides 1–day delivery to most destinations.
**VIDEO ORDER FORM**

<table>
<thead>
<tr>
<th>Requester Name</th>
<th>Date of Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization</td>
<td>Phone Number</td>
</tr>
<tr>
<td>Shipping Address</td>
<td>Customer ID Number (required for invoicing)</td>
</tr>
<tr>
<td>Fax Number</td>
<td></td>
</tr>
<tr>
<td>E-mail Address</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Qty.</th>
<th>Doc. ID No. *</th>
<th>Video Title #</th>
<th>Playing Time</th>
<th>Format</th>
<th>Standard</th>
<th>Price Code/ Unit Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Required Field</td>
<td>Apollo 11: For All Mankind</td>
<td>34 min.</td>
<td>Beta</td>
<td>PAL</td>
<td>P02</td>
</tr>
</tbody>
</table>

**Method of Payment** (Only U.S. Currency Accepted)

Processing occurs only after payment is received by CASI as designated below.

- **Invoicing or Deposit Account**
  - (for user with an active billing account registered at CASI, enter Customer ID number above)

- **Cheque**
  - (must be drawn from a U.S. bank, made payable to NASA Center for AeroSpace Information)
  - Credit Card (circle one)
    - VISA
    - MC
    - American Express
    - Diner's Club

Card No. ____________________________
Exp. Date __________ (mm/dd/yy)
Signature ____________________________
(Required to validate credit card order)

**Processing**:

- □ Standard
  - (most orders are processed within three (3) business days, then shipped)
  - □ Rush $10.00 per item
  - (orders are processed within one (1) business day, then shipped)

**Shipping & Handling: per item**

- □ Standard (USPS Priority)
  - U.S. $2.00 (delivered within 2-3 business days to most destinations)
  - International - $7.00 (delivered within 4-7 business days to most destinations)

- □ USPS Express (U.S. only)
  - $13.00, 1-day delivery service to most destinations

- □ Fax: up to 30 pages
  - (U.S. $16.50; International $24.00)

- □ Federal Express (User’s Account only)

Total Charges $__________

Video Total $__________

---
Please Read These Instructions Carefully Before Completing Form

ORDERING INSTRUCTIONS

Customer Name and Address
Please give your name, organization, phone number, fax number, and complete shipping address including number and street.

Videotape Standards
All videos are distributed in the U.S. Standard, NTSC. To receive videos in a broadcast standard outside of the United States (PAL or SECAM), please contact the NASA STI Help Desk by phone at (301) 621-0390 for foreign standards pricing.

Formats
All videos are formatted in VHS and Betacam SP. Requests for other consumer formats such as SVHS and Hi8, as well as other professional formats can be accommodated. Special handling, however, will result in an increased cost to the requester. Please contact the NASA STI Help Desk by phone at (301) 621-0390 for special format requests.

Videos Requested
Please list each quantity, accession number, title, and playing time requested on a separate line. Please include the full title since many of the videos have similar titles. If you are requesting more than six titles, please use an additional form.

Video Program Allocation
Video titles are purchased separately. You may receive each title on a separate videotape, or you may request that several titles ordered go on a single video cassette, if space allows.

Method of Payment
Payment should be made at time of order by check, credit card, or Customer ID number.

Processing
Standard service means that most video requests are processed in-house within three business days, then shipped. Rush service is also available for an additional fee, whereby orders are processed within one business day, then shipped.

Shipping
A standard shipping and handling fee of $2.00 for U.S. addresses and $7.00 for international addresses is charged for each item. Standard shipping is through the USPS Priority Mail service with delivery expected within 2–3 days to most U.S. destinations and 4–7 days to most international destinations. USPS Express Mail service is available for $13.00 per item within the U.S. only. Express Mail service provides 1–day delivery to most destinations.
# VIDEO ORDER FORM

<table>
<thead>
<tr>
<th>Requester Name</th>
<th>Date of Order</th>
<th>Organization</th>
<th>Phone Number</th>
<th>Shipping Address</th>
<th>Customer ID Number</th>
<th>Fax Number</th>
<th>E-mail Address</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>19950022986</td>
<td>Apollo 11: For All Mankind</td>
<td>34 min.</td>
<td>Beta</td>
<td>PAL</td>
<td>P02</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Method of Payment** (Only U.S. Currency Accepted)

- Invoicing or Deposit Account
  - (for user with an active billing account registered at CASI, enter Customer ID number above)
- Check
  - (must be drawn from a U.S. bank, made payable to NASA Center for AeroSpace Information)
- Credit Card (circle one)
  - VISA
  - MC
  - American Express
  - Diner's Club

<table>
<thead>
<tr>
<th>Card No.</th>
<th>Exp. Date (mm/dd/yy)</th>
<th>Signature (Required to validate credit card order)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Processing:**

- Standard
  - (most orders are processed within three (3) business days, then shipped)
- Rush $10.00 per item
  - (orders are processed within one (1) business day, then shipped)

**Shipping & Handling: per item**

- Standard (USPS Priority)
  - U.S. $2.00 (delivered within 2-3 business days to most destinations)
  - International - $7.00 (delivered within 4-7 business days to most destinations)
- USPS Express (U.S. only)
  - $13.00, 1-day delivery service to most destinations
- Fax: up to 30 pages
  - (U.S. $16.50; International $24.00)
- Federal Express (User’s Account only)

<table>
<thead>
<tr>
<th>Video Total</th>
<th>$</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Total Charges</th>
<th>$</th>
</tr>
</thead>
</table>
This 'Project Mathematics' series video from CalTech presents the tunnel of Samos, a famous underground aqueduct tunnel located near the capital of Pithagorion (named after the famed Greek mathematician, Pythagorus, who lived there), on one of the Greek islands. This tunnel was constructed around 600 BC by King Samos and was built under a nearby mountain. Through film footage and computer animation, the mathematical principles and concepts of why and how this aqueduct tunnel was built are explained.
01 AERONAUTICS (GENERAL)

Includes general research topics related to manned and unmanned aircraft and the problems of flight within the Earth's atmosphere. Also includes manufacturing, maintenance, and repair of aircraft. For specific topics in aeronautics see categories 02 through 09. For information related to space vehicles see 12 Astronautics.

19940029666 NASA Lewis Research Center, Cleveland, OH, USA
NACA fire crash research
Jan 1, 1992; In English; 39 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--94--12922; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
This video provides a better understanding of the important factors involved in the start and spread of crash fires, as a necessary first step leading to significant reduction in the crash fire hazards.

19950004297 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA
Dryden and transonic research
May 27, 1992; In English; 20th Anniv. F-8 Digital Fly-By-Wire (DFBW) and Supercritical Wing (SCW) Symposium, 1995; 30 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--94--23629; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video on transonic research is given by Dryden engineer Ed Saltzman as part of the 20th Anniversary F-8 Digital Fly-By-Wire (DFBW) and Supercritical Wing (SCW) Symposium.

19950004337 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA
NACA/NASA: X-1 through X-31
Apr 4, 1994; In English; 28 min. playing time, in color, no sound
Report No.(s): NONP--NASA--VT--94--23546; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video presents clips (in-flight, ground crew, pilots, etc.) of almost everything from X-1 through X-31.

02 AERODYNAMICS

Includes aerodynamics of flight vehicles, test bodies, airframe components and combinations, wings, and control surfaces. Also includes aerodynamics of rotors, stators, fans and other elements of turbomachinery. For related information, see also 54 Fluid Mechanics and Heat Transfer.

19940001498 NASA Lewis Research Center, Cleveland, OH, USA
A future view of computational science in aircraft
Aug 1, 1989; In English; 9 min. 26 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--93--185300; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The accomplishments of LeRC in the field of computational fluid dynamics are presented.

19940001559 NASA Langley Research Center, Hampton, VA, USA
III-20 personnel launch system
Sep 1, 1990; In English; 5 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--93--185307; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This is an overview of research being done in laminar flow at Ames Dryden Flight Research Center and Langley Research Center. Airflow research at Ames Dryden has resulted in a special wing covering that will artificially induce laminar flow on the wing surface; this specially adapted wing is shown being tested in different flying conditions. This video also features research done at Langley in producing a chemical covering for wings that will make visible laminar flow and turbulent airflow patterns as they occur. Langley researchers explain possible use of this technology in supersonic flight.

19940001491 NASA, Washington, DC, USA
Airflow research
Dec 1, 1985; In English; 3 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--94--198219; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video is an overview of research being done in laminar flow at Ames Dryden Flight Research Center.

19940002658 NASA Langley Research Center, Hampton, VA, USA
Leading-edge vortex—system details obtained on F-106B aircraft using a rotating vapor screen and surface techniques
Lamar, John E., NASA Langley Research Center, USA; Johnson, Thomas D., Jr., Lockheed Engineering and Sciences Co., USA; Severance, Kurt, NASA Langley Research Center, USA; Childers, Brooks A., NASA Langley Research Center, USA; Nov 1, 1993; In English; Videotape supplement to NASA-TP-3374: 14 min., color, sound, VHS
Contract(s)/Grant(s): RTOP 505-59-30-03
Report No.(s): NONP--NASA--SUPPL--VT--94--209775; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
In this video the following sequences are presented: flight-test operational procedures; animation of post-processing key elements; digitization process of flight video tape; extractor procedure demonstration; reconstructor procedure demonstration; reconstructor used to compare flight results from 1985 with those in 1991; enhanced procedure demonstration; and mapping of oil-flow photograph onto surface geometry for comparison with vapor-screen-determined vortex characteristics.

Author
F-106 Aircraft; Flow Visualization; Leading Edges; Vortices
**1995#04144 NASA, Washington, DC, USA**

**Scientific balloons**

Dec 1, 1991; In English; 3 min. 38 sec. playing time
Report No.(s): NONP-NASA-VT-94-23140; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video discusses how NASA uses large helium-filled balloons to take payloads up to 25 miles to the edge of space to gather data. Balloons provide a cost-effective approach to reach these heights.

**CASI**

**Balloon Soundings: High Altitude Balloons**

---

**1995#013580 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA**

**F-16XL interview with Marta Bohm-Meyer**

Jul 27, 1992; In English; 30 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-95-41117; No Copyright; Avail: CASEI B02, Videotape-Beta; V02, Videotape-VHS

Marta Bohm-Meyer discusses the cooperative research between Rockwell Industries and NASA research facilities in their effort to optimize and maintain the supersonic laminar flow on the F-16XL aircraft. Research on the airfoil design, chord optimization, introduction of a suction feature to maintain pressure distribution, and CFD, both theoretical and actual phenomena, are discussed. Bohm-Meyer discusses the differences between supersonic and subsonic laminar flow, cross flow, reasons behind using this particular F-16 aircraft for this research, and the future of this ongoing research, including the data base that investigators are building from wind tunnel data and in-flight validation.

**DFRC**

**Airfoil Design: Airfoils; F-16 Aircraft**

---

**1997#05033 NASA Johnson Space Center, Houston, TX USA**

**Wind Tunnel Tests of an Inflatable Airplane**

Oct. 09, 1996; In English; Videotape: 32 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-97-005936; No Copyright; Avail: CASI; V03, Videotape-VHS

In this video, a wind tunnel investigation of aerodynamic and structural deflection characteristics of an inflatable airplane is shown. The film includes scenarios during wind tunnel tests of an inflatable airplane in the Langley Full Scale Tunnel with the main objective of obtaining load factors prior to wing buckle of 4.5 to 5.0 g. The inflation pressure during the test was indicated to be 70 psi.

**CASI**

**Inflatable Structures: Wings; Buckling; Deflection; Aerodynamic Stalling; Aerodynamic Stability; Aerodynamic Loads; Aerodynamic Characteristics**

---

**03 AIR TRANSPORTATION AND SAFETY**

Includes passenger and cargo air transport operations; aircraft ground operations; flight safety and hazards; and aircraft accidents. Systems and hardware specific to ground operations of aircraft and to airport construction are covered in 09 Research and Support Facilities (Air). Air traffic control is covered in 04 Aircraft Communications and Navigation. For related information see also 16 Space Transportation and Safety; and 85 Technology Utilization and Surface Transportation.

---

**1994#01953 NASA, Washington, DC, USA**

**Life saving satellites**

Aug 1, 1985; In English; 6 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-190414; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Details of COSPAS/SARSAT, the international search and rescue project, are covered.

**CASI**

**COSPAS; Rescue Operations; SARSAT**

---

**1994#027297 NASA Lewis Research Center, Cleveland, OH, USA**

**WHIPICE**

Jan 1, 1992; In English; 8 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-9949; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video documents efforts by NASA Lewis Research Center researchers to improve ice protection for aircraft. A new system of deicing aircraft by allowing a thin sheet of ice to develop, then breaking it into particles, is being examined. Particularly, to determine the extent of shed ice ingestion by jet engines that results. The process is documented by a high speed imaging system that scans the breakup and flow of the ice particles at 1000 frames per second. This data is then digitized and analyzed using a computer program called WHIPICE, which analyzes grey scale images of the ice particles. Detailed description of the operation of this computer program is provided.

**CASI**

**Aircraft Hazards; Aircraft Icing; Applications Programs (Computers); Deicing; Ice Prevention**

---

**1994#029657 NASA, Washington, DC, USA**

**Airline safety and economy**

Jan 1, 1993; In English; 6 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-12939; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video documents efforts at NASA Langley Research Center to improve safety and economy in aircraft. Featured are the cockpit weather information navigation computer system, which relays real-time weather information to the pilot, and efforts to improve techniques to detect structural flaws and corrosion, such as the thermal bond inspection system.

**CASI**

**Aircraft Maintenance; Aircraft Safety; Aviation Meteorology; Flight Management Systems; Flight Safety; Inspection**

---

**1994#029243 NASA Lewis Research Center, Cleveland, OH, USA**

**Crash impact survival in light planes**

Jan 1, 1994; In English; 7 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-12927; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video explains the effects on aircraft and passengers of light plane crashes. The explanation is provided through the use of simulated light planes and dummies.

**CASI**

**Aircraft Accidents; Civil Aviation; Crashers; General Aviation Aircraft; Light Aircraft; Passengers**

---

**1995#004136 NASA, Washington, DC, USA**

**The High Speed Research Program**

Jun 1, 1993; In English; 1 min. 11 sec. playing time, with sound
Report No.(s): NONP-NASA-VT-94-23140; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video highlights the endeavors of NASA and the USA manufacturers to provide technology that will make air travel to Pacific countries more efficient. This video was shown at the 1993 Paris Airshow.

**CASI**

**Air Transportation; High Speed; Supersonic Transports**
04 AIRCRAFT COMMUNICATIONS AND NAVIGATION

Includes all modes of communication with and between aircraft; air navigation systems (satellite and ground based); and air traffic control. For related information see also 06 Avionics and Aircraft Instrumentation; 17 Space Communications; Spacecraft Communications, Command and Tracking, and 32 Communications and Radar.

05 AIRCRAFT DESIGN, TESTING AND PERFORMANCE

Includes all stages of design of aircraft and aircraft structures and systems. Also includes aircraft testing, performance, and evaluation, and aircraft and flight simulation technology. For related information, see also 18 Spacecraft Design, Testing and Performance and 39 Structural Mechanics. For land transportation vehicles, see 65 Technology Utilization and Surface Transportation.

06 SPACECRAFT DESIGN, TESTING AND PERFORMANCE

Includes all stages of design of space vehicles and space systems and spacecraft structures and systems. Also includes spacecraft testing, performance, and evaluation; space flight simulation technology; and space transportation vehicles. For related information, see also 65 Technology Utilization and Surface Transportation.

07 SPACECRAFT COMMUNICATIONS, COMMAND AND TRACKING

Includes all modes of communication with and between spacecraft; spacecraft testing, performance, and evaluation; space communication systems (satellite and ground based); and space traffic control. For related information see also 06 Avionics and Aircraft Instrumentation; 17 Space Communications; Spacecraft Communications, Command and Tracking, and 32 Communications and Radar.
The central optimization of the wing, the forward canard, and the rear flaps by an onboard flight computer is also described.

**CASI**

**Airborne/Spaceborne Computers; Flight Control; Histories; Research Aircraft; Swept Forward Wings; X-29 Aircraft**

19940929059 NASA, Washington, DC, USA

**Perspective: Global watcher**

Jan 1, 1993; In English; 7 min, playing time, in color, with sound

Report No.(s): NONP--NASA--VT--94--12941; No Copyright; Avail: CASI;

B01, Videotape-Beta; V01, Videotape-VHS

This video documents efforts of NASA Dryden Flight Research Center to develop and utilize ultra-light, remotely piloted gliders to study Earth’s atmosphere. The advantage of these vehicles is that they are inexpensive, and can fly at altitudes twice that of commercial airlines.

**CASI**

**Aircraft Design; Earth Atmosphere; Environmental Monitoring; Gliders; Light Aircraft; Remote Control**

19940929284 NASA Lewis Research Center, Cleveland, OH, USA

**STOVL**

Jan 1, 1990; In English; 4 min, 43 sec, playing time, in color, with sound

Report No.(s): NONP--NASA--VT--94--13535; No Copyright; Avail: CASI;

B01, Videotape-Beta; V01, Videotape-VHS

This video examines research and applications of the STOVL aircraft.

**CASI**

**Lift Augmentation; Powered Lift Aircraft; STOVL Aircraft**

19950104299 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

**F–18 HARV presentation for industry**

May 1, 1993; In English; 20 min, 57 sec, playing time, in color, with sound

Report No.(s): NONP--NASA--VT--94--23631; No Copyright; Avail: CASI;

B04, Videotape-Beta; V04, Videotape-VHS

This video provides a look at some work done by Dryden’s F–18 High Alpha Research Vehicle (HARV) in cooperation with the USA Navy and industry.

**DFRC**

**Angle of Attack; F–18 Aircraft; Research Aircraft**

19950104303 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

**Research excitation system flight testing**

Mar 30, 1992; In English; 2 min, 35 sec, playing time, in color, with sound

Report No.(s): NONP--NASA--VT--94--23635; No Copyright; Avail: CASI;

B01, Videotape-Beta; V01, Videotape-VHS

Excitation system research at Dryden with an F–16XL aircraft is presented.

**DFRC**

**Excitation; F–16 Aircraft; Flight Tests; Research Aircraft**

19950104304 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

**NASA and the SR–71: Back to the future**

Sep 9, 1991; In English; 4 min, 41 sec, playing time, in color, with sound

Report No.(s): NONP--NASA--VT--94--23636; No Copyright; Avail: CASI;

B01, Videotape-Beta; V01, Videotape-VHS

Presented is a musical video salute to NASA’s delivery of three SR–71 aircraft for use in flight research.

**DFRC**

**Flight Tests; SR–71 Aircraft**

19950104328 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

**HL–10 dedication ceremony**

Apr 3, 1990; In English; 30 min, 35 sec, playing time, in color, with sound

Report No.(s): NONP--NASA--VT--94--23640; No Copyright; Avail: CASI;

B03, Videotape-Beta; V03, Videotape-VHS

The dedication of NASA’s HL–10 lifting body, being put on display at NASA Dryden Flight Research Center, is shown.

**DFRC**

**HL–10 Reentry Vehicle; Lifting Bodies**

19950104329 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

**F–104 resource tape**

Oct 9, 1992; In English; 34 min, playing time, in color, with sound

Report No.(s): NONP--NASA--VT--94--23641; No Copyright; Avail: CASI;

B03, Videotape-Beta; V03, Videotape-VHS

This video presents raw, unedited material of Dryden’s F–104 aircraft.

**DFRC**

**F–104 Aircraft; Research Aircraft**

19950104330 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

**F–15 B35 (HIDEC) resource tape**

Feb 1, 1993; In English; 1 hr, 29 min, 59 sec, playing time, in color, with sound

Report No.(s): NONP--NASA--VT--94--23642; No Copyright; Avail: CASI;

B04, Videotape-Beta; V04, Videotape-VHS

This video presents raw, unedited material of Dryden’s F–15 Highly Integrated Digital Electronic Control (HIDEC) aircraft.

**DFRC**

**F–15 Aircraft; Flight Control; Research Aircraft**

19950104331 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

**F–16XL resource tape**

Jan 28, 1993; In English; 1 hr, 6 min, 30 sec, playing time, in color, with sound

Report No.(s): NONP--NASA--VT--94--23643; No Copyright; Avail: CASI;

B04, Videotape-Beta; V04, Videotape-VHS

This video presents raw, unedited material of Dryden’s F–16XL aircraft.

**DFRC**

**F–16 Aircraft; Research Aircraft**

19950104332 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

**F–18 high alpha research vehicle resource tape**

Aug 11, 1992; In English; 1 hr, 29 min, 30 sec, playing time, in color, with sound

Report No.(s): NONP--NASA--VT--94--23644; No Copyright; Avail: CASI;

B04, Videotape-Beta; V04, Videotape-VHS

This video presents raw, unedited material of Dryden’s F–18 High Alpha Research Vehicle (HARV) aircraft.

**DFRC**

**F–18 Aircraft; Research Vehicles**

19950104333 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

**X–31 resource tape**

Aug 23, 1993; In English; 1 hr, 33 min, playing time, in color, with sound

Report No.(s): NONP--NASA--VT--94--23645; No Copyright; Avail: CASI;

B04, Videotape-Beta; V04, Videotape-VHS

This video presents raw, unedited material of Dryden’s X–31 aircraft.

**DFRC**

**Research Aircraft: X–31 Aircraft**

19950104339 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

**X–31 tailless testing**

Sep 9, 1994; In English; 3 min, 20 sec, playing time, in color, with sound

Report No.(s): NONP--NASA--VT--94--23651; No Copyright; Avail: CASI;

B01, Videotape-Beta; V01, Videotape-VHS
This video addresses the NASA Dryden and X-31 International Test Organization (ITO) testbeds provided for the Pentagon’s ‘tailless’ and quasi-tailless vehicle configuration testing.

**Aircraft Configurations: Test Ranges; X-31 Aircraft**

---

**Revitalizing general aviation**

Jul 20, 1994; In English; 6 min. 30 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–95–35013; No Copyright; Avail: CASI;
B01; Videotape-Beta; V01; Videotape-VHS

This video contains a short feature of NASA and the FAA joint effort to incorporate new technology into the design of general aviation aircraft.

**Aerospace Technology Transfer: General Aviation Technology Utilization**

---

**F-15 resource tape**

Jan 1, 1994; In English; 9 min. 25 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–95–41114; No Copyright; Avail: CASI; B01; Videotape-Beta; V01; Videotape-VHS

An F-15 fighter aircraft is portrayed in resource video. A flight test is shown with take-off, touch and go landings, some flight maneuvers, and pilot to control tower communication with references to drag vectors.

**Aircraft Landing; Aircraft Maneuvers; Aircraft Performance; F-15 Aircraft; Flight Tests; Takeoff; Touchdown**

---

**Acoustic climb to cruise test**

Nov 27, 1991; In English; 9 min. 30 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–95–41116; No Copyright; Avail: CASI; B01; Videotape-Beta; V01; Videotape-VHS

Flight test film footage of three different aircraft testing the acoustical noise levels during take-off, climb, maneuvers, and touch and go landings are described. These sound tests were conducted on two fighter aircraft and one cargo aircraft. Results from mobile test vehicle are shown.

**Acoustics; Aircraft Noise; Climbing Flight; Flight Tests; Noise Intensity**

---

**Hyper-X Model Testing with Animation**

Mar 21, 1996; In English; Videotape: 6 min. 25 sec. playing time, in color, with partial sound

Report No.(s): NONP–NASA–VT–2000043976; No Copyright; Avail: CASI;
B01; Videotape-Beta; V01; Videotape-VHS

Live footage shows the Hyper-X program modeling at NASA Langley Research Center. The Hyper-X craft is shown on top of a Pegasus booster in a 20’ Mach 6 Wind Tunnel. Visualization data runs are performed in the wind tunnel. Also seen is a brief interview with Vincent Rausch the Hyper-X Program Manager. Animation includes the flight model of the Hyper-X vehicle.

**Hypersonic Flight; X-33 Vehicle; Pegasus Air-Launched Booster; Air Launching**

---

**07 AIRCRAFT PROPULSION AND POWER**

Includes prime propulsion systems and systems components, e.g., gas turbine engines and compressors, and onboard auxiliary power plants for aircraft. For related information see also 20 Spacecraft Propulsion and Power, 28 Propellants and Fuels, and 44 Energy Production and Conversion.

**Rotor stator CGI**

Apr 1, 1988; In English; 5 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–93–185320; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video contains computer graphics of numerous kinds of flow within jet engines. Analyses include pressure contours (shock waves), fluid pressures, etc. The video also contains dramatic views of jet engine manufacturing.

**Computer Graphics; Computerized Simulation; Flow Distribution; Jet Engines; Numerical Flow Visualization; Rotor Stator Interactions; Rotors; Stators**

---

**Futurepath 2**

Apr 1, 1989; In English; 28 min. 48 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–93–190236; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

This covers advanced turboprop tests, the diesel engine as an aircraft propulsion system in helicopters, and the development of the Stirling engine as a space power system.

**Aircraft Engines: Diesel Engines; Spacecraft Power Supplies; Stirling Engines; Turboprop Engines**

---

**Futurepath 1**

Apr 1, 1988; In English; 8 min. 30 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–93–190242; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The videotape presents material concerning Advanced Turboprop programs. Additionally, material covering the development of power systems for Freedom is shown.

**Space Station Freedom: Space Station Power Supplies; Turboprop Engines**

---

**Back to propellers**

Jun 1, 1987; In English; 2 min. 50 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–93–190242; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The videotape shows the unique propfan design. The propfan is designed to achieve the speeds and altitudes of jets while only using half the normal amount of fuel.

**Civil Aviation; NASA Programs; Prop-Fan Technology; Propeller Fans; Research and Development**

---

**08 AIRCRAFT STABILITY AND CONTROL**

Includes flight dynamics, aircraft handling qualities; piloting; flight controls; and autopilots. For related information, see also 05 Aircraft Design, Testing and Performance and 06 Avionics and Aircraft Instrumentation.

**STS–26 STA training (Hauck)**

May 1, 1988; In English; 3 min. 50 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–93–190353; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video shows astronaut Rick Hauck at the Shuttle Training Aircraft (STA), CU’s of the heads-up display, and air-to-air exercises.

CASI
Astronaut Training: Head-Up Displays: Training Aircraft

1995004305 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA
Radio controlled for research
Jul 1, 1994; In English; 3 min. 43 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–94-23637; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video presents how Dryden engineers use radio-controlled aircraft such as the 1/8-scale model F-18 High Alpha Research Vehicle (HARV) featured to conduct flight research.

DFRC Aircraft Models; Flight Tests; Radio Control; Research Aircraft; Scale Models

1995004336 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA
F-15 Propulsion Controlled Aircraft (PCA) Jul 1, 1993; In English; 2 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–94-23646; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video presents a brief history of the Langley Research Center.

CASI DFRC Aircraft Control; Computer Programs; F-15 Aircraft; Flight Control

200001016466 NASA Johnson Space Center, Houston, TX USA
STS–103 Crew Interviews: Claude Nicollier
Sep. 9, 1999; In English; Videotape: 43 min. 36 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999213443; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
This video gives the history of the Icing Research Tunnel at LeRC and how it is used today to understand and protect against icing.

CASI Hubble Space Telescope: Maintenance; Replacing; Computers; Gyroscopes; Transistors; X-Ray Astrophysics Facility

09 RESEARCH AND SUPPORT FACILITIES (AIR)
includes airports, runways, hangars, and aircraft repair and overhaul facilities; wind tunnels, water tunnels, and shock tubes; flight simulators; and aircraft engine test stands. Also includes airport ground equipment and systems. For airport ground operations see 03 Air Transportation and Safety. For astronomical facilities see 14 Ground Support Systems and Facilities (Space).

1994020852 NASA, Washington, DC, USA
Rotorcraft research
Jan 1, 1986; In English; 2 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190249; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This document describes wind tunnel testing and computer modeling done on the rotorcraft prior to building the final aircraft.

CASI Computerized Simulation; Rotary Wing Aircraft; Wind Tunnel Tests

19940014489 NASA Marshall Space Flight Center, Huntsville, AL, USA
Technology test bed
Aug 1, 1988; In English; 1 min. 30 sec. playing time, in color, with sound
B01, Videotape-Beta; V01, Videotape-VHS
This video details the renewed use of the massive rocket propulsion test stand at Marshall Space Flight Center, first used to test Saturn 5 rockets during the Apollo Program. The test stand can incorporate over 600 sensors during test firings of the Space Shuttle’s main engines, which will result in increased safety and reliability, and reduced production costs.

CASI Engine Tests; Performance Tests; Propulsion System Performance; Saturn 5 Launch Vehicles; Space Shuttle Main Engine; Spacecraft Propulsion; Test Firing; Test Stands

19940014490 NASA, Washington, DC, USA
The world’s largest wind tunnel
Oct 1, 1987; In English; 2 min. 47 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–198218; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
NASA’s National Full Scale Aerodynamics Complex, which houses two of the world’s largest wind tunnels and has been used for testing experimental aircraft since 1944, is presented. This video highlights the structure and instrumentation of the 40 x 80 feet and 80 x 120 feet wind tunnels and documents their use in testing full scale aircraft, NASA’s Space Shuttle and the XV-15 Tiltrotor aircraft.

CASI Aerodynamics; Research Aircraft; Research Facilities; Wind Tunnel Tests; Wind Tunnels

19940029264 NASA John C. Stennis Space Center, Bay Saint Louis, MS, USA
High Heat Flux Facility
Jan 1, 1993; In English; 4 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12962; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video gives an overview of the High Heat Flux Facility being built at Stennis Space Center in conjunction with Wright-Patterson Air Force Base. This facility will simulate flight heat conditions and will be used to test engine and materials for the National Aerospace Plane.

CASI Flight Conditions; Heat Flux; National Aerospace Plane Program; Test Facilities

19940029245 NASA Lewis Research Center, Cleveland, OH, USA
Icing research tunnel
Jan 1, 1990; In English; 7 min. 39 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–13534; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video gives the history of the Icing Research Tunnel at LeRC and how it is used today to understand and protect against icing.

CASI Aircraft Icing; Ice Prevention; Wind Tunnels

19950004135 NASA Langley Research Center, Hampton, VA, USA
Langley overview
Feb 10, 1993; In English; 6 min. 31 sec. playing time
Report No.(s): NONP–NASA–VT–94–23130; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video presents a brief history of the Langley Research Center.

CASI Histories; NASA Programs; Research Facilities

19950004140 NASA, Washington, DC, USA
The model builders
Dec 1, 1991; In English; 2 min. 52 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23144; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video explores the world of modeling at the NASA Johnson Space
Center. Artisans create models, large and small, to help scientists and engineers make final design modifications before building more costly prototypes.

19950004298 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

Dryden overview for schools
Feb 28, 1992; In English; 6 min. 22 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-23638; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video provides educators an overview of Dryden for students from late elementary through high school.

DFRC Education; General Overviews; NASA Programs; Research Facilities

19950004302 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

Dryden tour tape, 1994
Feb 1, 1994; In English; 19 min. 3 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-23634; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
This video provides an overview of NASA's Dryden Flight Research Center. This is the program shown to visitors during the tour at Dryden.

DFRC General Overviews; NASA Programs; Research Facilities

19950004326 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

Building the Integrated Test Facility: A foundation for the future
Oct 1, 1992; In English; 14 min. 7 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-23628; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
A look at the construction and resources of Dryden's Integrated Test Facility is given.

DFRC NASA Programs; Test Facilities

19950004334 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

The Western Aeronautical Test Range
Aug 1, 1988; In English; 32 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-23646; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
An overview of the Western Aeronautical Test Range (WATR) and its connection to NASA Dryden is presented.

DFRC Test Facilities; Test Ranges

19950004335 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

Dryden overview for schools
Feb 3, 1994; In English; 6 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-23647; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video presentation gives a narrated, quick look at the Dryden Flight Research Center and the Center's various projects. The presentation is directed toward a 6th-grade audience and emphasizes staying in school to learn the vital skills needed to succeed today.

DFRC Education; Research Facilities

12 ASTRONAUTICS (GENERAL)

Includes general research topics related to space flight and manned and unmanned space vehicles, platforms or objects launched into, or assembled in, outer space; and related components and equipment. Also includes manufacturing and maintenance of such vehicles or platforms. For specific topics in astronautics see categories 13 through 20. For extraterrestrial exploration, see 91 Lunar and Planetary Science and Exploration.

19940009158 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-12 mission highlights resource tape
Mar 1, 1998; In English; 55 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-18536; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
Important visual events including launch, Syncom 4 deployment, LDEF retrieval, onboard crew activities, and landing are presented. Air-to-ground transmission between the crew and Mission Control is also included.

Author (revised)
Long Duration Exposure Facility; Orbital Rendezvous; Space Shuttle Missions; Space Transportation System Flights; Spacecraft Launching; Spacecraft Recovery; Syncom 4 Satellite

19940009167 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-28 crew presentation clip
Sep 1, 1989; In English; 23 min. 58 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-18533; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
This Department of Defense space shuttle mission is shown during launch and landing. The video tape also includes scenes of the following: the crew working on the otolith Tilt Translation Reinterpretation Experiment, various views of the Earth, the crew during mealtime, and preparations for reentry.

Author (revised)
Defense Program: Space Transportation System Flights: Spacecraft Launching

1994001035 NASA Goddard Space Flight Center, Greenbelt, MD, USA

GAS highlights, 1988
Feb 1, 1989; In English; 30 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-190398; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
The videotape shows highlights of GSFC's involvement in the Get Away Special program during the 1988 calendar year.

CASI
Get Away Specials (STS): NASA Programs; Space Shuttles: Spaceborne Experiments

1994001096 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-26 crew participation in meetings
Aug 1, 1988; In English; 13 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-190316; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This videotape shows the crew attending and participating in a Payloads Operation Working Group (POWERG) meeting, a Flight Rules meeting, and a Flight Operating Review (FOR) meeting.

CASI

1994001098 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

Mars rover sample return mission
Sep 1, 1988; In English; 5 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-190318; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This videotape was created by NASA JSC's Missions Planning Division to depict a future unmanned Mars mission.

CASI
Mars Sample Return Missions; Mission Planning; NASA Space Programs
The story of Alan Shepard's May 1961 suborbital flight is presented. This is a re-release of 'The Flight of Freedom 7'.

CASI

Mercury Spacecraft; Suborbital Flight

19940011028 NASA Lewis Research Center, Cleveland, OH, USA Astronauts number 2 Sep 1, 1985; In English; 29 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT--93-190226; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The story of Alan Shepard's May 1961 suborbital flight is presented. This is a re-release of 'The Flight of Freedom 7'.

CASI

Apollo 11: 20th anniversary

19940014596 NASA, Washington, DC, USA Apollo 11: 20th anniversary Jul 1, 1989; In English; 3 min. 27 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT--94-198211; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The Apollo 11 Mission which culminated in the first manned lunar landing on July 20, 1969 is recounted. Historical footage of preparation, takeoff, stage separation, the Eagle Lunar Lander, and the moon walk accompany astronauts Michael Collins, Buzz Aldrin, and Neal Armstrong giving their recollections of the mission are shown.

CASI

Astronauts; Friendship 7; Mercury Ma-6 Flight

19940014598 NASA, Washington, DC, USA Apollo 11: The Goddard connection Sep 1, 1985; In English; 28 min. 30 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT--93-190227; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video recounts the Apollo 11 Mission which took ten years of preparation and the work of over a half a million people, culminating in the first manned lunar landing on July 20, 1969. Historical footage is accompanied by a narrated account of the mission. The footage includes preparation for launch, takeoff, stage separation, docking in space the Eagle Lunar Lander, flights of the Earth and Moon from space, Michael Collins orbiting the Moon in the Columbia Orbiter, Edwin Aldrin and Neil Armstrong walking on the Moon, setting up a Solar Wind experiment, collecting lunar samples, shots aboard the U.S.S. Hornet, retrieval of the astronauts after splashdown, and the parade given in honor of the astronauts.

CASI

Apollo 11 Flight: Lunar Exploration; Lunar Landing; Moon

19940029760 NASA Goddard Space Flight Center, Greenbelt, MD, USA Apollo 11: The Goddard connection Jul 1, 1989; In English; 15 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT--94-12943; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video reviews John Glenn's flight into space. This is a re-release of 'The Flight of Friendship 7'.

CASI

Apollo Project; Manned Space Flight Network; Moon; Spacecraft Communication; Spacecraft Tracking

19940029668 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA Ulysses: A solar odyssey Jul 23, 1990; In English; 11 min. 33 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT--94-12948; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video reviews John Glenn's flight into space. It is a re-release of 'The Flight of Friendship 7'.

CASI

Orbital Maneuvers; Polar Orbits; Solar Orbits; Space Exploration; Sun; Ulysses Mission

19940029878 NASA Lewis Research Center, Cleveland, OH, USA Astronauts number 3, part 2 Sep 1, 1988; In English; 27 min. 24 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT--94-12957; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Ulysses mission is recounted. This video covers the Apollo 16 mission to the Decartes region.

CASI

Apollo Project: Apollo 15 Flight; Lunar Exploration

19940029872 NASA Lewis Research Center, Cleveland, OH, USA NASA images 15 May 13, 1988; In English; 27 min. 44 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT--94-12952; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video covers the Apollo 16 mission to the Decartes region.

CASI

Apollo Project: Apollo 16 Flight

19940031084 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA Magellan to Venus Jul 1, 1990; In English; 3 min. 35 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT--94-15918; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video presents cell animation of the Magellan approach to Venus, orbit insertion, and mapping sequence.
CASI
Magellan Spacecraft (NASA); Space Exploration; Venus (Planet)

1995004107 NASA Lewis Research Center, Cleveland, OH, USA
NASA images 9 no. 3005
Feb 1, 1988; In English; 27 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–94–23170; No Copyright; Avail: CASI;
B02, Videotape-Beta; V01, Videotape-VHS
This video gives a historic look at the Pioneer, Mariner, and Voyager missions.
LeRC
Mariner Program; NASA Space Programs; Pioneer Project; Space Exploration; Voyager Project

1995004108 NASA Lewis Research Center, Cleveland, OH, USA
Challenger Center: Rendezvous with Comet Halley no. 3072
Dec 1, 1990; In English; 12 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–94–23171; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This presentation introduces the Challenger Center and the rendezvous with Comet Halley in the 2061 scenario.
LeRC
Education; Halley’S Comet

1995004109 NASA Lewis Research Center, Cleveland, OH, USA
Challenger Center: Return to the Moon no. 4005
Dec 1, 1989; In English; 8 min. 49 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–94–23172; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This presentation introduces the Challenger Center and the ‘return to Moon’ scenario.
LeRC
Education; Lunar Programs

1995004306 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA
LLRV/Apollo 11 25th anniversary
Jul 1, 1994; In English; 2 min. 51 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–94–23638; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video salutes the 25th anniversary of the Apollo 11’s landing on the moon and Dryden’s contribution with the Lunar Landing Research Vehicle (LLRV) program.
DFRC
Apollo 11 Flight: General Overviews; Lunar Landing; Lunar Landing Modules

1995004317 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–60 post flight press conference
Jan 1, 1994; In English; 18 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–94–23617; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
This video contains footage selected by the astronauts, as well as their comments on their respective flights. It also contains launch, onboard crew activities, and landing.
JSC
Space Shuttle Missions; Space Shuttle Payloads; Space Transportation System Flights; Spaceborne Experiments

1995004318 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–62 post flight press conference
Jan 1, 1994; In English; 21 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–94–23618; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
This video contains footage selected by the astronauts, as well as their comments on their respective flights. It also contains launch, onboard crew activities, and landing.
JSC
Space Shuttle Missions; Space Shuttle Payloads; Space Transportation System Flights; Spaceborne Experiments

1995004320 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–65 post flight presentation
Jan 1, 1994; In English; 44 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–94–23620; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
This video contains footage selected by the astronauts, as well as their comments on their respective flights. It also contains launch, onboard crew activities, and landing.
JSC
Space Shuttle Missions; Space Shuttle Payloads; Space Transportation System Flights; Spaceborne Experiments

1995004321 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–59 post flight presentation
May 1, 1994; In English; 40 min. 7 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–94–23621; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
This video contains footage selected by the astronauts, as well as their comments on their respective flights. It also contains launch, onboard crew activities, and landing.
JSC
Space Shuttle Missions; Space Shuttle Payloads; Space Transportation System Flights; Spaceborne Experiments

19950012153 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–68 mission highlights resource tape
Dec 22, 1994; In English; 55 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–95–38127; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
VJSC1440 contains important visual events including Space Radar Laboratory-2, Get Away Special canisters, Commercial Protein Crystal Growth, Biological Research in Canisters, Cosmic Radiation Effects and Activation Monitor, Military Applications of Ship Tracks, other onboard activities, earth views, and landing. Also includes Air-to-ground transmission between the crew and Mission control.
Author
Cosmic Rays: Earth Observations (From Space); Ground-Air-Ground Commu-
1995012625 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Apollo: The first 40 days
Jan 1, 1975; In English; 22 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–39136; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
This video records the launch of unmanned Skylab-1 on May 14, 1973 and
the major problems resulting from the loss of the meteoroid heat shield. Also
shown is the fabrication of materials and the equipment used in the repair opera-
tion, followed by the installation of the parapet at the launch and docking
of the manned SL-2 with the SL-1 workshop. The onboard sequences of daily work
routines and some of the experiments are included.
JSC
Earth Resources Survey Program; Skylab Program; Skylab 1; Skylab 2; Space-
borne Experiments; Spacecraft Docking; Spacecraft Launching

1995012643 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Legacy of Gemini
Jan 1, 1967; In English; 28 min. running time, in color, with sound
Report No.(s): NONP–NASA–VT–95–39131; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
In the perspective of a single composite mission, this documentary illus-
trates the major accomplishments of the Gemini two man space flights and the
significance of these flights to the Apollo Program. This film includes
outstanding photography of the Earth and man in space.
JSC
Apollo Project: Earth Observations (From Space); Gemini Flights; Manned
Space Flight; Spaceborne Photography

1995012644 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Skylab: The second manned mission. A scientific harvest
Jan 1, 1974; In English; 36 min. 30 sec. playing time, in black and white, no sound
Report No.(s): NONP–NASA–VT–95–39132; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
This black and white video presentation covers the Skylab launch activities
and docking with unmanned SL-1 workshop. Included are observations of student
experiments (the Minskoy maws and Arabella, the spider), observations of student experiments, exercise routines, and the enabling of the Earth Resources Experiments Package. Also shown is planet Earth documenta-
tion, manned operation of the Apollo Telescope Mount for observations of the
Sun and beyond, outside EVA activity, testing of the Astronaut Maneuvering
Unit, experiments to explore industrial uses of space, and the Skylab living
routine.
JSC
Apollo Telescope Mount; Earth Observations (From Space); Earth Resources
Program; Manned Maneuvering Units; Manned Space Flight; Skylab 1; Space
Technology Experiments; Spaceborne Experiments

19950212645 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Time of Apollo
Jan 1, 1979; In English; 29 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–39133; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
In the year 1961, President John F. Kennedy set forth the task that..."This
nation should commit itself to achieving the goal, before this decade is out, of
landing a man on the Moon and returning him safely to Earth". The decade is
over and the task has been accomplished. Project Apollo has been achieved. This video documentary is a tribute to the historical accomplishments of the Apollo
program.
JSC
Apollo Flights; Apollo Project: Lunar Exploration; Lunar Landing; Moon

19950813579 NASA, Washington, DC, USA
Challenger's night flight
Aug 1, 1983; In English; 4 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–41115; No Copyright; Avail: CASI; B01,
Videotape-Beta; V01, Videotape-VHS
STS Mission 8 and its night flight (both launch and landing) are highlighted in
this color video. The 5-member crew is introduced and their special assign-
ments for this flight are discussed, along with their continuous weightlessness
experiments performed during the flight. The first black astronaut, Guion S.
Blufords, Jr., is introduced and file footage of an STS Mission orbiting the earth is
captured.
CASI
Astronauts: Challenger (Orbiters); Launching; Night Flights (Aircraft); Space-
borne Experiments; Spacecraft Landing

199509019904 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Apollo 12: Pinpoint for science
Sep 30, 1991; In English; 28 min. playing time, in color and black and white, with sound
Report No.(s): NONP–NASA–VT–95–46065; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
This video, using historical film footage, photography, and computer anima-
tion, describes the launch, flight, lunar landing and exploration, and return
flight of Apollo 12, one of the manned lunar missions. The astronauts were
Charles Conrad, Richard Gordon, and Alan Bean. Thirty-six seconds into the
November 14, 1969 launch, the spacecraft was hit by lightning from the thunder-
storm surrounding the launch site. In spite of this mishap, the vehicle and
astronauts were not harmed and continued with their mission. The Yakkee
Clipper (command module) docked with the Intrepid (lunar module) and upon
reaching the Moon, the Intrepid disconnected during lunar orbit and descended to
the Moon’s surface to a landing area previously marked by the Surveyor satel-
lette. After lunar surface exploration, soil sample collection, satellite mainte-
nance, and setting up various lunar surface monitoring equipment (a seismometer and two atmospheric monitors), the Intrepid launched back into
lunar orbit, docked with the Yankee Clipper, and returned to Earth. There are both B/W and color photography and film footage, which includes the earth launch, lunar orbit, descent and ascent of Intrepid on the Moon, return flight, atmospheric
reentry, and recovery on the Earth, and ground to air and space communication
is shown.
CASI
Apollo 12 Flight; Command Modules; Histories; Liftoff (Landing); Lunar
Exploration; Lunar Landing; Lunar Orbit; Lunar Soil; Lunar Surface;
Manned Spacecraft; Moon

19950822986 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Apollo 11: For all mankind
Jan 1, 1969; In English; 34 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–51757; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
Historical film footage of Apollo 11 is shown. The pre-flight, launch,
module docking, lunar orbit, lunar landing, ascent, and return-to-Earth flight is
shown. There are lunar surface shots, Moon views, Earth views from Earth orbit,
Earth views from the Moon, and footage of actual moon walk by astronauts.
Mission control and space to ground control communication is heard.
CASI
Apollo 11 Flight; Earth Observations (From Space); Histories; Lunar Explora-
tion; Lunar Landing; Lunar Orbit; Lunar Surface; Manned Spacecraft; Moon

19950826746 NASA, Washington, DC, USA
Shuttle to Space Station. Heart assist implant, Hubble update, X-30
mock-up
Aug 1, 1992; In English; 15 min. 17 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–63907; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Shuttle to Space Station, Heart Assist Implant, Hubble Update, and X-30
Mockup are the four parts that are discussed in this video. The first part, Shuttle
to Space Station, is focused on the construction and function of the Space
Station Freedom. While part two, Heart Assist Implant, discusses a newly devel-
This video gives a brief history of the Jet Propulsion Laboratory, current missions and what the future may hold. Scenes includes various planets in the solar system, robotic exploration of space, discussions on the Hubble Space Telescope, the source of life, and solar winds. This video was narrated by Jodie Foster. Animations include: close-up image of the Moon; close-up images of the surface of Mars; robotic exploration of Mars; the first mapping assignment of Mars; animated views of Jupiter; animated views of Saturn; and views of a Giant Storm on Neptune called the Great Dark Spot.

CASl
Solar System; Space Exploration; Planets; Sun; Solar Wind

1999002587 NASA Johnson Space Center, Houston, TX USA
1998 Mars Missions Science Briefing
Nov. 13, 1998; In English; Videotape: 58 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999002587; No Copyright; Avail: CASI;
B04, Videotape-Beta: V03, Videotape-VHS

NASA executives gathered together for an interview to discuss the 1998 Mars Mission. A simulated overview of the Lander Mission is presented. Also presented are views of pre-launch activities, countdown, and launch of the spacecraft, burnouts of the first, second, and third engines, and the probe separating from the spacecraft. During this mission the Lander performs in situ investigations that addresses the science theme "Volatiles and Climate History" on Mars. The purpose of this mission is to study the following: climate; life; water; carbon dioxide; and dust particles.

CASl
Mars (Planet); Mars Atmosphere; Mars Environment; Mars Sample Return Mission; Mars Polar Lander

19990036756 NASA, Washington, DC USA
Space 2000 Symposium
Mar. 24, 1999; In English; Sponsored by American Univ., USA; Videotape: 7 hours 38 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–19990036756; No Copyright; Avail: CASI;
B07, Videotape-Beta: V07, Videotape-VHS

The purpose of the Space 2000 Symposium is to present the creativity and achievements of key figures of the 20th century. It offers a retrospective discussion on space exploration. It considers the future of the enterprise, and the legacy that will be left for future generations. The symposium includes panel discussions, smaller session meetings with some panelists, exhibits, and displays. The first session entitled "From Science Fiction to Science Facts" commences after a brief overview of the symposium. The panel discussions include talks on space exploration over many decades, and the missions of the millennium to search for life on Mars. The second session, "Risks and Rewards of Human Space Exploration," focuses on the training and health risks that astronauts face on their exploratory mission to space. Session three, "Messages and Messengers: Informing and Inspire Space Exploration and the Public," focuses on the use of TV medium by educators and actors to inform and inspire a wide variety of audiences with adventures of space exploration. Session four, "The Legacy of Carl Sagan," discusses the influences made by Sagan to scientific research and the general public. In session five, "Space Exploration for a New Generation," two student speakers and the NASA Administrator Daniel S. Goldin address the group. Session six, "Destiny or Delusion? - Humankind's Place in the Cosmos," ends the symposium with issues of space exploration and some thought provoking questions. Some of these issues and questions are: what will be the societal implications if we discover the origin of the universe, stars, or life; what will be the impact if scientists find clear evidence of life outside the domains of the Earth; should there be limits to what humans can or should learn; and what visionary steps should space-faring people take now for future generations.

CASl
Conferences; Mars Exploration; Mars (Planets); Mars Sample Return Mission; Mars Surveyor 98 Program; Extraterrestrial Life; Exobiology

19990036351 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA
Welcome to Outer Space
Aug. 26, 1999; In English; Videotape: 19 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–19990036351; No Copyright; Avail: CASI;
B02, Videotape-Beta: V02, Videotape-VHS

Live footage of the Solar and Heliophysical Observatory (SOHO) spacecraft located at the Spacecraft Assembly and Encapsulation Facility (SAEF 2) is presented. A representative from the European Space Agency (ESA) SOHO project, and Kenneth Sizemore, Project Manager Goddard Space Flight Center, discuss the objectives of the SOHO mission, which are to provide an understanding of how the sun works and also its interaction with the Earth's environment. SOHO will be positioned between the sun and the Earth and will give the
scientist an unobstructed view of the Sun for two years. SOHO will be positioned along with Atlas IIAS which is an Atlas Centaur launch vehicle featuring two solid rocket boosters. Launch is set for November 1995.

CASI
Atlas Centaur Launch Vehicle; SOHO Mission: Booster Rocket Engines; European Space Agency

200001068800 NASA Kennedy Space Center, Cocoa Beach, FL USA XTE Science Briefing from KSCNF Oct. 06, 1995; In English; Videotape: 42 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–2000078608; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The X-ray Timing Explorer (XTE), launched on Dec., 30, 1995, is a Satellite that observes the fast-moving, high-energy worlds of black holes, neutron stars, x-ray pulsars and bursts of X-rays that light up the sky and then disappear forever. This videotape presents a pre-launch science briefing to the press by a few of the scientist and managers associated with the XTE satellite. The moderator for the press briefing is Jim Sahli, from the Public Affairs Office at Goddard Space Flight Center (GSFC). He introduces Alan Bunner, of the High Energy Astrophysics at NASA Headquarters; Fred Lamb, from the University of Illinois; Richard Maslowsky; X Ray Scientist at GSFC; Rick Rothschild, Principal Investigator from the University of California at San Diego; and Dale Schultz, the XTE project manager at GSFC. Dr. Bunner explains the electromagnetic spectrum, the placement of x-rays and the importance of the XTE observations to a better understanding of the Universe. Dr. Lamb explains the difference between white dwarfs, neutron stars and black holes, and the type of observations that the XTE will give to a further understanding of these phenomena. Dr. Maslowsky expands the viewpoint to beyond the galaxy, and explains the interests of scientists who hope to use XTE to further study Quasars and Active Galactic Nuclei. Dr. Rothschild reviews some of the features of XTE, using a diagram to show the features of interest, such as the X-ray Telescopes, and the collecting Proportional Counter Array (PCA). Mr. Schultz presents a videotape tour of the XTE, in which he shows the scientific instruments and other features of the satellite. In this tour, the source of each of the instruments is noted. Questions from the members of the press are then fielded. Many of the questions are about the cost of the XTE and any problems that are anticipated in regards to the launch.

CASI
X Ray Timing Explorer; X Ray Astronomy; X Ray Telescopes; X Ray Sources; X Ray Spectra

200001069043 NASA Kennedy Space Center, Cocoa Beach, FL USA Delta WIND Mission Science Briefing Oct. 31, 1994; In English; Videotape: 12 min. 7 sec. playing time, in color, with sound Report No.(s): NONP–NASA–VT–2000078325; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

A continuation of the question and answer period on the Delta WIND science briefing is presented. See NONP–NASA–VT–2000078324 for live coverage of the WIND science briefing.

CASI
Solar Wind; Space Missions; Earth Magnetosphere; Plasma (Physics)

200001069049 NASA Kennedy Space Center, Cocoa Beach, FL USA Delta WIND Mission Science Briefing Oct. 31, 1994; In English; Videotape: 62 min. 41 sec. playing time, in color, with sound Report No.(s): NONP–NASA–VT–2000078324; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The science objectives of the WIND mission are to: 1) provide complete plasma, energetic particle, and magnetic field input for magnetospheric and ionospheric studies; 2) determine the magnetospheric output to interplanetary space in the up-stream region; 3) investigate basic plasma processes occurring in the near-Earth solar wind; and 4) provide baseline ecliptic plane observations to be used in heliospheric latitudes from ULYSSES. The WIND science briefing is presented by George Diller, NASA public affairs; Dr. Robert L. Carovillano, Project Scientist for the Global Geospace Science Initiative, NASA Headquarters; Dr. Mario H. Acuna, Project Scientist for the WIND Project, Goddard Space Flight Center (GSFC); Dr. Keith W. Ogilvie, Principle Investigator; Solar Wind Experiment at GSFC; Dr. Ianc Louis Bougeret, Principle Investigator, Radio/Plasma Wave Experiment, Paris; and Dr. Eugeny Mazets, Co-Principle Investigator, Russian Gamma Ray Spectrometer Instrument, St. Petersburg, Russia. Dr. Carovillano presents a cartoon slide describing GEOTAIL, POLAR, WIND, SOHO, ULYSSES and Cluster which are the various tools used to study the complex solar terrestrial system. Dr. Ogilvie explains four particle and wave instruments on WIND. These instruments will be used to study the contributions and characteristics of plasma and plasma waves that occur in the solar wind. Dr. Bougeret explains the European participation in the WIND mission. He also shows a slide presentation of SOHO and the CLUSTER spacecraft. Dr. Mazets explains the main objective of the Transient Gamma Ray Spectrometer (TGRS) aboard the WIND spacecraft, which is to perform high resolution measurements of Gamma Ray Burst spectra and time histories, with emphasize on the search for line features in the energy spectra. The briefing ends with a question and answer period. See NONP–NASA–VT–2000078325 for additional question and answer footage.

CASI
Solar Wind; Space Missions; Plasmas (Physics); Delta Launch Vehicle; Earth Magnetosphere

20010856851 NASA, Washington, DC USA Looking Back, Looking Forward: Forty Years of US Human Spaceflight, Parts 1 and 2 May 08, 2001; In English; Videotape: 6 hr. 34 min. 35 sec. playing time, in color, with sound Report No.(s): NONP–NASA–VT–2001083803; No Copyright; Avail: CASI; V04, Videotape-VHS

This video shows footage from the symposium 'Looking Back, Looking Forward: Forty Years of US Human Spaceflight' held at the George Washington University on May 8, 2001. John Logsdon, Director of the GWU Space Policy Institute, introduces Daniel Goldin, NASA Administrator, who briefly discusses 'what it has meant to be a spacefaring nation'. A short video gives an overview of the history of spaceflight, including details on the Cold War space race between the US and the Soviet Union, and the first flights in space and to the moon by the US. Charles Murray presents 'Human Space Flight and American Society'. The Record So Far' as the keynote speaker. Session 1, 'The Experience of Space Flight', consists of the astronauts Bob Crippen, Charles Walker, Mary Ellen Weber, and T.J. Creamer, who discuss their personal experiences with space flight. Session 2 ('Perspectives on the Past Forty Years of Human Space Flight'), Session 3 ('Perspectives on the Next Forty Years of US Human Spaceflight'), and the presentation 'The International Space Station and the Future of Human Space Flight' can be found on 'Looking Back, Looking Forward: Forty Years of US Human Spaceflight, These are all in Part 1. Part 2 consists of the following presentations: (1) 'The Space Flight Revolution Revisited' by William Simons Rainbird; (2) 'Mutual Influences: USSR-US Interactions during the Space Race' by Asif Siddiqi; (3) 'Making Human Space Flight as Safe as Possible' by Fred Gregory; and (4) 'What if? Paths Not Taken' by John Logsdon. Session 3, 'Perspectives on the Next Forty Years of Human Spaceflight', consists of Neil de Grasse Tyson presenting 'Humans or Robots? Choosing Paths of the Frontier of Space Exploration', Robert Zubrin presenting 'Human Space Flight: An Element of American Greatness', Lori Zoloth presenting 'The Ethics of Human Space Flight, and James Garvin presenting 'NASA Faces the Future'. The final presentation is 'The International Space Station and the Future of Human Space Flight' by Bill Readly, Deputy Associate Administrator 60hr Space Flight, NASA, and William Shepherd, Commander of Expedition 1, International Space Station.

CASI
Conferences; Space Flight; Histories; International Space Station; Space Exploration

20010857599 NASA Langley Research Center, Hampton, VA USA Apollo 10 – II 2001; In English; Videotape: 57 min. 43 sec. playing time, in color, with sound Report No.(s): NONP–NASA–VT–2001089735; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video gives overviews of the Apollo 10 and Apollo 11 missions to the moon, including footage from the launches and landings of the Command Module Columbia, which is used for both flights. The Apollo 10 crewmembers, Commander Thomas Stafford, Command Module Pilot John Young, and Lunar
Module Pilot Eugene Cernan, are seen as they suit-up in preparation for launch and then as they experiment with the microgravity environment on their way to the moon. The moon’s surface is seen in detail as the Command Module orbits at an altitude of 69 miles. The Apollo 11 crewmembers, Commander Neil Armstrong, Command Module Pilot Michael Collins, and Lunar Module Pilot Buzz Aldrin, are seen during various training activities, including simulated lunar gravity training, practicing collecting lunar material, and using the moonquake detector. Footage shows the approach and landing of the Lunar Module Eagle on the moon. Armstrong and Aldrin descend to the moon’s surface, collect a sample of lunar dust, and erect the American flag. Eagle’s liftoff from the moon is seen.

CASI
Spacecraft Launching; Crew Procedures (Inflight); Crew Procedures (Preflight); Astronaut Training; Moon; Lunar Surface; Spacecraft Landing

Footage is shown of the crew of Apollo 11 (Commander Neil Armstrong, Lunar Module Pilot Edwin Aldrin Jr., and Command Module Pilot Michael Collins) inside the spacecraft as they fly from the Earth to the Moon. A scene shows the entire Earth as seen from Apollo.

CASI
Apollo 11 Flight; Crew Procedures (Inflight); Spacecraft

The Apollo 11 spacecraft is lifted from the ocean after its water landing (not shown) onto the deck of the USS Hornet. The crewmembers, Commander Neil A. Armstrong, Lunar Module Pilot Edwin E. Aldrin, Jr., and Command Module Pilot Michael Collins, are seen going from the spacecraft to the quarantine chambers. They talk to family members over the phone after their arrival at the Ellington Air Force Base. Footage shows the celebration of Armstrong’s birthday and the release of the crew from quarantine.

CASI
Command Modules; Spacecrews

A prelaunch press conference shows the crewmembers of Apollo 11, Commander Neil A. Armstrong, Lunar Module Pilot Edwin E. Aldrin, Jr., and Command Module Pilot Michael Collins, answering questions about their upcoming mission (this section has sound, the rest of the video is without sound). Footage is seen of the crew during training for the extravehicular activity portion of the mission and using the flight simulator.

CASI
Spacecrews; Extravehicular Activity; Lunar Module; Astronaut Training; Prelaunch Summaries

Footage shows the crew of Apollo 11, Commander Neil Armstrong, Lunar Module Pilot Edwin Aldrin Jr., and Command Module Pilot Michael Collins, during various pre-mission activities. They are seen training for the extravehicular activity on the surface of the Moon, giving speeches in front of the White House, and during a parade in Houston.

CASI
Extravehicular Activity; Astronaut Training; Crew Procedures (Preflight); Apollo 11 Flight

This video shows footage of ground control when the Apollo 11 spacecraft is recovered from its water landing.

CASI
Ground Based Control; Apollo 11 Flight
This video shows footage of the ground support team tracking Apollo 11’s progress on its way to the Moon.

CASI

*Ground Support Systems: Apollo 11 Flight*

20010115233 NASA Johnson Space Center, Houston, TX USA

*Apollo 11 Facts Project: Earth Views and Crew Activities*

Jun. 17, 1994; In English; Videotape: 1 hr. 32 min. 34 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-2001185555; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The crewmembers of Apollo 11, Commander Neil Armstrong, Lunar Module Pilot Edwin Aldrin, Jr., and Command Module Pilot Michael Collins, are seen performing various on-orbit activities, including systems identification and Lunar Module checkout. The Earth is seen from space.

CASI

*Checkout: Earth Observations (From Space): Apollo 11 Flight: Crew Procedures (Inflight)*

20010116507 NASA Johnson Space Center, Houston, TX USA

*Apollo 11 Facts [Post Flight Press Conference], Part 1 of 2*

Jun. 28, 1994; In English; Videotape: 1 hr. 14 min. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-2001181405; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Apollo 11 Commander Neil Armstrong, Lunar Module Pilot Edwin Aldrin, Jr., and Command Module Pilot Michael Collins are seen during this post-mission conference, where they give details about the mission, concentrating on their activities on the Moon. They then answer questions from the audience. The second part of this conference is seen on “Apollo 11 Facts: Post Flight Press Conference, Part 2 of 2” (internal ID 2001181396).

CASI

*Apollo 11 Flight: Postflight Analysis: Moon*

20010117040 NASA Johnson Space Center, Houston, TX USA

*Apollo 11 Facts: Ceremony in the Astrodome*

Aug. 29, 1994; In English; Videotape: 21 min. 40 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-2001181397; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video shows the ceremony in the Astrodome to honor the Apollo 11 astronauts, Commander Neil Armstrong, Lunar Module Pilot Edwin Aldrin, Jr., and Command Module Pilot Michael Collins.

CASI

*Astronauts: Apollo 11 Flight*

20010117032 NASA Johnson Space Center, Houston, TX USA

*Apollo 13 Facts: Recovery*

Jun. 01, 2001; In English; Videotape: 1 hr. 3 min. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-2001181399; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This video shows footage of the Expedition 1 crew, William Shepherd, Yuri Gidzenko, and Sergei Krikalev, training in the Soyuz spacecraft and inspecting the Service Module and Node 1. The three crewmembers are seen training for winter survival and extravehicular activity (in the Neutral Buoyancy Lab). They are taught how to use the fire extinguishers and extravehicular activity tools. Scenes show Gidzenko training in the crew compartment trainer and on the Mir Space Station and Krikalev on the STS-60 mission. A computer animation shows the Soyuz spacecraft docking with the Service Module.

CASI

*Computer Animation: Extravehicular Activity: International Space Station: Training Devices: Astronaut Training*

20010117037 NASA Johnson Space Center, Houston, TX USA

*Apollo 11 Facts [Lunar EVAs]*

Jun. 23, 1994; In English; Videotape: 1 hr. 7 min. 45 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-2001181406; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This video shows the water landing of the Apollo 13 spacecraft. A computer animation shows the atmospheric reentry of the Command Module.

CASI

*Atmospheric Entry: Water Landing: Apollo 13 Flight: Spaceship Landing*
Apollo 11 Commander Neil Armstrong and Lunar Module Pilot Edwin Aldrin, Jr., are seen on the surface of the Moon performing their extravehicular activities (EVAs).

CASI
Extravehicular Activity; Moon; Apollo 11 Flight

20010117039 NASA Johnson Space Center, Houston, TX USA
Apollo 11 Facts [Post Mission Honorary Ceremony]
Jan. 01, 2001; In English; Videotape: 1 hr. 5 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001181409; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
The Apollo 11 astronauts, James Lovell, Jr., John Swigert, Jr., and Fred Haise, Jr., are shown performing various on-orbit activities. The Lunar Module rendezvous and docking, tunnel repressurization, and S4-B separation are also seen. The press conference section of this video has sound, the headlines section does not.
CASI
Astronauts; Apollo 11 Flight

20010117040 NASA Johnson Space Center, Houston, TX USA
Apollo 11 Facts [Post Flight Press Conference]
Jan. 01, 2001; In English; Videotape: 1 hr. 16. min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001181410; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
The Apollo 11 astronauts, James Lovell, Jr., John Swigert, Jr., and Fred Haise, Jr., are seen during this post flight press conference. They describe their mission and answer questions from the audience.
CASI
Apollo 11 Flight; Astronauts: Postflight Analysis

20010117041 NASA Johnson Space Center, Houston, TX USA
Apollo 11 Facts: Press Conference
Jan. 01, 2001; In English; Videotape: 1 hr. 24. min. playing time, in color, most with sound
Report No.(s): NONP--NASA--VT--2001181430; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
Flight Director Gene Krautz gives an overview of the Apollo 13 mission as corrections are made in the power down checklist, passive thermal control, and orbital burns after the spacecraft runs into problems. He then answers questions from the press. The astronauts are shown. The footage then shows newspaper headlines “We’re Not Concerned” and “Getting Ready to Land” as people watch televisions to see if the astronauts landed safely.
CASI
Apollo 13 Flight: Spacecraft Landing; Procedures

20010117042 NASA Johnson Space Center, Houston, TX USA
Apollo 13 Facts [On-Orbit Activities]
Jan. 01, 2001; In English; Videotape: 1 hr. 1 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001174283; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
Footage shows the on-orbit Apollo 13 Command Module checkout and tour of the Lunar Module.
CASI
Checkout: Command Modules; Lunar Module; Apollo 13 Flight

20010117043 NASA Johnson Space Center, Houston, TX USA
ISS Node 1 and 2 Resource Reel
Sep. 01, 1995; In English; Videotape: 1 hr. 14. min. 24. sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001181408; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
This video shows Nodes 1 and 2 being constructed (machined, refined, and washed) and tested (pressure tests) for the International Space Station. A computer animation shows the Space Shuttle as it attaches to an orbiting Node.
CASI
Machining: Refitting; Space Station Structures

20010117047 NASA Johnson Space Center, Houston, TX USA
Apollo 11 Facts: First Moonwalks
Jun. 22, 1994; In English; Videotape: 1 hr. 20. min. 15 sec. playing time, black and white, with sound
Report No.(s): NONP--NASA--VT--2001181432; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
This video shows footage from the surface of the Moon as the astronauts Neil Armstrong and Edwin Aldrin, Jr. walk on the Moon for the first time. They are seen descending from the Lunar Module and collecting soil samples.
CASI
Moon; Soil Sampling; Crew Procedures (Inflight); Lunar Surface; Apollo 11 Flight

13 ASTRODYNAMICS
Includes powered and free-flight trajectories; and orbital and launching dynamics.

19940011026 NASA, Washington, DC, USA
Space Flight: The application of orbital mechanics
Dec 1, 1989; In English; 35 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--93--190221; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
This is a primer on orbital mechanics originally intended for college-level physics students.

CASI
Orbital Mechanics: Space Navigation

2000080177 NASA Kennedy Space Center, Cocoa Beach, FL USA

Mars Observer Orbit Insertion Briefing
Aug. 24, 1993; In English; Videotape: 62 min. 24 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–2000081555; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Steve Wall is the host of this video entitled, "Return to the Red Planet". Live animation of the Mars Observer orbiting Mars is presented. Steve Wall explains the spacecraft insertion maneuver and also explains the purpose for the Mars Observer launch. Live coverage of the Cape Canaveral launch of the Mars Observer is also presented. Suzanne Dodd, Chief of the Mission Planning team describes the burn start and how the spacecraft will be captured by Mars' gravity.

Glenn Cunningham, Mars Observer Project Manager, gives background information on the Mars Observer and describes the organizations behind the Mars Observer spacecraft, such as the Deep Space Network, the Mission Operations Support Office, Science Investigators, the Flight Engineering Office, Operations Office, and the Ground Data System Office. Dr. William Pirotrowski, Acting Director, Solar System Exploration Division, NASA, talks about the purpose of the Mars Pathfinder which is to develop the technology and systems for landing small science packages on Mars. Mr. Roger Gibbs, Former Mars Observer Spacecraft Systems Engineer, tells us how the Mars Observer was built and describes the structural elements on the Mars Observer. The 11-month cruise period for the spacecraft is given by Joseph Beener, Manager of the Engineering office. The thrust for the Mars Orbit Insertion is described by Ronald Klemetsen, Technical Manager, Propulsion Subsystem Jet Propulsion Laboratory (JPL). George Chen, Lead Engineer Attitude and Articulation Subsystem Spacecraft team, explains the importance of the attitude control engines on the spacecraft.

Marvin Traxler, Manager of Tracking and Data Acquisition, describes how searching for a signal from the Mars Observer works. See NONP-NASA–VT–2000081555 for a continuation of this discussion with Marvin Traxler.

CASI
Mars Observer; Orbit Insertion; Spacecraft Maneuvers; Spacecraft Launching

2000080367 NASA Kennedy Space Center, Cocoa Beach, FL USA

Mars Observer Orbit Insertion Briefing
Aug. 24, 1993; In English; Videotape: 56 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–2000081555; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

For the first part of this briefing, see NONP-NASA–VT–2000081555. Marvin Traxler continues his discussion on tracking from the Mars Observer. Julie Webster, Lead Engineer, Telecommunications Subsystem, is introduced. She explains how signals coming back from Mars are detected. Dr. Pasquale Esposito talks about flyby orbits and capture orbits. He says that frequencies coming from the spacecraft can determine if the spacecraft has flown by Mars, or if a capture orbit has occurred. Charles Whetsel, System Engineer Spacecraft Team, presents a computer program. He shows where the signal will appear on the computer from the spacecraft. Suzanne Dodd presents orbit insertion geometry: Dr. Arden Albee, Project Scientist Mars Observer Project, Cal Tech tech, says that Mars is studied to get more data to confirm their hypotheses derived from previous Mars Missions such as the Viking Mars Program and the Mariner Program. Dr. Albee also describes instrumentation on the Mars Observer such as the Ultra Stable Oscillator, Mars Orbiter Laser Altimeter, and Magnetometer. The camera on the spacecraft is similar to a fax machine because it scans one line at a time as the spacecraft orbits Mars. Dr. Michael Malin, Principle Investigator Mars Observer Camera, Malin Space Science Systems, Inc., describe this process.

CASI
Mars Missions; Mars Observer; Orbit Insertion; Spacecraft Orbits

14
GROUND SUPPORT SYSTEMS AND FACILITIES (SPACE)

Includes launch complexes, research and production facilities; ground support equipment, e.g., mobile transporters; and test chambers and simulators. Also includes extraterrestrial bases and supporting equipment. For related information see also 06 Research and Support Facilities (Air).

1994010262 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS–35 crew trash compactor briefing
May 1, 1990; In English; 7 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190288; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Parker, Brand, and Gardner are shown in the CFT learning how to work the trash compactor on the middeck.

Author
Garbage; Spacecrafts; Waste Disposal

1994010314 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS–35 integrated sim in SMS and MOCR
May 1, 1990; In English; 22 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190288; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

A clip that intersperses between the MOCR and the SMS during an STS-35 sim is provided.

Author (revised)
Space Transportation System; Space Transportation System Flights

1994010763 NASA, Washington, DC, USA

Human factor studies
Aug. 1, 1985; In English; 2 min. 55 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–89–190379; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video tape looks at research done in the Manned Vehicle Systems Research Facility at ARC to investigate issues related to aircraft pilot and crew performance.

CASI
Aircraft Pilots; Flight Crews; Human Factors Engineering; Human Performance

1994010792 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS–30 suited ascent training in fixed base SMS
Apr. 1, 1989; In English; 10 min. 59 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190379; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The Space Shuttle crew is shown training for the ascent portion of the mission in the fixed base SMS.

CASI
Aircraft: Astronaut Training; Space Shuttle Missions

1994010797 NASA Goddard Space Flight Center, Greenbelt, MD, USA

GFSC–TV demo tape
Jan. 1, 1989; In English; 8 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190384; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This demonstration tape produced by and for the Goddard Space Flight Center Television facility shows some of the capabilities of this state of the art facility that are available to projects at Goddard.

CASI
Research Facilities; Test Facilities

1994010680 NASA Goddard Space Flight Center, Greenbelt, MD, USA

Stock footage of Goddard Space Flight Center and Headquarters
Jun. 1, 1989; In English; 25 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190387; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Produced for Century Teleproductions in Boston, MA this video is a
The Space Shuttle crew is shown lighting a pond of gasoline and then performing firefighting tasks. The crew is also shown tasting food including... performing extravehicular activity (EVA) equipment checkouts in the CCT middeck and airlock.

19940419098 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Astronaut Training: Consumables (Spacecraft Supplies); Fire Fighting; Space Vehicle Checkout Program; Spacecraft Maintenance

19940901005 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Commitment to challenge
May 1, 1988; In English; 13 min. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--93--190320; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This videotape gives a brief overview of the NASA JSC including the following: mission control, mission operations, and mission planning: new scientific and technologies developments; and educational programs.
CASI
Mission Planning; NASA Space Programs: Research Facilities; Space Laboratories

19940901100 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Commitment to challenge
May 1, 1988; In English; 13 min. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--93--190358; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video shows the crew entering the SMS for the long-duration SIM in preparation for their flight.
CASI
Astronaut Training: Astronauts: Long Duration Space Flight; Simulation

19940227238 NASA Lewis Research Center, Cleveland, OH, USA
Aerospace test facilities at NASA LERC Plum Brook
Oct 1, 1992; In English; 10 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--94--9955; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
An overview of the facilities and research being conducted at LERC's Plum Brook field station is given. The video highlights four main structures and explains their uses. The Space Power Facility is the world's largest space environment simulation chamber, where spacecraft hardware is tested in simulations of the vacuum and extreme heat and cold of the space plasma environment. This facility was used to prepare Atlas I rockets to ferry CRRES into orbit; it will also be used to test space nuclear electric power generation systems. The Spacecraft Propulsion Research Facility allows rocket vehicles to be hot fired in a simulated space environment. In the Cryogenic Propellant Tank Facility, researchers are developing technology for storing and transferring liquid hydrogen in space. There is also a Hypersonic Wind Tunnel which can perform flow tests with winds up to Mach 7.
CASI
Aerospace Engineering; Cryogenic Fluid Storage; Environmental Tests; NASA Programs; Nuclear Electric Power Generation; Research and Development; Research Facilities; Research Projects; Space Environment Simulation; Spacecraft Propulsion: Test Facilities

19940902065 NASA John C. Stennis Space Center, Bay Saint Louis, MS, USA
Stennis Space Center 1992
Jan 1, 1992; In English; 9 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--94--12924; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The history and a description of the John C. Stennis Space Center is presented.
CASI
Histories: NASA Space Programs: Test Facilities

19940902964 NASA Lewis Research Center, Cleveland, OH, USA
The making of the time capsule
Jan 1, 1991; In English; 7 min. 55 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--94--12935; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video highlights the celebration of NASA Lewis Research Center's 50th anniversary celebrations, to commemorate this event, employees designed and manufactured a statue that contains a time capsule. The design process is shown, as well as the unveiling ceremony which features speeches by the center director and local dignitaries.
CASI
NASA Programs: Structures

19940902961 NASA John C. Stennis Space Center, Bay Saint Louis, MS, USA
John C. Stennis Space Center overview
May 1, 1994; In English; 11 min. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--94--12944; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
An overview of research being conducted at the John C. Stennis Space Center is given. The Space Center is not only a NASA Space Flight Center, but also houses facilities for 22 other governmental agencies. The programs described are Stennis' High Heat Flux Facility, the Component Test Facility (used to test propulsion rockets and for the development of the National Aerospace Plane), oceanographic and remote sensing research, and contributions to the development of Space Station Freedom.
CASI
National Aerospace Plane Program; Research Facilities: Space Station Freedom; Test Facilities

19940902925 NASA John C. Stennis Space Center, Bay Saint Louis, MS, USA
Way station to space: The history of Stennis Space Center
Jan 1, 1994; In English; 25 min. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--94--12947; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video traces the history of the Stennis Space Center from its origins as...
a test facility for President Kennedy’s initiative to put a man on the moon to its present day tasks as a leading center for propulsion research and its contributions towards the development or Space Station Freedom.

CASI

Histories; NASA Programs: Test Facilities

19950804142 NASA, Washington, DC, USA

Goldstone
Aug 1, 1991; In English; 6 min. 21 sec. playing time, with sound
Report No.(s): NONP--NASA--VT--94--23147; No Copyright; Avail: CASI;
B01, Videotape-Beta: V01, Videotape-VHS

Goldstone is a complex of deep space communications antennas that command and receive information from satellites or receive information from satellites or about distant stars and galaxies. The video feature discusses the Goldstone complex and its 30 plus years of service to NASA.

CASI

Ground Stations: Space Communication; Tracking Stations

2000011228 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-103 Payload Removal From Shipping Canister PSSP: Discovery Bubble Repair Mission
Aug 16, 1999; In English; Videotape: 3 min., 30 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000008207; No Copyright; Avail: CASI;
B01, Videotape-Beta: V01, Videotape-VHS

Live footage of the STS-103 payload, Orbital Replacement Unit Carrier, removal from a shipping canister is shown. The carrier is a modified Spacechel pult that contains the tools and replacement parts necessary to service the HST.

CASI

Space Transportation System; Space Shuttle Payloads; Discovery (Orbiters); Ground Handling

2000058142 NASA Kennedy Space Center, Cocoa Beach, FL USA

Atlas GEOS-J Pad Activity with Blockhouse
May 19, 1995; In English; Videotape: 4 min. 32 sec. playing time, in color, without sound
Report No.(s): NONP--NASA--VT--2000078626; No Copyright; Avail: CASI;
B01, Videotape-Beta: V01, Videotape-VHS

Footage shows night shots of the erected Atlas GEOS-J on the launch pad, and work being done.

CASI

Launching Pads: Preflight Operations; Flight Operations: Aircraft Maintenance

15 LAUNCH VEHICLES AND LAUNCH OPERATIONS

Includes all classes of launch vehicles, launchspaces vehicle systems, and boosters; and launch operations. For related information see also 16 Spacecraft Design, Testing, and Performance; and 20 Spacecraft Propulsion and Power.

19940810868 NASA, Washington, DC, USA

Mission San Marco
Nov 1, 1988; In English; 3 min. 14 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--93--190239; No Copyright; Avail: CASI;
B01, Videotape-Beta: V01, Videotape-VHS

The videotape shows a satellite launch from San Marco, Africa.

CASI

San Marco Satellites: Spacecraft Launching

19950806716 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

White Sands Test Facility
Jan 1, 1994; In English; 27 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--94--28237; No Copyright; Avail: CASI;
B02, Videotape-Beta: V02, Videotape-VHS

This is an overview of the White Sands Test Facility’s role in ensuring the safety and reliability of materials and hardware slated for launch aboard the Space Shuttle. Engine firings, orbital flights debris impact tests, and propulsion tests are featured as well as illustrating how they provide flight safety testing for the Johnson Space Center, other NASA centers, and various government agencies. It also contains a historical perspective and highlights of major programs that have been participated in as part of NASA.

JSC


19950807287 NASA Goddard Space Flight Center, Greenbelt, MD, USA

Delta, America’s space ambassador
Oct 1, 1994; In English; 24 min. playing time
Report No.(s): NONP--NASA--VT--94--20868; No Copyright; Avail: CASI;
B02, Videotape-Beta: V02, Videotape-VHS

This video presentation features the major satellites launched by the Delta rocket in a celebration of this dependable launch vehicle’s past.

GSFC

Delta Launch Vehicle: Space Programs

19950811725 NASA Goddard Space Flight Center, Greenbelt, MD, USA

Meteor 3/TOMS launch of 15 August 1991 in Plesetsk, USSR
Aug 3, 1994; In English; 11 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--95--37004; No Copyright; Avail: CASI;
B01, Videotape-Beta: V01, Videotape-VHS

The TOMS launch of August 15, 1991, was a joint effort between the U.S.S.R. and the USA. The pre-launch briefing, a tour of the TOMS storage site, its delivery and setup at the launch site, and the actual launch were viewed in this video, along with a post-launch conference and a dinner. The launch occurred in Plesetsk, U.S.S.R., with the TOMS payload being launched on a Soviet Meteor. Officials from NASA were present for the launch.

CASI

Atmospheric Circulation: International Cooperation; Liftoff (Launching); Meteorological Satellites; Ozone Depletion; Payloads; Total Ozone Mapping Spectrometer

19990832573 NASA Johnson Space Center, Houston, TX USA

Delta II Stardust Pre-Launch Press
Feb. 05, 1999; In English; Videotape: 1 hour 2 min. 13 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1999036752; No Copyright; Avail: CASI;
B04, Videotape-Beta: V04, Videotape-VHS

Coverage of the press conference for the Stardust Launch Mission is presented. The objective of this press conference is to identify and explain the purpose of the Stardust Mission. A question and answer phase followed the mission objective. Also presented was an animation of the exact mission highlights, which included the orbit of the probe, collection of dust materials and space particles, and deployment of the solar panels.

CASI

Conferences: Return to Earth Space Flight; Stardust Mission: Space Probes

19990832574 NASA Johnson Space Center, Houston, TX USA

Delta II Stardust Mission Briefing
Jan. 13, 1999; In English; Videotape: 1 hour 3 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1999036753; No Copyright; Avail: CASI;
B04, Videotape-Beta: V04, Videotape-VHS

An overview of the Stardust Mission is shown. NASA personnel is seen discussing and explaining the path of the probe. An animated clip is presented to demonstrate how the probe will collect interstellar dust materials, and space particles by using an aerogel. The animation also described the process by which the probe will take photographs of the comets from the on board camera. The dust samples and the photographs will be analyzed in order to learn more about interstellar materials.

CASI

Conferences; Stardust Mission; Space Probes; Cosmic Dust; Space Debris
Rocket from Complex 17. The primary objective of the Delta XTE is to study time variability and broadband spectral phenomena in the X-ray emission from astronomical sources. XTE is designed for a required lifetime of two years with a goal of five years and will be inserted into a low-Earth circular orbit at an altitude of 600 km. The launch was postponed due to unfavorable wind conditions aloft.

CASI Anomalies: X Ray Timing Explorer; Spacecraft Launching; Delta Launch Vehicle

Delta XTE Launch Activities (Scrub #2)
Dec. 11, 1995; In English; Videotape: 3 min. playing time, in color, without sound
Report No.(s): NONP-NASA-2000078623; No Copyright; Avail: CASI; B01, Videotape-VHS

This NASA Kennedy Space Center video presents Delta XTE (X-Ray Timing Explorer) launch activities on 12/11/95. The launch was rescheduled for next weekend due to out of limit upper level wind conditions.

CASI X Ray Timing Explorer; Delta Launch Vehicle

Atlas-EO/SP Propulsion Unit and Electrical Module Uncrating at SAEF-2
Aug. 08, 1995; In English; Videotape: 6 min. playing time, in color, no sound
Report No.(s): NONP-NASA-200007855; No Copyright; Avail: CASI; B01, Videotape-VHS

The uncrating of the Atlas-EO/SP's (Solar and Heliospheric Observatory) electrical and propulsion units in the Spacecraft Assembly and Encapsulation Facility (SAEF-2) is shown.

CASI SOHO Mission; Atlas Centaur Launch Vehicle; Electronic Modules: Propulsion; Ground Handling; Spacecraft Modules

Atlas Centaur 77 GOES-J Mated to Centaur at Cape Canaveral Air Station Complex 36B
May 06, 1995; In English; Videotape: 4 min. playing time, in color, no sound
Report No.(s): NONP-NASA-200007855; No Copyright; Avail: CASI; B01, Videotape-VHS

The Geostationary Operational Environmental Satellite-J (GOES-J), a weather satellite to be launched aboard the Atlas I rocket, is hoisted into the Pad 36-B gantry and mated to the Atlas Centaur 77 (AC-77) rocket.

CASI GOES Satellites; Launching Fails; Atlas Centaur Launch Vehicle: Preflight Operations

Atlas SOHO Wet Dress Rehearsal
Oct. 30, 1995; In English; Videotape: 7 min. playing time, in color, no sound
Report No.(s): NONP-NASA-2000078649; No Copyright; Avail: CASI; B01, Videotape-VHS

The Atlas launch vehicle Wet Dress Rehearsal (WDR) is shown. The WDR verifies the launch readiness of the vehicle, the launch support equipment at the pad and in the blockhouse.

CASI Atlas Launch Vehicles: Ground Handling; Prelaunch Tests

19950007846 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta XTE Launch Activities and Scrub (Anomaly) at Cape Canaveral Air Station Complex 17
Dec. 17, 1995; In English; Videotape: 4 min. playing time, in color, without sound
Report No.(s): NONP-NASA-2000078620; No Copyright; Avail: CASI; B01, Videotape-VHS

This NASA Kennedy Space Center video presents launch activities of the Delta X-Ray Timing Explorer and scrub aboard a McDonnell-Douglas Delta II rocket from Complex 17. The primary objective of the Delta XTE is to study time
Footage shows the erection of the Atlas GEOS I on the launch pad.

**CASI**

**Construction: GEOS Satellites (ESA): Atlas Launch Vehicles**

**20000058191** NASA Kennedy Space Center, Cocoa Beach, FL USA  
**Delta-WIND Solar Panel Repair and Move at Cape Canaveral Air Station, Hangar AO**  
Sep. 13, 1994; In English; Videotape: 4 min. 56 sec. playing time, in color, no sound  
Report No.(s): NONP-NASA-VT-2000080447; No Copyright; Avail: CASI;  
B01, Videotape-Beta; V01, Videotape-VHS

This NASA Kennedy Space Center video release presents footage of workcrews moving the WIND solar panel in order to make repairs in Hangar AO prior to launch at Cape Canaveral Air Station, Sep. 13, 1994. WIND was launched on November 1, 1994 and is the first of two NASA spacecraft in the Global Geospace Science initiative and part of the International Solar Terrestrial Physics (ISTP) Project.

**CASI**  
**Solar Arrays; Spacecraft Maintenance**

**20000059202** NASA Kennedy Space Center, Cocoa Beach, FL USA  
**RADARSAT Launch**  
Nov. 01, 1995; In English; Videotape: 2 hrs. 30 min. playing time, in color, with sound  
Report No.(s): NONP-NASA-VT-2000078226; No Copyright; Avail: CASI;  
B015, Videotape-Beta; V05, Videotape-VHS

The footage begins with scenes from Space Launch Complex 2 at Vandenberg AFB, CA, including the Canadian Space Agency’s RADARSAT satellite and Delta II Launch Vehicle on the launch pad. There is pre-recorded footage of the McDonnell Douglas and NASA launch teams in the blockhouse and pre-recorded information from the Canadian Space Agency about the RADARSAT mission. The rest of the footage returns to “live” coverage of the launch.

**CASI**  
**Delta Launch Vehicle; RADARSAT Launching Bases; Launching**

**20000059206** NASA Kennedy Space Center, Cocoa Beach, FL USA  
**Delta/NEAR Launch**  
Feb. 17, 1996; In English; Videotape: 60 min. 14 sec. playing time, in color, with sound  
Report No.(s): NONP-NASA-VT-2000078322; No Copyright; Avail: CASI;  
B003, Videotape-Beta; V03, Videotape-VHS

A continuation of the live presentation of the Delta/NEAR Earth Asteroid Rendezvous Spacecraft (NEAR) launch is presented. Data from the launch of NEAR is anticipated. While waiting for data to be received, a video tape is shown by Andrew Santo of the Johns Hopkins University Applied Physics Laboratory in Laurel, Maryland. Data is finally received from Guam and all of the spacecraft functions are proper. For the first part of the Delta/NEAR launch, see NONP-NASA-VT-2000078233.

**CASI**  
**Asteroid Missions: Spacecraft Launching; Near Earth Asteroid Rendezvous Mission; Delta Launch Vehicle**

**20000060840** NASA Kennedy Space Center, Cocoa Beach, FL USA  
**ATLAS-2 Video News Release**  
Mar. 30, 1993; In English; Videotape: 2 min. 38 sec. playing time, in color, with sound  
Report No.(s): NONP-NASA-VT-2000081544; No Copyright; Avail: CASI;  
B01, Videotape-Beta; V01, Videotape-VHS

This NASA Kennedy Space Center (KSC) video presents a Marshall Space Flight Center Television (MSFC-TV) news release describing the objectives of the Atmospheric Laboratory for Applications in Science-2 (ATLAS-2), which is being flown on STS-56. Dr. Tim Miller (Mission Scientist), Dr. Martha Torr (Mission Scientist), and Teresa Vanhooser (Mission Manager) explain that the ATLAS-2 mission is being launched to study earth atmospheric interactions with the sun in general and how manmade chemicals and pollution are contributing to ozone depletion in our atmosphere in particular. Seven instruments comprise the core payload. ATLAS-2 is an integral part of the Spacelab contribution to NASA’s Mission to Planet Earth and characterizes the chemical and physical components of Earth’s middle atmosphere and the solar energy injected in the atmosphere, studies that began on ATLAS-1.

**CASI**  
**Spacelab; Spacelab Payloads; Earth Atmosphere; Solar Activity**

**20000060841** NASA Kennedy Space Center, Cocoa Beach, FL USA  
**ATLAS-1 Video News Release**  
Mar. 06, 1992; In English; Videotape: 2 min. 28 sec. playing time, in color, with sound  
Report No.(s): NONP-NASA-VT-2000081543; No Copyright; Avail: CASI;  
B01, Videotape-Beta; V01, Videotape-VHS

Allen Kenitzer, from Marshall Space Flight Center (MSFC), narrates this NASA Kennedy Space Center video presenting a MSFC-Television news release describing the overall scientific objectives of the Atmospheric Laboratory for Applications in Science-1 (ATLAS-1) Spacelab mission. Byron Lichtenberg (NASA Science Astronaut) and Anthony O’Neil (ATLAS-1 Mission Manager) explain that the 13 sophisticated and complementary instruments carried in shuttle Atlantis’ payload bay are designed to identify the chemical species in our atmosphere, to measure the Sun’s energy falling on and entering the atmosphere, to study the behavior of charged particles in the electric and magnetic fields surrounding the earth, and to gather ultraviolet light from stars and galaxies. ATLAS-1 is the first Spacelab flight of the National Aeronautics and Space Administration’s (NASA’s) Mission to Planet Earth.

**CASI**  
**Spacelab; Spacelab Payloads; Earth Atmosphere; Solar Activity; Ultraviolet Radiation; Space Shuttle Missions**

**20000060864** NASA Kennedy Space Center, Cocoa Beach, FL USA  
**Delta XTE Spacecraft Activities at CCAS Skid Strip**  
Dec. 10, 1995; In English; Videotape: 3 min. 30 sec. playing time, in color, without sound  
Report No.(s): NONP-NASA-VT-2000078619; No Copyright; Avail: CASI;  
B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the night launch activities of the Delta XTE Spacecraft. The activities for 12/10/95 were scrubbed.

**CASI**  
**Delta Launch Vehicle; Preflight Operations; Flight Operations; Crew Procedures (Preflight)**

**20000062363** NASA Kennedy Space Center, Cocoa Beach, FL USA  
**Delta II Geotail — 1st Stage and Solid Motor Booster Erection**  
Jul. 22, 1992; In English; Videotape: 2 min. playing time, in color, no sound  
Report No.(s): NONP-NASA-VT-2000078584; No Copyright; Avail: CASI;  
B01, Videotape-Beta; V01, Videotape-VHS

The Geotail mission’s goal was to investigate the structure and dynamics of the geomagnetic tail that extends on the nightside of the Earth. The launch date was July 24, 1992. This video shows the Delta II on the pad, being prepared for the launch. The first stage and the solid motor booster are shown being moved into place on the rocket.

**CASI**  
**Construction: Delta Launch Vehicle: Rocket Vehiciles**

**20000062366** NASA Kennedy Space Center, Cocoa Beach, FL USA  
**Mars Observer Spacecraft Processing**  
Sep. 25, 1992; In English; Videotape: 51 min. 36 sec. playing time, in color, with sound  
Report No.(s): NONP-NASA-VT-2000078547; No Copyright; Avail: CASI;  
B03, Videotape-Beta; V03, Videotape-VHS

Footage shows various Mars Observer activities. Scenes include the checkout of the radar pin, the arrival of both the transfer orbit stage and the Mars Observer Spacecraft. Also shown are the mating of the spacecraft, pre-launch activities, countdown, animation of the Martian Environment, and replays of the launching of the Titan satellite.

**CASI**  
**Mars Observer; Mars Missions; Mars Exploration; Mars Environment**
Atlas Centaur Launch Vehicle;
CASI

cities, and some trouble that the Observer is having. 'he panelists m'e also seen
tile Jet Propulsion Laborat_xy. The speakers discuss the launch procedm'es, activ-
Langley Researdr Center; Sid Sm_cier, Transfer Orbit Stage, DhTector from
Manager from NASA Headqumters; James Wornack, NASA

Speakers includes: William Piotrowski, Program
B02, Videotape-Beta; V02, Videotape-VHS

Report No.(s): NONP NASA VT 200061533; No Copyright; Avail: CASI;

AC 67 Launch Video
Mar. 26, 1987; In English; Videotape: 2 min. 4 sec. playing time, in color, with
sound
Report No.(s): NONP-NASA-VT-200068612; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Live footage of the Unmanned Atlas Centaur (AC) 67 launch is presented
on March 26, 1987 at the WESH television station in Florida. Lighting is shown
after 49 seconds into the flight. The vehicle is totally destroyed due to a cloud-to-
ground lightning flash.

Atlas/Centaur--SOHO Pre-Launch News Conference
Nov. 22, 1995; In English; Videotape: 20 min. 55 sec. playing time, in color, with
sound
Report No.(s): NONP--NASA--VT--2000681546; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Live coverage of a pre-launch news conference on the Atlas/Centaur SOHO
mission is presented. George Diller, NASA Public Affairs, introduces the panel.
Floyd Curington, NASA Launch Manager, Kennedy Space Center, presents
countdown activities. Pat Symons, Launch Vehicle Manager, NASA Lewis
Research Center, analyzes the time duration from liftoff to spacecraft separation.
Fabrizio Felici, SOHO Mission Director, European Space Agency (ESA), explains
the important features of SOHO, which includes a payload of 650 kilos and
12 major instruments with multisensors. Ken Sizemore, International Solar
Terrestrial Physics (ISTP) Project Manager Goddard Space Flight Center (GSFC),
talks about the successful international collaboration between the ESA and NASA.
Joel Tumboli, Launch Weather Officer USA Air Force (USAF), presented the weather
forecast. SOHO was launched aboard an Atlas II rocket on November 23, 1995.
The news conference ends with a brief question and answer period.

CASI

Solar Instruments; Space Transportation System Flights; Radiation Measuring
Instruments

21S0216627 NASA Kennedy Space Center, Cocoa Beach, FL USA
INTELSAT V-A (F-10) Launch
Mar. 22, 1985; In English; Videotape: 38 min. 50 sec. playing time, in color, with
sound
Report No.(s): NONP--NASA--VT--2000078610; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Footage shows panoramic views of the Atlas launch vehicle on the launch
complex. Also shown are ignition, liftoff, several different launch replays from
different cameras, and views of the complex after launch.

CASI

Intelsat Satellites; Atlas Launch Vehicles

20000630827 NASA Kennedy Space Center, Cocoa Beach, FL USA

Mars Observer
Jul. 31, 1991; In English; Videotape: 56 min. 30 sec. playing time, in color, with
sound
Report No.(s): NONP--NASA--VT--2000096692; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

The Mars Observer is shown arriving at the Payload Hazardous Servicing
Facility (PHSF) and being moved into the hangar. Close-up shots are also shown
of the Observer.

CASI

Mars Observer; Pre-launch Tests; Mars Missions; Mars Satellites

SPACE TRANSPORTATION AND SAFETY

Includes passenger and cargo space transportation, e.g., shuttle operations, and
space rescue techniques. For related information, see also 03 Air Transportation
and Safety and 15 Launch Vehicles and Launch Vehicles, and 18 Spacecraft
Design, Testing and Performance. For space suits, see 54 Man/System
Technology and Life Support.

2000086165 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

Launch, entry, and landing resource elp
June 1, 1989; In English; 9 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--93-185312; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

A video tape of scenes of the shuttle during launch is presented. The scenes
were shot from various points of view. The following scenes are also included:
SRB and ET separation, OMS burn, reentry glow, and landing at Edwards AFB,
California.

Author (revised)
Space Shuttle Missions; Spacecraft Landing; Spacecraft Launching; Spacecraft
Reentry
Gearing up for 1988

Report No.(s): NONP NASA VT 93 190187; No Copyright; Avail: CASI; May 1, 1988; In English; 4 min. 59 sec. playing time, in color, with sound

This video explains all engineering efforts to ensure safety and reliability for the next Shuttle mission, STS-26.

Aerospace Safety: Space Shuttle Mission 51-F: Spacecraft Reliability

Astronaut Training: Operations Procedures (flight); Galileo Spacecraft; Space Shuttle Missions

STS-34 Space Shuttle Portable Onboard Computer (SOPC) briefing

Aug 1, 1989; In English; 7 min. 10 sec. playing time, in color, with sound

Report No.(s): NONP NASA VT-93–190255; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The Space Shuttle crew is shown learning how to operate the Shuttle Portable Onboard Computer (SOPC).

CASI

Aerobee/Spaceborne Computers: Space Shuttle Orbiters: Space Shuttles

STS-34 post-flight press conference

Nov 1, 1989; In English; 8 min. 54 sec. playing time, in color, with sound

Report No.(s): NONP NASA VT-93–190256; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video tape contains footage selected and narrated by crew including launch, Galileo/1US deployment, onboard crew activities, and landing.

CASI

Space Shuttle Missions: Spacecrews

STS-34 onboard 16mm photography quick release

Oct 1, 1989; In English; 23 min. 50 sec. playing time, in color, with sound

Report No.(s): NONP NASA VT-93–190257; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video tape features scenes shot by the crew of onboard activities including Galileo deploy, Shuttle Solar Backscatter Ultraviolet (SSBUV) student experiments, other activities on the flight deck and middeck, and Earth and payload bay views.

CASI

Photography: Space Shuttle Missions

STS-34 mission highlights resource tape, part 1

Nov 1, 1989; In English; 53 min. 21 sec. playing time, in color, with sound

Report No.(s): NONP NASA VT-93–190258; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video tape contains important visual events including launch Galileo/1US deployment, onboard crew activities, and landing. Also included is air-to-ground transmission between the crew and Mission Control.

CASI

Space Shuttle Missions: Spacecrews

STS-34 McCully and Baker during IFM training

Aug 1, 1989; In English; 10 min. 20 sec. playing time, in color, with sound

Report No.(s): NONP NASA VT-93–190259; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Astronauts McCully and Baker are shown learning how to use various tools that will be aboard the Space Shuttle. They are also seen cleaning air filters and checking wires.

CASI

Astronaut Training: Crew Procedures (InFlight): Space Shuttles: Spacecrews

STS-34 Galileo integrated deploy sim

Sep 1, 1989; In English; 12 min. 23 sec. playing time, in color, with sound

Report No.(s): NONP NASA VT-93–190260; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The Space Shuttle crew practices Galileo deploy from the SMS. Intercuts of the MOCR are included.

CASI

Crew Procedures (InFlight); Galileo Spacecraft: Space Shuttle Missions

STS-29 mission highlights resource tape

Apr 1, 1990; In English; 58 min. playing time, in color, with sound

Report No.(s): NONP NASA VT-93–190269; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video contains important visual events including launch, TDERS-D/JUS deployment, onboard crew activities, and landing. Also included are air-to-ground transmission between the crew and Mission Control.

CASI

Astronauts; Space Communication: Space Shuttle Missions: Space Shuttle Payloads: Space Transportation System Flights; Spacecraft Launching: Spacecrews; TDR Satellites

STS-32 onboard 16mm photography quick release

Jan 1, 1990; In English; 21 min. 50 sec. playing time, in color, with sound

Report No.(s): NONP NASA VT-93–190271; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video tape features scenes shot by the crew of onboard activities including Syncom deploy, Long Duration Exposure Facility retrieval, various middeck experiments, and Earth and payload bay views.

CASI

Long Duration Exposure Facility: Payload Retrieval (STS); Space Shuttle Missions: Space Shuttle Payloads: Syncom 4 Satellite

STS-32 LDEF approach in SES

Nov 1, 1989; In English; 9 min. 50 sec. playing time, in color, with sound

Report No.(s): NONP NASA VT-93–190274; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Astronauts Wetherbee, Dunbar, and Low are shown in the Shuttle Engineering Simulator (SES) practicing techniques for approaching the Long Duration Exposure Facility on orbit.

CASI

Astronaut Training: Long Duration Exposure Facility: Payload Retrieval (STS); Shuttle Engineering Simulator: Simulation

STS-31 Post-Flight Conference

May 1, 1990; In English; 22 min. 10 sec. playing time, in color, with sound

Report No.(s): NONP NASA VT-93–190275; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video tape contains footage selected and narrated by the STS-31 Commander and crew including launch, Hubble Space Telescope deployment, onboard activities, and landing.

CASI

Hubble Space Telescope: Space Shuttle Missions

Movement in microgravity

May 1, 1988; In English; 8 min. 50 sec. playing time, in color, no sound

Report No.(s): NONP NASA VT-93–190323; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video takes a serious and humorous look at life in the low gravity envi-
enronment of space flight. The video also includes onboard activities from Skylab to Space Shuttle missions.

CASI
Microgravity: Weightlessness

199404010925 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-33 EVA prep and post with Gregory, Blaha, Carter, Thornton, and Musgrave in FFT
Oct 1, 1989; In English; 9 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190266; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video tape shows the crew in the airlock of the FFT, talking with technicians about the extravehicular activity (EVA) equipment. Thornton and Carter put on EVA suits and enter the airlock as the other crew members help with checklists.

CASI
Extravehicular Activity: Spacewalks

199404010927 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-33 crew post flight film
Feb 1, 1990; In English; 20 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190267; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
This video tape contains footage selected by the Commander and crew of the STS-33 DoD mission, including launch, limited onboard activities, and landing.

CASI
Space Shuttle Missions: Spacewalks

199404010930 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-27 crew presentation clip
Jan 1, 1989; In English; 14 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190349; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
This video features scenes from this Department of Defense Space Shuttle Mission. Included are launch, landing, the crew playing weightless football and exercising, and food preparation on middeck.

CASI
Physical Exercise: Space Shuttle Missions: Space Transportation System Flights; Spacecraft Landing; Spacecraft Launching

199404010934 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-26 missions highlight resource tape
Oct 1, 1988; In English; 57 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190357; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS
This video contains important visual events including launch, TDRS-C/JUS onboard crew activities and landing. Also includes air-to-ground transmission between ground and Mission Control.

CASI
Astronauts: Ground Based Control; Space Communication; Space Shuttle Missions; Spacecraft Landing; Spacecraft Launching; Spacecrafts; TDR Satellites

199404010950 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-30 onboard 16mm photography quick release
May 1, 1989; In English; 21 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190377; No Copyright; Avail: CASI;
B05, Videotape-Beta; V05, Videotape-VHS
This video features scenes shot by the Space Shuttle crew of onboard activities including Magellan deploy, Earth views, payload bay views, and middeck views.

CASI
Crew Procedures (Inflight); Magellan Spacecraft (NASA); Payload Stations; Space Shuttle Orbiters

199404010965 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-31 onboard 16mm photography quick release
May 1, 1990; In English; 30 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190275; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
This video features scenes shot by the crew of onboard activities including Hubble Space Telescope deploy, remote manipulator system (RMS) checkout, flight deck and middeck experiments, and Earth and payload bay views.

CASI
Crew Procedures (Inflight); Space Shuttle Missions; Spaceborne Experiments

199404010967 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-31 mission highlights resource tape
Jun 1, 1990; In English; 56 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190276; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
This video contains important visual events including launch, Hubble Space Telescope deployment, onboard crew activities, and landing. Air-to-ground transmission between crew and Mission Control is also included.

CASI
Crew Procedures (Inflight); Hubble Space Telescope; Space Shuttle Missions

199404010968 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-36 crew presentation clip
Jul 1, 1990; In English; 20 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190294; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS
This video features scenes from this Department of Defense Shuttle mission showing crew onboard activities.

CASI
Astronauts: Defense Program: Space Shuttle Missions: Space Transportation System Flights: Spacewalks

199404010991 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-35 onboard photography quick release
Dec 1, 1990; In English; 25 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190297; No Copyright; Avail: CASI;
B05, Videotape-Beta; V05, Videotape-VHS
This video features scenes shot by the crew of onboard activities including ASTRO-1 operation, middeck experiments, flight deck views, and earth and payload bay views.

CASI
Astro Missions (STS); Astronauts: Intravehicular Activity; Space Shuttle Missions: Space Shuttle Payloads: Spaceborne Photography

199404010992 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-35 mission highlights resource tape
Feb 1, 1991; In English; 59 min. 27 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190298; No Copyright; Avail: CASI;
B06, Videotape-Beta; V06, Videotape-VHS
This document contains videos on launch, ASTRO-1 operations, onboard operations, crew activities, and landing. It also includes air-to-ground transmission between crew and Mission Control.

CASI
Astro Missions (STS); Astronauts: Ground-Air-Ground Communication; Intravehicular Activity; Space Shuttle Missions; Space Transportation System Flights; Spacecraft Communication; Spacecraft Landing

199404010993 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Science operation in space: Lessons
Jan 1, 1988; In English; 32 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190299; No Copyright; Avail: CASI;
B07, Videotape-Beta; V07, Videotape-VHS
This program (conceived by a group of veteran Shuttle astronauts) shows prospective experimenters how they can better design their experiments for
operation onboard Shuttle flights. Shuttle astronauts Dunbar, Seddon, Hoffman, Cleave, Ross, and Chang-Diaz also show how crews live and work in space.

**Astronauts: Experiment Design; Intravehicular Activity; Space Shuttle Payloads; Space Transportation System Flights; Spaceborne Experiments**

19940010995 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**STS-27 crew deorbit prep in SMS with Gibson, Shepard, Mullane, Ross, and G. Gardner**
May 1, 1988; In English; 5 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT-93–190315; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This videotape shows the crew training. Forward and aft flight deck views are provided.

**Astronaut Training: Space Transportation System Flights; Spacecraft**

19940011043 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**STS-41 post-flight press presentation**
Nov 1, 1990; In English; 21 min. 36 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT-93–190312; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This videotape contains footage selected and narrated by the crew. The footage covers the launch, the deployment of Ulysses, onboard crew activities, and the landing.

**Deployment: Space Transportation System Flights; Ulysses Mission**

19940011045 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**STS-41 onboard 16mm photography quick release**
Oct 1, 1990; In English; 17 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT-93–190312; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This videotape features scenes of onboard activities. The videotape was shot by the crew. The scenes include the following: Ulysses’ deployment, middeck experiments, computer workstations, and Earth payload bay views.

**Deployment: Space Transportation System Flights; Ulysses Mission**

19940011048 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**STS-41 mission highlights resource tape**
Jan 1, 1991; In English; 54 min. 44 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT-93–190313; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This videotape contains important visual events including launch, Ulysses’ deployment, onboard crew activities, and landing. The videotape also includes air-to-ground transmission between the crew and Mission Control.

**Deployment: Space Transportation System Flights; Ulysses Mission**

19940014447 NASA, Washington, DC, USA

**Robots**
Aug 1, 1985; In English; 2 min. 51 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT-94–198198; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

An overview of research being done into the use of robotic devices in space by MSFC is discussed. The video includes footage and explanations of robots being used to blast layers of thermal coating from the Space Shuttle’s external tanks, the Shuttle’s Remote Manipulator Arm, and animations of an Orbiting Maneuvering Vehicle to retrieve and repair satellites.

**Astronaut Performance: Flight Operations; Space Shuttle Missions**

19940014481 NASA Marshall Space Flight Center, Huntsville, AL, USA

**Shuttle-C, the future is now**
Feb 1, 1989; In English; 7 min. 12 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT-94–198202; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video details plans for Shuttle-C, an unmanned heavy launch vehicle to carry payloads into orbit. Computer animations depict the Shuttle-C, which uses the same recoverable external boosters, external fuel tank and main orbiter engines as the existing Space Shuttles, through liftoff and entry into orbit, where it progressively jettisons the cargo shroud, external fuel tank, and nose shroud. The video also shows computer simulations of a remotely controlled orbital maneuvering vehicle positioning pressurized components of a Space Station and delivering planetary probes and lunar exploration materials to orbit.

**Computer Animation: Heavy Lift Launch Vehicles; Orbital Assembly; Orbital Maneuvering Vehicles; Space Transportation System Flights**

19940014482 NASA, Washington, DC, USA

**Return to space**
Aug 1, 1989; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT-94–198203; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video documents the preparations for Shuttle Flight STS-26 with Shuttle Discovery, NASA’s return to manned space flight after the Challenger disaster. Footage and descriptions document such changes to the new Shuttle as new joints, improved insulation, and added O-rings to the solid rocket boosters; new safety hardware and procedures such as parachute and sidearm evacuations during liftoff, and new pressure suits; modified landing gear, brakes, and nose wheel steering, as well as a modified landing runway. Also profiled are the 5 member crew of all veteran Shuttle astronauts, the TDRS 3 Satellite to be released from the cargo bay in orbit, and 11 commercial and student experiments to be performed during the mission.

**Discovery (Orbiter); Manned Space Flight; Space Shuttle Missions; Space Transportation System Flights**

19940014598 NASA Marshall Space Flight Center, Huntsville, AL, USA

**Pathfinder: Shuttle exhibit**
Aug 1, 1988; In English; 1 min. 46 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT-94–198204; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video introduces the Pathfinder Shuttle Exhibit, a joint project between the Marshall Space Flight Center and the State of Alabama’s Space and Rocket Center in Huntsville. The exhibit features a new flown Shuttle vehicle, Pathfinder, that was used in early ground tests in the Shuttle Program, as well as an actual external fuel tank and set of booster rockets. The video includes footage of actual launches, the Pathfinder Shuttle Exhibit, and shots of the Space Camp at Alabama’s Space and Rocket Center.

**Museums; Space Shuttle Orbiters**

19940029665 NASA John F. Kennedy Space Center, Cape Canaveral, FL, USA

**STS–99/SRL–1**
Apr 20, 1994; In English; 58 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT-94–129665; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video covers the STS-99 mission. Video segments include breakfast, suit-up, departure, launch, on-orbit operations, and landing.

**Astronaut Performance: Flight Operations; Space Shuttle Missions**

19940029693 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**STS–57 post flight press conference**
Jan 1, 1994; In English; 21 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT-94–129666; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video contains footage selected and narrated by crew members.

CASI

Space Shuttle Missions; Space Transportation System

1994029282 NASA, Washington, DC, USA
Shuttle 51L: Challenger
Jan 1, 1994; In English; 45 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-12963; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video follows the pre-launch and launch of the Space Shuttle Challenger preceding the accident. It then details the accident investigation report.

CASI

Accident Investigation: Challenger (Orbiter); Space Shuttle Mission 51-L; Spacecraft Launching

1995004134 NASA John F. Kennedy Space Center, Cocoa Beach, FL, USA
KSC technology: Automated orbiter window inspection system
Mar 30, 1990; In English; 2 min. 42 sec. playing time
Report No.(s): NONP-NASA-VT-94-23318; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video recording is a demonstration of the procedures for visual inspection of the six orbiter windows at the end of each flight.

KSC

Inspection; Quality Control

1995004153 NASA Lewis Research Center, Cleveland, OH, USA
Simulated Shuttle no. 4008
May 1, 1990; In English; 10 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-23168; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Review of the simulated shuttle program including the building of their buses into the shuttle and their trips. This is a cooperative school/community effort.

LeRC

Education; Space Shuttles

1995004322 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-60 mission highlights resource tape
Jan 1, 1994; In English; 58 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-23622; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The important visual events of each mission including launch, onboard crew activities, and landing are depicted.

JSC

Space Shuttle Missions; Space Shuttle Payloads; Space Transportation System Flights; Spaceborne Experiments

1995004323 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-62 mission highlights resource tape
Jan 1, 1994; In English; 54 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-23623; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The important visual events of each mission including launch, onboard crew activities, and landing are depicted.

JSC

Space Shuttle Missions; Space Shuttle Payloads; Space Transportation System Flights; Spaceborne Experiments

1995004324 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-59 mission highlights resource tape
Jan 1, 1994; In English; 59 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-23625; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The important visual events of each mission including launch, onboard crew activities, and landing are depicted.

JSC

Space Shuttle Missions; Space Shuttle Payloads; Space Transportation System Flights; Spaceborne Experiments

1995006709 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
From underwater to outer space: The STS-40 jellyfish experiment
Jan 1, 1994; In English; 5 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-28236; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This is an educational production featuring ‘Ari’, animated jellyfish who recounts his journey into space. Jellyfish were flown aboard the shuttle to study the effects of microgravity on living organisms. Topics Ari explores are: microgravity, life sciences, similarities between jellyfish and humans, and the life cycle and anatomy of a jellyfish.

JSC

Gravitational Effects; Invertebrates; Microgravity

1995006717 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-65 mission highlights resource tape
Jan 1, 1994; In English; 15 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-28238; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The important visual events of each mission including launch, onboard crew activities, and landing are depicted.

JSC

Space Shuttle Missions; Space Transportation System; Spacecraft Landing; Spacecraft Launching

1995006718 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-68 post flight presentation
Jan 1, 1994; In English; 47 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-28239; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This contains mission footage selected by the STS-68 crew of pre-launch, launch, onboard activities and experiments, Space Radar Laboratory-2 (SRL-2), Get Away Special canisters (GAS cans), Earth views, and landing. Crew members provide descriptive voice-over narration of the scenes.

JSC

Get Away Specials (STS); Postflight Analysis; Space Shuttle Missions; Space Transportation System Flights

1995006719 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-61 mission highlights resource tape
Jan 1, 1994; In English; 2 hr. 1 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-28240; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This contains important visual events including launch, Hubble Space Telescope (HST) capture, repair and re-deployment, onboard activities, earth views, and landing. Also included is the air-to-ground transmission between the crew and Mission Control.

JSC

Postflight Analysis; Space Shuttles; Space Transportation System; Space Transportation System Flights

1995006720 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Memorial service for the mission 51-L crew (edited)
Jan 31, 1994; In English; 27 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-28241; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The original memorial service held at NASA JSC for the STS-51L Challenger crew who died onboard the Shuttle is presented. President Ronald Reagan conducts this briefing.

JSC

Challenger (Orbiter); Death; Space Shuttle Mission 51-L; Spacecrews

19950099485 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-66 post flight presentation
Jan 1, 1994; In English; 40 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-33203; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video contains mission footage selected by the STS-66 crew of pre-launch, launch, onboard activities and experiments, ATLAS-3, CRISTA/SPAS,
SSBUV/A, ESCAPE II, Earth views, and landing. Crew members provide descriptive voice-over narration of the scenes.

ISC
Postlaunch Reports: Space Transportation System Flights; Spaceborne Experiments; Spacecraft Launching

1995014696 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS 63 flight day 4 highlights/MIR–Shuttle rendezvous
Feb 5, 1995; In English; 1 hr. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–42156; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS 63 Flight, day 4, the MIR–Shuttle rendezvous is highlighted in this video. The six-member team in the Shuttle are introduced and discuss their functions and tests for this day of the flight. There is actual footage of earth from space, of the MIR Space Station, a tour of the Shuttle cockpit, some footage from the MIR of the Space Shuttle, and footage from inside the MIR with the cosmonauts. Mission control communications with the Shuttle, communication between the Shuttle and MIR, and an historic communication between the Shuttle’s astronauts and President Bill Clinton are included. President Clinton interviews each of the six-member team and discusses the upcoming space walk by Dr. Bernard Harris, the first black astronaut to walk in space. This video was recorded on February 6, 1995.

CASI
Advanced Launch System (STS); Earth Orbital Rendezvous; Mir Space Station; Mission Planning; Rendezvous Spacecraft; Space Shuttles; Space Transportation System Flights; Spacecraft Communication

1995015141 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS 63: Post flight presentation
Feb 27, 1995; In English; 42 min. 33 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–42494; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

At a post flight conference, Captain Jim Wetherbee, of STS Flight 63, introduces each of the other members of the STS 63 crew (Eileen Collins, Pilot; Dr. Bernard Harris, Payload Commander; Dr. Michael Foale, Mission Specialist from England; Dr. Janice Voss, Mission Specialist; and Colonel Vladimir Titov, Mission Specialist from Russia). A short biography of each member and a brief description of their assignment during this mission is given. A film was shown that included the pre-launch suit-up, a view of the launch site, the actual night launch, a tour of the Space Shuttle and several of the experiment areas, several views of earth and the MIR Space Station and cosmonauts, the MIR–Space Shuttle rendezvous, the deployment of the Spartan Ultraviolet Telescope, Foale and Harris’s EVA and space walk, the retrieval of Spartan, and the night entry home, including the landing. Several spaceborne experiments were introduced: the radiation monitoring experiment, environment monitoring experiment, solid surface combustion experiment, and protein crystal growth and plant growth experiments. This conference ended with still, color pictures, taken by the astronauts during the entire STS 63 flight, being shown.

CASI
Earth Orbital Rendezvous; Extravehicular Activity; Mir Space Station; Night Flights (Aircraft); Payload Deployment & Retrieval System; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System; Spaceborne Experiments

1995015878 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS Flight 64 mission highlights
Feb 21, 1995; In English; 1 hr. 4 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–42495; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The pre-launch, launch, in-flight, and landing activities of STS Flight 64 are highlighted in this video. Footage of the astronauts (Richard, Hammond, Lee, Helms, Meade, and Linenger) suit up, the payload activities with the Shuttle arm, the deployment of the Spartan satellite, the tethered spacewalk of Lee and other in-space experiments with Lee and Meade (including a body roll), the pre-lifting shots and actual landing, and some footage of the Mission Operations Control Room watching the Space Shuttle maneuverers are included.

CASI
Astronaut Locomotion; Extravehicular Activity; Liftoff (Landing); Payload Deployment & Retrieval System; Roll; Space Shuttle Missions; Space Shuttle Payloads; Space Transportation System; Spaceborne Experiments; Spacecraft Landing

1995016185 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Toys in space, 2
Herbert, Dexter, editor, NASA Lyndon B. Johnson Space Center, USA; Jun 24, 1993; In English; Its Liftoff to Learning Series; 37 min. 53 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–43894; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

In this educational video from the ‘Liftoff to Learning’ series, astronauts from the STS-54 Mission (Mario Runco, John Casper, Don McMonagle, Susan Helms, and Greg Harbaugh) explain how microgravity and weightlessness in space affects motion by using both mechanical and nonmechanical toys (gravitrons, slinky’s, dart boards, magnetic marbles, and others). The gravitational effects on rotation, force, acceleration, magnetism, magnetic fields, center of axis, and velocity are actively demonstrated using these toys through experiments onboard the STS-54 Mission flight as a part of their spaceborne experiment payload.

CASI
Education: Gravitational Effects; Mechanical Devices: Microgravity; Payloads: Space Shuttle Missions; Space Shuttles; Space Transportation System Flights; Spaceborne Experiments; Weightlessness

1995017244 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Endeavor: Now and then
Sep 22, 1992; In English; Its Liftoff to Learning Series; 19 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–43942; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

In this educational ‘Liftoff to Learning’ video series, astronauts from STS-49 Space Shuttle Mission (Thomas Akers, Bruce Melnick, Pierre Thuot, Kathy Thorton, Kevin Chilton, and Richard Hibb) compare their mission aboard the Space Shuttle Endeavor and their shuttle with its namesake, the ship ‘Endeavor’, commanded by Captain James Cook of England in the late 1700’s. Using historical paintings, drawings, and computer graphics, Cook’s Endeavor is brought to life. Its voyage path, problems, biological experiments, and discoveries are shown and compared to the modern-day Endeavor, its mission and experiments. The Space Shuttle Endeavor was named in 1988, through a nationwide school contest. It is the fifth Space Shuttle to be built and employs new technology in its design, for example, its drag shoot for shuttle landings. One part of the STS-49 Mission was the retrieval of the Intel satellite.

CASI
Aerospace Technology Transfer: Computer Animation; Computer Graphics; Histories; Intelsat Satellites; Payload Retrieval (STS); Ships; Spaceborne Experiments; Technology Utilization

1995017245 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
All systems go!
Sep 2, 1992; In English; Its Liftoff to Learning Series; 33 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–43945; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

In this educational ‘Liftoff to Learning’ video series, astronauts from STS-40 Space Shuttle Mission (F. Drew Gaffney, Millie Hughes-Fulford, Rhea Seddon, James Bagga, Bryan O’Connor, Tamara Jernigan, and Sidney Gutierrez) show, using footage and highlights from their mission, how microgravity causes changes in the human body. The STS-40 was a mission of spaceborne experiments concerned with the physiological, biological, and chemical changes that occur in the human body as a result of microgravity. Different experiments are shown and their significance are explained.

CASI
Aerospace Medicine: Biological Effects; Chemical Reactions: Flight Stress
Go for EVA
Apr 5, 1995; In English; Its Liftoff to Learning Series; 13 min. 48 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--95--43940; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video contains important visual events of the STS-66 Space Shuttle Atlantis Mission in November 1994. Astronauts included: Don McMonagle (Mission Commander), Kent G. Bowersox (Payload Commander), Joe Tanner, Scott Parazynski, and Jean-Francois Clervoy (collaborating French astronaut). Footage includes: pre-launch setup, entering Space Shuttle, countdown and launch of Shuttle, mission activities (Hubble Telescope deployment, spacewalks to make repairs on Hubble, solar array deployment, replacement of solar array, and deployment of Solar-B). Also included are Earth views and EVA activities with payload deployment and retrieval (ASTRO-2 and SPARTAN-204). This video (JSC1472) contains important visual events including launch, payload deployment, and repair activities for the Hubble Space Telescope.

STS-67 mission highlights resource tape
Jan 1, 1995; In English; 54 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--95--44679; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video contains the mission highlights of the STS-67 Space Shuttle Atlantis Mission. Astronauts included: Commander Jesse C. Chaffee, Pilot Stephen S. Oswald, Mission Specialists William L. McArthur, Michael J. Massimino, and William M. Oefinger. This mission included repairs to the Hubble Space Telescope and deployment of the Space Station Freedom (SSFR). Also included are Earth views and EVA activities with payload deployment and retrieval (ASTRO-2 and WUPPE (Wisconsin Ultraviolet Photo Polarimeter Experiment)).

STS-68 post flight presentation
Apr 3, 1995; In English; 41 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--95--45307; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video is the post-flight presentation by the astronauts of the STS-68 Space Shuttle Mission. Astronauts included: Commander Bill Oefinger, Pilot James D. Halsell, and Mission Specialists Steven L. Smith, Leroy Chiao, and Ellen Ochoa. This mission included deployment of the Portable Infrared Gas Analyzer (PIGA), an experiment to study the Earth's atmosphere from space. Also included are Earth views and EVA activities with payload deployment and retrieval (ASTRO-2 and WUPPE (Wisconsin Ultraviolet Photo Polarimeter Experiment)).
1995023533 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-71 Shuttle/Mir flight: Day 1
Jun 30, 1995; In English; 15 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-95-56567; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

The first day of the STS-71 flight of the Space Shuttle Atlantis is contained
in this video. This mission highlights the first U.S. docking with the Mir Space
Station. The scope of this part of the STS-71 mission is to drop off and pick up
two cosmonauts, and to pick up one American astronaut who has been living
aboard the Mir Station for several months. The STS-71 flight crew consists of:
Atlantis Mission Specialist Gregory Harbaugh; Ellen Baker; Flight Commander
Robert Gibson; Russian cosmonaut Arnost Solovyov; Vladimir Dezhurov;
Gennady Strekalov; and Dr. Norman Thagard. Flight footage contains prelaunch
activities.

Author
Mir Space Station: Space Shuttle Missions; Space Shuttle Payloads; Space
Shuttles; Space Transportation System Flights; Spacecraft Docking; Spacecraft
Launching

1995023534 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-71 Shuttle/Mir flight: Day 2
Jun 30, 1995; In English; 20 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-95-56568; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

The second day of the STS-71 flight of the Space Shuttle Atlantis is
contained in this video. Flight footage contains launch, and orbital activities.

Author
Mir Space Station: Space Shuttle Missions; Space Shuttles; Space
Transportation System; Space Transportation System Flights

1995023535 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-71 Shuttle/Mir flight: Day 3
Jun 30, 1995; In English; 32 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-95-56569; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

The third day of the STS-71 flight of the Space Shuttle Atlantis is contained
in this video. Flight footage contains earth views from space, and views of
Mir Space Station taken from various angles.

Author
Earth Observations (From Space); Earth Orbits; Mir Space Station; Space
Shuttle Missions; Space Shuttles; Space Transportation System Flights

1995023536 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-71 Shuttle/Mir flight: Day 4
Jun 30, 1995; In English; 29 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-95-56570; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Day 4 of the STS-71 flight Space Shuttle Atlantis mission is highlighted
in this video. During this segment of the mission the Space Station is docked
with the Mir Space Station. There are interviews with the astronauts by Vice
President Al Gore.

Author
Ground-Air-Ground Communication; Mir Space Station; Space Shuttle
Operations; Space Stations; Space Transportation System Flights; Spacecraft
Communication; Spacecraft Docking

1995023537 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-71 Shuttle/Mir flight: Day 5
Jun 30, 1995; In English; 22 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-95-56571; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Day 5 of the STS-71 flight Space Shuttle Atlantis mission is highlighted
in this video. During this segment of the mission the Space Station is docked
with the Mir Space Station and they are orbiting the earth together. There is footage
of the astronauts performing physiological tests inside the Shuttle.

Author
Earth Orbits; Mir Space Station; Space Shuttle Missions; Space Shuttles; Space
Transportation System Flights; Spacecraft Docking

1995023538 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-71 Shuttle/Mir flight: Day 6
Jun 30, 1995; In English; 27 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-95-56572; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Day 6 of the STS-71 flight Space Shuttle Atlantis mission is highlighted
in this video. During this segment of the mission the Space Station is docked
with the Mir Space Station and they are orbiting the earth together. Also contained
are views of the orbital docking system and brief views of earth.

Author
Earth Observations (From Space); Earth Orbits; Mir Space Station; Multiple
Docking Adapters; Space Shuttle Missions; Space Shuttles; Space Transportation
System Flights; Spacecraft Docking

1995023539 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-71 Shuttle/Mir flight: Day 7
Jul 3, 1995; In English; 29 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-95-56573; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Day 7 of the STS-71 mission are featured in this video, a continuation from
day 1-6, this video includes live footage onboard the STS-71 Space Station
Atlantis and the Mir Space Station. Astronaut, Dr. Norman Thagard, after living
in space for 3 months onboard the Mir Space Station, joins the crew of Atlantis
for his trip back to earth. Live interviews are conducted with the crew of Atlantis.

Author
Earth Orbits; Ground-Air-Ground Communication; Mir Space Station; Space
Shuttle Missions; Space Shuttles; Space Transportation System Flights; Spacecraft
Communication; Spacecraft Docking

1995023540 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-71 Shuttle/Mir flight: Day 8
Jul 3, 1995; In English; 17 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-95-56574; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Day 8 of the STS-71 mission are featured in this video, a continuation from
days 1-7, this video includes live footage onboard the STS-71 Space Shuttle
Atlantis and the Mir Space Station. Live interviews are conducted with the
crew of Atlantis. Views are shown of the Mir Space Station from various angles.

Author
Earth Orbits; Ground-Air-Ground Communication; Mir Space Station; Space
Shuttle Missions; Space Shuttles; Space Transportation System Flights; Spacecraft
Communication; Spacecraft Docking

1995023541 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-71 Shuttle/Mir flight: Day 9
Jul 3, 1995; In English; 17 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-95-56575; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Day 9 of the STS-71 mission are featured in this video, a continuation from
days 1-8, this video includes live footage onboard the STS-71 Space Shuttle
Atlantis and the Mir Space Station. Views are shown of the Mir Space Station
from various angles and its earth orbit after disconnection from Atlantis.

Author
Flight Operations; Mir Space Station; Space Shuttle Missions; Space Shuttles;
Space Transportation System Flights

1995023542 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-71 Shuttle/Mir flight: Day 10
Jul 6, 1995; In English; 22 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-95-56623; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Day 10, the last day of the STS-71 Space Shuttle mission, is featured in this
video. There is live footage from onboard the shuttle and interviews with the
Shuttle’s astronauts. Also, some earth view footage from the Shuttle is included.

Author
Earth Orbits; Flight Operations; Mir Space Station; Space Shuttle Missions;
Space Shuttles; Space Transportation System; Space Transportation System Flights;
Spacecraft Docking

30
The fifth day of the STS-70 Space Shuttle Discovery mission is contained on this video. The crew continues working on experiments, such as the Space Tissue Loss Analysis and the Bioreactor Development System. CNN reporter, John Holliman, interviewed the flight crew and the crew also answered questions posed by Internet users while on NASA's Shuttle Web. There are brief views of Earth's surface included.

CASI

Discovery (Orbiter): Flight Crews; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System Flights; Spaceborne Experiments
The first day of the STS-70 flight of the Space Shuttle Discovery is contained on this video. This mission highlights the deployment of NASA's communications satellite, the sixth and last such satellite to be deployed from a space shuttle. The STS-70 crew consists of Commander Tom Henricks, Pilot Kevin Kregel, and Mission Specialists Don Thomas, Nancy Currie, and Mary Ellen Weber. Flight footage contains prelaunch and launch activities.

CASI

Discovery (Orbiter); Payload Delivery (STS); Prelaunch Summaries; Space Shuttle Missions; Space Shuttle Payloads; Space Transportation System Flights; Spacecraft Launching

STS-43 post flight press conference
Jan 1, 1991; In English; 30 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VD-95-65004; No Copyright; Avail: CASI
B02, Videotape-Beta; V02, Videotape-VHS

The flight crew (Blaha, Baker, Low, Adamson, and Lucid) present and discuss their STS-43 Space Shuttle Mission in this press conference video. This mission was the first flight to deploy the Tracking Data and Relay Satellite (TDRS), the primary payload. A large number of secondary payload experiments were performed. The included: several cell tissue growth and enzyme analysis experiments; a Lower Body Negative Pressure Experiment; optic coupling and flame front propagation/combustion physics experiments; The Space Station Heat Pipe Advanced Radiator Experiment (SHARE) for the Space Station; a crystal control device evaluation; a software and hardware systems checkout for the Shuttle; some flight tests of the new orbiter auto-pilot system; some materials tests on polymer membranes; the Zero Gravity physics experiments; and the Space Shuttle Backscatter Ultraviolet Experiment. Earth views included: the Kurukum oil fires; cloud cover; and B&W lighting footage.

CASI

Checkout: Combustion Physics; Deployment: Earth Observations (From Space); Flight Crews; Flight Tests; Materials Tests; Physiological Tests; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System Flights; Spaceborne Experiments; TDR Satellites

STS-70 post flight presentation
Petterson, Glen, editor; NASA, USA; Aug 1, 1995; In English; 32 min. 21 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VD-95-65005; No Copyright; Avail: CASI
B03, Videotape-Beta; V03, Videotape-VHS

In this post-flight overview, the flight crew of the STS-70 mission, Tom Hendricks (Cmdr.), Kevin Kregel (Pilot), Major Nancy Currie (MS), Dr. Mary Ellen Weber (MS), and Dr. Don Thomas (MS), discuss their mission and accompanying experiments. Pre-flight, launch, and orbital footage is followed by the in-orbit deployment of the Tracking and Data Relay Satellite (TDRS) and a discussion of the following spaceborne experiments: a microgravity bioreactor experiment to grow 3D body-like tissue; pregnant rat muscular changes in microgravity; embryonic development in microgravity; Shuttle Amateur Radio Experiment (SAREX); terrain surface imagery using the HERCULES camera; and a range of other physiological tests, including an eye and vision test. Views of Earth include: tropical storm Chantal; the Nile River and Red Sea; lightning over Brazil. A three planet view (Earth, Mars, Venus) was taken right before sunrise. The end footage shows shuttle pre-landing checkout, entry, and landing, along with a slide presentation of the flight.

CASI

Atmospheric Entry; Deployment: Earth Observations (From Space); Flight Crews; Microgravity; Physiological Tests; Space Shuttle Payloads; Space Shuttles; Space Transportation System Flights; Spaceborne Experiments; TDR Satellites

STS-7 launch and landing
Aug 2, 1983; In English; 55 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VD-95-65006; No Copyright; Avail: CASI
B03, Videotape-Beta; V03, Videotape-VHS

The prelaunch, launch, and landing activities of the STS-7 Space Shuttle mission are highlighted in this video, with brief footage of the deployment of the Shuttle Pallet Satellite (SPAS). The flight crew consisted of: Cmdr. Bob Crippen, Pilot Rich Truly, and Mission Specialists John Fabian, Dr. Sally Ride, and Norm Thaggart. With this mission, Cmdr. Crippen became the first astronaut to fly twice in a Space Shuttle Mission and Dr. Sally Ride was the first American
woman to fly in space. There is a large amount of footage of the Space Shuttle by the aircraft that accompanies the Shuttle launchings and landings.

CASI

Deployment: Shuttle Pallet Satellites; Space Missions: Space Shuttle Payloads; Space Transportation System Flights; Spaceborne Experiments

1996000168 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS--48 mission highlights resource tape. Part 1 of 2

Jan 1, 1991; In English; 60 min. playing time, in color and black and white, with sound

Report No(s): NONP--NASA--VT--95--65007; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

In this first part of a two part video mission-highlights set, the flight of the STS-48 Space Shuttle Orbiter Discovery is reviewed. The flight crew consisted of: J. O. Creighton (Commander); Ken Reightler (Pilot); Charles 'Sam' Gemar (Mission Specialist); James 'Jim' Buchli (MS); and Mark Brown (MS). Step-by-step pre-launch and sunset launch sequences are shown with accompanying shots inside the Mission Control Center. The primary goal of this mission was the deployment of Upper Atmosphere Research Satellite (UARS). Other (secondary) payloads included: the Mid-Dek Zero Gravity Experiment (MODE); the Sam/Cream device; the Shuttle Activation Monitor/ Cocki Ray Effect and Activation Monitor Experiment; and the Physiology and Anatomical Rodent Experiment (PARE). Crew activities were shown, along with Earth views (Aurora Borealis (B/W), light from the Kuwait oil fires, lightning over Italy and other areas, polar regions and ice caps, and the USA at night (B/W)). This was the thirteenth flight of the Space Shuttle Discovery. A night landing is shown.

CASI

Deployment: Discovery (Orbiter); Earth Observations (From Space); Launching; Space Shuttle Missions; Space Shuttle Payloads; Space Transportation System Flights; Spaceborne Experiments; Spacecrews; Upper Atmosphere Research Satellite (UARS)

1996000169 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS--48 mission highlights resource tape. Part 2 of 2

Jan 1, 1991; In English; 18 min. 18 sec. playing time, in color and black and white, with sound

Report No(s): NONP--NASA--VT--95--65008; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

In this second part of a two part mission highlights tape for the STS-48 Mission, television interviewee, Larry King, hosts a live, satellite-link interview with the flight crew of the STS-48 Mission. Listeners called in and the astronauts answered questions about their flight and space travel in general. The flight crew consisted of: Cmdr. J. O. Creighton, Pilot Ken Reightler, MS Charles Gemar, MS James Buchli, and MS Mark Brown.

CASI

Astronauts; Discussion; Space Shuttle Missions; Space Transportation System Flights; Spacecrews; Television Systems

1996000428 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS--47 mission highlights resource tape

Sep 1, 1992; In English; 1 hr. playing time, in color, with sound

Report No(s): NONP--NASA--VT--95--65630; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The mission of the STS-47 flight is highlighted in this video. The flight crew consisted of: Cmdr. 'Hoot' Gibson, Pilot Kurt Brown, Payload Cmdr. Jan Davis, Payload Specialist, M. Mohri (Japanese Astronaut), and Mission Specialists Jay Apt and May Jamson. The primary goal of this mission was the set-up and carrying out of experiments in the accompanying Japanese Spacelab (SL-1) in cooperation with the Japanese Space Program. Dr. Mohri is the first professional Japanese astronaut to fly in space. Vice President Dan Quayle and his wife are shown addressing the astronauts of the Space Shuttle Endeavour with a small pre-launch speech. On this flight many different physical, physiological, and biological spaceborne experiments were performed. These experiments included: a gas evaporation in low gravity environment experiment; a brainwave signals from carp experiment; several human eye movement and visual physiological tests; various physiological tests on a variety of insects and frogs; an embryology experiments on tadpoles; several experiments concerned with fluid dynamics; an imaging furnace test with heated glass containing gold particles (flow measurement); a Solid Surface Combustion Experiment; and a protein crystal growth experiment. Launch, in-orbit, and landing footage is shown, along with a variety of crew activities. One feature that astronauts were able to video-tape was the actual in-orbit movement of the slide wing flaps of the Space Shuttle.

CASI

Endeavour (Orbiter); Fluid Dynamics; Furnaces; Imaging Techniques; International Cooperation; Physiological Tests; Protein Crystal Growth; Space Shuttle Missions; Space Shuttle Payloads; Space Transportation System Flights; Spaceborne Experiments; Spacecrews; Spacelab

1996000487 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS--44 onboard 16mm photography

Dec 1, 1991; In English; 14 min. playing time, in color, with sound

Report No(s): NONP--NASA--VT--95--65628; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This silent video was filmed by the crew of the STS-44 Space Shuttle using a 16mm camera. Astronauts, Frederick D. Gregory, Terence T. Henricks, F. Story Musgrave, Mario Runco, Jr., James S. Voss, and Thomas J. Hennen, filmed various crew activities inside the shuttle, the deployment of the Defense Support Program satellite (DSP), and several Earth view-footage of arid land masses and cloud cover.

Author

Artificial Satellites; Cameras; Deployment; Space Shuttle Payloads; Space Shuttles; Spacelab Photography

1996001778 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS--48 post flight press conference

Jan 1, 1991; In English; 28 min. 30 sec. playing time, in color and black and white, with sound

Report No(s): NONP--NASA--VT--95--65009; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The flight crew of the STS-48 Space Shuttle Discovery's 13th Flight (Cmdr. J. O. Creighton, Pilot Ken Reightler, MS Charles Gemar, MS James Buchli, and MS Mark Brown) review their mission and discuss their in-flight activities and experiments in this video. The primary goal of this mission was the deployment of the Upper Atmosphere Research Satellite (UARS). Secondary payloads included: the Mid-Dek Zero Gravity Experiment (MODE) that showed how fluids in microgravity and in-orbit conditions respond to different influences (dynamics and harmonic analysis) and the Extended Duration Orbiter physiological tests of astronaut heat and lung functions. Through these experiments, information useful in the construction and design of the proposed Space Station is hoped to be gained. Earth views included: the Aurora Borealis (B/W); polar region ice packs and caps; the Nile River (at night); the Galapagos Islands, and Earth lightning shots. A night landing is shown.

CASI

Deployment; Earth Observations (From Space); Physiological Tests; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System Flights; Spaceborne Experiments; Spacecrews; Upper Atmosphere Research Satellite (UARS); Vibration Tests

1996002572 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS--44 mission highlights resource tape. Part 2 of 2

Nov 1, 1991; In English; 25 min. 55 sec. playing time, in color, with sound

Report No(s): NONP--NASA--VT--95--72064; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

In this second part of a two part video set of the mission of STS-44, an in-orbit press conference was held. The astronauts (Cmdr. Fred Gregory, Pilot Tom Hendricks, Payload Specialist Tom Hennen, and Mission Specialists Jim Voss, Story Musgrave, and Mario Runco) conversed via satellite with the Johnson Press Center at the Johnson Space Center, Houston, Texas. Journalists asked questions regarding the mission, the status of the mission's experiments, the problems with living in a microgravity environment, upcoming NASA space programs, and future objectives of the Space Shuttle missions.

CASI

News Media; Space Communication; Space Shuttle Missions; Space Shuttles; Space Transportation System Flights; Spacecrews
The STS-69 mission was highlighted in this first part of a two part video set.

The flight crew consisted of: Cmndr. Dave Gregory; Pilot Tom Hendricks; Payload Specialist Tom Hennem; and Mission Specialists Story Musgrave, Jim Voss, and Mario Runco. The primary space shuttle mission objective was the deployment of the Defense Support Program (DSP) satellite. Secondary payload and spaceborne experiments consisted of: a microbial air sampler, the Terra Scout PADVOS system, an MS8-1 camera demonstration, a low-body negative pressure test, the Visual Function Tester, and a bioreactor demonstration. A tour of the flight deck, mid-deck, bathroom, and flight compartments with explanations of the equipment found in each area was conducted, a trash compactor was demonstrated, and footage of the crew together for their Thanksgiving dinner was shown. Earth views included several oceans, cloud cover, typhoon Yuri, northeast Australia, and the Barrier Reef Islands. The actor John Patrick Stewart (Commander Pickard of the show 'Star Trek: The Next Generation') performed the wake-up call for the astronauts. This flight was shortened due to an inertial measurement unit failure on the sixth day of the mission.

CASI
Satellite-Borne Instruments: Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecrews

STS-69 flight day 1 highlights
Sep 7, 1995: In English; 24 min. 30 sec. playing time, in color, with sound Report No.(s): NONP-NASA--VT--95--72065; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The first day of the STS-69 flight is highlighted in this video. Shown are the prelaunch and launch activities and the in-orbit STAPRTAN-201 satellite predeployment checkout of the robot arm in the shuttle’s bay. The flight crew consisted of: Cmndr. Dave Walker, Pilot Ken Cockrell, and Mission Specialists Jim Voss, Jim Newman, and Mike Gernhardt. Earth views of cloud cover are included.

CASI
Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spacecraft Launching; Spacecrews

STS-69 flight day 2 highlights
Sep 8, 1995: In English; 19 min. 30 sec. playing time, in color, with sound Report No.(s): NONP-NASA--VT--95--72067; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

In this second day of the STS-69 mission, the SPARTAN-201 satellite is deployed. The SPARTAN satellite is being used for the study of solar physics. An in-orbit interview is conducted with crew member, Mission Specialist Jim Newman, by KABC 7.90 Talk Radio. Newman answers questions from station listeners regarding the mission, future NASA objectives, present NASA objectives, and general questions regarding living in space. The remaining crew members include: Cmndr. Dave Walker, Pilot Ken Cockrell, and Mission Specialists Jim Voss and Mike Gernhardt.

CASI
Space Communication; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spacecrews; Spartan Satellites

STS-69 flight day 11 highlights
Sep 17, 1995: In English; 24 min. 35 sec. playing time, in color, with sound Report No.(s): NONP-NASA--VT--95--72079; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eleventh day of the STS-69 flight, the astronauts, Cmndr. Dave Walker, Pilot Ken Cockrell, and Mission Specialists Jim Voss, Jim Newman, and Mike Gernhardt were awakened to the theme song for the cartoon ‘Charlie Brown.’ The crew spent most of the day preparing the shuttle for reentry and landing. Several reporters interviewed the crew via a satellite link. Questions ranging from the status and problems with the mission to NASA’s future were asked. Walker and Cockrell performed a successful landing of the space shuttle at Kennedy Space Center.

CASI
Space Communication; Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights

STS-69 flight day 4 highlights
Sep 10, 1995; In English; 18 min. 45 sec. playing time, in color, with sound Report No.(s): NONP-NASA--VT--95--72080; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On the fourth day of the STS-69 mission, the astronauts, Cmndr. Dave Walker, Pilot Ken Cockrell, and Mission Specialists Jim Voss, Jim Newman, and Mike Gernhardt, were awakened by 5 year old Madeline Cockrell (Ken Cockrell’s daughter) singing the song ‘Bingo Was His Name.’ The interception and retrieval of the SPARTAN-201 satellite was the first task of the day. The SPARTAN-201’s mission was the study of the solar corona and the solar wind. The rest of the day was spent preparing for the deployment of the Wake Shield Facility (WSF), whose purpose during its two day orbit of the Earth, is to grow films for semiconductors in a vacuum-like environment. Earth views included some cloud cover and different areas of South America.

CASI
Payload Retrieval (STS); Semiconducting Films; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecrews; Spartan Satellites

STS-69 flight day 5 highlights
Sep 11, 1995; In English; 14 min. 30 sec. playing time, in color, with sound Report No.(s): NONP-NASA--VT--95--72081; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Awakening to the theme song of the television show ‘Ramtin Tin’, the astronauts, Cmndr. Dave Walker, Pilot Ken Cockrell, and Mission Specialists Jim Voss, Jim Newman, and Mike Gernhardt, of the STS-69 mission began their fifth day in orbit. The deployment of the Wake Shield Facility (WSF) was accomplished successfully, although it was delayed several hours due to communication problems between the satellite and its carrier platform located in the shuttle’s cargo bay. The WSF satellite’s main purpose was to grow up to seven layers of semiconductor films in a vacuum-like state while orbiting behind the space shuttle. The shuttle’s Global Positioning System and Satellite Tracking System were both given checkout tests.

CASI
Scientific Satellites; Semiconducting Films; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecraft Instruments; Spacecrews

STS-69 flight day 6 highlights
Sep 12, 1995; In English; 45 min. 30 sec. playing time, in color, with sound Report No.(s): NONP-NASA--VT--95--72082; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

After being awakened by the Beatles song, ‘A Hard Days Night’, the flight crew of the STS-69 mission, Cmndr. Dave Walker, Pilot Ken Cockrell, and Mission Specialists Jim Voss, Jim Newman, and Mike Gernhardt, began their sixth day in orbit by monitoring the free orbiting Wake Shield Facility (WSF). Later Cmndr. Walker conducted an interview with television reporters from Atlanta and Boston, answering questions about the mission and general questions about NASA’s space program. The crew filmed a video for themselves performing daily routines (eating, shaving, exercising), as well as some of the physiological experiments, and shuttle equipment maintenance and checkout. One of the secondary experiments included the Commercial Generic Bioprocessing Apparatus-7 (CGBA-7), which served as an incubator and experiment station for a variety of tests (agricultural, pharmaceutical, biomedical, and envi-
Environmental. Earth views included some cloud cover, the Gulf of Mexico, Texas, and the Atlantic Ocean.

CASl

Scientific Satellites; Semiconducting Films: Space Shuttle Missions; Space Shuttle Payloads; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecraft Instruments; Spacecrafts; Vacuum Deposition

19960002858 NASA Lyndon B. Johnson Space Center, Houston, TX, USA STS-69 flight day 7 highlights Sep 13, 1995; In English; 9 min. 15 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT–95–72083; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On the seventh day of the STS-69 mission, the astronauts, Cmdr. Dave Walker, Pilot Ken Cockrell, and Mission Specialist Jim Voss, Jim Newman, and Mike Gernhardt, were awakened by the theme song from the movie "Patten." Voss and Gernhardt performed a pre-EVA (Extravehicular Activity) checkout of the new thermal spacesuits that they will be wearing in two days. Solving problems with the Wake Shield Facility (WSF) occupied the other astronauts for most of this day. Earth views included tropical storm Marilyn in the Caribbean.

CASl

Checkout; Scientific Satellites; Space Shuttle Missions; Space Shuttles; Space Suits; Space Transportation System; Space Transportation System Flights; Spacecreevs

19960002854 NASA Lyndon B. Johnson Space Center, Houston, TX, USA STS-69 flight day 8 highlights Sep 14, 1995; In English; 16 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT–95–72084; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The astronauts, Cmdr. Dave Walker, Pilot Ken Cockrell, and Mission Specialists Jim Voss, Jim Newman, and Mike Gernhardt were awakened by the theme song of the television cartoon show 'Underdog' on this eighth day of the STS-69 mission. The retrieval of the Wake Shield Facility (WSF) occurred without any major problems. The WSF was unable to grow all seven layers of films before its retrieval. Only four were grown due to thermal problems.

CASl

Payload Retrieval (STS); Scientific Satellites; Space Shuttle Missions; Space Shuttles; Space Suits; Space Transportation System; Space Transportation System Flights; Spacecreevs

19960002855 NASA Lyndon B. Johnson Space Center, Houston, TX, USA STS-69 flight day 9 highlights Sep 15, 1995; In English; 30 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT–95–72085; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The song, 'He's A Tramp', from the Walt Disney cartoon movie, 'Lady and the Tramp', awakened the astronauts, Cmdr. Dave Walker, Pilot Ken Cockrell, and Mission Specialists Jim Voss, Jim Newman, and Mike Gernhardt, on the ninth day of the STS-69 mission. The Wake Shield Facility (WSF) was again unbereathed from the shuttle cargo bay and, using the shuttle's robot arm, held over the side of the shuttle for five hours where it collected data on the electrical field build-up around the spacecraft as part of the Charging Hazards and Wake Studies (CHAWS) experiment. Voss and Gernhardt rehearsed their Extravehicular Activity (EVA) spacewalk, which was planned for the next day. Earth views included cloud cover, a hurricane, and its eye.

CASl

Extravehicular Activity; Payload Deployment & Retrieval System; Scientific Satellites; Space Shuttle Missions; Space Shuttle Orbiters; Space Shuttle Payloads; Space Transportation System; Space Transportation System Flights; Spacecreevs

19960002856 NASA Lyndon B. Johnson Space Center, Houston, TX, USA STS-69 flight day 10 highlights Sep 16, 1995; In English; 17 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT–95–72086; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

In honor of the Extravehicular Activity (EVA) spacewalk today, the tenth day of the STS-69 mission, the astronauts, Cmdr. Dave Walker, Pilot Ken Cockrell, and Mission Specialists Jim Voss, Jim Newman, and Mike Gernhardt were awakened by the Frankies Valley and the Four Seasons tune, 'Walk Like A Man.' Voss and Gernhardt tested the new thermal spacesuits and some new tools in the shuttle's cargo bay for six hours. The EVA was successful. The rest of the astronauts monitored the EVA and packed up the equipment and experiments in preparation for their reentry flight tomorrow.

CASl

Extravehicular Activity; Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecrevs

19960003228 NASA Lyndon B. Johnson Space Center, Houston, TX, USA STS-70 mission highlights Sep 5, 1995; In English; 39 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT–95–1995006569; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The highlights of the STS-70 mission are presented in this video. The flight crew consisted of Cmdr. John Hendricks, Pilot Kevin Kregel, Flight Engineer Nancy Currie, and Mission Specialists Dr. Don Thomas and Dr. Mary Ellen Weber. The mission's primary objective was the deployment of the 7th Tracking Data and Relay Satellite (TDRS), which will provide a communication, tracking, telemetry, data acquisition, and command services space-based network system essential to low Earth orbital spacecraft. Secondary mission objectives included activating and studying the Physiological and Anatomical Rodent Experiment/National Institutes of Health-Rodents (PAR/N-I-R), the Bioreactor Demonstration System (BDS), the Commercial Protein Crystal Growth (CPCG) studies, the Space Tissue Loss/National Institutes of Health-Cells (STL/NIH-C) experiment, the Biological Research in Canines (BRIC) experiment, Shuttle Amateur Radio Experiment-2 (SAREX-2), the Visual Function Tester-4 (VFT-4), the Hand-Held, Earth Oriented, Real-Time, Cooperative, User-Friendly, Location-Targeting and Environmental System (HERCULES), the Microcapsules in Space-B (MIS-B) experiment, the Windows Experiment (WINDEX), the Radiation Monitoring Equipment-3 (RME-3), and the Military Applications of Ship Tracks (MAST) experiment. There was an in-orbit dedication ceremony by the spacecraft and the newly integrated Mission Control Center to commemorate the center's integration. The STS-70 mission was the first mission monitored by this new control center. Earth views included the Earth's atmosphere, a sunrise over the Earth's horizon, several views of various land masses, some B/W lightning shots, some cloud cover, and a tropical storm.

CASl

Bioreassay; Payload Deployment & Retrieval System; Physiological Tests; Radio Communication; Radio Relay Systems; Space Shuttle Missions; Space Shuttle Payloads; Space Technology Experiments; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecrevs; TDR Satellites

19960007446 NASA Lyndon B. Johnson Space Center, Houston, TX, USA STS-71 mission highlights resource tape Sep 25, 1995; In English; 1 hr 15 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT–95–1995006562; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video highlights the international cooperative Shuttle/Mir mission of the STS-71 flight. The STS-71 flight crew consists of Cmdr. Robert Hoot Gibson, Pilot Charles Precourt, and Mission Specialists Ellen Baker, Bonnie Dunbar, and Gregory Harbaugh. The Mir 18 flightcrew consisted of Cmdr. Anatoly Solyvoy and Flight Engineer Nikolai Budarin. The prelaunch, launch, shuttle in-orbit, and in-orbit rendezvous and docking of the Mir Space Station to the Atlantis Space Shuttle are shown. The Mir 19 crew accompanied the STS-71 crew and will replace the Mir 18 crew upon undocking from the Mir Space Station. Shown is on-board footage from the Mir Space Station of the Mir 18 crew engaged in hardware testing and maintenance, medical and physiological tests, and a tour of the Mir. A spacewalk by the two Mir 18 cosmonauts is shown as they performed maintenance of the Mir Space Station. After the docking between Atlantis and Mir is completed, several mid-deck physiological experiments are performed along with a tour of Atlantis. Dr. Thagard remained behind with the Shuttle after undocking to return to Earth with reports from his Mir
Spaceborne Experiments; demonstration system. Earth views include some cloud cover and various Earth experiments shown include the High-Packed Digital Television (H-PAC) demonstration, the Surface Tension Driven Convection Experiment (STDC), and the Drop Physics Module (DPM) experiment. Video footage is shown of the crew working in the Spacelab along with a split screen Shuttle downlink/Ground-Air Television (GATV) uplink from Mission Control. Several of the astronauts are interviewed by Mission Control regarding the status of the experiments.

CASI
Space Communication; Space Shuttle Missions; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecraft: Spacelab

On this fifth day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine "Cady" Colman, and Michael Lopez-Alegria are shown performing several of the spaceborne experiments onboard the USA Microgravity Lab-2 (USML-2). These experiments include the Astroculture (tm)ASC experiment, which is an experiment using liquid/liquid diffusion methods, and the Drop Physics Module (DPM) experiment. Both of these experiments are designed to study the behavior of fluids in microgravity conditions. The experiments are performed on the Spacelab and are monitored by Mission Control through a Ground-Air Television (GATV) system.

CASI
Space Communication; Space Shuttle Missions; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecraft: Spacelab

On this fifth day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine "Cady" Colman, and Michael Lopez-Alegria are shown performing several of the spaceborne experiments onboard the USA Microgravity Lab-2 (USML-2). These experiments include the Astroculture (tm)ASC experiment, which is an experiment using liquid/liquid diffusion methods, and the Drop Physics Module (DPM) experiment. Both of these experiments are designed to study the behavior of fluids in microgravity conditions. The experiments are performed on the Spacelab and are monitored by Mission Control through a Ground-Air Television (GATV) system.

CASI
Space Communication; Space Shuttle Missions; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecraft: Spacelab

On this fifth day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine "Cady" Colman, and Michael Lopez-Alegria are shown performing several of the spaceborne experiments onboard the USA Microgravity Lab-2 (USML-2). These experiments include the Astroculture (tm)ASC experiment, which is an experiment using liquid/liquid diffusion methods, and the Drop Physics Module (DPM) experiment. Both of these experiments are designed to study the behavior of fluids in microgravity conditions. The experiments are performed on the Spacelab and are monitored by Mission Control through a Ground-Air Television (GATV) system.

CASI
Space Communication; Space Shuttle Missions; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecraft: Spacelab
Surface Tension Driven Convection Experiment (STDCE), the Protein Crystal Growth (PCG) experiment, and a Hand-Held Diffusion Test Cell experiment. Lopez-Alegria is interviewed in Spanish by two Spanish radio show hosts. Earth views include cloud cover, the Earth’s horizon and atmospheric boundary layers, and several oceans.

CASI
Earth Observations (From Space); Ground-Air-Ground Communication; Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportion System Flights; Spaceborne Experiments; Spacecrews; Spacelab

1996/09/06/45 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-73 flight day 6
Oct 25, 1995; In English; 22 min. 55 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VI–95–1995062322; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this sixth day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine ‘Cad’ Collman, and Michael Lopez-Alegria are shown performing several of the spaceborne experiments onboard the USA Microgravity Lab-2 (USML-2). The experiments shown include the Protein Crystal Growth (PCG) experiment, the Astroculture(tm)(ASC) experiment, the Drop Physics Module (DPM) experiment, and the Surface Tension Driven Convection Experiment (STDCE). All the experiment imagery was downlinked to Mission Control with the High-Packed Digital Television (HI-PAC) system. The experiments shown include the Surface Tension Driven Convection Experiment (STDCE), the Drop Physics Module (DPM) experiment, and the Geophysical Fluid Flow Cell Experiment (GFFC). All experiment imagery was downlinked from the shuttle to Mission Control using the High-Packed Digital Television (HI-PAC) system.

CASI
Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecrews; Spacelab

1996/09/08/46 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-73 flight day 7
Oct 26, 1995; In English; 10 min. 15 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VI–95–1995062323; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this seventh day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine ‘Cad’ Collman, and Michael Lopez-Alegria are shown performing several of the spaceborne experiments onboard the USA Microgravity Lab-2 (USML-2). The experiments shown include the Surface Tension Driven Convection Experiment (STDCE), the Drop Physics Module (DPM), the Protein Crystal Growth (PCG) experiment, and the Glovebox (GBX) demonstration. All the experiments were monitored by the High-Packed Digital Television (HI-PAC) system onboard the shuttle.

CASI
Ground-Air-Ground Communication; Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecrews; Spacelab

1996/09/08/47 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-73 flight day 8
Oct 27, 1995; In English; 16 min. 45 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VI–95–1995062324; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eighth day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine ‘Cad’ Collman, and Michael Lopez-Alegria are shown performing several of the spaceborne experiments onboard the USA Microgravity Lab-2 (USML-2). The experiments shown include the Astroculture(tm)(ASC) experiment, the Protein Crystal Growth (PCG) experiment, the Surface Tension Driven Convection Experiment (STDCE), the Commercial Generic Bioprocessing Apparatus (CGBA), and further testing of the High-Packed Digital Television (HI-PAC) system. An interview with Bowersox and Thornton regarding the mission’s status was conducted by radio World News Now in Houston.

CASI
Ground-Air-Ground Communication; News Media; Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecrews; Spacelab

1996/09/08/48 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-73 flight day 9
Oct 28, 1995; In English; 12 min. 30 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VI–95–1995062325; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this ninth day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine ‘Cad’ Collman, and Michael Lopez-Alegria are shown performing several of the spaceborne experiments onboard the USA Microgravity Lab-2 (USML-2). The experiments shown include the Surface Tension Driven Convection Experiment (STDCE) and the Protein Crystal Growth (PCG) experiment with different types of solution mixtures used. The imagery of the experiments inside the Spacelab were downlinked to Mission Control with the High-Packed Digital Television (HI-PAC) system.

CASI
Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecrews; Spacelab

1996/09/08/49 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-73 flight day 10
Oct 29, 1995; In English; 12 min. 5 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VI–95–1995062326; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this tenth day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine ‘Cad’ Collman, and Michael Lopez-Alegria are shown performing several of the spaceborne experiments onboard the USA Microgravity Lab-2 (USML-2). The experiments shown include the Surface Tension Driven Convection Experiment (STDCE), the Drop Physics Module (DPM) experiment, and the Geophysical Fluid Flow Cell Experiment (GFFC). All experiment imagery was downlinked from the shuttle to Mission Control using the High-Packed Digital Television (HI-PAC) system.

CASI
Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecrews; Spacelab

1996/09/08/50 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-73 flight day 11
Oct 30, 1995; In English; 7 min. 25 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VI–95–1995062327; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this eleventh day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine ‘Cad’ Collman, and Michael Lopez-Alegria are shown performing several of the spaceborne experiments onboard the USA Microgravity Lab-2 (USML-2). The experiments shown include the Surface Tension Driven Convection Experiment (STDCE). Thermistor is used in the STDCE to study fluid dynamics behind particle motion.

CASI
Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecrews; Spacelab
On this twelfth day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine 'Cady' Collman, and Michael Lopez-Alegria are shown performing several of the spaceborne experiments onboard the USA Microgravity Lab-2 (USML-2). The experiments shown include the Drop Physics Module (DPM) experiment, the Surface Tension Driven Convection Experiment (STDCE), and the Astroculture (m) ASC) demonstration. Rominger was interviewed by a Colorado radio news show and asked questions about the mission and living in space. Earth views included cloud cover.

CASI

Earth Observations (From Space); Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecrews; Spacelab

On this thirteenth day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine 'Cady' Collman, and Michael Lopez-Alegria are shown preparing the USA Microgravity Lab-2 (USML-2) and the shuttle for return to Earth. There is footage of the shuttle from the robot arm cameras and of Earth. Earth views include cloud cover, various land masses, mountain ranges, and oceans.

CASI

Earth Observations (From Space); Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spacecrews; Spacelab

On this fourteenth day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine 'Cady' Collman, and Michael Lopez-Alegria are shown performing several of the spaceborne experiments onboard the USA Microgravity Lab-2 (USML-2). The experiments shown include the Drop Physics Module (DPM) experiment, the Surface Tension Driven Convection Experiment (STDCE), the Geophysical Fluid Flow Cell (GFFC) experiment, and an experiment on fuel combustion and combustion products. Bowersox, Sacco, Thornton, and Rominger (the red team) were interviewed by high school students from Worcester, Massachusetts, who asked questions regarding the mission’s experiments and general questions about living in space. Earth views included a black and white image of the Earth’s atmospheric boundary layers.

CASI

Earth Observations (From Space); Ground/Air-Ground Communication; Microgravity; Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecrews; Spacelab

On this fifteenth day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine 'Cady' Collman, and Michael Lopez-Alegria are shown hosting an in-orbit interview with various newspaper reporters from Johnson Space Center, Kennedy Space Center, and Marshall Space Flight Center via satellite hookup. The astronauts were asked questions regarding the status of the USA Microgravity Lab-2 (USML-2) experiments, their personal goals regarding their involvement in the mission, their future in the space program, and general questions about living in space. Earth views included cloud cover and a tropical storm.

CASI

Earth Observations (From Space); EURECA (ESA); European Space Agency; Flight Crews; Payload Deployment & Retrieval System; Postflight Analysis; Scientific Satellites; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Tethered Satellites
On this first day of the STS-74 mission, the flight crew, Cmdr. Kenneth Cameron, Pilot James Halsell, and Mission Specialists William McArthur, Jerry Ross, and Chris Hatfield, are shown in prelaunch and launch activities. This mission is the second of seven Mir-Space Shuttle hook-ups. Major objectives of this mission are to include a docking between Mir and the Space Shuttle and the transfer of a Russian docking module, water, supplies, and two solar arrays to the Mir space station. This mission highlights the first time that astronauts from Canada, Russia, the U.S. and the European Space Agency (ESA) will be onboard a single spacecraft in space at the same time. Additional experimental payloads onboard the shuttle are the GLO-4 PASDE Payload (GPP) experiment and the Photogrammetric Apparatus Structure Dynamics Experiment (PASDE).

CASI
Flight Crews; Mir Space Station; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecraft Docking

On this second day of the STS-74 mission, the flight crew, Cmdr. Kenneth Cameron, Pilot James Halsell, and Mission Specialists William McArthur, Jerry Ross, and Chris Hatfield, were awakened to music from the play 'The Nutcracker'. The astronauts hosted an in-orbit interview with Canadian reporters and journalists from Toronto, answering general questions about living in space and space flight, and explaining the delicate maneuvers that the shuttle will have to perform for the Mir docking procedures scheduled for the next day. Due to the awkward angle that the shuttle will use to approach the Mir, the docking procedure will be done in an almost blind state.

CASI
Flight Crews; Mir Space Station; Space Communication; Space Shuttle Missions; Space Shuttle Payloads; Space Transportation System; Space Transportation System Flights; Spacecraft Docking; Spacecraft Maneuvers

On this third day of the STS-74 mission, the flight crew, Cmdr. Kenneth Cameron, Pilot James Halsell, and Mission Specialists William McArthur, Jerry Ross, and Chris Hatfield successfully connect the Russian-made docking module to the Space Shuttle using the shuttle's robotic arm. There is a live, in-orbit press interview with the astronauts from inside the Russian docking module regarding the status of the mission thus far. The docking module will remain with Mir after the two spacecraft have undocked.

CASI
Flight Crews; Mir Space Station; Modules; Space Communication; Space Shuttle Payloads; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spacecraft Docking

On this fourth day of the STS-74 mission, the flight crew, Cmdr. Kenneth Cameron, Pilot James Halsell, and Mission Specialists William McArthur, Jerry Ross, and Chris Hatfield, perform a successful docking between the space shuttle and the Mir space station using the Russian-made docking module that had been previously installed on the third day of the mission. The astronauts and the Mir 20 cosmonauts, Cmdr. Yuri Gidzenko, Flight Engineer Sergei Avdeyev, and Cosmonaut-Researcher (ESA) Thomas Reiter, are shown greeting each other from inside the docking module and an in-orbit interview between the crews and NASA is conducted in both English and Russian.

CASI
Flight Crews; Mir Space Station; Orbital Maneuvers; Space Communication; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spacecraft Docking

On this fifth day of the STS-74 mission, the flight crew, Cmdr. Kenneth Cameron, Pilot James Halsell, and Mission Specialists William McArthur, Jerry Ross, and Chris Hatfield, were awakened to the theme from the movie 2001: A Space Odyssey. The Mir 20 cosmonauts, Cmdr. Yuri Gidzenko, Flight Engineer Sergei Avdeyev, and Cosmonaut-Researcher (ESA) Thomas Reiter, and shuttle astronauts are shown giving each other quizzes and presents to commemorate their historic docking event and the start towards the development of the International Space Station. There is a press conference from Moscow by one of the officers of the Russian Space Agency with both flight crews and an additional separate press interview of the crews by Canadian reporters. There is video footage of the two docked spacecraft taken from various angles.

CASI
Conferences; Flight Crews; Mir Space Station; Space Communication; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecraft Docking

On this sixth day of the STS-74 mission, the flight crew, Cmdr. Kenneth Cameron, Pilot James Halsell, and Mission Specialists William McArthur, Jerry Ross, and Chris Hatfield and the Mir 20 cosmonauts, Cmdr. Yuri Gidzenko, Flight Engineer Sergei Avdeyev, and Cosmonaut-Researcher (ESA) Thomas Reiter, were greeted and briefly interviewed by the Secretary General of the United Nations, Boutros Boutros-Ghali, on the 50th anniversary of the United Nations via a radio satellite hookup. An additional interview with other journalists from different areas of the USA and Canada was also presented.

CASI
Flight Crews; Mir Space Station; Space Communication; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecraft Docking

On this seventh day of the STS-74 mission, the flight crew Cmdr. Kenneth Cameron, Pilot James Halsell, and Mission Specialists William McArthur, Jerry Ross, and Chris Hatfield, filmed the Mir-shuttle separation maneuver. After separation, the shuttle performed a fly-around of the Mir space station, during which, a variety of views of the Mir station were taken. Earth views include cloud cover.

CASI
Mir Space Station; Space Rendezvous; Space Transportation System; Space Transportation System Flights; Spacecraft Docking

On this eighth day of the STS-74 mission, the flight crew, Cmdr. Kevin P.
1996025958 NASA Johnson Space Center, Houston, TX USA

STS-75 Flight Day 8
Feb. 29, 1996; In English; Videotape: 17 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–96–1996037043; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this eighth day of the STS-75 mission, the flight crew, Cmdr. Andrew Allen, Pilot Scott Horowitz, Payload Cmdr. Franklin Chang-Diaz, Payload Specialist Umberto Guidoni (Italy), and Mission Specialists Jeffrey Hoffman, Maurizio Cheli (ESA) and Claude Nicollier (ESA), are shown performing the Advanced Automated Directional Solidification Furnace (AADSF) experiment which is one part of the USA Microgravity Payload-3 (USMP-3) experiments. Earth views include cloud cover.
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Microgravity; Space Shuttle Missions; Space Shuttle Payloads; Spaceborne Experiments; Earth Observations (From Space); Columbia (Orbiter)
Control’s help, still trying to correct the problems with the ‘Smart Flex’ computer system which is delaying the deployment of the Tethered Satellite System Reflight (TSS-1R). There is imaging shown of the shuttle’s exhaust system using water vapor.

**CASI**

*Space Transportation System; Space Transportation System Flights; Spacecrews; Spacecraft Electronic Equipment; Space Shuttle Missions; Space Shuttle Payloads; International Cooperation: Columbia (Orbiter)*

---

**STS-75 Flight Day 1**

Feb. 22, 1996; In English; Videotape: 30 min. playing time, in color, with sound

Report No.(s): NONP-NASA-VT--96--1996037036; No Copyright; Aval: CASI; B02, Videotape-Beta; V02, Videotape-VHS

---

**STS-72 Post Flight Presentation**

Peterson, Glen, Editor, NASA Johnson Space Center, USA; Feb. 1996; In English; Videotape: 28 min. 59 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT--96--1996037045; No Copyright; Aval: CASI; B02, Videotape-Beta; V02, Videotape-VHS

---

**STS-74 Flight Day 15**

Mar. 07, 1996; In English; Videotape: 11 min. 30 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT--96--1996037070; No Copyright; Aval: CASI; B01, Videotape-Beta; V01, Videotape-VHS

---

**STS-74 Post Flight Presentation**

Dec. 08, 1995; In English; Videotape: 39 min. 12 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT--96--1996031303; No Copyright; Aval: CASI; B03, Videotape-Beta; V03, Videotape-VHS
19960825991 NASA Johnson Space Center, Houston, TX USA

STS-75 Flight Day 13
Mar 05, 1996; In English; Videotape: 14 min. 12 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VE-96-1996037048; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this thirteenth day of the STS-75 mission, the flight crew, Cmdr. Andrew Allen, Pilot Scott Horowitz, Payload Cmdr. Franklin Chang-Diaz, Payload Specialist Umberto Guidoni (Italy), and Mission Specialists Jeffrey Hoffman, Maurizio Cheli (ESA) and Claude Nicollier (ESA), are shown conducting combustion and burn experiments. The flight crew is interviewed by reporters from USA and Europe via a satellite hookup. Earth views include clouds and storm systems. A view of the lost, free-flying tethered satellite is shown.

CASI
Space Transportation System: Space Transportation System Flights; Spacecrews; Tethered Satellites; Space Shuttle Missions; Space Shuttle Payloads; Columbus (Orbiter); Space Communication; Spaceborne Experiments; Earth Observations (From Space)

19960825992 NASA Johnson Space Center, Houston, TX USA

STS-75 Flight Day 12
Mar 04, 1996; In English; Videotape: 16 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VE-96-1996037047; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this twelfth day of the STS-75 mission, the flight crew, Cmdr. Andrew Allen, Pilot Scott Horowitz, Payload Cmdr. Franklin Chang-Diaz, Payload Specialist Umberto Guidoni (Italy), and Mission Specialists Jeffrey Hoffman, Maurizio Cheli (ESA) and Claude Nicollier (ESA), are shown being interviewed via satellite hookup by reporters. Cheli, through the demonstration of a simple experiment, explains a simple acceleration physics concept. Middelde Glockbox burn and combustion experiments are also shown. Earth views include Italy, other land masses, some cloud cover, a sunrise, and horizon shots.

CASI
Space Transportation System: Space Transportation System Flights; Spacecrews; Spaceborne Experiments; Microgravity; Space Communication; Space Shuttle Missions; Space Shuttle Payloads; Columbia (Orbiter)

19960825993 NASA Johnson Space Center, Houston, TX USA

STS-75 Flight Day 11
Mar 03, 1996; In English; Videotape: 17 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VE-96-1996037046; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eleventh day of the STS-75 mission, the flight crew, Cmdr. Andrew Allen, Pilot Scott Horowitz, Payload Cmdr. Franklin Chang-Diaz, Payload Specialist Umberto Guidoni (Italy), and Mission Specialists Jeffrey Hoffman, Maurizio Cheli (ESA) and Claude Nicollier (ESA), are shown conducting combustion experiments in the Middelde Glockbox station, conducting physiological tests, and performing a variety of daily activities (eating, exercising, etc.). Horowitz, Cheli, and Guidoni are interviewed by Voice of America via satellite hookup and they answered general questions regarding the mission, experiments, and the lost tethered satellite. Earth views include a sunrise and some cloud cover.

CASI
Space Transportation System: Space Transportation System Flights; Spacecrews; Columbus (Orbiter); Spaceborne Experiments; Space Shuttle Missions; Space Shuttle Payloads; Earth Observations (From Space); Space Communication; Voice of America

19960825994 NASA Johnson Space Center, Houston, TX USA

STS-69 Mission Highlights Resource Tape
Dec. 19, 1995; In English; Videotape: 55 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VE-96-1996036744; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The STS-69 mission of the Endeavour Space Shuttle and crew are highlighted in this video. The 'Dog Crew', as they called themselves, Cmdr. Dave Walker, Pilot Ken Crockell, and Mission Specialists Mike Gernhardt, Jim Voss, and Jim Newman, are shown performing pre-launch and launch activities; the SPARTAN-201 and the Wake Shield Facility (WSF) deployments, retrievals, and berthing; physiological and other Middeck experiments; and jet thruster firing tests on the WSF. A 6 1/2 hour EVA was conducted to test the thermal properties of the new space suits and to test the tools and equipment to be used in the construction of the International Space Station. General crew activities are also shown and Earth views include cloud cover and the WSF with the Earth as the background.

CASI
Spacecraft Satellites; Spacecraft; Space Transportation System; Endeavour (Orbiter); Extravehicular Activity; Spaceborne Experiments; Space Transportation System Flights; Space Shuttle Missions; Space Shuttle Payloads; Rocket Engines

19960825995 NASA Johnson Space Center, Houston, TX USA

STS-72 Flight Day 2
Jan. 12, 1996; In English; Videotape: 30 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VE-96-1996034866; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this second day of the STS-72 mission, the flight crew, Cmdr. Brian Duffy, Pilot Brent W. Jett, and Mission Specialists Leroy Chiao, Daniel T. Berry, Winston E. Scott, and Koichi Wakata (NASA), awakened to music from the motion picture 'Stars Wars'. The crew performed a systems checkout, prepared for the retrieval of the Japanese Space Flyer Unit (SFU), tested the spacecraft for the EVA, and activated some of the secondary experiments. An in-orbit news interview was conducted with the crew via satellite downlinking. Questions asked ranged from the logistics of the mission to the avoidance procedures. The Endeavour Orbiter performed a mass hitting the active Air Force satellite, nicknamed 'Misty' (MSTI). Earth views included cloud cover, several storm systems, and various land masses with several views of the shuttle's open cargo bay in the foreground.

CASI
Space Transportation System: Space Transportation System Flights; Endeavour (Orbiter); Flight Crews; Space Shuttle Missions; Earth Observations (From Space); Computer Systems Performance; Checkout; Space Communication

19960826002 NASA Johnson Space Center, Houston, TX USA

STS-76 Flight Day 3
Mar. 24, 1996; In English; Videotape: 30 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VE-96-1996039880; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this third day of the STS-76 mission, the flight crew, Cmdr Kevin P. Chilton, Pilot Richard A. Searfoss, and Mission Specialists Shannon W. Lucid, Linda M. Godwin, and Ronald M. Sega, are shown performing the docking maneuvers for the Mir Space Station and the Atlantis in-orbit rendezvous. The Atlantis crew is shown greeting the Mir cosmonaut crew, Cmdr. Yuri Onufrienko and Flight Engineer Yuri Usachev. The docking procedure is shown from both outside and inside the Atlantis. An interview with Mission Control is shown from inside Mir with both crews present. There is footage of the Mir, both docked with Atlantis and free flying. Not shown is the EVA by Clifford and Godwin to attach several experimental packages to the exterior of the Mir docking module, although their packing preparation is shown.

CASI
Space Transportation System Flights; Space Transportation System; Spacecraft Docking: Mir Space Station; Spacecraft Maneuvers

19960826003 NASA Johnson Space Center, Houston, TX USA

STS-76 Flight Day 5
Mar 29, 1996; In English; Videotape: 30 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VE-96-1996039889; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fifth day of the STS-76 mission, the flight crew, Cmdr. Kevin P. Chilton, Pilot Richard A. Searfoss, and Mission Specialists Shannon W. Lucid, Linda M. Godwin, Michael R. Clifford, and Ronald M. Sega, pay tribute to the late astronaut Bob Orlenev with views from the Atlantis/Mir configuration with the Earth in the background. Atlantis astronauts, interviewed by reporters from NASA Centers and Russia during an in-orbit press conference, describe their observations of Comet Hyakutake as it continues its close pass by Earth, remarking on the comet’s brilliance and visibility. The astronauts and cosmo-
The astronauts also took time out from their transfer and resupply activities to talk with Charlie Gibson of 'Good Morning America'.

**Space Transportation System Flights: Space Transportation System: Comets; News Media**

19960826004 NASA Johnson Space Center, Houston, TX USA

**STS–76 Flight Day 6**

Mar. 30, 1996; In English; Videotape: 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996039806; No Copyright; Avail: CASI; B02, Videotape-Veta; V02, Videotape-VHS

On this sixth day of the STS-76 mission, the flight crew, Cmdr. Kevin P. Chilton, Pilot Richard A. Scarfoss, and Mission Specialists Shannon W. Lucid, Linda M. Godwin, Michael R. Clifford, and Ronald M. Sega are shown preparing for Godwin and Clifford’s extra vehicular activity (EVA). The two astronauts are shown egressing from the Shuttle and performing activities during the EVA with the Earth in the background. Godwin and Clifford spent six hours spacewalking in Atlantis’ cargo bay and on the exterior of the Mir’s docking module. They are shown completing all of the objectives planned for the spacewalk, the most important of which was to install on the exterior of Mir four experiments to monitor the space environment for the next year and a half. This marks the first time that a spacewalk was conducted from a docked Space Shuttle. A variety of new tools capable of being used on both US and Russian spacecraft were evaluated during the spacewalk.

**CASI**

**Space Transportation System: Space Transportation System Flights: Space Shuttles: Extravehicular Activity**

19960826005 NASA Johnson Space Center, Houston, TX USA

**STS–76 Flight Day 7**

Mar. 31, 1996; In English; Videotape: 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996039805; No Copyright; Avail: CASI; B02, Videotape-Veta; V02, Videotape-VHS

On this seventh day of the STS-76 mission, the flight crew, Cmdr. Kevin P. Chilton, Pilot Richard A. Scarfoss, and Mission Specialists Linda M. Godwin, Michael R. Clifford, and Ronald M. Sega are shown bidding the Mir crew and Shannon W. Lucid an emotional farewell. Chilton calling it a ‘bittersweet moment.’ The Atlantis and Mir commanders, Chilton and Omurzenko, along with spacewalkers Godwin and Clifford took time out to talk with CBS’ ‘Up to the Minute.’ The space flyers discussed the success of their joint mission and the 6-hour spacewalk. The astronauts and cosmonauts exchanged handshakes and hugs in the Mir core module, and then praised both mission control centers, Houston and Kalamazoo for their support throughout the joint phase of the mission.

**CASI**

**Space Transportation System Flights: Space Transportation System: Crew Procedures (Inflight); News Media**

19960826017 NASA Johnson Space Center, Houston, TX USA

**STS–73 Post Flight Presentation**

Dec. 15, 1995; In English; Videotape: 28 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996031304; No Copyright; Avail: CASI; B02, Videotape-Veta; V02, Videotape-VHS

The post flight presentation of the STS-73 Space Shuttle’s USA Microgravity Lab. (USML) mission was presented by the flight crew, Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine ‘Cady’ Collman, and Michael Lopez-Alegria, using color video and slides. Film footage includes the prelaunch and launch activities, the USML and Middeck experiments (Advanced Protein Crystallization Facility (APCF), the Astroculture(tm) (ASC) hardware and experiment, the Commercial Generic Bioprocessing Apparatus (CGBA), the Crystal Growth Furnace (CGF), the Drop Physics Module (DPM), the Geophysical Fluid Flow Cell (GGFC), the Glovebox (GBX), the Zeolite Crystal Growth (ZCG) experiment, the Surface Tension Driven Convection Experiment (STDCE), the Protein Crystal Growth (PCG) experiment, three Measuring Microgravity experiments (the Space Acceleration Measurement System (SAMS), the Three Dimensional Microgravity Accelerometer (3DMA), and the Orbital Acceleration Research Experiment (OARE)), and the High-Packed Digital Television (HI-PAC) demonstration system), pre-return flight systems checkout, reentry, and space shuttle landing. The USML experiments were monitored via the HI-PAC system downlink. Earth views included mostly geographical locations (Mediterranean Sea; Turkey: Lake Powell, Arizona/Utah area; San Francisco Bay; Baltimore, Maryland; Washington, DC; India; Tibet; China: Bhutan; Philadelphia; and the Himalayas).

**CASI**

**Space Shuttle Orbital; Space Transportation System Flights; Flight Crews; Space Shuttle Missions; Spacelab; Microgravity; Spaceborne Experiments; Earth Observations (From Space); Digital Television; Downlinking; Television Systems; Space Transportation System**

19960826028 NASA Johnson Space Center, Houston, TX USA

**STS–75 Flight Day 2**

Feb. 23, 1996; In English; Videotape: 10 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996037037; No Copyright; Avail: CASI; B01, Videotape-Veta; V01, Videotape-VHS

On this second day of the STS-75 mission, the flight crew, Cmdr. Andrew Allen, Pilot Scott Horowitz, Payload Cmdr. Franklin Chang-Diaz, Payload Specialist Umberto Guidoni (Italian), and Mission Specialists Jeffrey Hoffman, Maurizio Cheli (ESA) and Claude Nicollier (ESA), are shown, via satellite downlinking, online with Dan Golden, the Director of NASA, discussing the mission and performing system set-ups. A problem with the ‘Smart Flex’ computer system develops and the crew spends most of the day trying to fix the problem with the help of Mission Control. Earth views include cloud cover, various land and water masses, and Earth’s Arctic regions.

**CASI**

**Space Transportation System: Space Transportation System Flights: Columbia (Orbiter); Spacecrews; International Cooperation; Spaceborne Experiments; Space Shuttle Missions; Spacecraft Electronic Equipment**

19960826029 NASA Johnson Space Center, Houston, TX USA

**STS–72 Flight Day 1**

Jan. 11, 1996; In English; Videotape: 28 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996034087; No Copyright; Avail: CASI; B02, Videotape-Veta; V02, Videotape-VHS

On this first day of the STS-72 mission, the flight crew, Cmdr. Brian Duffy, Pilot Brent W. Jett, and Mission Specialists Leroy Chiao, Daniel T. Barry, Winston E. Scott, and Koichi Wakata (NASDA), were shown in prelaunch and launch activities. This was the tenth flight of the Space Shuttle Orbiter Endeavour. The primary objectives of this mission were the retrieval of the Japanese Space Flyer Unit (SFU) spacecraft, the deployment and retrieval of the NASA Office of Aeronautics and Space Technology Laser Flier (OAS-TF) spacecraft, and two 6 1/2 hour spacewalks to test hardw_e and tools that will be used to assemble the International Space Station. Secondary objectives included the Shuttle Solar Backscatter Ultraviolet (SBUV-8), the Shuttle Laser Altimeter (SLAS), the Satellite Imaging System (SIS), the Shuttle’s Space Transportation System (STS), and the Space Shuttle’s Mission and Performance System (MPS). The flight crew performed system set-ups. A problem with the ‘Smart Flex’ computer system develops and the crew spends most of the day trying to fix the problem with the help of Mission Control. Earth views include cloud cover, various land and water masses, and Earth’s Arctic regions.

**CASI**

**Space Transportation System: Space Transportation System Flights: Columbia (Orbiter); Spacecrews; International Cooperation; Spaceborne Experiments; Space Shuttle Missions; Spacecraft Electronic Equipment**

19960826030 NASA Johnson Space Center, Houston, TX USA

**STS–72 Flight Day 3**

Jan. 13, 1996; In English; Videotape: 31 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996034085; No Copyright; Avail: CASI; B03, Videotape-Veta; V03, Videotape-VHS

On this third day of the STS-72 mission, the flight crew, Cmdr. Brian Duffy, Pilot Brent W. Jett, and Mission Specialists Leroy Chiao, Daniel T. Barry, Winston E. Scott, and Koichi Wakata (NASDA), awakened to a traditional breakfast in the Mir core module, and then praised both mission control centers, Houston and Kaliningrad for their support throughout the joint phase of the mission. The post flight presentation of the STS-72 mission, the flight crew, Cmdr. Andrew Allen, Pilot Scott Horowitz, Payload Cmdr. Franklin Chang-Diaz, Payload Specialist Umberto Guidoni (Italian), and Mission Specialists Jeffrey Hoffman, Maurizio Cheli (ESA) and Claude Nicollier (ESA), are shown, via satellite downlinking, online with Dan Golden, the Director of NASA, discussing the mission and performing system set-ups. A problem with the ‘Smart Flex’ computer system develops and the crew spends most of the day trying to fix the problem with the help of Mission Control. Earth views include cloud cover, various land and water masses, and Earth’s Arctic regions.

**CASI**

**Space Transportation System: Space Transportation System Flights: Columbia (Orbiter); Spacecrews; International Cooperation; Spaceborne Experiments; Space Shuttle Missions; Spacecraft Electronic Equipment**

19960826031 NASA Johnson Space Center, Houston, TX USA

**STS–72 Flight Day 4**

Jan. 16, 1996; In English; Videotape: 28 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996034089; No Copyright; Avail: CASI; B04, Videotape-Veta; V04, Videotape-VHS

On this fourth day of the STS-72 mission, the flight crew, Cmdr. Chris Ferguson, Pilot Gregory B. McCall, Mission Specialists Yury Averyanov, Vitaliy B. Zaika, Orson Welles, and Henry Segrave (SSTI), were shown performing system checks and a variety of scientific experiments. The flight crew performed system set-ups. A problem with the ‘Smart Flex’ computer system develops and the crew spends most of the day trying to fix the problem with the help of Mission Control. Earth views include cloud cover, various land and water masses, and Earth’s Arctic regions.

**CASI**

**Space Transportation System: Space Transportation System Flights: Columbia (Orbiter); Spacecrews; International Cooperation; Spaceborne Experiments; Space Shuttle Missions; Spacecraft Electronic Equipment**
Japanese song, "Sea in Springtime". Wakata, using the shuttle's robot arm, successfully retrieved the Japanese Space Flyer Unit (SFU) satellite and berthed it in the shuttle's cargo bay. Duffy and Wakata were interviewed, via satellite, by Japanese journalists and reporters in Houston, Texas. Earth views include cloud cover, storm systems, Africa and several other land masses.

CASI

Space Transportation System: Space Transportation System Flights; Endeavour (Orbiter); Space Shuttle Missions; Payload Retrieval (STS); Remote Manipulator System; Earth Observations (From Space); Space Communication; Flight Crews

19960826035 NASA Johnson Space Center, Houston, TX USA
STS-76 Flight Day 1
Mar. 22, 1996; In English; Videotape: 22 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--96–1996039005; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this first day of the STS-76 mission, the flight crew, Cmdr. Kevin P. Chilton, Pilot Richard A. Searfoss, and Mission Specialists Shannon W. Lucid, Linda M. Godwin, Michael R. Clifford, and Ronald M. Sega, are shown performing prelaunch and launch activities for the night launch of the Space Shuttle Atlantis. The primary objective of this mission is the third docking between the Mir Space Station and Atlantis and a crew transfer. Lucid will remain onboard the Mir for about four months. Other activities include an EVA by Godwin and Clifford, logistics operations, and scientific research with a SPACEHAB module, some middeck experiments, and a Get Away Special (GAS) canister. Also, almost a ton of equipment and supplies will be transferred to the Mir. Experiments include the Mir Electric Field Characterization (MEFC), European Space Agency (ESA) Biorack life sciences experiment, Queen's University Experiment in Liquid Diffusion (QUELD), Optizone Liquid Phase Sintering Experiment (OLIPS), and a Naval Research Laboratory (NRL) GAS payload Trapped Ions in Space (TRIS), which will measure low-energy particle radiation in the inner magnetosphere. This mission also will include a KRLSat, a prototype of Earth viewing cameras and instruments, that allow students in grades K-12 to see and direct the capture of pictures from space. Footage from Mission control is also included.

CASI

Space Transportation System Flights: Space Shuttle; Spacecraft Docking: Spacelab Payloads; Mir Space Station

19960826036 NASA Johnson Space Center, Houston, TX USA
STS-75 Flight Day 14
Mar. 05, 1996; In English; Videotape: 17 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--96–1996037049; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this fourteenth day of the STS-75 mission, the flight crew, Cmdr. Andrew Allen, Pilot Scott Horowitz, Payload Cmrd. Franklin Chang-Diaz, Payload Specialist Umberto Guidoni (Italy), and Mission Specialists Jeffrey Hoffman, Maurizio Cheli (ESA) and Claude Nicoller (ESA), are shown conducting material burn tests and physiological experiments. Earth views include cloud cover, sunrise, atmospheric boundary layer, Florida, Amazon River, Brazil coast line, and the Pacific Ocean.

CASI

Space Transportation System: Space Transportation System Flights; Spacecrafts; Physiological Tests: Spaceborne Experiments; Combustion Physics; Space Shuttle Missions: Space Shuttle Payloads: Columbus (Orbiter); Earth Observations (From Space)

19960826037 NASA Johnson Space Center, Houston, TX USA
STS-75 Flight Day 10
Mar. 02, 1996; In English; Videotape: 14 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--96–1996037045; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this tenth day of the STS-75 mission, the flight crew, Cmdr. Andrew Allen, Pilot Scott Horowitz, Payload Cmrd. Franklin Chang-Diaz, Payload Specialist Umberto Guidoni (Italy), and Mission Specialists Jeffrey Hoffman, Maurizio Cheli (ESA), and Claude Nicoller (ESA), are shown performing middeck and Microgravity lab experiments, including the Material pour l'étude des Phenomenes interessant la Solidification sur Terre et en Orbite (MEPHISTO) experiment, as well as some material burn tests. Earth views include cloud cover and horizon shots.

CASI

Space Transportation System Flights: Spacecrafts; Space Transportation System: Microgravity; Space Shuttle Missions: Space Shuttle Payloads; Spaceborne Experiments; Earth Observations (From Space)

19960826038 NASA Johnson Space Center, Houston, TX USA
STS-75 Flight Day 6
Feb. 27, 1996; In English; Videotape: 18 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--96–1996037041; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this sixth day of the STS-75 mission, the flight crew, Cmdr. Andrew Allen, Pilot Scott Horowitz, Payload Cmdr. Franklin Chang-Diaz, Payload Specialist Umberto Guidoni (Italy), and Mission Specialists Jeffrey Hoffman, Maurizio Cheli (ESA) and Claude Nicoller (ESA), are shown performing experiments from the USA Microgravity Payload-3 (USMP-3). Mission Control continues to update the flight crew regarding the status of the free orbiting tethered satellite and the few experiments that they were able to start-up onboard the satellite. There is an in-orbit question and answer interview with the astronauts by a group of sixth graders from a West Virginia school. Earth views include water masses and horizon shots.

CASI

Space Transportation System: Space Transportation System Flights: Spacecrafts; Tethered Satellites; Microgravity; Space Communication; Space Shuttle Missions: Space Shuttle Payloads: Columbus (Orbiter); Spaceborne Experiments

19960826039 NASA Johnson Space Center, Houston, TX USA
STS-76 Flight Day 4
Mar. 25, 1996; In English; Videotape: 30 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--96–1996038089; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this fourth day of the STS-76 mission, the flight crew, Cmdr. Kevin P. Chilton, Pilot Richard A. Searfoss, and Mission Specialists Shannon W. Lucid, Linda M. Godwin, Michael R. Clifford, and Ronald M. Sega, are shown performing various experiments on the Middeck and transferring supplies to the Mir Space Station. Godwin explains the European Space Agency (ESA) Biorack investigations. Chilton, Lucid and Mir Cmdr. Yuri Onufenko talk with NASA Administrator Dan Goldin via satellite link. Lucid will be joining the cosmonauts, Onufenko and Flight Engineer Yuri Usachev, for a 140 day mission on the Mir.

CASI

Space Transportation System: Space Transportation System Flights: Mir Space Station: Spaceborne Experiments

19960826040 NASA Johnson Space Center, Houston, TX USA
STS-76 Flight Day 8
Apr. 01, 1996; In English; Videotape: 26 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--96–1996039881; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this eighth day of the STS-76 mission, the flight crew, Cmdr. Kevin P. Chilton, Pilot Richard A. Searfoss, and Mission Specialists Linda M. Godwin, Michael R. Clifford, and Ronald M. Sega are shown undocking from the Mir Space Station. With Mir some 69 nautical miles behind them, the Atlantis astronauts prepared for the return to Earth. Chilton, Searfoss and Clifford perform a routine checkout of Atlantis’ flight control surfaces and a hot fire test of the orbiter’s reaction control system jets. Views include the undocking maneuver; Atlantis as seen from the Mir Space Station; Atlantis’ fly-round of Mir; and the firing of the Reaction Control System (RCS) primary thrusters.

CASI

Space Transportation System Flights; Space Transportation System; Mir Space Station: Crew Procedures (Inflight); Flight Control; Maneuverable Spacecraft
The flight crew of the STS-72 Space Shuttle Orbiter Endeavour Cmdr. T. Brown, Pilot Curtis L. Brown, Jr., and Mission Specialists Andrew S.W. Thomas, Ph.D., Daniel W. Bursch, Mario Runco, Jr., and Marc Garneau, Ph.D., return to the orbiter’s middeck and in the Spacehab module. The Inflatable Antenna (LA.E) was jettisoned later in the morning and is expected to enter the Earth’s atmosphere. This morning’s rendezvous is the first of four planned rendezvous with the small aerodynamically stabilized satellite. Commander John Casper and Pilot Curt Brown guided Endeavour to just under 2,000 feet from the cylindrically shaped Passive Aerodynamically Stabilized Magnetically Damped Satellite Test Unit (PMS-STU). It was deployed from a small canister in Endeavour’s payload bay earlier in the mission in an unstable, slightly rambling attitude to observe how or whether it could stabilize itself without using satellite lifetime-limiting propellants. Casper was scheduled to take time out during the final phase of the rendezvous to talk to fellow astronaut Shannon Lucid and her two cosmonaut crewmates aboard the Russian Space Station Mir. Various views of the Earth can be seen.

**Space Transportation System Flights:** Aerodynamic Stability; Attitude (Inclination); Mir Space Station
the ship's robot arm to grapple the satellite for its berthing back on its payload bay platform.

CASI

Space Transportation System Flights: Inflatable Spacecraft; Inflatable Structures; Deployment

STS–77 Flight Day 1
May 19, 1996; In English; Videotape: 16 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996060590; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this first day of the STS-77 mission, the flight crew, Cmdr. John H. Casper, Pilot Curtis L. Brown, Jr., and Mission Specialists Andrew S.W. Thomas, Ph.D., Daniel W. Bursch, Mario Runco, Jr., and Marc Garneau, Ph.D., can be seen performing post-launch activities such as eating the traditional breakfast, crew suit-up, and the launch to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being reached in the "white room" for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Following an on-time launch, the crew of Endeavor are shown setting up a variety of experiments that will operate for much of the mission.

CASI

Space Transportation System Flights: Inflatable Spacecraft; Inflatable Structures; Deployment

STS–77 Mission Highlights Resource Tape
Apr. 28, 1996; In English; Videotape: 59 min. 42 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996047713; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The flight crew of the STS-74 Space Shuttle Orbiter Atlantis Cmdr. Ken Cameron, Pilot Jim Halsell, and Mission Specialists Chris Hadfield, Jerry Ross, and William McArthur present an overview of their flight mission, whose primary objective is the rendezvous and space docking with the Russian Mir Space Station. Video film footage includes the following: prelaunch and launch activities; shuttle launch; in-orbit rendezvous; installation of the Russian-made docking module; in-orbit docking between Mir and the orbiter; general crew activities; transfer of supplies, equipment, and a crystal growth experiment to Mir; data collection from Mir thruster firings; undocking maneuvers and a Mir fly around; pre-return checkout of flight systems; and the reentry and landing of the orbiter. Earth views include horizon sunsets, atmospheric boundary layers, and a variety of geographical location footage (New Orleans; Atlanta; James Bay, Canada; Poland; Turkey; Mt. Pinatubo, Philippines; Salt Lake City, Utah; and Colorado).

CASI

Space Transportation System Flights: Inflatable Spacecraft; Inflatable Structures; Deployment

STS–77 Flight Day 2
May 20, 1996; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996060597; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this eighth day of the STS-77 mission, the flight crew, Cmdr. John H. Casper, Pilot Curtis L. Brown, Jr., and Mission Specialists Andrew S.W. Thomas, Ph.D., Daniel W. Bursch, Mario Runco, Jr., and Marc Garneau, Ph.D., can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the launch to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being reached in the "white room" for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Following an on-time launch, the crew of Endeavor are shown setting up a variety of experiments that will operate for much of the mission.

CASI

Space Transportation System Flights: Inflatable Spacecraft; Inflatable Structures; Deployment

STS–77 Flight Day 8
May 30, 1996; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996060597; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this eighth day of the STS-77 mission, the flight crew, Cmdr. John H. Casper, Pilot Curtis L. Brown, Jr., and Mission Specialists Andrew S.W. Thomas, Ph.D., Daniel W. Bursch, Mario Runco, Jr., and Marc Garneau, Ph.D., can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the launch to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being reached in the "white room" for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Following an on-time launch, the crew of Endeavor are shown setting up a variety of experiments that will operate for much of the mission.

CASI

Space Transportation System Flights: Inflatable Spacecraft; Inflatable Structures; Deployment

STS–77 Flight Day 3
May 23, 1996; In English; Videotape: 14 min. 49 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996060594; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fifth day of the STS-77 mission, the flight crew, Cmdr. John H. Casper, Pilot Curtis L. Brown, Jr., and Mission Specialists Andrew S.W. Thomas, Ph.D., Daniel W. Bursch, Mario Runco, Jr., and Marc Garneau, Ph.D., can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the launch to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being reached in the "white room" for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Following an on-time launch, the crew of Endeavor are shown setting up a variety of experiments that will operate for much of the mission.

CASI

Space Transportation System Flights: Inflatable Spacecraft; Inflatable Structures; Deployment

STS–77 Flight Day 4
May 22, 1996; In English; Videotape: 14 min. 58 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996060593; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fourth day of the STS-77 mission, the flight crew, Cmdr. John H. Casper, Pilot Curtis L. Brown, Jr., and Mission Specialists Andrew S.W. Thomas, Ph.D., Daniel W. Bursch, Mario Runco, Jr., and Marc Garneau, Ph.D., can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the launch to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being reached in the "white room" for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Following an on-time launch, the crew of Endeavor are shown setting up a variety of experiments that will operate for much of the mission.

CASI

Space Transportation System Flights: Inflatable Spacecraft; Inflatable Structures; Deployment

STS–77 Flight Day 7
May 24, 1996; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996060595; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this sixth day of the STS-77 mission, the flight crew, Cmdr. John H. Casper, Pilot Curtis L. Brown, Jr., and Mission Specialists Andrew S.W. Thomas, Ph.D., Daniel W. Bursch, Mario Runco, Jr., and Marc Garneau, Ph.D., can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the launch to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being reached in the "white room" for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Following an on-time launch, the crew of Endeavor are shown setting up a variety of experiments that will operate for much of the mission.

CASI

Space Transportation System Flights: Inflatable Spacecraft; Inflatable Structures; Deployment

STS–77 Flight Day 9
May 25, 1996; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996060596; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this seventh day of the STS-77 mission, the flight crew, Cmdr. John H. Casper, Pilot Curtis L. Brown, Jr., and Mission Specialists Andrew S.W. Thomas, Ph.D., Daniel W. Bursch, Mario Runco, Jr., and Marc Garneau, Ph.D., can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the launch to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being reached in the "white room" for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Following an on-time launch, the crew of Endeavor are shown setting up a variety of experiments that will operate for much of the mission.

CASI

Space Transportation System Flights: Inflatable Spacecraft; Inflatable Structures; Deployment

STS–77 Flight Day 10
May 26, 1996; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996060597; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this eighth day of the STS-77 mission, the flight crew, Cmdr. John H. Casper, Pilot Curtis L. Brown, Jr., and Mission Specialists Andrew S.W. Thomas, Ph.D., Daniel W. Bursch, Mario Runco, Jr., and Marc Garneau, Ph.D., can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the launch to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being reached in the "white room" for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Following an on-time launch, the crew of Endeavor are shown setting up a variety of experiments that will operate for much of the mission.

CASI

Space Transportation System Flights: Inflatable Spacecraft; Inflatable Structures; Deployment
expenditure and pulmonary function continue throughout the day, as well as the processing of advanced semiconductor materials and alloys in the Advanced Gradient Heating Facility. In an interview with the NBC News, Mission Commander Tom Henricks is shown discussing Columbia’s flight and the varied experiments that are being conducted on board. Crew members are shown participating in tests that measure their performance.

CASI

STS-78 Flight Day 11
Jun. 30, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT-96–1996085857; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this eleventh day of the STS-78 mission, the flight crew, Cmdr. Terence T. Henricks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Linnehan, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, Ph.D. and Robert B. Thirsk, M.D., are shown conducting a news conference to discuss the progress of the international mission with media from the USA, Canada and Europe. During the press conference, the crew explained the relevance of the experiments conducted aboard the Life Sciences and Microgravity mission, and praised support crews and researchers on Earth who are involved in the mission. Payload Specialist Dr. Robert Thirsk told Canadian journalists of how the research will not only benefit astronauts as they conduct long-term space missions, but also people on Earth. Some of the research will aid studies on osteoporosis and the effects steroids have on bones, and also may help doctors on Earth develop treatments for muscle diseases like muscular dystrophy. Thirsk told reporters in Toronto.

CASI

STS-78 Flight Day 10
Jun. 29, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT-96–1996085858; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this tenth day of the STS-78 mission, the flight crew, Cmdr. Terence T. Henricks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Linnehan, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, Ph.D. and Robert B. Thirsk, M.D., continue to perform in a nearly flawless fashion. The crew is shown completing another of four tests focusing on the effects of microgravity on the vestibular system in the inner ear. In space, the vestibular system sometimes becomes confused as to which way is up and down, leading to nausea and disorientation. Using specially designed head gear to monitor head movement and eye coordination, Linnehan, Brady, Favier, Thirsk and Helms performed tests throughout their shifts to determine how the head and eyes track visual and motion targets in microgravity. The study is providing scientists with important information about the crew’s ability to adapt to microgravity.

CASI

STS-78 Flight Day 9
Jun. 28, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT-96–1996085859; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this ninth day of the STS-78 mission, the flight crew, Cmdr. Terence T. Henricks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Linnehan, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, Ph.D. and Robert B. Thirsk, M.D., continue to serve as test subjects for a host of human health and microgravity investigations. The tests concentrate on measurements of lung capacity and muscle strength. In addition, the crew is shown continuing to operate and maintain the experiment equipment.

CASI
Space Transportation System Flights: Muscles: Microgravity: Lungs: Spacehab

STS-78 Flight Day 8
Jun. 27, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT-96–1996085860; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this eighth day of the STS-78 mission, the flight crew, Cmdr. Terence T. Henricks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Linnehan, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, Ph.D. and Robert B. Thirsk, M.D., continue to perform tests throughout their shifts to determine how the head and eyes track visual and motion targets in microgravity. The study is providing scientists with important information about the crew’s ability to adapt to microgravity.

CASI

STS-78 Flight Day 7
Jun. 26, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT-96–1996085861; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this seventh day of the STS-78 mission, the flight crew, Cmdr. Terence T. Henricks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Linnehan, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, Ph.D. and Robert B. Thirsk, M.D., continue as test subjects in a series of investigations that seek to understand the effects of microgravity on the human musculoskeletal system. As they approach the halfway mark of a possible record-setting Space Shuttle mission, the crew of Columbia continues its full schedule of life science and microgravity experiments.

CASI
Space Transportation System Flights: Space Missions: Musculoskeletal System: Microgravity: Life Sciences: Gravitational Effects

STS-78 Flight Day 6
Jun. 25, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT-96–1996085862; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this sixth day of the STS-78 mission, the flight crew, Cmdr. Terence T. Henricks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Linnehan, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, Ph.D. and Robert B. Thirsk, M.D., are shown performing status checks on the life and microgravity experiments and conducting a brief maintenance procedure to correct an electrical circuit problem in the Bubble Drop Particle Unit. On this day, the crew is given four hours off to relax after five days of work with the life and microgravity science investigation being conducted on board.

CASI
Space Transportation System Flights: Microgravity: Gravitational Effects
continue with investigations into the effects of microgravity on muscle strength and endurance, lung function, and adaptation of the neurovestibular system to a microgravity environment. Henriks and Pilot Kevin Kregel will complete work with a laptop computer designed to test the crew's critical thinking skills and reaction time. They also will test a voice control system that allows them to reposition Columbia's closed-circuit television cameras with verbal cues, keeping their hands free to perform other tasks.

CASI

Space Transportation System Flights: Spacecraft; Microgravity; Lungs

1996050105 NASA Johnson Space Center, Houston, TX USA
STS-78 Post Flight Presentation
Jul. 25, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT--96-1996085850; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The flight crew of the STS-78 mission, Cmdr. Terence T. Henriks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Limnahan, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, P.D., and Robert B. Thirsk, M.D., can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the Jem-Jacques Favier, P.D., and Robert B. Thirsk, M.D., continue to conduct routine firings of the orbiter's reaction control system jets and conducting out their flight control systems and aero surfaces in anticipation of the planned landing at the Kennedy Space Center. Commander Tom Henricks and Pilot Kevin Kregel successfully fire Columbia's 34-reaction control system jets and then tests the aero surfaces that will be used during Columbia's high speed re-entry. This firings procedure is part of a test to prove a concept that may be used on Space Shuttle Discovery's next mission -- STS-82 -- to service the Hubble Space Telescope. The vernier jet firings should raise the orbit without disturbing any payloads on board, or in the case of the Hubble Space Telescope, without placing any force on the telescope's fragile solar arrays.

CASI

Space Transportation System Flights: Spacecraft; Protein Crystal Growth; Microgravity; Gravitational Effects; Life Sciences; Space Flight; Space Missions

1996050806 NASA Johnson Space Center, Houston, TX USA
STS-78 Flight Day 17
Jul. 06, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT--96-1996085851; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this seventeenth day of the STS-78 mission, the flight crew, Cmdr. Terence T. Henriks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Limnahan, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, P.D., and Robert B. Thirsk, M.D., are conducting routine firings of the orbiter's reaction control system jets and checking out its flight control systems and aero surfaces in anticipation of the planned landing at the Kennedy Space Center. Commander Tom Henricks and Pilot Kevin Kregel successfully fire Columbia's 34-reaction control system jets and then tests the aero surfaces that will be used during Columbia's high speed re-entry. This firings procedure is part of a test to prove a concept that may be used on Space Shuttle Discovery's next mission -- STS-82 -- to service the Hubble Space Telescope. The vernier jet firings should raise the orbit without disturbing any payloads on board, or in the case of the Hubble Space Telescope, without placing any force on the telescope's fragile solar arrays.

CASI

Space Transportation System Flights: Space Missions; Space Shuttles; Jet Control; Flight Control

1996050809 NASA Johnson Space Center, Houston, TX USA
STS-78 Flight Day 1
Jun. 21, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT--96-1996085867; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this first day of the STS-78 mission, the flight crew, Cmdr. Terence T. Henriks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Limnahan, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, P.D., and Robert B. Thirsk, M.D., can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being seated in the white room for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Henriks shares a unique view of Columbia's climb to orbit with flight controllers from a small camera that was mounted on the flight deck. The video follows Columbia's flight from just before main engine start through main engine cutoff, showing the force of main engines and solid booster ignition as experienced by the astronauts.

CASI

Space Transportation System Flights: Launching; Flight Control; Countdown; Climbing Flight; Astronauts

19960506098 NASA Johnson Space Center, Houston, TX USA
STS-78 Flight Day 2
Jun. 21, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT--96-1996085866; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this second day of the STS-78 flight, mission controllers wake the flight crew, Cmdr. Terence T. Henriks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Limnahan, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, P.D., and Robert B. Thirsk, M.D., with 'Free Falling' a song by Tom Petty. Crew members are then shown working with various neurological and cardiovascular experiments inside the Spacehab.

CASI

Space Transportation System Flights: Cardiovascular System; Flight Control; Neurology; Spacehab

199605060102 NASA Johnson Space Center, Houston, TX USA
STS-78 Flight Day 5
Jun. 24, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT--96-1996085865; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fifth day of the STS-78 mission, the flight crew, Cmdr. Terence T. Henriks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Limnahan, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, P.D., and Robert B. Thirsk, M.D., are shown in the Spacehab conducting microgravity research. They concentrate on the use of the gradient furnace and the Bubble Drop Particle Unit to study process of manufacturing materials in microgravity, and on studies of human muscles and balance mechanisms. Also, Brady, Thirsk, Limnahan, and Favier conduct musculoskeletal tests that measure arm and hand-grip strength.

CASI

Space Transportation System Flights: Spacehab: Musculoskeletal System; Muscles; Microgravity; Manufacturing; Furnaces

199605060104 NASA Johnson Space Center, Houston, TX USA
STS-78 Flight Day 16
Jul. 05, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT--96-1996085852; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this sixteenth day of the STS-78 mission, the flight crew, Cmdr. Terence T. Henriks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Limnahan, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, P.D., and Robert B. Thirsk, M.D., are shown continuing their scientific investigations in the Spacehab module. Today's work focuses on how the astronauts' bodies are responding to the microgravity environment after more than two weeks in orbit. The payload crew will continue studies in the adaptation of the neurovestibular system and the musculoskeletal system during spaceflight.

CASI

Space Transportation System Flights: Spacehab: Space Flight: Musculoskeletal System; Microgravity

199605060105 NASA Johnson Space Center, Houston, TX USA
STS-78 Flight Day 8
Jun. 27, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT--96-1996085860; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this eighth day of the STS-78 mission, the flight crew, Cmdr. Terence T. Henriks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Limnahan, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, P.D., and Robert B. Thirsk, M.D., continue to conduct...
On this twelfth day of the STS-78 mission, the flight crew, Cmdr. Terrence T. Henricks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M.琳纳, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, Ph.D. and Robert B. Thirsk, M.D., are awakened by the Canadian national anthem Oh Canada! This morning, Thirsk is shown delivering a holiday message to Prime Minister Jean Chretien and other dignitaries gathered at Parliament Hill in Ottawa. The crew is then shown celebrating Canada Day aboard the Space Shuttle. Also this morning, Mission Specialist Susan Helms discusses the progress of Columbus’ flight with WBBM Radio in Chicago.

CASI
Space Transportation System Flights; Space Shuttles; Microgravity; Human Body; Human Behavior

1997006500 NASA Johnson Space Center, Houston, TX USA
STS-79 Flight Day 9
Sep. 24, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–1996093676; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this ninth day of the STS-79 mission, the flight crew, Cmdr. William F. Readdy, Pilot Terrence W. Wilcutt, Mission Specialists, Thomas D. Akers, Shannon Lucid, Jay Apt, and Carl E. Walz having completed five days of joint operations between the American astronauts and the Russian cosmonauts are seen flying solo once again after undocking from the Mir Space Station. As Atlantis/Mir flew over the Ural Mountains of central Asia, the docking hooks and latches that joined the vehicles together were commanded open and Atlantis drifted slowly away from Mir. Wilcutt then initiated a tail-forward fly-around of the Russian space station. After one and one-half revolutions around Mir, Atlantis’ jets were fired in a separate maneuver to enable Atlantis to break away from Mir. On board Atlantis, the six-member crew is setting back into its normal routine with a fairly light schedule for the remainder of the day. Early in the morning as Atlantis flew over the USA, the crew took time to talk with anchors for the CBS Up to the Minute network news broadcast.

CASI
Space Transportation System Flights; Spacecraft Docking; Mir Space Station; Space Flight; Space Mission

1997006502 NASA Johnson Space Center, Houston, TX USA
STS-79 Flight Day 6
Sep. 21, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–1996093680; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this sixth day of the STS-79 mission, the flight crew, Cmdr. William F. Readdy, Pilot Terrence W. Wilcutt, Mission Specialists, Thomas D. Akers, Shannon Lucid, Jay Apt, and Carl E. Walz, continue activities aboard Atlantis/Mir as the nine astronauts and cosmonauts work in their second full day of docked operations. The continuing transfer of logistical supplies and scientific hardware can be seen proceeding smoothly. Apt and Walz once again worked with the Active Rack Isolation System experiment to replace a broken pushrod. With that complete, Apt monitors the ARIS experiment as Readdy and Korzen fire small maneuvering jets on their spacecraft to test the ability of ARIS to damp out any disturbances created by the firings. Walz is also continuing his work with the Mechanics of Granular Materials experiment in Atlantis’ double Spacehab module. The astronauts used the large format IMAX camera to conduct a photographic survey of Mir from the Shuttle’s flight deck windows while Akers shot IMAX movie scenes of Readly, Wilcutt, and Korzen in the Spektar module.

CASI
Space Transportation System Flights; Spacecraft Docking; Mir Space Station; Space Flight; Space Shuttle Missions

1997006553 NASA Johnson Space Center, Houston, TX USA
STS-79 Flight Day 4
Sep. 19, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–1996093682; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this fourth day of the STS-79 mission, the flight crew, Cmdr. William F. Readdy, Pilot Terrence W. Wilcutt, Mission Specialists, Thomas D. Akers, John Blaha, Jay Apt, and Carl E. Walz, are seen docking with the Mir Space Station. After two hours of pressure and leak checks, the hatches between the two spacecraft are then opened. The two crews are seen greeting one another to begin five days of joint operations. The rendezvous and docking went flawlessly as Readly flew the orbiter manually through the final 2,000 feet. Docking occurred within seconds of the pre-planned time and flight controllers reported that only slight oscillations were felt through the Orbiter Docking System as the two spacecraft locked together. Within hours of the hatch opening, crew members John Blaha and Shannon Lucid formally swapped places before going to bed with Blaha becoming a member of the Mir-22 crew and Lucid joining the STS-79 crew to wrap up 179 days as a member of the Mir station. Blaha joins Mir 22 Commander Valery Korzun and Flight Engineer Alexander Kalen on Mir for the next four months. Soon after the crew members completed their welcoming ceremony, they went to work, hauling bags of water and other supplies from the Shuttle’s Spacehab module into the Mir. More than 4,000 pounds of equipment and logistical supplies will be transferred to the Mir before Atlantis undocks from the space station.

CASI
Space Transportation System Flights; Spacecraft Docking; Mir Space Station; Space Flight; Space Shuttle Missions

1997006557 NASA Johnson Space Center, Houston, TX USA
STS-79 Flight Day 11
Sep. 25, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–1996093674; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this eleventh day of the STS-79 mission, the flight crew, Cmdr. William F. Readdy, Pilot Terrence W. Wilcutt, Mission Specialists, Thomas D. Akers, Shannon Lucid, Jay Apt, and Carl E. Walz aboard the Space Shuttle Atlantis glided into the Kennedy Space Center to mark the ending of the fourth docking flight with Mir and the end of Shannon Lucid’s record setting 188 day stay on board the Russian space station.

CASI
Space Transportation System Flights; Space Shuttle Missions; Space Flight; Space Mission

1997006558 NASA Johnson Space Center, Houston, TX USA
STS-79 Flight Day 10
Sep. 25, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–1996093675; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this tenth day of the STS-79 mission, the flight crew, Cmdr. William F. Readdy, Pilot Terrence W. Wilcutt, Mission Specialists, Thomas D. Akers, Shannon Lucid, Jay Apt, and Carl E. Walz spent the day storing equipment and deactivating experiments in preparation for the planned landing at Kennedy Space Center (KSC) in Florida. All systems aboard the orbiter were checked out overnight in preparation for landing day, including testing the flight control surfaces and thruster jets that will be used to maneuver the spacecraft through the atmosphere.

CASI
Space Transportation System Flights; Space Shuttle Missions; Space Flight

1997006559 NASA Johnson Space Center, Houston, TX USA
STS-79 Flight Day 8
Sep. 23, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–1996093677; No Copyright; Avail: CASI;
STS-79 Flight Day 3

Sep. 16, 1996; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1996093678; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

On this first day of the STS-79 mission, the flight crew, Cmdr. William F. Read, Pilot Terrence W. Wilcutt, Mission Specialists, Thomas D. Akers, John E. Blaha, Jay Apt, and Carl E. Walz, are seen in activating the double Spacehab module during the tour pointing out the numerous transfer activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the white room for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters.

CASI
Space Shuttle Missions: Space Flight: Launching: Space Transportation System Flights

STS-79 Flight Day 2

Sep. 17, 1996; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP--NASA--DK--96--1996093684; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

On this second day of the STS-79 mission, the flight crew, Cmdr. William F. Read, Pilot Terrence W. Wilcutt, Mission Specialists, Thomas D. Akers, John E. Blaha, Jay Apt, and Carl E. Walz, are seen conducting two rendezvous burns while other crew members are seen working in the Spacehab module. Readly and Wilcutt are seen conducting various panoramic views of the shuttle on the pad. The Active Rack Isolation System, or ARIS, is turned on by Walz, who performs a minor maintenance procedure on one of ARIS' vibration-damping pistons. Readly and Wilcutt are waiting in the Spacehab module with a name board reader to more effectively keep track of items that will be transferred back and forth between the Shuttle and the Mir. The crew continues work with the Solid Rocket Boosters.

CASI
Space Transportation System Flights: Vibration Damping: Inventory Management: Space Flight: Space Shuttle Missions

STS-79 Flight Day 5

Sep. 20, 1996; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1996093681; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

On this fifth day of the STS-79 mission, the flight crew, Cmdr. William F. Read, Pilot Terrence W. Wilcutt, Mission Specialists, Thomas D. Akers, Shannon Lucid, Jay Apt, and Carl E. Walz, are seen floating through several of Mir's modules and back into Atlantis' space station with flight controllers, taking a break from the transfer activities that have occupied the astronauts' time during three days of docked operations. Readly and Apt floated through several modules and back into Atlantis' double Spacehab module during the tour pointing out the numerous transfer activities. Readly, Wilcutt, Lucid and Blaha are seen discussing their mission in an interview with CNN's John Holliman.

CASI
Space Transportation System Flights: Mir Space Station: Flight Control: Space Shuttle Missions

STS-79 Flight Day 7

Sep. 22, 1996; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1996093679; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

On this seventh day of the STS-79 mission, the flight crew, Cmdr. William F. Readly, Pilot Terrence W. Wilcutt, Mission Specialists, Thomas D. Akers, Shannon Lucid, Jay Apt, and Carl E. Walz, share a quick video tour of the Mir Space Station with flight controllers, taking a break from the transfer activities that have occupied the astronauts' time during three days of docked operations. Readly and Apt floated through several modules and back into Atlantis' double Spacehab module during the tour pointing out the numerous transfer activities. Readly, Wilcutt, Lucid and Blaha are seen discussing their mission in an interview with CNN's John Holliman.

CASI
Space Transportation System Flights: Mir Space Station: Flight Control: Space Shuttle Missions

STS-78 Mission Highlights Resource Tape

Oct. 9, 1996; In English; Videotape: 57 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1997005934; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of the STS-78 mission, Cmdr. Terence T. Henricks, Pilot Kevin R. Kreigl, Payload Crew: Susan J. Helms, Mission Specialists Richard M. Limneman, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, Pd.D. and Robert B. Thurs, M.D., present a video mission overview of their space flight. Images include: pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen floating in the white room for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine igni-
tion, launch, and the separation of the Solid Rocket Boosters. Following an on-time launch, the crew of Endeavor are shown setting up a variety of experiments that will operate for much of the mission.

**CASI**

*Space Transportation System Flights; Space Shuttle Orbiters; Spacecrews*

---

**STS-75 Mission Highlight Resource Tape**

Oct. 09, 1996; In English; Videotape: 56 min. 57 sec. playing time, in color, with sound

Report No.(s): NONP-NASA–VT–97–1997005930; No Copyright; Avail: CASI; B03; Videotape-Beta; V03; Videotape-VHS

The flight crew of the STS-75 mission, Cmdr. Andrew M. Allen, Pilot Scott J. Horowitz, Payload Cmdr. Franklin R. Chang-Diaz, Mission Specialists Maurizio Cheli, Jeffrey A. Hoffman, and Claude Nicollier, and Payload Specialist Umberto Guidoni, present a video overview of their mission. Images include: pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the white room for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters (SRB). Also included are views of activities inside the Firing Control Room at KSC.

**CASI**

*Space Transportation System; Spacecrews; Flight Crews: Countdown; Video Tapes*

---

**STS-79 Post Flight Presentation**

Oct. 09, 1996; In English; Videotape: 43 min. 27 sec. playing time, in color, with sound

Report No.(s): NONP-NASA–VT–97–1997005931; No Copyright; Avail: CASI; B03; Videotape-Beta; V03; Videotape-VHS

The flight crew of the STS-79 mission, Cmdr. William F. Readdy, Pilot Terrence W. Wilcutt, and Mission Specialists, Thomas D. Akers, John E. Blaha, Jay Apt, and Carl E. Walz, present a video mission overview of their space flight. Images include: pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the white room for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Following an on-time launch, the crew of Endeavor are shown setting up a variety of experiments that will operate for much of the mission.

**CASI**

*Space Transportation System; Spacecrews; Space Flight; Space Missions; Space Shuttle Missions; Space Transportation System Flights*

---

**STS-81 Mission Highlights Resource Tape**

Oct. 09, 1996; In English; Videotape: 1 hr. 1 min. 5 sec. playing time, in color, with sound

Report No.(s): NONP-NASA–VT–97–1997005931; No Copyright; Avail: CASI; B03; Videotape-Beta; V03; Videotape-VHS

The flight crew of the STS-81 mission, Cmdr. Kevin P. Chilton, Pilot Richard A. Scorfano, and Mission Specialists Shannon W. Lucid, Linda M. Godwin, Michael R. Clifford, and Ronald M. Sega, present a video mission overview of their space flight. Images include: pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the white room for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Once in orbit, various views of the Mir Space Station can be seen as the shuttle begins its approach and docking. There several views of Godwin and Clifford as they spent six hours spacewalking in Atlantis’s cargo bay and on the exterior of the Mir’s docking module. The mission ending re-entry and landing can also be seen.

**CASI**

*Space Transportation System; Spacecrews; Spacecraft Docking; Mir Space Station; Flight Crews; Video Tapes*

---

**STS-77 Post Flight Presentation**

Oct. 09, 1996; In English; Videotape: 59 min. playing time, in color, with sound

Report No.(s): NONP-NASA–VT–97–1997005932; No Copyright; Avail: CASI; B03; Videotape-Beta; V03; Videotape-VHS

The flight crew of the STS-77 mission, Cmdr. John H. Casper, Pilot Curtis L. Brown, Jr., and Mission Specialists Andrew S.W. Thomas, Ph.D., Daniel W. Bursch, Mario Runco, Jr., and Marc Garneau, Ph.D., present a video mission overview of their space flight. Images include: pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the white room for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Following an on-time launch, the crew of Endeavor are shown setting up a variety of experiments that will operate for much of the mission. Also seen is the deployment and inflation of the Spartan Satellite, experiments being conducted in the Spacelab module, thruster firing to stabilized the shuttle, and the mission ending re-entry and landing of the shuttle Endeavor. The crew than answers questions from the press.

**CASI**

*Space Transportation System Flights; Space Transportation System; Spacecrews; Launching; Flight Crews*

---

**STS-81 Flight Day 7**

Jan. 18, 1997; In English; Videotape: 10 min. playing time, in color, with sound

Report No.(s): NONP-NASA–VT–97–1997021179; No Copyright; Avail: CASI; B01; Videotape-Beta; V01; Videotape-VHS

On this seventh first day of the STS-81 mission, the flight crew, Cmdr. Michael A. Baker, Pilot Brent W. Jett, Mission Specialists, John M. Grunsfeld, Marshall S. Ivins, Peter J.K. Wisoff, and John Blaha, and the cosmonauts of the Russian Space Station Mir continue to transfer hundreds of pounds of water, supplies, and logistical items to each other’s spacecraft. More than 1,300 pounds of water have now been transferred from Atlantis to the Mir to resupply the Russian outpost, along with equipment that will be used by astronaut Jerry M. Linenger during his four-month research mission. A bioprocessing device and
an experiment used to grow cartilage cells during astronaut John Blaha’s four
month stay on the Mir is also transferred to Atlantis for the trip back to Earth.
Linenger spends most of the day collecting water samples from the Mir for anal-
ysis back on Earth and Blaha continues to exercise on a treadmill on the Mir to
stay in shape for his return to Earth and a readaptation to gravity after four months
of weightlessness.

CASI
Space Transportation System Flights; Bioprocessing; Adaptation; Gravitation;
Mir Space Station; Physical Exercise; Spacecrews; Supplying; Weightlessness

1997012039 National Aeronautics and Space Administration. Lyndon B.
Johnson Space Cen ter, Houston, TX USA
STS–81 Flight Day 5
Jan. 16, 1997; In English; Videotape: 16 min. 5 sec. playing time, in color, with
sound
Report No.(s): NONP–NASA–VT–97–1997021180; No Copyright; Avail:
CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this fifth day of the STS-81 mission, the flight crew, Cmdr. Michael A.
Baker, Pilot Brent W. Jett, Mission Specialists, John M. Grunsfeld, Marsh S.
Ivins, Peter J.K. Wisoff, and John Blaha, and the Mir cosmonauts including
astronaut Jerry M. Linenger continue with the transfer of food, water and
supplies between the two spacecrafts for a second day of joint operations. With
both spacecraft in excellent shape, the nine crewmembers float back and forth
between Atlantis and the Mir, hauling bags of water, packets of logistical
supplies and equipment hardware. The supplies and hardware will be used by
cosmonauts and Linenger during his four months of scientific research aboard
the Mir; Linenger, who officially became a Mir crewmember earlier, spends time
with his predecessor; John Blaha to get familiar with his new home.
CASI
Space Transportation System Flights; Spacecrews; Supplying; Mir Space
Station

1997012041 National Aeronautics and Space Administration. Lyndon B.
Johnson Space Cen ter, Houston, TX USA
STS–81 Flight Day 3
Jan. 14, 1997; In English; Videotape: 14 min. 50 sec. playing time, in color, with
sound
Report No.(s): NONP–NASA–VT–97–1997021182; No Copyright; Avail:
CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this third day of the STS-81 mission, the flight crew, Cmdr. Michael A.
Baker, Pilot Brent W. Jett, Mission Specialists, John M. Grunsfeld, Marsh S.
Ivins, Peter J.K. Wisoff, and Jerry M. Linenger, spend most of their workday
completing preparations for the rendezvous and linkup of the Space Shuttle with
the Mir Space Station. Pilot Brent Jett finishes the checkout of navigation tools
that will be used during the rendezvous. Later he joins John Grunsfeld and they
install a camera in the Orbiter Docking System to provide television views of the
docking target on the Mir. Commander Mike Baker will use this later as he flies
Atlantis to its docking with Mir.
CASI
Space Transportation System Flights; Spacecraft Docking; Mir Space Station;
Space Missions

1997012042 National Aeronautics and Space Administration. Lyndon B.
Johnson Space Cen ter, Houston, TX USA
STS–80 Flight Day 14
Dec. 03, 1996; In English; Videotape: 15 min playing time, in color, with sound
Report No.(s): NONP–NASA–VT–97–1997021157; No Copyright; Avail:
CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this fourteenth day of the STS-80 mission, the flight crew, Cmdr.
Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E.
Jernigan, Thomas D. Jones, and E. Story Musgrave, spend this day working with
tools inside the crew cabin. The astronauts answer questions on the status of their
mission from reporters at the Johnson Space Center in Houston and the Kennedy
Space Center in Florida during a news conference.
CASI
Space Transportation System Flights; Astronauts; Space Exploration; Space
Flight; Space Missions

1997012043 National Aeronautics and Space Administration. Lyndon B.
Johnson Space Cen ter, Houston, TX USA
STS–81 Flight Day 6
Jan. 17, 1997; In English; Videotape: 9 min. 28 sec. playing time, in color, with
sound
Report No.(s): NONP–NASA–VT–97–1997021155; No Copyright; Avail:
CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this sixth day of the STS-81 mission, the flight crew, Cmdr. Michael A.
Baker, Pilot Brent W. Jett, Mission Specialists, John M. Grunsfeld, Marsh S.
Ivins, Peter J.K. Wisoff, and John Blaha, and the cosmonauts of the Mir Space
Station continue to transfer hundreds of pounds of water, food and supplies
between each other’s spacecraft for a third day. Jerry M. Linenger spent several
hours continuing to familiarize himself with his new orbital home, unpacking
experiment hardware and helping astronaut John Blaha transfer biomedical
samples back to Atlantis for Blaha’s trip back to Earth. Blaha is wrapping up his
four-month tour of duty in space.
CASI
Space Transportation System Flights; Mir Space Station; Supplying; Space
Flight; Space Missions

1997012048 National Aeronautics and Space Administration. Lyndon B.
Johnson Space Cen ter, Houston, TX USA
STS–80 Post Flight Presentation
Dec. 05, 1996; In English; Videotape: 40 min. 45 sec. playing time, in color, with
sound
Report No.(s): NONP–NASA–VT–97–1997021172; No Copyright; Avail:
CASI; B03, Videotape-Beta; V03, Videotape-VHS
The flight crew of STS-80, Cmdr. Kenneth D. Cockrell, Pilot Kent V.
Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F.
Story Musgrave give a post flight presentation of their mission. This presentation
is divided into two parts first a slide presentation of still shots, and the second is a
video presentation.
CASI
Space Exploration; Manned Space Flight; Space Shuttle Missions; Space
Shuttles

1997012049 National Aeronautics and Space Administration. Lyndon B.
Johnson Space Cen ter, Houston, TX USA
STS–79 Mission Highlight Presentation
Dec. 05, 1996; In English; Videotape: 1 hr. 30 sec. playing time, in color, with
sound
Report No.(s): NONP–NASA–VT–97–1997021171; No Copyright; Avail:
CASI; B04, Videotape-Beta; V04, Videotape-VHS
The flight crew of STS-79, Cmdr. William F. Readdy, Pilot Terrence W.
Wilcutt, Mission Specialists, Thomas D. Akers, Shannon Lucid, Jay Apt, and
Carl E. Walz can be seen performing pre-launch activities such as eating the tradi-
tional breakfast, crew suit-up, and the ride out to the launch pad. Also, included
are various panoramic views of the shuttle on the pad. The crew can be seen being
readied in the ‘white room’ for their mission. After the closing of the hatch and
arm retraction, launch activities are shown including countdown, engine igni-
tion, launch, and the separation of the Solid Rocket Boosters. STS-79 is the
second Shuttle-Mir mission to carry a SPACEHAB module on board, and the first
to carry a double module. The forward portion of the double module will house
experiments conducted by the crew before, during and after Atlantis is docked
to the Russian space station. The aft portion of the double module primarily
houses the logistics equipment to be transferred to the Russian space station.
Logistics include food, clothing, experiment supplies, and spare equipment for
Mir.
CASI
Space Transportation System Flights; Supplying; Space Missions; Mir Space
Station; Spacecrews; Logistics; Launching

1997012050 National Aeronautics and Space Administration. Lyndon B.
Johnson Space Cen ter, Houston, TX USA
STS–80 Flight Day 2
Nov. 21, 1996; In English; Videotape: 12 min. 20 sec. playing time, in color, with
sound
Report No.(s): NONP–NASA–VT–97–1997021169; No Copyright; Avail:
CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this second day of the STS-80 mission, the flight crew, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave, complete the first major objective of the mission with the deployment of the Orbiting Retrievable Far and Extreme Ultraviolet Spectrometer (ORFEUS) on the reusable Shuttle Pallet Satellite. Release of ORFEUS from Columbia’s robotic arm came at 8 hours 15 minutes mission elapsed time. Three hours after the release, ground controllers inform the crew that the instrument package appears to be working properly. This begins two weeks of gathering data on the origin and makeup of stars.

CASI
Space Transportation System Flights; Shuttle Pallet Satellites; Spacecrews; Deployment

1997012051 National Aeronautics and Space Administration. Lyndon B. Johnson Space Center, Houston, TX USA

STS-80 Flight Day 3
Nov. 22, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA–VT–97–1997021168; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this third day of the STS-80 mission, the flight crew, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave, are seen preparing for two spacewalks which are to be performed by Jernigan and Jones. Jernigan, Jones, and Musgrave inspect the suits, finding everything in excellent condition for the upcoming spacewalks, which will test techniques and equipment that may be used for future construction of the International Space Station.

CASI
Space Transportation System Flights; Spacecrews; Space Exploration; Space Flight; Space Missions

1997012052 National Aeronautics and Space Administration. Lyndon B. Johnson Space Center, Houston, TX USA

STS-80 Flight Day 12
Dec. 01, 1996; In English; Videotape: 13 min. playing time, in color, with sound Report No.(s): NONP-NASA–VT–97–1997021159; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this twelfth day of the STS-80 mission, the flight crew, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave, spend the day discussing the failed hatch with ground controllers. The failure of the hatch to properly open causes the cancellation of the second planned spacewalk by Jernigan and Jones. NASA engineers and managers continue to collect and analyze data on what may be causing the failure. The leading candidate is a misalignment of the hatch against the airlock seal.

CASI
Space Transportation System Flights; Misalignment; Hatches; Failure; Air Locks

1997012053 National Aeronautics and Space Administration. Lyndon B. Johnson Space Center, Houston, TX USA

STS-80 Flight Day 13
Dec. 02, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA–VT–97–199721158; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this thirteenth day of the STS-80 mission, the flight crew, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave, are notified that the remaining spacewalks for the mission are to be canceled following extensive ground analysis and testing of the airlock hatch. Mission managers could not conclusively identify the problem that was causing the hatch to jam, and decided not to risk unnecessary damage to the hatch or seals.

CASI
Space Transportation System Flights; Hatches; Air Locks; Risk; Space Flight; Space Missions

1997012054 National Aeronautics and Space Administration. Lyndon B. Johnson Space Center, Houston, TX USA

STS-80 Flight Day 10
Jan. 20, 1997; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA–VT–97–1997021175; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this tenth day of the STS-80 mission, the flight crew, Cmdr. Michael A. Baker, Pilot Brent W. Jett, Mission Specialists, John M. Grunsfeld, Marsha S. Ivins, Peter J.K. Wisoff, and John Blaha, prepare for the return back to earth. The shuttle’s key flight control systems are checked for entry and landing phase of the mission. Commander Mike Baker and Pilot Brent Jett activate one of Atlantis’ three hydraulic power units to test the shuttle’s aerosurfaces. Baker and Jett fire Atlantis’ steering jets in a routine prelanding checkout. The astronauts also test a medical restraint system in the Spacelab module, placing two crewmembers in the device. Crewmembers then begin to stow items away in the crew cabin, initiate the scheduled deactivation of Spacelab systems and associated hardware.

CASI
Space Transportation System Flights; Spacecrews; Landing

1997012055 National Aeronautics and Space Administration. Lyndon B. Johnson Space Center, Houston, TX USA

Galileo Science Update Europa Unveiled
Jan. 17, 1997; In English; Videotape: 49 min. 48 sec. playing time, in color, with sound Report No.(s): NONP-NASA–VT–97–1997021170; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A five person panel discuss newly imaged photographs of the surface of Jupiter’s satellite Europa. In the discussion the topics that are covered are: surface features, ice and water formation, erosion, volcanism, thermal dissipation, crustal spreading, plate tectonics, impact sites, exobiology, and life. The run time on this video is 49:48 the air date is 1/17/97.

CASI
Europa; Plates (Tectonics); Volcanology; Exobiology; Ice Formation; Surface Water; Space Exploration

1997012056 National Aeronautics and Space Administration. Lyndon B. Johnson Space Center, Houston, TX USA

STS-80 Flight Day 9
Nov. 28, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA–VT–97–1997021162; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this ninth day of the STS-81 mission, the flight crew, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave, begin preparations for two planned spacewalks with the depressurization of the shuttle’s cabin from 14.7 pounds per square inch to 10.2 pounds per square inch. This reduces the amount of time Jernigan and Jones will have to prebreathe pure oxygen before beginning the spacewalk. The first spacewalk will allow the astronauts to evaluate assembly and maintenance techniques that will be used for construction of the International Space Station.

CASI
Space Transportation System Flights; International Space Station; Pressure Reduction

1997012057 National Aeronautics and Space Administration. Lyndon B. Johnson Space Center, Houston, TX USA

STS–80 Flight Day 15
Dec. 04, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA–VT–97–1997021156; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fifteenth day of the STS-80 mission, the flight crew, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave, are seen performing routine mission operations including monitoring experiments and discussing their mission
On this eighth day of the STS-81 mission, the flight crew, Cmdr. Michael A. Baker, Pilot Brent W. Jett, Mission Specialists, John M. Grunsfeld, Marsh S. Ivins, Peter J. K. Wisoff, and Jerry M. Linenger, prepare for the fifth linkage of the Space Shuttle and the Mir Space Station. The Atlantis docks with Mir at a point 210 nautical miles above the Earth southeast of Moscow, culminating a three-day rendezvous. Two hours after docking, the hatches between Atlantis and Mir are opened and Baker and Mir 22 Commander Valery Korzun share a hug to mark the start of five days of joint operations between the two crews. After an informal welcoming ceremony in the Mir’s core module, the STS-81 crewmembers receive a station safety briefing. Linenger becomes the fourth American to occupy a position on the Russian Space Station following the docking of Atlantis to the outpost. During the docked phase of the mission, the two crews transfer nearly three tons of food, water and supplies to Mir.

CAS1
Space Transportation System Flights: Spacecraft Docking; Spacecrews; Mir Space Station; Supplying

On this fourth day of the STS-80 mission, the flight crew, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave, conduct a thorough check of the tools that Jernigan and Jones will be using for their spacewalk. The astronauts also prepare the middeck for the first spacewalk. The first extravehicular activity will test a telescoping crane which will be used during the assembly of the International Space Station to move large components from module to module. The two astronauts will use the crane to move a simulated space station satellite back and forth around the cargo bay.

CAS1
Space Transportation System Flights: Spacecrews; Extravehicular Activity; International Space Station

On this eighth day of the STS-81 mission, the flight crew, Commander Mike Baker, Pilot Brent Jett and Mission Specialists Jeff Wisoff, John Grunsfeld, Martha Ivins and John Blaha say goodbye to Mir 22 Commander Valery Korzun, Flight Engineer Alexander Kaleri and the newest Mir crewmember, astronaut Jerry Linenger. The hatchs on the two spacecraft are closed.

CAS1
Space Transportation System Flights: Spaceflight; Space Missions

199701120109 National Aeronautics and Space Administration. Lyndon B. Johnson Space Center, Houston, TX USA
STS-80 Flight Day 4
Nov. 22, 1996; In English; Videotape: 13 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–97–1997021167; No Copyright; Avail: CAS1; B01, Videotape-Beta; V01, Videotape-VHS
On this fourth day of the STS-80 mission, the flight crew, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave, conduct a thorough check of the tools that Jernigan and Jones will be using for their spacewalk. The astronauts also prepare the middeck for the first spacewalk. The first extravehicular activity will test a telescoping crane which will be used during the assembly of the International Space Station to move large components from module to module. The two astronauts will use the crane to move a simulated space station battery back and forth around the cargo bay.

CAS1
Space Transportation System Flights: Spacecrews; Extravehicular Activity; International Space Station

On this eighth day of the STS-80 mission, the flight crew, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave, focus on additional science investigations with the Wake Shield Facility while it is attached to the shuttle’s robot arm. Jones imbibes the Wake Shield, and returns it to its resting place in the payload bay after using its instruments to characterize the environment around the shuttle.

CAS1
Space Transportation System Flights: Robot Arms; Payloads

19970112104 National Aeronautics and Space Administration. Lyndon B. Johnson Space Center, Houston, TX USA
STS-80 Flight Day 10
Nov. 29, 1996; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–97–1997021161; No Copyright; Avail: CAS1; B01, Videotape-Beta; V01, Videotape-VHS
On this tenth day of the STS-80 mission, the flight crew, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave, conduct a thorough check of the tools that Jernigan and Jones will be using for their spacewalk. The astronauts also prepare the middeck for the first spacewalk. The first extravehicular activity will test a telescoping crane which will be used during the assembly of the International Space Station to move large components from module to module. The two astronauts will use the crane to move a simulated space station battery back and forth around the cargo bay.

CAS1
Space Transportation System Flights: Spacecrews; Space Exploration; Space Flight; Space Missions
days. Cockrell flawlessly takes the shuttle to within 35 feet of the satellite and Jones latches the mechanical arm onto the Wake Shield, as the shuttle flies 220 miles above South America.

CASI
Space Transportation System Flights; Spacecrews; Space Flight; Space Missions

1997012107 National Aeronautics and Space Administration. Lyndon B. Johnson Space Center, Houston, TX USA
STS-80 Flight Day 6
Nov. 25, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT–97–1997021165; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this sixth day of the STS-80 mission, the flight crew, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave, are awakened to news from Mission Control that the ORFEUS-SPAS astronomy satellite may be closing in on the Wake Shield Facility satellite slightly faster than originally predicted. The Orbiting and Retrievable Far and Extreme Ultraviolet Spectrometer, or ORFEUS-SPAS satellite, has conducted 77 different astronomical observations since being deployed on launch day. Jernigan reports that the VIEW-CAPL experiment, designed by students at the University of Maryland, is working well. The experiment tests capillary pumped loop technology that one day may be used for more reliable spacecraft cooling systems. The crew also sends down television pictures of the flight deck and address half a dozen questions posed via the NASA Shuttle Web on the Internet.

CASI
Space Transportation System Flights; Astronomy; Launching; Ultraviolet Spectrometers

1997012108 National Aeronautics and Space Administration. Lyndon B. Johnson Space Center, Houston, TX USA
STS-80 Flight Day 5
Nov. 24, 1996; In English; Videotape: 27 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT–97–1997021166; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fifth day of the STS-80 mission, the flight crew, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave, focus on maintaining formation and working with m-cabin microgravity experiments. Jernigan and Rominger work with the Visualization in an Experimental Water Capillary Pumped Loop (VIEW-CAPL) experiment. Later in the day Musgrave is interviewed by CBS News.

CASI
Space Transportation System Flights; Supplying; Spacecrews; Microgravity; Gravitational Effects

1997012110 National Aeronautics and Space Administration. Lyndon B. Johnson Space Center, Houston, TX USA
STS-81 Flight Day 1
Jan. 12, 1997; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT–97–1997021176; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This first day of the STS-81 mission begins with the flight crew, Cmdr. Michael A. Baker, Pilot Brent W. Jett, Mission Specialists, John M. Grunsfeld, Marshall S. Ivins, Peter J.K. Wisoff, and Jerry M. Linenger, performing pre-launch activities such as eating the traditional breakfast, being suited-up, and riding out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is readied in the ‘white room’ for their mission. After the closing of the hatch and arm retraction, launch activities are shown including the countdown, engine ignition, and launch. The film ends with the separation of the Solid Rocket Boosters (SRB) from the shuttle.

CASI
Space Transportation System Flights; Countdown; Launching; Ignition; Space Missions

1997012111 National Aeronautics and Space Administration. Lyndon B. Johnson Space Center, Houston, TX USA
STS-81 Flight Day 2
Jan. 13, 1997; In English; Videotape: 15 min. 15 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT–97–1997021177; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this second day of the STS-81 mission, the flight crew, Cmdrs. Michael A. Baker, Pilot Brent W. Jett, Mission Specialists, John M. Grunsfeld, Marshall S. Ivins, Peter J.K. Wisoff, and Jerry M. Linenger, continue to close in on The Mir Space Station. Payload work involves activating a radiation monitor in addition to the Biowall multipurpose facility which is designed to investigate the effects of microgravity and radiation on plant tissue, cell and fungus growth. Mission Specialists Jeff Wisoff and John Grunsfeld spend much of their work day setting up and performing initial work in the experiment’s glove box.

CASI
Space Transportation System Flights; Spacelab Payloads; Mir Space Station; Spacecrews; Exobiology

1997012159 National Aeronautics and Space Administration. Lyndon B. Johnson Space Center, Houston, TX USA
STS-81 Flight Day 9
Jan. 29, 1997; In English; Videotape: 15 min. 35 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT–97–1997021174; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this ninth day of the STS-81 mission, the flight crew, Cmdrs. Michael A. Baker, Pilot Brent W. Jett, Mission Specialists, John M. Grunsfeld, Marshall S. Ivins, Peter J.K. Wisoff, and John Blaha, are flying on their own after undocking the Mir Space Station. Following the separation Pilot Brent Jett initiates a two-revolution flyby around the Russian complex at a distance of about 560 feet, Jett fires maneuvering jets to separate Atlantis from Mir for the final time until May, when the shuttle will return on STS-84 to deliver astronaut Mike Foale to the outpost as Jerry M. Linenger’s replacement.

CASI
Space Transportation System Flights; Mir Space Station; Spacecrews; Space Flight; Space Missions

1997012168 National Aeronautics and Space Administration. Lyndon B. Johnson Space Center, Houston, TX USA
STS-80 Flight Day 1
Nov. 20, 1996; In English; Videotape: 15 min. 40 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT–97–1997021173; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This first day of the STS-80 mission begins with the flight crew, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave, performing pre-launch activities such as eating the traditional breakfast, being suited-up, and riding out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is readied in the ‘white room’ for their mission. After the closing of the hatch and arm retraction, launch activities are shown including the countdown, engine ignition, and launch. The film ends with the separation of the Solid Rocket Boosters (SRB) from the shuttle.

CASI
Space Transportation System Flights; Launching; Space Flight

1997017658 NASA Johnson Space Center, Houston, TX USA
STS-80 Mission Highlights Resource Tape
Feb. 27, 1997; In English; Videotape: 50 min. 52 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT–1997026055; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of STS-80, Cmdrs. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave are seen performing pre-launch activities such as eating the traditional breakfast, being suited-up, and riding out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is readied in the ‘white room’ for their mission. After the closing of the hatch and
arm retraction, launch activities are shown including the countdown, engine igni-
tion, launch, and the separation of the Solid Rocket Boosters (SRB) from the
shuttle. The crew completes the first major objective of the mission with the
deployment of the Orbiting Retrievable Far and Extreme Ultraviolet Spectrom-
eter (ORFEUS) on the reusable Shuttle Pallet Satellite. The crew then begins
final preparations for the release of Space Shield. Jones powers up the shuttle’s
Canadian-built robot arm and grapples the satellite, while Jerinigan powers up
the Orbiter Space Vision System, which will be used to track precisely the Space
Shield’s location. Cockrell places Columbia in a gravity gradient attitude to mini-
mize disturbances during the release. Jones uses the robot arm to hold Space
Shield in position for a two-and-a-half hour cleansing by atomic oxygen mole-
cules before moving the satellite to the deployment position. The failure of the latch
to properly open causes the cancellation of all EVAs planned for this mission by
Jerinigan and Jones. The mission ends with the shuttle landing at the Kennedy
Space Center.

CASI
Space Transportation System: Space Shuttle Orbiters; Space Shuttle Payloads; Spacecrafts; Flight Crews; Far Ultraviolet Radiation: Extravehicular Activity; Deployment

19970117656 NASA Johnson Space Center, Houston, TX USA
STS–82 Day 05 Highlights
Feb. 15, 1997; In English; Videotape: 19 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–1997026063; No Copyright; Avail: CASI; B02; Videotape-Beta; V02, Videotape-VHS
The fifth day of the STS-82 mission begins with the crew. Commander Kenneth D. Bowersox, Pilot Scott J. Horowitz, Payload Commander Mark C. Lee, and Mission Specialists Gregory J. Harbaugh, Steven L. Smith, Joseph R. Tanner, and Steven A. Hawley completing the checkout of spacecrafts well ahead of schedule, allowing them to start the second spacewalk of the flight. Harbaugh and Tanner went right to work, replacing a degraded Fine Guidance Sensor and a failed Engineering and Science Tape Recorder with new spares. The astronauts also installed a new unit known as the Optical Control Electronics Enhancement Kit, which will further increase the capability of the new Fine Guidance Sensor. During the spacewalk, the astronauts and flight controllers took note of cracking and wear incurred by thermal insulation which protects several areas of the telescope.

CASI
Space Transportation System: Space Transportation System Flights; Space Shuttle Missions; Flight Control; Guidance Sensors; Spacecrafts; Reaction Wheels

19970117657 NASA Johnson Space Center, Houston, TX USA
STS–82 Day 07 Highlights
Feb. 17, 1997; In English; Videotape: 16 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–1997026061; No Copyright; Avail: CASI; B02; Videotape-Beta; V02, Videotape-VHS
The seventh day of the STS-82 mission begins with the crew. Commander Kenneth D. Bowersox, Pilot Scott J. Horowitz, Payload Commander Mark C. Lee, and Mission Specialists Gregory J. Harbaugh, Steven L. Smith, Joseph R. Tanner, and Steven A. Hawley performing their third spacewalk of the mission by emerging from Discovery’s airlock. Their first task is the replacement of a Solar Array Drive Electronics package which is used to control the positioning of Hubble’s solar arrays. Harbaugh and Tanner next venture to the top of the telescope where they replaced covers over Hubble’s magnetometers, which are used to sense the telescope’s position in relation to the Earth through data acquired from the Earth’s magnetic field. The spacewalking astronauts then place thermal blankets of multi-layer material over two areas of degraded insulation around the light shield portion of the telescope just below the top of the astronomical observatory.

CASI
Space Transportation System: Astronomical Observatories; Geomagnetism; Magnetometers; Solar Arrays; Thermal Insulation; Spacecrafts; Hubble Space Telescope

19970117658 NASA Johnson Space Center, Houston, TX USA
STS–82 Day 08 Highlights
Feb. 18, 1997; In English; Videotape: 17 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–1997026060; No Copyright; Avail: CASI; B02; Videotape-Beta; V02, Videotape-VHS
The eighth day of the STS-82 mission begins with the crew. Commander Kenneth D. Bowersox, Pilot Scott J. Horowitz, Payload Commander Mark C. Lee, and Mission Specialists Gregory J. Harbaugh, Steven L. Smith, Joseph R. Tanner, and Steven A. Hawley performing the final spacewalk of the mission. Lee and Smith attach several thermal insulation blankets to three equipment compartments at the top of the Support Systems Module section of Hubble which contain key data processing, electronics and scientific instrument telemetry packages. Following the completion of that work, Lee and Smith briefly return to the airlock while flight controllers evaluated a possible glitch with one of four Reaction Wheel Assembly units in Hubble used to maneuver the telescope for its scientific observations. A space Reaction Wheel Assembly was available aboard Discovery for a swap out during an additional spacewalk had it been necessary, but a few hours later, after further analysis, payload controllers reported that the Reaction Wheel Assembly was in excellent shape and operating at the proper speed.

CASI
Space Transportation System: Air Locks; Spacecrafts; Thermal Insulation; Hubble Space Telescope; Space Shuttle Missions; Space Shuttle Payloads; Space Transportation System Flights

19970117659 NASA Johnson Space Center, Houston, TX USA
STS–82 Day 09 Highlights
Feb. 19, 1997; In English; Videotape: 18 min. 13 sec. playing time, in color, with sound Report No.(s): NONP–NASA–VT–1997026059; No Copyright; Avail: CASI; B02; Videotape-Beta; V02, Videotape-VHS
The ninth day of the STS-82 mission begins with the crew. Commander Kenneth D. Bowersox, Pilot Scott J. Horowitz, Payload Commander Mark C. Lee, and Mission Specialists Gregory J. Harbaugh, Steven L. Smith, Joseph R. Tanner, and Steven A. Hawley placing the Hubble Space Telescope back into its own orbit to continue its investigation of the far reaches of the universe. At the time of deployment, the Shuttle was at an altitude of 334 nautical miles over the southwest coast of Africa. Hubble is now operating at the highest altitude it has ever flown, a 335 by 321 nautical mile orbit. A few hours after Hubble’s deployment, the crew receives a congratulatory phone call from NASA Administrator Daniel Goldin. The four spacewalking crewmembers also answered questions from several news networks regarding their work over the past week to upgrade the telescope.

CASI
Space Transportation System: Hubble Space Telescope; Deployment; Spacecrafts; Space Exploration; Space Shuttle Missions; Space Transportation System Flights

19970117660 NASA Johnson Space Center, Houston, TX USA
STS–82 Day 10 Highlights
Feb. 20, 1997; In English; Videotape: 20 min. 20 sec. playing time, in color, with sound Report No.(s): NONP–NASA–VT–1997026058; No Copyright; Avail: CASI; B02; Videotape-Beta; V02, Videotape-VHS
The tenth day of the STS-82 mission begins with the crew. Commander Kenneth D. Bowersox, Pilot Scott J. Horowitz, Payload Commander Mark C. Lee, and Mission Specialists Gregory J. Harbaugh, Steven L. Smith, Joseph R. Tanner, and Steven A. Hawley conducting the third spacewalk of the mission. Lee and Smith are seen removing and replacing a Data Interface Unit which provides command and data interfaces between Hubble’s data management system and other subsystems. They also replace an old reel-to-reel style Engineering and Science Tape Recorder with a new digital Solid State Recorder (SSR) that will allow simultaneous recording and playback of data. The final task for Lee and Smith is the change out of one of four Reaction Wheel Assembly units that use spin momentum to move the telescope toward a target and maintain it in a stable position.

CASI
Space Transportation System: Space Shuttle Missions; Space Transportation System Flights; Spacecrafts; Reaction Wheels

19970117665 NASA Johnson Space Center, Houston, TX USA
STS–82 Day 10 Highlights
Feb. 20, 1997; In English; Videotape: 20 min. 20 sec. playing time, in color, with sound Report No.(s): NONP–NASA–VT–1997026058; No Copyright; Avail: CASI; B02; Videotape-Beta; V02, Videotape-VHS
The tenth day of the STS-82 mission begins with the crew, Commander...
Kenneth D. Bowersox, Pilot Scott J. Horowitz, Payload Commander Mark C. Lee, and Mission Specialists Gregory J. Harbaugh, Steven L. Smith, Joseph R. Tanner, and Steven A. Hawley checking out Discovery’s flight control systems in preparations for returning to Earth. The seven astronauts stow equipment and prepare for the planned landing at the Kennedy Space Center. Before wrapping up what is expected to be their final day in orbit, the astronauts held a press conference to discuss the flight, which set a record five spacewalks conducted to service the Hubble Space Telescope for the second time.

CASI


1997#17672 NASA Johnson Space Center, Houston, TX USA

STS-82 Day 01 Highlights
Feb. 11, 1997; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1997020605; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The first day of the STS-82 mission begins with the crew, Commander Kenneth D. Bowersox, Pilot Scott J. Horowitz, Payload Commander Mark C. Lee, and Mission Specialists Gregory J. Harbaugh, Steven L. Smith, Joseph R. Tanner, and Steven A. Hawley performing pre-launch activities such as eating the traditional breakfast, being suited up, and riding out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is realized in the "white room" for their mission. After the closing of the hatch, and arm retraction, launch activities are shown including the countdown, engine ignition, launch, shuttle roll maneuver, and then the separation of the Solid Rocket Boosters (SRB) from the shuttle. Once in orbit the cargo bay doors are seen opening.

CASI


1997#17673 NASA Johnson Space Center, Houston, TX USA

STS-82 Day 02 Highlights
Feb. 12, 1997; In English; Videotape: 13 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1997020606; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

On the second day of the STS-82 mission, the crew Commander Kenneth D. Bowersox, Pilot Scott J. Horowitz, Payload Commander Mark C. Lee, and Mission Specialists Gregory J. Harbaugh, Steven L. Smith, Joseph R. Tanner, and Steven A. Hawley survey the payload bay with the Shuttle’s 50-foot remote manipulator system (RMS). Hawley puts the arm through its paces to verify it’s ability to capture the Hubble Space Telescope (HST), to prepare for the upcoming spacewalks, the astronauts assemble on the mid-deck to checkout tools they will use while servicing the telescope.

CASI


1997#17674 NASA Johnson Space Center, Houston, TX USA

STS-82 Day 03 Highlights
Feb. 13, 1997; In English; Videotape: 16 min. 36 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1997020605; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

The third day of the STS-82 mission begins with the crew, Commander Kenneth D. Bowersox, Pilot Scott J. Horowitz, Payload Commander Mark C. Lee, and Mission Specialists Gregory J. Harbaugh, Steven L. Smith, Joseph R. Tanner, and Steven A. Hawley successfully retrieving the Hubble Space Telescope. Hawley then lowers the 12-ton observatory onto the Flight Support System berthing platform in Discovery’s cargo bay, where it is latched in place for servicing. The astronauts are then seen in the mid-deck preparing for the first of four spacewalks designed to service and upgrade the scientific capabilities of the Hubble Space Telescope.

CASI


1997#17683 NASA Johnson Space Center, Houston, TX USA

STS-82 Post Flight Presentation
Mar. 11, 1997; In English; Videotape: 33 min. 56 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1997020606; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

The STS-82 crew, Commander Kenneth D. Bowersox, Pilot Scott J. Horowitz, Payload Commander Mark C. Lee, and Mission Specialists Gregory J. Harbaugh, Steven L. Smith, Joseph R. Tanner, and Steven A. Hawley present a video and still picture overview of their mission. Included in the presentation are the following: the pre-launch activities such as eating the traditional breakfast, being suited up, and riding out to the launch pad, various panoramic views of the shuttle on the pad, the countdown, engine ignition, launch, shuttle roll maneuver, separation of the Solid Rocket Boosters (SRB) from the shuttle, survey of the payload bay with the Shuttle’s 50-foot remote manipulator system (RMS), the successful retrieval of the Hubble Space Telescope (HST), EVA’s to repair HST, release of HST, and the shuttle’s landing.

CASI


1997#17684 NASA Johnson Space Center, Houston, TX USA

STS-82 Day 04 Highlights
Feb. 14, 1997; In English; Videotape: 18 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1997020604; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

The fourth day of the STS-82 mission begins with the crew, Commander Kenneth D. Bowersox, Pilot Scott J. Horowitz, Payload Commander Mark C. Lee, and Mission Specialists Gregory J. Harbaugh, Steven L. Smith, Joseph R. Tanner, and Steven A. Hawley in preparations for conducting the second servicing mission of the Hubble Space Telescope. The first spacewalk was slightly delayed to enable ground controllers to assess the unexpected movement of one of Hubble’s solar arrays, which slipped from a horizontal to a vertical position as Discovery’s solar array was depressurized. Astronauts Mark Lee and Steve Smith are seen working in the cargo bay of the Shuttle Discovery. Their spacewalk to upgrade the Hubble Space Telescope lasts six hours and 42 minutes. At the conclusion of their EVA, HST has graded science instruments for an expanded view of the universe.

CASI

Space Transportation System Flights: Space Transportation System: Space Missions: Spacecrews: Astronauts

1997#021175 NASA Johnson Space Center, Houston, TX USA

STS-83 Postflight Presentation
Jun. 09, 1997; In English; Videotape: 21 min. 51 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1997033261; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

The flight crew of the STS-83 mission, Cmdr. James D. Halsell, Pilot Susan S. Stiff, Payload Cmdr. Janice E. Voss, Mission Specialists Donald Thomas and Michael Gernhardt, and Payload Specialists Roger Crouch and Greg Linzner, offer a video and still photo presentation of their journey. Included in the presentation are an introduction of the crew and a short briefing by Cmdr. Halsell, the launch and ascent narrated by Stiff, Spacehab Module narration by Voss, mission control narrated by Cmdr. Halsell, experiment narration by Thomas and Crouch. Also included are video views of the Baja Peninsula, Simi Peninsula, pivot-point irrigation circles, Comet Hale-Bopp, and the cross-wind landing. The crew poses outside the shuttle for photos. Crew members discuss still photos taken during the mission, including shots of sunsets, the Grand Bahamas Island, Nile River, Baja Peninsula, Indus River of India, and Guadaloupe Island.

CASI

Space Transportation System Flights: Spacelab: Spacecrews: Photographs: Launching: Comets
19979022115 NASA Johnson Space Center, Houston, TX USA

STS–82 Mission Highlight Presentation
Jun. 02, 1997; In English; Videotape: 59 min. 31 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997032904; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The STS–82 is the second in a series of planned service missions to the Hubble Space Telescope (HST). The flight crew of STS–82, Cmdr. Kenneth D. Bowersox, Pilot Scott J. Horowitz, Mission specialists, Mark C. Lee, Steven A. Hawley, Gregory J. Harbaugh, Steven L. Smith, and Joseph R. Tanner can be seen performing pre-launch activities preparing for the night launch. The crew meets the press for pre-launch photos before being transported to the launch pad. Several views can be seen of the final inspection team on the 0 level and the crew being recalled in the “white room”. Launch activities such as the oxygen vent hood retraction, liftoff, SRB separation, and personnel activities in the Houston Integrated Mission Control room are viewed. Subsequent footage is provided of the crew’s activities during the HST rendezvous and docking. Extravehicular Activities (EVA)’s preparation and EVA numbers 1, 3 and 5. During the first EVA the earth can be seen clearly in a reflection off of HST’s offshirod during its 60th orbit crossing the equator. The HST deployment and views of the Hale-Bopp comet are clearly seen before Discovery’s reentry and landing. After reentry a beautiful view of Discovery moving at 10,400 mph can be seen looking east from Mission Control. The usual twin sonic boom precedes Discovery’s touchdown on runway 15 at Kennedy Space Center. This second HST service mission orbited Earth 150 times and traveled 1.4 million miles.

CASI Extravehicular Activity; Hubble Space Telescope; Launching; Space Transportation System Flights; Space Maintenance

19970027209 NASA Johnson Space Center, Houston, TX USA

STS–81 Mission Highlights Resources Tape
Sep. 25, 1997; In English; Videotape: 53 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997047950; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of the STS–81 Space Shuttle Orbiter Atlantis Commander Michael A. Baker, Pilot Brent W. Jett Jr., and Mission Specialists, John M. Grunsfeld, Martha S. Ivans, Peter J.K. Wisoff, and John M. Linzinger present an overview of their mission. Video footage includes the following: prelaunch and launch activities, the crew eating breakfast, shuttle launch, on orbit activities, rendezvous with Mir, Shuttle/Mir joint activities, undocking, and the shuttle landing.

CASI Space Transportation System Flights; Space Shuttle Orbiters; Mir Space Station; Flight Crews; Spacecraft Docking

19970027210 NASA Johnson Space Center, Houston, TX USA

STS–83 Day 02
Jul. 02, 1997; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997047945; No Copyright; Avail: CASI; B01, Videotape-Beta: V01, Videotape-VHS

On this second day of the STS-83 mission, the flight crew, Cmdrs. James D. Halsell, Jr. Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists Michael L. Gernhardt and Donald A. Thomas, and Payload Specialists Gregory T. Lintner and Roger K. Crouch present an overview of their mission. The primary payload is the Microgravity Science Laboratory (MSL), which is a collection of microgravity experiments housed inside a European SpaceLab Long Module (MLM). MSL features 19 materials science investigations in 4 major facilities. These facilities are the Large Isothermal Furnace, the EPIXcute the PRocessing of Experiments to the Space Station (EXPRESS) Rack, the Electromagnetic Containerless Processing Facility (TEMPUS), and the Coarsening in Solid-Liquid Mixtures (CSLM) Facility, the Droplet Combustion Experiment (DCE); and the Combustion Module 1 Facility. Additional technology experiments will be performed in the Middelock Glovebox (MOGBX) developed by the Marshall Space Flight Center (MSFC) and the High-Packed Digital Television (HPD-DIV) system will be used to provide multi-channel real-time analog science video. Pre-flight, launch, and orbital footage is followed a discussion of the spaceborne experiments aboard the MLM. The end footage shows the shuttle’s prelaunch checklist, reentry, and landing.

CASI Space Transportation System Flights; Spaceborne Experiments; Spacelab; Space Processing; Low Gravity Manufacturing; Spacelab Payloads

19979027221 NASA Johnson Space Center, Houston, TX USA

Pressure Wave Propagation in a Screech Cycle
Sep. 25, 1997; In English; Videotape: 6 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997047951; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The screech noise generation process from supersonic underexpanded jets, issuing from a sonic nozzle pressure ratio of 2.4 and 3.5 (expanded Mach number, M(subj) – 1.19 and 1.42), is investigated experimentally. Sprack Schlieren visualization at different phases of the screech cycle are clearly shown. The rms pressure fluctuation at the screech frequency is measured in the near field region by a traversing microphone.

CASI Supersonic Jet Flow; Sonic Nozzles; Nozzle Flow; Noise Generators; Wave Propagation; Elastic Waves; Gas Jets; Sound Waves; Sound Pressure; Oscillating Flow; Jet Aircraft Noise; Noise Reduction

19970027233 NASA Johnson Space Center, Houston, TX USA

STS–71 Mission Highlights Resources Tape
Sep. 25, 1997; In English; Videotape: 1 hour 13 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997047949; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of the STS–71 Space Shuttle Orbiter Atlantis Commander Robert L. Gibson, Pilot Charles J. Precourt, Mission Specialists, Ellen S. Baker, Bonnie J. Dunbar, Gregory J. Harbaugh, and Payload Specialists, Norman E. Thagard, Vladimir Dezhurov, and Gennadiy Strekalov present an overview of their mission. It’s primary objective is the first Mir docking with a space shuttle and crew transfer. Video footage includes the following: prelaunch and launch activities; the crew eating breakfast; shuttle launch; on orbit activities; rendezvous with Mir; Shuttle/Mir joint activities; undocking; and the shuttle landing.

CASI Space Transportation System Flights; Flight Crews; Spacecraft Docking; Space Shuttle Orbiters; Mir Space Station

19970027234 NASA Johnson Space Center, Houston, TX USA

STS–83 Mission Highlights Resources Tape
Jun. 08, 1997; In English; Videotape: 44 min. 36 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997047948; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The STS–83 mission flight crew, Cmdr. James D. Halsell Jr., Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists Michael L. Gernhardt and Donald A. Thomas, and Payload Specialist Gregory T. Lintner and Roger K. Crouch present an overview of their mission. The primary payload is the Microgravity Science Laboratory (MSL), which is a collection of microgravity experiments housed inside a European SpaceLab Long Module (MLM). MSL features 19 materials science investigations in 4 major facilities. These facilities are the Large Isothermal Furnace, the EPIXcute the PRocessing of Experiments to the Space Station (EXPRESS) Rack, the Electromagnetic Containerless Processing Facility (TEMPUS), and the Coarsening in Solid-Liquid Mixtures (CSLM) Facility, the Droplet Combustion Experiment (DCE); and the Combustion Module 1 Facility. Additional technology experiments will be performed in the Middelock Glovebox (MOGBX) developed by the Marshall Space Flight Center (MSFC) and the High-Packed Digital Television (HPD-DIV) system will be used to provide multi-channel real-time analog science video. Pre-flight, launch, and orbital footage is followed a discussion of the spaceborne experiments aboard the MLM. The end footage shows the shuttle’s prelaunch checklist, reentry, and landing.

CASI Space Transportation System Flights; Spaceborne Experiments; Spacelab; Space Processing; Low Gravity Manufacturing; Spacelab Payloads
CASI brought back from the Mir Space Station, Atlantis is ferrying home astronaut the Spacehab module in the cargo bay. In addition to 2,600 pounds of items being day on orbit is devoted to stowing equipment and finishing experiment work in
are ready to support the Shuttle's high speed return to Earth. The astronauts' final
morning testing Atlantis' flight control surfaces and auxiliary jets to ensure
May 23, 1995; In English; Videotape: 15 min. playing time, in color, with

STS-83 Day 03
Jul. 03, 1997; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--1997047946; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

On this third day of the STS-83 mission, the flight crew, Cmdr. James D. Halsell Jr., Pilot Susan L. Still, Payload Cmrd: Janice E. Voss, Mission Specialists Michael L. Gernhardt and Donald A. Thomas, and Payload Specialist Gregory T. Linters and Roger K. Crouch continue to conduct experiments. The crew of the Microgravity Science Laboratory mission has successfully activated all Spacelab facilities with help from the science teams on the ground.

CASI

STS-83 Day 01
Jul. 01, 1997; In English; Videotape: 21 min. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--1967047944; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-83 mission, the flight crew, Cmdr. James D. Halsell Jr., Pilot Susan L. Still, Payload Cmdr: Janice E. Voss, Mission Specialists Michael L. Gernhardt and Donald A. Thomas, and Payload Specialists Gregory T. Linters and Roger K. Crouch can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the 'white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters.

CASI

STS-84 Day 06 Highlights
May 23, 1995; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--1997053793; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

On this the ninth day of the STS-84 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Eileen M. Collins, Payload Cmrd: Jean-Francois Clervoy (ESA), Mission Specialists Edward T. Lu, Carlos I. Noriega, Elena V. Kondakova, Jerry M. Linenger (download), and C. Michael Foale (upload) continue science work aboard Spacelab module and begin deactivating experiments in preparations for an early return to Earth.

CASI
Space Transportation System Flights: Spacecraft: Space Station: Spacelab Processing: Astronauts

STS-84 Post Flight Presentation
May 24, 1995; In English; Videotape: 55 min. 11 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--1997053794; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

The STS-84 mission flight crew, Cmdr. Charles J. Precourt, Pilot Eileen M. Collins, Payload Cmrd: Jean-Francois Clervoy (ESA), Mission Specialists Edward T. Lu; Carlos I. Noriega; Elena V. Kondakova; Jerry M. Linenger, present a post flight analysis of their mission through the use of color slides and video footage. Prelaunch and launch activities are shown and briefly discussed. The astronauts take turns talking about different aspects of their specific roles during the mission.

CASI
Space Transportation System Flights: Spacecraft: PostFlight Analysis: Astronauts

STS-84 Day 05 Highlights
May 19, 1995; In English; Videotape: 16 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--1997053789; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

On this fifth day of the STS-84 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Eileen M. Collins, Payload Cmrd: Jean-Francois Clervoy (ESA), Mission Specialists Edward T. Lu, Carlos I. Noriega, Elena V. Kondakova, Jerry M. Linenger (download), and C. Michael Foale (upload) continue their work through the overnight hours, transferring water, hardware and logistical supplies to and from each other’s spacecraft. It is the third day of joint operations between the Shuttle and the Russian Space Station crewmembers. As planned, the newest member of the Mir-23 crew, Mike Foale, and astronaut Jerry Linenger continue their handover activities to prepare Foale for his 4 month stay on Mir. Foale will serve aboard the Russian outpost until he is replaced by astronaut Wendy Lawrence during Atlantis' next visit to Mir in September.

CASI
Space Transportation System Flights: Spacecraft: Space Stations: Payloads: Astronauts

STS-84 Day 04 #5 Highlights
May 20, 1995; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--1997053790; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

On this sixth day of the STS-84 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Eileen M. Collins, Payload Cmrd: Jean-Francois Clervoy (ESA), Mission Specialists Edward T. Lu, Carlos I. Noriega, Elena V. Kondakova, Jerry M. Linenger (download), and C. Michael Foale (upload) continue the transfer supplies In all they moved about 3 tons of supplies and items earmarked for use by U.S. astronaut Mike Foale during his four month stay on the Mir as well as those designated for return to Earth for researchers and officials of the Russian Space Agency.

CASI
Space Transportation System Flights: Spacecraft: Payloads: Astronauts

STS-84 Day 03 Highlights
May 21, 1995; In English; Videotape: 21 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--1997053791; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

On this seventh day of the STS-84 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Eileen M. Collins, Payload Cmrd: Jean-Francois Clervoy (ESA), Mission Specialists Edward T. Lu, Carlos I. Noriega; Elena V. Kondakova; Jerry M. Linenger (download) and C. Michael Foale (upload) are seen saying their final farewells and closing the hatch on their two spacecraft. This wrap up five days of joint operations in which about 7,600 pounds of supplies, experiments and water were transferred between the two vehicles, as well as...
astronaut Mike Foale, who swapped places with Jerry Linenger for the start of a four-month research mission on the Russian outpost. The final handshakes by Commanders Charles Precourt and Valery Tsibliev came moments before the hatch between Atlantis and Mir swung shut.

CASI
Space Transportation System Flights; Spacecraft Docking; Spacecrews; Cosmonauts; Astronauts

1997/027701 NASA Johnson Space Center, Houston, TX USA
STS-84 Day 08 Highlights
May 22, 1995; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT--1997053792; No Copyright; Avail: CASI
B01, Videotape-Beta; V01, Videotape-VHS

On this eighth day of the STS-84 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Eileen M. Collins, Payload Cmdr. Jean-Francois Clervoy (ESA), Mission Specialists Edward T. Lu, Carlos I. Noriega, Elena V. Kondakova, Jerry M. Linenger (download), and C. Michael Foale (upload) sang The Cosmonauts’ Song’ to Mir-23 crew members Vasily Tsibliev, Alexander Lazutkin and astronaut Mike Foale, who is beginning his four-month research mission on Mir. Foale and his new crewmates played music as Atlantis departed following the joint phase of the flight. Atlantis’ undocking from Mir was modified from previous joint missions in that a flyaround of the station for photographic purposes was not conducted. Instead, Pilot Eileen Collins guided Atlantis below the Mir after the two spacecraft completed their physical separation, stopping three times at distances of 90, 300 and 1,500 feet to collect data from a European sensor device designed to assist future rendezvous of a proposed European Space Agency resupply vehicle with the International Space Station. Once the data collection was completed, the shuttle took advantage of the microgravity environment to conduct various experiments.

CASI
Space Transportation System Flights; Spacecrews; Orbit Mechanics: International Space Station; Astronauts; Cosmonauts

1997/027702 NASA Johnson Space Center, Houston, TX USA
STS-84 Day 04 Highlights
May 18, 1995; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT--1997053788; No Copyright; Avail: CASI
B01, Videotape-Beta; V01, Videotape-VHS

On this fourth day of the STS-84 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Eileen M. Collins, Payload Cmdr. Jean-Francois Clervoy (ESA), Mission Specialists Edward T. Lu, Carlos I. Noriega, Elena V. Kondakova, Jerry M. Linenger (download), and C. Michael Foale (upload) spend their first full day of work together conducting science investigations and transferring equipment from one spacecraft to the other. The Spacelab double module at the rear of Atlantis’ payload bay was the focus of activity today as crew members conducted science experiments in the Biornack facility and transferred items to and from the Mir Space Station. In an interview with CBS News, Precourt and Tsibliev praise the sixth joint docking mission between the U.S. and Russia, indicating it is serving as a worthwhile experiment. The flight crew can be seen interacting with each other during this segment of the mission.

CASI
Space Transportation System Flights; Spacecraft Docking; Spacecrews; Spacelab Payloads; Mir Space Station

1997/027716 NASA Johnson Space Center, Houston, TX USA
STS-84 Day 05 Highlights
May 17, 1995; In English; Videotape: 18 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT--1997053787; No Copyright; Avail: CASI
B01, Videotape-Beta; V02, Videotape-VHS

On this third day of the STS-84 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Eileen M. Collins, Payload Cmdr. Jean-Francois Clervoy (ESA), Mission Specialists Edward T. Lu, Carlos I. Noriega, Elena V. Kondakova, Jerry M. Linenger (download), and C. Michael Foale (upload) guide Atlantis to its docking with the Misr 23 Commandr Vasily Tsibliev and, after embraces and handshakes, the crew members make their way into the Mir Core Module for a brief welcoming ceremony. During the ceremony, the Shuttle crew give Tsibliev and Flight Engineer Alexander Luriekin baseball caps emblazoned with the STS-84 crew insignia as well as the traditional Russian offering of bread, tea and salt. Then, the ten astronauts and cosmonauts get down to business, first conducting a joint safety briefing to familiarize themselves with each other’s craft.

CASI
Space Transportation System Flights; Spacecraft Docking; Spacecrews; Astronauts

1997/027717 NASA Johnson Space Center, Houston, TX USA
STS-84 Day 02 Highlights
May 16, 1995; In English; Videotape: 18 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT--1997053786; No Copyright; Avail: CASI
B02, Videotape-Beta; V02, Videotape-VHS

On this second day of the STS-84 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Eileen M. Collins, Payload Cmdr. Jean-Francois Clervoy (ESA), Mission Specialists Edward T. Lu, Carlos I. Noriega, Elena V. Kondakova, Jerry M. Linenger (download), and C. Michael Foale (upload) continue to close on the Mir Space Station in anticipation of the sixth linkage between the Shuttle and the Russian space complex. Preparations for the docking are nearly complete as Atlantis’ seven astronauts worked around the clock to check out the rendezvous tools that will be used during the final phase of the approach to Mir.

CASI
Space Transportation System Flights; Spacecraft Docking; Spacecrews; Mir Space Station; Astronauts

1997/028433 NASA Johnson Space Center, Houston, TX USA
STS-84 Day 08 Highlights
Jul. 08, 1995; In English; Videotape: 14 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT--1997051162; No Copyright; Avail: CASI
B01, Videotape-Beta; V01, Videotape-VHS

On this eighth day of the STS-94 mission, the flight crew, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists Michael L. Gernhardt and Donald A. Thomas, and Payload Specialists Gregory T. Linteris and Roger K. Crouch conduct status checks and perform video documentation of some of the Microgravity Science Laboratory experiments and activities in the Spacelab. The first part of Pilot Susan Still’s day involves monitoring orbiter systems and working an in-flight maintenance procedure with the Shuttle Amateur Radio Experiment (SAREX).

CASI
Space Transportation System Flights; Spaceborne Experiments; Spacelab; Microgravity

1997/028439 NASA Johnson Space Center, Houston, TX USA
STS-94 Day 02 Highlights
Jul. 02, 1995; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT--1997051156; No Copyright; Avail: CASI
B01, Videotape-Beta; V01, Videotape-VHS

On this second day of the STS-94 mission, the flight crew, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists Michael L. Gernhardt and Donald A. Thomas, and Payload Specialists Gregory T. Linteris and Roger K. Crouch are seen continuing the payload activa-
tion process, as the research efforts of the Microgravity Science Laboratory (MSL) mission get into full swing.

CASI

Space Transportation System Flights: Spacecrews: Payloads

19970028440 NASA Johnson Space Center, Houston, TX USA

STS-94 Day 03 Highlights
Jul. 03, 1995; In English; Videotape: 12 min. playing time, in color, with sound Report No.(s): NONP-NASA--VT--1997051157; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this third day of the STS-94 mission, the flight crew, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmrdr. Janice E. Voss, Mission Specialists Micheal L. Gemhardl and Donald A. Thomas, and Payload Specialists Gregory T. Linteris and Roger K. Crouch are seen in the Microgravity Science Laboratory aboard Space Shuttle Columbia activating the final experiment facility and beginning additional experiments, among the more than 30 investigations to be conducted during the 16-day mission.

CASI

Space Transportation System Flights: Spacecrews: Payloads

19970028441 NASA Johnson Space Center, Houston, TX USA

STS-94 Day 04 Highlights
Jul. 04, 1995; In English; Videotape: 10 min. playing time, in color, with sound Report No.(s): NONP-NASA--VT--1997051158; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fourth day of the STS-94 mission, the flight crew, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmrdr. Janice E. Voss, Mission Specialists Micheal L. Gemhardl and Donald A. Thomas, and Payload Specialists Gregory T. Linteris and Roger K. Crouch have settled into a comfortable pace in their on-orbit home, Columbia. They continue their around-the-clock efforts with the experiments being flown as part of the Microgravity Science Laboratory payload. With no significant Shuttle system issues being worked, the crew is able to devote all of its efforts toward the science objectives of the flight.

CASI

Space Transportation System Flights: Spacecrews: Payloads

19970028442 NASA Johnson Space Center, Houston, TX USA

STS-94 Day 05 Highlights
Jul. 05, 1995; In English; Videotape: 12 min. playing time, in color, with sound Report No.(s): NONP-NASA--VT--1997051160; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this sixth day of the STS-94 mission, the flight crew, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmrdr. Janice E. Voss, Mission Specialists Micheal L. Gemhardl and Donald A. Thomas, and Payload Specialist Gregory T. Linteris and Roger K. Crouch continue their around-the-clock work with the Microgravity Science Laboratory experiments. During the morning period, Thomas works with the Large Isothermal Furnace experiment and the Glovebox unit. Columbia's systems continue to operate properly, providing a stable platform for microgravity science operations.

CASI

Space Transportation System Flights: Spacecrews: Payloads: Gravitational Effects

19970028458 NASA Johnson Space Center, Houston, TX USA

STS-94 Day 06 Highlights
Jul. 06, 1995; In English; Videotape: 10 min. 40 sec. playing time, in color, with sound Report No.(s): NONP-NASA--VT--1997051159; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS


CASI

Space Transportation System Flights: Payloads: Space Flight: Space Shuttles

19970028460 NASA Johnson Space Center, Houston, TX USA

STS-94 Day 01 Highlights
Jul. 01, 1995; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA--VT--1997051155; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-94 mission, the flight crew (the original crew of mission STS-83), Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmrdr. Janice E. Voss, Mission Specialists Micheal L. Gemhardl and Donald A. Thomas, and Payload Specialists Gregory T. Linteris and Roger K. Crouch can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the 'white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters.

CASI

Space Transportation System Flights: Space Shuttle Boosters: Launching; Booster Rocket Engines

19970028466 NASA Johnson Space Center, Houston, TX USA

STS-94 Day 14 Highlights
Jul. 14, 1995; In English; Videotape: 14 min. 40 sec. playing time, in color, with sound Report No.(s): NONP-NASA--VT--1997051167; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fourteenth day of the STS-94 mission, the flight crew, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmrdr. Janice E. Voss, Mission Specialists Micheal L. Gemhardl and Donald A. Thomas, and Payload Specialists Gregory T. Linteris and Roger K. Crouch continue to focus on Columbia's Microgravity Science Laboratory mission. The seven astronauts work around the clock on two shifts supporting the more than 30 experiments in the Spacelab module. Work in the laboratory includes plant experiment and protein crystal growth status checks as well as work in the glovebox on the Coursening in Solid-Liquid Mixtures experiment.

CASI

Space Transportation System Flights: Spacelab: Payloads: Protein Crystal Growth; Microgravity

19970028467 NASA Johnson Space Center, Houston, TX USA

STS-94 Day 09 Highlights
Jul. 09, 1995; In English; Videotape: 13 min. 45 sec. playing time, in color, with sound Report No.(s): NONP-NASA--VT--1997051163; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this ninth day of the STS-94 mission, the flight crew, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmrdr. Janice E. Voss, Mission Specialists Micheal L. Gemhardl and Donald A. Thomas, and Payload Specialists Gregory T. Linteris and Roger K. Crouch spend their morning in the Spacelab module working on several experiments. Thomas has been working with the Large Isothermal Furnace (LIF), a vacuum-heating furnace designed to heat large samples uniformly; the Middeck Glovebox (MGBX) unit; and the Internal Flows in a Free Drop Experiment (IFFD). The IFFD experiment involves containerless processing of materials using acoustic positioning techniques.

CASI

Space Transportation System Flights: Spacelab: Spacecrews: Payloads: Acoustic Levitation

19970028468 NASA Johnson Space Center, Houston, TX USA

STS-94 Day 12 Highlights
Jul. 12, 1995; In English; Videotape: 16 min. playing time, in color, with sound Report No.(s): NONP-NASA--VT--1997051166; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this twelfth day of the STS-94 mission, the flight crew, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmrdr. Janice E. Voss, Mission Specialists Micheal L. Gemhardl and Donald A. Thomas, and Payload Specialists Gregory T. Linteris and Roger K. Crouch focus on developing better methods for the efficient use of fossil fuels while reducing emissions and air pollutants. The seven-astronaut crew - divided into two teams - provides on-orbit assistance to

CASI

Space Transportation System Flights: Space Shuttle Boosters: Launching; Booster Rocket Engines

19970028469 NASA Johnson Space Center, Houston, TX USA

STS-94 Day 07 Highlights
Jul. 07, 1995; In English; Videotape: 13 min. 40 sec. playing time, in color, with sound Report No.(s): NONP-NASA--VT--1997051164; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS


CASI

Space Transportation System Flights: Payloads: Space Flight: Space Shuttles
On this fourteenth day of the STS-94 mission, the flight crew, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists Michael L. Gernhardt and Donald A. Thomas, and Payload Specialist Gregory T. Linteris and Roger K. Crouch conduct an interview with CBS’ "Up to the Minute" program during which they discuss the activities and progress that has been made so far on the flight.

CASI
Space Transportation System Flights: Spacecrews; Space Shuttle Orbiters; Microgravity

1997a00124849 NASA Johnson Space Center, Houston, TX USA

STS--94 Day 14 Highlights
Jul. 14, 1995; In English; Videotape: 12 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1997071119; No Copyright; Avail. CASI;
B01, Videotape-Beta; V01, Videotape-VHS

On this fourteenth day of the STS-94 mission, the flight crew, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists Michael L. Gernhardt and Donald A. Thomas, and Payload Specialist Gregory T. Linteris and Roger K. Crouch begin closing up shop in preparation for return to the Kennedy Space Center in Florida.

CASI
Space Transportation System Flights: Spacecrews; Astronauts;Microgravity; Space Flight

1997a0028533 NASA Johnson Space Center, Houston, TX USA

STS--94 Day 15 Highlights
Jul. 15, 1995; In English; Videotape: 17 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1997071168; No Copyright; Avail. CASI;
B02, Videotape-Beta; V02, Videotape-VHS

On this fifteenth day of the STS-94 mission, the flight crew, Cmdrs. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmdrs. Janice E. Voss, Mission Specialists Michael L. Gernhardt and Donald A. Thomas, and Payload Specialists Gregory T. Linteris and Roger K. Crouch express thanks to all those on the ground who prepared the shuttle, crew, and payload for an unprecedented repeat launch to complete work with the Microgravity Science Laboratory. The first flight of Columbia with the laboratory, then designated mission STS-83, was cut short due to a faulty fuel cell.

CASI
Space Transportation System Flights: Spacecrews; Space Shuttle Orbiters; Microgravity

1997a00035047 NASA Johnson Space Center, Houston, TX USA

STS--85 Day 8 Highlights
Aug. 11, 1997; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1997074848; No Copyright; Avail. CASI;
B01, Videotape-Beta; V01, Videotape-VHS

On this first day of the STS-85 mission, the flight crew, Cmdr. Curtis L. Brown, Jr., Pilot Kent V. Rominger, Payload Cmdrs. N. Jan Davis (Ph.D.), Mission Specialists Robert L. Curbeam, Jr., and Stephen K. Robinson (Ph.D.), and Payload Specialist Bjarni V. Tryggvason can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the 'white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters.

CASI
Space Transportation System Flights: Spacecrews; Countdown; Launching; Space Exploration; Space Flight

1997a00035047 NASA Johnson Space Center, Houston, TX USA

STS--85 Day 9 Highlights
Aug. 12, 1997; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1997074847; No Copyright; Avail. CASI;
B01, Videotape-Beta; V01, Videotape-VHS

On this sixth day of the STS-85 mission, the flight crew, Cmdr. Curtis L. Brown, Jr., Pilot Kent V. Rominger, Payload Cmdr. N. Jan Davis (Ph.D.), Mission Specialists Robert L. Curbeam, Jr., and Stephen K. Robinson (Ph.D.), and Payload Specialist Bjarni V. Tryggvason today continue their work with the Bioreactor Demonstration System designed to perform cell biology experiments under controlled conditions. Tryggvason, today continues his work with the Microgravity Vibration Isolation Mount which uses magnets to levitate a platform and protect sensitive microgravity processing experiments from vibrations.

CASI
Space Transportation System Flights: Spacecrews; Bioreactors
On this third day of the STS-85 mission, the flight crew, Cmdr. Curtis L. Brown, Jr., Pilot Kent V. Rominger, Payload Cmdr. N. Jan Davis (Ph.D.), Mission Specialists Robert L. Curbeam, Jr. and Stephen K. Robinson (Ph.D.), and Payload Specialist Bjarni V. Tryggvason enter the final portion of their flight. The new Mir 24 crew of Commander Anatoly Solovyev and Flight Engineer Pavel Vinogradov, who arrived on the station the same day Discovery was launched, bid farewell to Mir 23 Commander Vasily Tsiblnev and Flight Engineer Alexander Lazutkin who are returning home after 185 days in space. The Soyuz vehicle carrying the Mir 23 crew home undocked from the station. Robinson again used the Southwest Ultraviolet Imaging System (SWUIS), a 7-inch imaging telescope that is pointed out of the orbiter’s middeck hatch window, to observe the Hale-Bopp comet. Curbeam continued his work with the Bioreactor Demonstration System designed to perform cell biology experiments under controlled conditions. Tryggvason spent part of his time troubleshooting a computer hard drive system that support the Microgravity Vibration Isolation Mount experiment.

CASI

Space Transportation System Flights: Space Transportation System; Bioreactors: Microgravity; Manipulators: Ground Based Control; Gravitational Effects; Flight Tests

On this third day of the STS-85 mission, the flight crew, Cmdr. Curtis L. Brown, Jr., Pilot Kent V. Rominger, Payload Cmdr. N. Jan Davis (Ph.D.), Mission Specialists Robert L. Curbeam, Jr. and Stephen K. Robinson (Ph.D.), and Payload Specialist Bjarni V. Tryggvason enter the final portion of their flight. The new Mir 24 crew of Commander Anatoly Solovyev and Flight Engineer Pavel Vinogradov, who arrived on the station the same day Discovery was launched, bid farewell to Mir 23 Commander Vasily Tsiblnev and Flight Engineer Alexander Lazutkin who are returning home after 185 days in space. The Soyuz vehicle carrying the Mir 23 crew home undocked from the station. Robinson again used the Southwest Ultraviolet Imaging System (SWUIS), a 7-inch imaging telescope that is pointed out of the orbiter’s middeck hatch window, to observe the Hale-Bopp comet. Curbeam continued his work with the Bioreactor Demonstration System designed to perform cell biology experiments under controlled conditions. Tryggvason spent part of his time troubleshooting a computer hard drive system that support the Microgravity Vibration Isolation Mount experiment.

CASI

Space Transportation System Flights: Space Transportation System; Bioreactors: Microgravity; Manipulators: Ground Based Control; Gravitational Effects; Flight Tests

64
ations, the orbiter is functioning in excellent fashion while the crew gathers data using the Space Vision System.

CASI

Space Transportation System Flights: Space Transportation System; International Space Station

19970835992 NASA Johnson Space Center, Houston, TX USA

STS-85 Day 02 Highlights
Aug. 08, 1997; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–1997047842; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this second day of the STS-85 mission, the flight crew, Cmdr. Curtis L. Brown, Jr., Pilot Kent V. Rominger, Payload Cmdr. N. Jan Davis (Ph.D.), Mission Specialists Robert L. Curbeam, Jr. and Stephen K. Robinson (Ph.D.), and Payload Specialist Bjarni V. Tryggvason activated instruments of the Technology Applications and Science (TAS), including the Shuttle Laser Altimeter, the Infrared Spectral Imaging Radiometer (ISIR), the Cryogenic On-Orbit Long Life Active Refrigerator (COOLAR), Two Phase Flow (TPF), Critical Viscosity of Xeonon (CVX) and were initializing the Solar Constant Experiment (SOCLON) and preparing for its first observation. Work with the Japanese-built Manipulator Flight Demonstration (MFD) experiment 1 begins when Davis begins checkout of its Small Fine Arm, destined for use outside the International Space Station’s Japanese Experiment Module. Brown is seen being interviewed by WTIV-TV, Charlotte, N.C., and WTVD-TV, Raleigh-Durham, N.C.

CASI

Space Transportation System Flights: Space Transportation System; Japanese Space Program; Manipulators; Spacecrews: Flight Tests

19970835996 NASA Johnson Space Center, Houston, TX USA

STS-85 Day 04 Highlights
Aug. 10, 1997; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–1997047839; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fourth day of the STS-85 mission, the flight crew, Cmdr. Curtis L. Brown, Jr., Pilot Kent V. Rominger, Payload Cmdr. N. Jan Davis (Ph.D.), Mission Specialists Robert L. Curbeam, Jr., and Stephen K. Robinson (Ph.D.), and Payload Specialist Bjarni V. Tryggvason focus their attention on testing a small, robotic arm serving as a prototype for use on the future International Space Station. They also and conduct experiments on the Shuttle’s middeck.

CASI

Space Transportation System Flights: Space Transportation System; International Space Station; Robot Arms
On this fifth day of the STS-72 mission, the flight crew, Cmdr. Brian Duffy, Pilot Brent W. Jett, and Mission Specialists Leroy Chiao, Daniel T. Berry, Winston E. Scott, and Koichi Wakata (NASA), awakened to music from the television show, Star Trek: The Next Generation. Chiao and Barry are shown suit up for the first of the two scheduled 6 1/2 hour spacewalks and, later, conducting tests with various tools and materials from the shuttle's cargo bay during the spacewalk. The now heating and cooling units in the spacesuits will be tested during these EVAs.

The scheduled activities, their times, and who will be conducting them are highlighted along with various film clips from the beginning of the mission to date.

On this third day of the STS-86 mission, the flight crew, Cmdr. James D. Wetherbee, Jr., Pilot Michael J. Bloomfield, Mission Specialist Scott E. Parazynski, Jean-Loup Chretien, Vladimir G. Titov, Wendy B. Lawrence and David A. Wolf can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the "white room" for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters.

In this video clip, the NASA Television show, Mission Update, hosted by Pat Ryan, provides a synopsis of the eighth day of the STS-72 Space Shuttle mission in this video clip. The scheduled activities, their times, and who will be conducting them are highlighted along with various film clips showing different aspects of the mission.

On this seventh day of the STS-72 mission, the flight crew, Cmdr. Brian Duffy, Pilot Brent W. Jett, and Mission Specialists Leroy Chiao, Daniel T. Berry, Winston E. Scott, and Koichi Wakata (NASA), awakened to music from the Walt Disney movie, Snow White and the Seven Dwarfs. Chiao and Scott performed the second spacewalk of the mission where they tested equipment and work platforms that will be used in building the planned International Space Station. This space walk was almost seven hours long. Wakata conducted an interview with and answered questions from six graders from a Japanese school in Houston, Texas.

This video clip, the NASA Television show, Mission Update, hosted by Pat Ryan, provides a synopsis of the seventh day of the STS-72 Space Shuttle mission in this video clip. The scheduled activities, their times, and who will be conducting them are highlighted along with various film clips from the beginning of the mission to date.

On this first day of the STS-86 mission, the flight crew; Cmdr. James D. Wetherbee, Jr., Pilot Michael J. Bloomfield, Mission Specialist Scott E. Parazynski, Jean-Loup Chretien, Vladimir G. Titov, Wendy B. Lawrence and David A. Wolf discuss the mission's progress with their crewmates providing image data and close-up data readied in the "white room" for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters.

On this second day of the STS-86 mission, the flight crew, Cmdr. James D. Wetherbee, Jr., Pilot Michael J. Bloomfield, Mission Specialist Scott E. Parazynski, Jean-Loup Chretien, Vladimir G. Titov, Wendy B. Lawrence and David A. Wolf conduct a series of engine firings that are designed to refine Atlantis' approach to Mir. With its crewmates providing range rate and clonure data obtained from a variety of tools on board, Wetherbee manually flies Atlantis up
toward Mir. After docking, the hatch between the two vehicles are swung open allowing Wetherbee and Mir Commander Anatoly Solovyev a good view inside. The hatch was brought into orbit by Atlantis for installation following the docking phase of the mission. The ten crew members spend a few minutes greeting one another at the start of their joint work which will involve the transfer of some four tons of supplies and water from Atlantis to the Mir.

CASI

Space Transportation System Flights; Space Transportation System; Spacecraft Docking; Spacecrews

1998006564 NASA Johnson Space Center, Houston, TX USA
STS-86 Day 04 Highlights
Sep. 28, 1997; In English; Videotape: 21 min. playing time, in color, with sound Report No.(s): NONP--NASA--VT--1997077155; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this fourth day of the STS-86 mission, the flight crew, Cmdr. James D. Wetherbee, Jr., Pilot Michael J. Bloomfield, Mission Specialists Scott E. Parazynski, Jean-Loup Chretien, Vladimir G. Titov, Wendy B. Lawrence and David A. Wolf spend their first full day aboard the Atlantis-Mir space complex. The ten astronauts and cosmonauts begin the transfer of more than four tons of supplies. With that transfer, Mike Foale will conclude 134 days as a Mir crew member and board Atlantis as a member of the STS-86 crew. Foale spends time with Wolf, acquainting him with his new home and showing him the location of experiments and hardware.
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Supplying: Payload Delivery (STS); Space Shuttle Main Engine; Space Shuttle Missions; Space Shuttle Orbiters; Space Shuttle Payloads

1998006565 NASA Johnson Space Center, Houston, TX USA
STS-86 Day 05 Highlights
Sep. 29, 1997; In English; Videotape: 17 min. playing time, in color, with sound Report No.(s): NONP--NASA--VT--1997077157; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this fifth day of the STS-86 mission, the flight crew, Cmdr. James D. Wetherbee, Jr., Pilot Michael J. Bloomfield, Mission Specialists Scott E. Parazynski, Jean-Loup Chretien, Vladimir G. Titov, Wendy B. Lawrence and Mike Foale continue their transfer activities today, moving more supplies and water to the Russian outpost as U.S. astronaut Dave Wolf settles in for his four-month mission on the space station.
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Supplying: Space Stations; Payload Delivery (STS)

1998006566 NASA Johnson Space Center, Houston, TX USA
STS-86 Day 07 Highlights
Oct. 01, 1997; In English; Videotape: 21 min. playing time, in color, with sound Report No.(s): NONP--NASA--VT--1997077158; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this seventh day of the STS-86 mission, the flight crew, Cmdr. James D. Wetherbee, Jr., Pilot Michael J. Bloomfield, Mission Specialists Scott E. Parazynski, Jean-Loup Chretien, Vladimir G. Titov, Wendy B. Lawrence and Mike Foale are seen in preparations for a planned five-hour spacewalk to retrieve four experiment packages and to test tools and techniques for construction of the International Space Station. Parazynski and Titov are seen floating out of a hatch on Atlantis' tunnel adapter in front of the Orbiter Docking System to begin their spacewalk. They then affix a 121-pound instrument called a Solar Array Cap to the Docking Module for future use by Russian cosmonauts to seal off a suspected breach in the hull of the Spektr Module.
CASI
International Space Station; Solar Arrays; Space Transportation System; Space Transportation System Flights; Spacecraft Docking; Spacecrews

1998006567 NASA Johnson Space Center, Houston, TX USA
STS-86 Day 08 Highlights
Oct. 02, 1997; In English; Videotape: 23 min. 45 sec. playing time, in color, with sound Report No.(s): NONP--NASA--VT--1997077159; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this eighth day of the STS-86 mission, the flight crew, Cmdr. James D. Wetherbee, Jr., Pilot Michael J. Bloomfield, Mission Specialists Scott E. Parazynski, Jean-Loup Chretien, Vladimir G. Titov, Wendy B. Lawrence and Mike Foale and the Mir crew take a break from their busy schedules to hold a news conference. They talk with media assembled in the USA, Russia and France.
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Remote Manipulator System; Space Shuttle Main Engine; Space Shuttle Missions; Space Shuttle Orbiters; Space Shuttle Payloads

1998006568 NASA Johnson Space Center, Houston, TX USA
STS-86 Day 10 Highlights
Oct. 04, 1997; In English; Videotape: 23 min. playing time, in color, with sound Report No.(s): NONP--NASA--VT--1997077161; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this tenth day of the STS-86 mission, the flight crew, Cmdr. James D. Wetherbee, Jr., Pilot Michael J. Bloomfield, Mission Specialists Scott E. Parazynski, Jean-Loup Chretien, Vladimir G. Titov, Wendy B. Lawrence and Mike Foale are seen talking with four test subjects in an advance life support test underway at Johnson Space Center in Houston. The test team entered a closed chamber in Houston September 19 and will remain sealed inside until late December evaluating the effectiveness of regenerative life support systems that could be used for extended space missions.
CASI
Space Missions; Space Transportation System; Space Transportation System Flights; Spacecrews; Payload Integration Plan; Space Shuttle Main Engine

1998006569 NASA Johnson Space Center, Houston, TX USA
STS-86 Day 11 Highlights
Oct. 05, 1997; In English; Videotape: 18 min. playing time, in color, with sound Report No.(s): NONP--NASA--VT--1997077160; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this eleventh day of the STS-86 mission, the flight crew, Cmdr. James D. Wetherbee, Jr., Pilot Michael J. Bloomfield, Mission Specialists Scott E. Parazynski, Jean-Loup Chretien, Vladimir G. Titov, Wendy B. Lawrence and Mike Foale are seen undocking from the Mir. There are various external views of the two vehicles as they fly over southeast Russia just north of Mongolia.
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Space Shuttle Main Engine; Space Shuttle Missions; Space Shuttle Orbiters; Space Shuttles

1998006570 NASA Johnson Space Center, Houston, TX USA
STS-86 Day 09 Highlights
Oct. 03, 1997; In English; Videotape: 18 min. playing time, in color, with sound Report No.(s): NONP--NASA--VT--1997077160; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this ninth day of the STS-86 mission, the flight crew, Cmdr. James D. Wetherbee, Jr., Pilot Michael J. Bloomfield, Mission Specialists Scott E. Parazynski, Jean-Loup Chretien, Vladimir G. Titov, Wendy B. Lawrence and Mike Foale are seen discussing their mission objectives in an interview with CNN, PBS and the Russian media.
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Payload Delivery (STS); Space Shuttle Orbiters; Space Shuttle Payloads; Space Shuttles

1998006571 NASA Johnson Space Center, Houston, TX USA
STS-87 Day 02 Highlights
Nov. 29, 1997; In English; Videotape: 11 min. 11 sec. playing time, in color, with sound Report No.(s): NONP--NASA--VT--1997125962; No Copyright; Avail: CASI;
On this second day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk are seen conducting experiments involving the effect of weightlessness on materials and fluids. They also work with an experiment to study Earth’s protective ozone layers.

CAS1


STS–87 Day 03 Highlights

Nov. 21, 1997; In English; Videotape: 12 min. 22 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997125963; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this third day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk deploy the Spartan satellite with the shuttle’s robot arm.

CAS1

Space Transportation System: Space Transportation System Flights: Orbital Servicing; Payload Assist Module: Remote Manipulator System: Space Shuttle Main Engine: Space Shuttle Orbiters: Space Shuttle Missions

STS–87 Day 05 Highlights

Nov. 23, 1997; In English; Videotape: 12 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997125963; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS


CAS1

Space Transportation System: Space Transportation System Flights: Space Shuttle Main Engine: Space Shuttle Missions: Space Shuttle Orbiters: Space Shuttle Payloads

STS–87 Day 08 Highlights

Nov. 26, 1997; In English; Videotape: 14 min. 12 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997125968; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this eighth day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk take time out from their duties to be interviewed by CNN. As they reach the one week mark in their 16-day flight, the STS-87 crew shift the focus of their efforts towards the variety of science experiments flying on this mission.

CAS1


STS–87 Day 04 Highlights

Nov. 22, 1997; In English; Videotape: 15 min. 11 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997125964; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this forth day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk check out the spacesuits for the EVA planned for later during the mission. Mission Control developed plans that may allow Scott and Doi to recapture the Spartan satellite by hand during that EVA.

CAS1

Extravehicular Activity: Space Transportation System: Space Transportation System Flights: Space Shuttle Main Engine: Space Shuttle Missions: Space Shuttle Orbiters

STS–87 Day 15 Highlights

Dec. 03, 1997; In English; Videotape: 14 min. 3 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997125960; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fifteenth day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk spend a good part of their day checking out the important space craft systems that are needed to support reentry.

CAS1

Space Transportation System: Space Transportation System Flights: Spacecrafts: Space Shuttles

STS–86 Mission Highlights Resources Tape

Nov. 21, 1997; In English; Videotape: 1 hr. 56 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997093224; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The flight crew of the STS-86 mission, Cmdr. James D. Wetherbee, Jr., Pilot Michael J. Bloomfield, Mission Specialists Scott E. Parazynski, Jean-Loup Chrétien, Vladimir G. Titov, Wendy B. Lawrence and Mike Fosler present an overview of their mission, whose primary objective is the rendezvous and space docking with the Russian Space Station Mir. Video film footage includes: pre-launch and launch activities; shuttle launch; in-orbit rendezvous; docking between Mir and the orbiter; general crew activities; transfer of supplies; undocking maneuvers and a Mir fly-around; and the reentry and landing of the orbiter.

CAS1

Space Transportation System: Spacecraft Docking: Spacecraft Launching: Spacecrafts: Supplying: MIR Station
On this nineteenth day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk continue work with the microgravity science investigations in a special glovebox facility on the middeck. The autonomous operations with the mission’s prime payload continue in the payload bay of Columbia with no interaction by the crew. CASI

Space Transportation System: Space Transportation System Flights; Spacecrews; Space Shuttle: Space Shuttle Missions

On this twentieth day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk continue work on the microgravity science experiments in a special glovebox facility on the middeck. The autonomous operations with the mission’s prime payload continue in the payload bay of Columbia with no interaction by the crew. CASI

Space Transportation System: Space Transportation System Flights; Spacecrews; Space Shuttle: Space Shuttle Missions

On this twenty-first day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk continue work on the microgravity science experiments in a special glovebox facility on the middeck. The autonomous operations with the mission’s prime payload continue in the payload bay of Columbia with no interaction by the crew. CASI

Space Transportation System: Space Transportation System Flights; Spacecrews; Space Shuttle: Space Shuttle Missions

1998015896 NASA Johnson Space Center, Houston, TX USA

STS-87 Day 6 Highlights
Nov. 24, 1997; In English; Videotape: 18 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1997125966; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this sixth day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk continue work on the microgravity science experiments in a special glovebox facility on the middeck. The autonomous operations with the mission’s prime payload continue in the payload bay of Columbia with no interaction by the crew. CASI

Space Transportation System: Space Transportation System Flights; Spacecrews; Space Shuttle: Space Shuttle Missions

1998015897 NASA Johnson Space Center, Houston, TX USA

STS-87 Day 13 Highlights
Dec. 01, 1997; In English; Videotape: 15 min. 4 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1997125958; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this thirteenth day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk continue work on the microgravity science experiments in a special glovebox facility on the middeck. The autonomous operations with the mission’s prime payload continue in the payload bay of Columbia with no interaction by the crew. CASI

Space Transportation System: Space Transportation System Flights; Spacecrews; Space Shuttle Main Engine: Space Shuttles

1998023233 NASA Johnson Space Center, Houston, TX USA

STS-89 Day 1 Highlights
Jan. 23, 1998; In English; Videotape: 15 min. 7 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1998074671; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-89 mission, the flight crew, Cmdr. Terrence W. Wilcutt, Pilot Frank Edwards, and Mission Specialists Michael P. Anderson, James F. Reilly, Bonnie J. Dunbar, Salizhan Shakirovich Sharipov, David A. Wolf and Andrew S.W. Thomas, can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also included are various panoramic views of the shuttle on the pad. The crew is seen in the 'white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters.

CASI

Space Transportation System Flights: Spacecrews; Launching; Booster Rocket Engines; Space Flight: Space Missions: Space Shuttles

199808032959 NASA Johnson Space Center, Houston, TX USA
STS–89 Day 09 Highlights
Jan. 30, 1998; In English; Videotape: 13 min. 31 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998074670; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

On this ninth day of the STS-89 mission, the flight crew, Cmdr. Terrence W. Wilcutt, Pilot Frank Edwards, and Mission Specialist Michael P. Anderson, James F. Reilly, Bonnie J. Dunbar, Salizhan Shakirovich Sharipov, David A. Wolf and Andrew S.W. Thomas, prepare for the reentry phase of their mission. Bonnie Dunbar than gives a tour of the space shuttle.

CASI

Space Shuttle Missions; Space Transportation System Flights; Space Transportation System: Spacecrews; Microgravity

199808032960 NASA Johnson Space Center, Houston, TX USA
STS–89 Day 03 Highlights
Jan. 24, 1998; In English; Videotape: 19 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998074673; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

On this third day of the STS-89 mission, the flight crew, Cmdr. Terrence W. Wilcutt, Pilot Frank Edwards, and Mission Specialists Michael P. Anderson, James F. Reilly, Bonnie J. Dunbar, Salizhan Shakirovich Sharipov, David A. Wolf and Andrew S.W. Thomas, can be seen performing a flawless docking with the Mir. The linkup occurred while the two spacecrafts flew over southeastern Russia, west of Kazakhstan. After the docking the two crews open the entry hatch and great each other.

CASI

Space Transportation System Flights: Spacecraft Docking: Spacecrews: Space Rendezvous: Mir Space Station: Crew Experiment Stations

199808033342 NASA Johnson Space Center, Houston, TX USA
STS–85 Mission Highlights Resources Tape
Nov. 12, 1997; In English; Videotape: 57 min. 13 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997078432; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of STS-85, Cmdr. Curtis L. Brown, Jr., Pilot Kent V. Rominger, Payload Cmrd. N. Jan Davis (Ph.D.), Mission Specialist Robert L. Curbeam, Jr. and Stephen K. Robinson (Ph.D.), and Payload Specialist Bjarni V. Tryggvason, present an overview of their mission. During the pre-launch activities the shuttle is shown being mated to the external tank and Solid Rocket Boosters (SRBs). Also included is the arrival of the crew at the Kennedy Space Center (KSC), their suit-up, the crew being transported to the pad, being strapped in, and launch control activities. The launch includes the count down, main engine start-up, SRB start-up, the launch, the roll maneuver and SRB separation. Once the crew is in orbit, they deploy the CRISTA-SPAS payload and conduct various micro-gravity experiments. In the last part of the video the crew is seen preparing for the landing phase of the mission.

CASI

Space Shuttle Missions: Space Shuttle Orbits: Space Transportation System Flights; Solid Propellant Rocket Engines; Payload Retrieval (STS); Payload Delivery (STS)

199808033343 NASA Johnson Space Center, Houston, TX USA
STS–85 Postflight Presentation
Sop. 20, 1997; In English; Videotape: 52 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997058833; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of STS-85, Cmdr. Curtis L. Brown, Jr., Pilot Kent V. Rominger, Payload Cmrd. N. Jan Davis (Ph.D.), Mission Specialists Robert L. Curbeam, Jr. and Stephen K. Robinson (Ph.D.), and Payload Specialist Bjarni V. Tryggvason, present an overview of their mission. Events shown include pre-launch preparations, launch activities, on orbit activation of various experiments, and the return and landing of the shuttle at Kennedy Space Center (KSC). In the second part of the presentation the astronauts describe the still pictures that were taken during the mission.

CASI

Space Shuttle Missions; Space Shuttle Orbits; Space Transportation System; Space Shuttle Payloads; Space Transportation System Flights

199908033933 NASA Johnson Space Center, Houston, TX USA
STS–89 Day 08 Highlights
Jan. 29, 1998; In English; Videotape: 12 min. 48 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998074669; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

On this eighth day of the STS-89 mission, the flight crew, Cmdr. Terrence W. Wilcutt, Pilot Frank Edwards, and Mission Specialists Michael P. Anderson, James F. Reilly, Bonnie J. Dunbar, Salizhan Shakirovich Sharipov, David A. Wolf and Andrew S.W. Thomas, prepare to conclude their joint mission with the crew of the Mir. Endeavour separated from the Russian Space Station with a gentle push from springs in the docking mechanism attaching it to the Space Station. Following a flyaround of the station to gather additional photographic of the outpost, Pilot Joe Edwards conducts a final separation maneuver to allow Endeavour to drift away from the Mir.

CASI

Space Transportation System Flights: Spacecraft Docking: Spacecrews: Space Shuttle Missions: Mir Space Station: Earth Observations (From Space)

199908034852 NASA Johnson Space Center, Houston, TX USA
STS–89 Day 02 Highlights
Jan. 23, 1998; In English; Videotape: 14 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998074672; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

On this second day of the STS-89 mission, the flight crew, Cmdr. Terrence W. Wilcutt, Pilot Frank Edwards, and Mission Specialists Michael P. Anderson, James F. Reilly, Bonnie J. Dunbar, Salizhan Shakirovich Sharipov, David A. Wolf and Andrew S.W. Thomas, take time from their schedule to discuss with radio station KNX of Los Angeles the STS-89 mission and Thomas’ transfer to the Mir Space Station.

CASI

Space Transportation System Flights: Mir Space Station: Space Flight: Spacecrews; Orbital Maneuvers; Orbital Rendezvous

199908073213 NASA Johnson Space Center, Houston, TX USA
STS–89 Day 04 Highlights
Jan. 25, 1998; In English; Videotape: 19 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998074674; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

On this fourth day of the STS-89 mission, the flight crew, Cmdr. Terrence W. Wilcutt, Pilot Frank Edwards, and Mission Specialists Michael P. Anderson, James F. Reilly, Bonnie J. Dunbar, Salizhan Shakirovich Sharipov, David A. Wolf and Andrew S.W. Thomas, are interviewed by an unnamed news agency. Most of the questions are directed at Wolf and his experiences on Mir.

CASI


70
Doekine, Endeavour mad reentry and landing of the orbitea
docking maneuvers and Mir lly aromad; pre-remrn checkout of flight systems;
ities; transfer of supplies, equipment, and microgravity experiments to Mir;
shuttle lammh; in-orbit docldng between Mir arid Endeavour; general crew activ-
Space Station. Video film footage includes prelmmch and lmmdl activities;
Anderson, James E Reilly, Bomlie J. Dunbm', Salizhan Shakirovidl Sharipov,
Report No.(s): NONP NASA= VT 1998070594; No CopyrigN; Avail: CASI;
Jan. 27, 1998; In English; Videotape: 13 min. 49 sec. playing time, in color, with
Report No.(s): NONP--NASA–VT–1998074667; No Copyright; Avail: CASI;
Jan. 26, 1998; In English; Videotape: 14 min. 24 sec. playing time, in color, with sound
On this fifth day of the STS-89 mission, the flight crew, Cmdr. Terrence W. Wilcutt, Pilot Frank Edwards, and Mission Specialists Michael P. Anderson, James F. Reilly, Bonnie J. Dunbar, Salizhan Shakirovich Sharipov, David A. Wolf and Andrew S.W. Thomas, are interviewed by an unnamed news agency. The main focus of the interview was on international cooperation in outer space. CASI
Space Transportation System Flights; International Cooperation; Space Shuttles; Payload Retrieval (STS); Payload Transfer; Orbital Rendezvous; Crew Procedures (Inflight); Mir Space Station; Spacecraft Docking
STS-89 Day 06 Highlights
On this seventh day of the STS-89 mission, the flight crew, Cmdr. Terrence W. Wilcutt, Pilot Frank Edwards, and Mission Specialists Michael P. Anderson, James F. Reilly, Bonnie J. Dunbar, Salizhan Shakirovich Sharipov, David A. Wolf and Andrew S.W. Thomas, are interviewed by John Holohan of Cable News Network (CNN) and Russian news media. The crew discuss the progress of the mission and activities that lie ahead for Mir crew member Andy Thomas. CASI
Space Transportation System Flights; Mir Space Station; Spacecraft Docking; Space Stations; Space Rendezvous; Orbital Rendezvous; News Media; Spacecrews
STS-89 Day 07 Highlights
On this seventh day of the STS-89 mission, the flight crew, Cmdr. Terrence W. Wilcutt, Pilot Frank Edwards, and Mission Specialists Michael P. Anderson, James F. Reilly, Bonnie J. Dunbar, Salizhan Shakirovich Sharipov, David A. Wolf and Andrew S.W. Thomas are interviewed by an unnamed news agency. CASI
Space Transportation System Flights; Space Transportation System; Space Shuttles; Payload Delivery (STS); Payload Retrieval (STS); Space Shuttle Missions; Space Shuttle Orbiters
STS-89 Day 08 Post Flight Presentation
On this thirteenth day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk once again take part in a variety of human cardiovascular experiments designed to examine blood pressure regulation in microgravity. Crew members repeat an experiment in which they use an innovative technique called microneurography. This involves placing a very fine needle in a nerve just below the knee, allowing nerve signals traveling from the brain to the blood vessels to be measured directly while the cardiovascular system is challenged using the Lower Body Negative Pressure device. LBNP is a high-tech canister that pulls bodily fluids from the lower extremities, simulating the effect of standing on Earth. CASI
Space Transportation System Flights; Space Transportation System; Spacecrews; Microgravity; Lower Body Negative Pressure; Cardiovascular System; Autonomic Nervous System
STS-90 Day 13 Highlights
On this thirteenth day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk once again take part in a variety of human cardiovascular experiments designed to examine blood pressure regulation in microgravity. Crew members repeat an experiment in which they use an innovative technique called microneurography. This involves placing a very fine needle in a nerve just below the knee, allowing nerve signals traveling from the brain to the blood vessels to be measured directly while the cardiovascular system is challenged using the Lower Body Negative Pressure device. LBNP is a high-tech canister that pulls bodily fluids from the lower extremities, simulating the effect of standing on Earth. CASI
Space Transportation System Flights; Space Transportation System; Spacecrews; Microgravity; Lower Body Negative Pressure; Cardiovascular System; Autonomic Nervous System
STS-90 Day 14 Highlights
On this thirteenth day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk, are interrupted due to problems with equipment that removes carbon dioxide from the cabin atmosphere. Because of this, Columbia's crew went to bed about two hours later than scheduled. CASI
Space Transportation System Flights; Flight Crews; Cabin Atmospheres; Space Flight
On this eighth day of the STS-91 mission, the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Daifydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckley and James A. Paweleczk continue to operate the 26 individual experiments designed to provide insight into the operation of the nervous system, the most complex and least well-known part of the human body. The STS-91 crew members have used themselves as test subjects in a variety of experiments associated with studying functions such as blood pressure regulation, balance, coordination and sleep patterns. They also have studied a variety of animals to gain additional insight into the effects of the weightless environment of space on the development and performance of the nervous system.

**Space Transportation System Flights; Space Transportation System: Environmental Tests; Space Exploration: Space Flight**

On this seventh day of the STS-91 mission, the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Daifydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckley and James A. Paweleczk continue experiments that look at the autonomic nervous system, the part of the nervous system that automatically controls blood pressure. These investigations are designed to uncover changes that take place in blood pressure control during space flight. Crewmembers use the Lower Body Negative Pressure (LBNP) device which places a stress on the cardiovascular system similar to what is experienced when standing in Earth’s gravity environment.

**Space Transportation System Flights; Space Transportation System: Lower Body-Negative Pressure; Crews: Spacecrews**

On this eighth day of the STS-91 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Dominic L. Pudwill Gorie and Mission Specialists Wendy B. Lawrence, Franklin R. Chang-Diaz, Janet L. Kavandi, and Valery Viktorovich Ryumin awaken to ‘Manic Monday’ performed by The Bangles, played the crew by Mission Control in honor of an historic Monday for the U.S. and Russian space programs. Today’s schedule includes television feed from the Mir of a final crew farewell and hatch closing. After undocking, the shuttle backs away from the Mir until it reaches a distance of approximately 240 feet below the station. Pilot Dom Gorie then performs a nose forward flyaround of Mir.

**Space Transportation System: Space Transportation System Flights; Scientists**
PEP which involves heating samples and then recording the mixture as it resolidifies; and the study of plant growth in space.

CASI

Space Transportation System; Spacecrews; Booster Rocket Engines; Flight Crews; Space Flight; Space Missions

19980218917 NASA Johnson Space Center, Houston, TX USA

STS-91 Day 04 Highlights
Jun. 05, 1998; In English; Videotape: 4 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1998358184; No Copyright; Avail: CASI; B01, Videotape-VHS

On this fourth day of the STS-91 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Dominick L. Pudwill Gorse and Mission Specialists Wendy B. Lawrence, Franklin R. Chang-Diaz, Janet L. Kavandi, and Valery Victorovitch Ryumin are awakened to the sounds of 'South Australia,' honoring Thomas who is a native of Adelaide in South Australia. The two astronauts and cosmonauts aboard Discovery-Mir are spending their first full day of joint operations continuing the transfer of about four tons of logistical supplies and equipment. Much of the day is spent transferring water, scientific gear and other hardware between the two spacecraft. The crew members had transferred five bags of water to the Mir by the end of the day.

CASI

Space Transportation System; Space Transportation System Flights; Spacecrews; Cosmonauts; Astronauts

19980218918 NASA Johnson Space Center, Houston, TX USA

STS-91 Day 05 Highlights
Jun. 04, 1998; In English; Videotape: 19 min. 19 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1998358183; No Copyright; Avail: CASI; B02, Videotape-VHS

On this third day of the STS-91 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Dominick L. Pudwill Gorse and Mission Specialists Wendy B. Lawrence, Franklin R. Chang-Diaz, Janet L. Kavandi, and Valery Victorovitch Ryumin prepare for docking with the Mir Space Station and a reunion with U.S. Astronaut Andy Thomas, who is about to conclude his more-than-four-month mission to the Russian outpost. After the docking the two crews open the entry hatch and greet each other. The astronauts and cosmonauts transfer supplies from the shuttle to Mir.

CASI

Space Transportation System; Spacecraft Docking; Space Transportation System Flights; Mir Space Station

19980218920 NASA Johnson Space Center, Houston, TX USA

STS-91 Mission Highlights Resource Tape
Jun. 03, 1998; In English; Videotape: 1 hour 14 min. 46 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1998357051; No Copyright; Avail: CASI; B04, Videotape-VHS

The crew STS-91 mission, Cmdr. Charles J. Precourt, Pilot Dominick L. Pudwill Gorse and Mission Specialists Wendy B. Lawrence, Franklin R. Chang-Diaz, Janet L. Kavandi, and Valery Victorovitch Ryumin can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is readied in the 'white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Once in orbit, there are various views of the Mir Space Station as the shuttle begins its approach and docks. After the docking the two crews open the entry hatch and greet each other. The astronauts and cosmonauts transfer supplies from the shuttle to Mir. The astronauts prepare for the reentry phase of their mission. The Shuttle separates from the Russian Space Station with a gentle push from springs in the docking mechanism that attaches it to the Space Station. The final view shows the crews' preparations for reentry and landing.

CASI

Space Transportation System; Spacecraft Docking; Space Stations; Space Shuttle Boosters; Solid Propellant Rocket Engines; Mir Space Station; Launching; Booster Rocket Engines

19980218921 NASA Johnson Space Center, Houston, TX USA

STS-90 Post Flight Presentation
Apr. 14, 1998; In English; Videotape: 17 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1998357050; No Copyright; Avail: CASI; B02, Videotape-VHS

The flight crew of the STS-90 mission, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jack B. Buckley and James A. Pawelecyzyn can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is readied in the 'white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. In the second part of the video the crew turns its attention to a variety of experiments inside the Shuttle's cabin. These experiments include the processing of several samples of materials in the glovebox facility in Columbia's middeck; the experiment called PEP which involves heating samples as they resolidify; and the study of plant growth in space.

CASI

Solid Propellant Rocket Engines; Space Shuttle Boosters; Launching; Flight Crews; Booster Rocket Engines; Countdown

19980218925 NASA Johnson Space Center, Houston, TX USA

STS-90 Day 15 Highlights
Apr. 27, 1998; In English; Videotape: 17 min. 11 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1998348939; No Copyright; Avail: CASI; B02, Videotape-VHS

On this fifteenth day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jack C. Buckley and James A. Pawelecyzyn turn its attention to dexterity tests and dissections of rats neonates and the ball-catch experiment. Mission Specialists Rick Linnehan and Dave Williams and Payload Specialist Jim Pawelecyzyn will dissect the newborn rats. The dexterity test will test the response of young rats as they are tilted and turned while walking and climbing on a special apparatus with various surfaces. Later, all four payload crew members will repeat the ball-catch experiment. This experiment studies the ability of the central nervous system to accept and interpret new stimuli in space. The astronauts have performed this test at various points in the mission so scientists can compare their responses as their bodies adapt to weightlessness.

CASI

Space Transportation System; Space Transportation System Flights; Astronauts; Crews

19980218926 NASA Johnson Space Center, Houston, TX USA

STS-90 Day 14 Highlights
Apr. 26, 1998; In English; Videotape: 11 min. 26 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1998348938; No Copyright; Avail: CASI; B01, Videotape-VHS

On this fourteenth day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckley and James A. Pawelecyzyn focus on the efforts of Neurolab's National Plasticity Team to better understand how the adult nervous system adapts to the new environment of space. Columbia's science crew -- Mission Specialists Rick Linnehan and Dave Williams and Payload Specialists Jay Buckley and Jim Pawelecyzyn perform the second and final in-flight dissections of the adult male rats on board. The crew euthanizes and dissects nine rats and remove the vestibular or balance organs of the inner ear; the cerebellum, the part of the brain critical for maintaining balance and for processing information from the limbs so they can be moved smoothly; and the cerebrum, one part of which controls automatic functions such as body temperature regulation and the body's
internal clock, and the cortical region that controls cognitive functions such as thinking. The first dissection, which was performed on the second day of the flight, went extremely well, according to Payload scientist.

**Space Transportation System Flights:** Space Transportation System; Neurophysiology; Nervous System

---

**STS-90 Day 16 Highlights**

Apr. 28, 1998; In English; Videotape: 10 min. 15 sec. playing time, in color, with sound.

Report No.(s): NONP--NASA--VT--1998348936; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this sixteenth day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckay and James A. Pawelczyk begin a busy day preparing for their return to the Kennedy Space Center later in the day.

CASI

**Space Transportation System; Space Transportation System Flights; Space Exploration; Space Flight**

---

**STS-90 Day 12 Highlights**

Apr. 24, 1998; In English; Videotape: 21 min. 17 sec. playing time, in color, with sound.

Report No.(s): NONP--NASA--VT--1998348935; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk continue their investigations into how the human nervous system adapts to the weightlessness of space. Buckey and Pawelczyk take part in a variety of autonomic experiments designed to examine blood pressure regulation in microgravity. The test uses a special device resembling a hi-tech sack to place a stress on the cardiovascular system similar to that experienced when standing in Earth’s gravity.

CASI

**Space Transportation System Flights; Space Transportation System; Microgravity; Cardiovascular System; Autonomic Nervous System**

---

**STS-90 Day 10 Highlights**

Apr. 22, 1998; In English; Videotape: 20 min. 7 sec. playing time, in color, with sound.

Report No.(s): NONP--NASA--VT--348934; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this tenth day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk have a relatively light day of scientific activity on board Columbia. The science crew of Mission Specialists Rick Linnehan and Dave Williams, along with Payload Specialists Jay Buckey and Jim Pawelczyk, continue investigations into how the human nervous system adapts to the weightlessness of space. All four serve as subjects in a vestibular experiment that uses an on-board rotating chair. The Visual and Vestibular Integration System (VVIS) correlates eye movements with balance. Developed by the European Space Agency, the chair stimulates the human balance system with both spinning and tilting sensations. Infrared video cameras observe and capture the eye movements that accompany the exercise.

CASI

**Physical Exercise; Space Transportation System Flights; Space Transportation System; Space Exploration; Space Flight**

---

**STS-90 Day 04 Highlights**

Apr. 16, 1998; In English; Videotape: 19 min. 47 sec. playing time, in color, with sound.

Report No.(s): NONP--NASA--VT--1998348925; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fourth day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk continue work with the Escher Staircase Behavior Testing of Adult Rats experiment. This is the first of two behavior testing sessions with the adult rats being used for this experiment. The rats will have a ‘hyper drive’ unit placed on their head which has recording electrodes made of microscopic wires that are positioned in the brain to record activity in the hippocampus. The hippocampus is that portion of the brain used to develop spatial maps to help us navigate from one place to the other. With the ‘hyper drive’ units in place, the rats will be put through a maze or on a track. While the rat is maneuvering on the maze or track, the cell activity of the hippocampus will be measured and recorded.

CASI

**Space Transportation System; Space Transportation System Flights; Space Exploration; Space Flight**

---

**STS-90 Day 03 Highlights**

Apr. 15, 1998; In English; Videotape: 19 min. 55 sec. playing time, in color, with sound.

Report No.(s): NONP--NASA--VT--1998348922; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this third day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk continue to conduct both human and animal research experiments in the Spacelab module. During the morning, the payload crew members Linnehan, Williams, Buckey and Pawelczyk perform transfer activities with the Animal Enclosure Module, setting up the General Purpose Work Station (GPWS) and operations with the ball catch experiment. In the afternoon, their attention will be on injections and dissecting of some of the research animals and an objects recognition test.

CASI

**Space Transportation System Flights; Spacelab; Space Flight; Space Exploration; Space Crews**

---

**STS-90 Day 02 Highlights**

Apr. 15, 1998; In English; Videotape: 19 min. 55 sec. playing time, in color, with sound.

Report No.(s): NONP--NASA--VT--1998348922; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this second day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk activate the Bioreactor Demonstration Experiment, an investigation that grows cell tissue cultures in weightlessness. The device, making its fourth shuttle flight, has the capability to grow more bone marrow, both samples being evaluated for the ability to produce substances useful in a variety of medical treatments on Earth. Cell samples in the bioreactor experiment aboard Columbia include renal tissue and bone marrow, both samples being evaluated for the ability to produce substances useful in a variety of medical treatments on Earth.

CASI

**Space Transportation System Flights; Space Crews; Space Transportation System**

---

**STS-90 Mission Highlights Resource Tape**

Jun. 11, 1998; In English; Videotape: 1 hour 31 min. playing time, in color, with sound.

Report No.(s): NONP--NASA--VT--1998348208; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
The flight crew of the STS-90 mission, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckley and James A. Paweleczyk can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is readied in the ‘white room’ for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. In the second part of the video the crew turn their attention to a variety of experiments inside the Shuttle’s cabin. These experiments include the processing of several samples of materials in the glovebox facility in Shuttle’s middeck; the experiment called PEP which involves heating samples and then recording the mixture as it solidifies; and the study of plant growth in space.

**CAS1**  
Space Transportation System; Solid Propellant Rocket Engines; Space Shuttle Boosters; Launching; Ignition; Countdown

STS–90 Day 11 Highlights  
Apr. 23, 1998; In English; Videotape: 19 min. 19 sec. playing time, in color, with sound  
Report No.(s): NONP–NASA–VT–1998372739; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eleventh day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckley and James A. Paweleczyk once again take part in an experiment aimed at exploring the influence of gravity on blood pressure. The lower body negative pressure test places a stress on the cardiovascular system similar to that experienced when standing in Earth’s gravity. Paweleczyk also takes part in the ValSalva test, which stimulates the pressure receptors in the neck and chest and measures those responses. Both Buckley and Paweleczyk participate as subjects and as operators in tests of the autonomic nervous system. All four science crew members conduct tests of their pulmonary systems as well as additional runs in a rotating chair to measure the response of their eyes and inner ears in maintaining balance in a weightless environment.

**CAS1**  
Space Transportation System Flights; Space Transportation System: Lower Body Negative Pressure; Gravitational Effects; Payload Delivery (STS); Space Shuttle Missions; Space Shuttle Orbiters; Space Shuttle Payloads

STS–90 Day 06 Highlights  
Apr. 19, 1998; In English; Videotape: 27 min. 42 sec. playing time, in color, with sound  
Report No.(s): NONP–NASA–VT–1998372737; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this sixth day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckley and James A. Paweleczyk are back on the job full-time as they begin the search for their mission. In the second part of the video the crew turn their attention to a variety of experiments inside the Shuttle’s cabin. Some of these experiments include the monitoring of several samples of materials in the glovebox facility in Shuttle’s middeck; the experiment called PEP which involves heating samples and then recording the mixture as it solidifies; and the study of plant growth in space.

**CAS1**  
Space Transportation System; Solid Propellant Rocket Engines; Space Shuttle Boosters; Launching; Ignition; Countdown

STS–95 Day 07 Highlights  
Nov. 05, 1998; In English; Videotape: 41 min. 33 sec. playing time, in color, with sound  
Report No.(s): NONP–NASA–VT–1998401600; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On this seventh day of the STS-95 mission, the flight crew, Cmdr. Curtis L. Brown, Pilot Steven W. Lindsey, Mission Specialists Scott E. Parazynski, Stephen K. Robinson, and Pedro Duque, and Payload Specialists Chiaki Mukai and John H. Glenn, again test the Orbiter Space Vision System. OSVS uses special markings on Spartan and the shuttle cargo bay to provide an alignment aid for the arm’s operator using shuttle television images. It will be used extensively on the next Space Shuttle flight in December as an aid in using the arm to join together the first two modules of the International Space Station. Specialist John Glenn will complete a daily back-pain questionnaire by as part of a study of how the muscle, intervertebral discs and bone marrow change after exposure to microgravity.

**CAS1**  
International Space Station; Space Transportation System Flights; Space Transportation System; Space Shuttle Orbiters; Spacecrafts; Bays (Structural Units)

STS–95 Day 06 Highlights  
Nov. 04, 1998; In English; Videotape: 12 min. 21 sec. playing time, in color, with sound  
Report No.(s): NONP–NASA–VT–1998401598; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this sixth day of the STS-95 mission, the flight crew, Cmdr. Curtis L. Brown, Pilot Steven W. Lindsey, Mission Specialists Scott E. Parazynski, Stephen K. Robinson, and Pedro Duque, and Payload Specialists Chiaki Mukai and John H. Glenn, test a device called the Video Guidance Sensor, a component of an automated docking system being prepared for use on the International Space Station. As Discovery closes in on Spartan, the astronauts will use a laser system that provides precise measurements of how far away the shuttle is from a target and how fast it is moving toward or away from the target.

**CAS1**  
International Space Station; Space Transportation System; Space Transportation System Flights; Spacecraft Docking; Astronauts
The crew is required to perform various experiments, such as the Advanced Organic Protein Turnover Experiment, which studies the effects of microgravity on protein metabolism, and the Microencapsulation Separations (ADSEP) experiment, which demonstrates the capability to separate and purify biological materials in microgravity environments. These experiments help researchers understand the physiological effects of space travel on the human body.

On the fifth day of the STS-95 mission, the flight crew, Cmdr. Curtis L. Brown, Pilot Steven W. Lindsey, Mission Specialists Scott E. Parazynski, Stephen K. Robinson, and Pedro Duque, and Payload Specialists Chiaki Mukai and John H. Glenn, check the status of components of the Hubble Space Telescope Orbital Systems Test (HOST) payload, which provides an on-orbit test bed for hardware that will be used during the third Hubble servicing mission. Then Parazynski and Pilot Steve Lindsey set up some of the tools that will be used during the rendezvous and subsequent capture and reberthing of the Spartan satellite.

On the seventh day of the STS-95 mission, the flight crew, Cmdr. Curtis L. Brown, Pilot Steven W. Lindsey, Mission Specialist Scott E. Parazynski, Stephen K. Robinson, and Pedro Duque, and Payload Specialists Chiaki Mukai and John H. Glenn, prioritize their work for the upcoming missions. Glenn continues blood sample analysis and blood processing that are part of the Protein Turnover (PTO) experiment, which is studying the effects of microgravity on the human body.

On the ninth day of the STS-95 mission, the flight crew, Cmdr. Curtis L. Brown, Pilot Steven W. Lindsey, Mission Specialists Scott E. Parazynski, Stephen K. Robinson, and Pedro Duque, and Payload Specialists Chiaki Mukai and John H. Glenn, continue to perform microgravity experiments. Specialist John Glenn completes a back-pain questionnaire as part of a study of the effects of microgravity on the human body.

The mission results will be compared with data provided by astronauts during previous missions. Glenn continues blood sample analysis and blood processing that are part of the Protein Turnover (PTO) experiment, which is studying the effects of microgravity on the human body. The data collected during the mission will help researchers understand the physiological effects of space travel on the human body and improve future space missions.
On this seventh day of the STS-88 mission, the flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev are seen preparing for a 6-1/2 hour space walk. During this walk Newman and Ross install two box-like antennas on the outside of the Unity module. In addition they remove launch restraints over four hatchways, install insulating covers on the trimmings pins, and free one of two balya antennas on Zarya’s backup rendezvous navigation system.

CASI
Space Transportation System Flights: Manned Space Flight; Crew Procedures (Inflight); Flight Crews; International Space Station; Zarya Control Module; Unity Connecting Module

On this eleventh day of the STS-88 mission, the flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev are awakened with the song “Goodnight, Sweetheart, Goodnight.” Pilot Rick Sturckow undocks Endeavour from the station and backs the shuttle away to a distance of 450 feet above the station before beginning a nose-forward fly-around. Later Cabana, Sturckow and Roan deploy the SAC-A satellite from Endeavour’s payload bay. SAC-A is a small, self-contained, non-recoverable satellite built by the Argentinian National Commission of Space Activities. The cube-shaped, 590-pound satellite will test and characterize the performance of new equipment and technologies that may be used in future scientific or operational missions. The payload includes a differential global positioning system, a magnetometer, silicon solar cells, a charge-coupled device Earth camera and a whale tracker experiment.

CASI
Space Transportation System Flights: Endeavour (Orbiter); International Space Station; Zarya Control Module; Unity Connecting Module

On this tenth day of the STS-88 mission, the flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev are awakened by the sounds of Elvis Presley’s "Hound Dog." Today’s activities are devoted mostly to tasks that ready the station for future assembly work. The crew’s first job is to release some cable ties on four cables connected on an earlier space walk, three located on Unity’s upper mating adapter and one on its lower adapter, to relieve tension on the lines. The space walkers also will check an insulation cover that would allow an astronaut to fly back to the station if they should ever become untethered. Finally, each astronaut test fires the Simplified Aid for Extravehicular Activity Rescue (SAFER) jet backpacks they are wearing, a type of space “lifejacket,” that would allow an astronaut to fly back to the station if they should ever become untethered.

CASI
Space Transportation System Flights: Extravehicular Activity; International Space Station; Unity Connecting Module; Large Space Structures

On this third day of the STS-88 mission, the flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev are awakened with the song “Jerry the Rigger,” in honor of Mission Specialist Jerry Ross. Ross and Newman are then seen being readied for the first EVA. This space walk, which will last 6-1/2 hours, will focus on connecting computer and electrical cables between Unity, the two mating adapters attached to either end of Unity, and Zarya. In all, Ross and Newman will make about 40 connections during the spacewalk. This will enable power to flow to Unity for the first time in orbit and will permit Unity’s avionics, computers and heaters to be activated.

CASI
Space Transportation System Flights; Zarya Control Module; Extravehicular Activity; Spacewalks; Space Flight; International Space Station; Unity Connecting Module; Manned Space Flight
various tools they will use during the three scheduled spacewalks to be conducted later in the flight. They then begin an early set-up of the Shuttle’s airlock in preparation for the first spacewalk. Newman and Russian cosmonaut Sergei Krikalev take part in an on-camera interview by the New York Times. Currie is seen placing Unity just inches above the extended outer ring on Endeavour’s docking mechanism, enabling Commander Bob Cabana to fire downward maneuvering jets to lock the shuttle’s docking system to one of two Pressurized Mating Adapters (PMA’s) attached to Unity.

CASI
Space Transportation System Flights: Unity Connecting Module; Spacecraft Docking: Zarya Control Module: Maneuvers; Adapters; Air Locks; Space Rendezvous; Orbital Rendezvous

1999014494 NASA Johnson Space Center, Houston, TX USA
STS-88 Day 09 Highlights
Dec. 12, 1998; In English; Videotape: 24 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998435143; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this ninth day of the STS-88 mission, the flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev are awakened by “The Nutcracker” in honor of cosmonaut and Mission Specialist Sergei Krikalev. Currie and Krikalev continue their work removing access panels inside Unity and unstowing hardware that will be used by visiting astronauts on future assembly missions.

CASI
Space Transportation System Flights; International Space Station; Zarya Control Module; Unity Connecting Module; Orbital Assembly; Space Station Structures; Space Ejectable Structures

1999014495 NASA Johnson Space Center, Houston, TX USA
STS-88 Day 02 Highlights
Dec. 05, 1998; In English; Videotape: 21 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998435142; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this second day of the STS-88 mission, the flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev are awakened with the song “Get Ready” by the Temptations. Ross and Newman perform a checkout of the SAFER or Simplified Aid for EVA Rescue unit. SAFER is a mini maneuvering system that can provide self-rescue capability for a spacewalker if they inadvertently become separated from the spacecraft during a spacewalk. The crew then downloads video taken inside the crew cabin during their ascent to orbit.

CASI
Space Transportation System Flights; Spacecrafts; Extravehicular Activity; Aerospace Environments; Manned Maneuvering Units; Space Shuttles; Space Flight

1999014496 NASA Johnson Space Center, Houston, TX USA
STS-88 Day 12 Highlights
Dec. 15, 1998; In English; Videotape: 15 min. 38 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998435141; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this twelfth day of the STS-88 mission, the flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev are awakened by the sounds of James Brown’s “I Got You (I Feel Good).” Crew members focus their activities today preparing for their scheduled return to the Kennedy Space Center. Cabana and Sturckow spend a good part of the day checking out spacecraft systems for entry and landing.

CASI
Space Transportation System Flights; Endeavour (Orbiter); International Space Station; Zarya Control Module; Unity Connecting Module; Space Flight

1999014497 NASA Johnson Space Center, Houston, TX USA
STS-88 Day 01 Highlights
Dec. 05, 1998; In English; Videotape: 19 min. 29 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998435140; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-88 mission, the flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is readied in the “white room” for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters.

CASI
Space Transportation System Flights; Space Transportation System; Space Shuttle Boosters; Launching; Ignition; Countdown

1999014505 NASA Johnson Space Center, Houston, TX USA
STS-90 Day 01 Highlights
Apr. 14, 1998; In English; Videotape: 18 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998166380; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-90 mission, the flight crew, Cmdr. Richard A. Scott, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Hudson and James A. Poverelle, can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is readied in the “white room” for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. The shuttle’s payload bay doors are then opened in anticipation of the 16-day scientific mission. The astronauts then are seen readying the Spacelab module for various experiments.

CASI
Space Transportation System Flights; Spacecrafts; Space Flight; Space Shuttles; Space Stations

1999025559 NASA Johnson Space Center, Houston, TX USA
STS–81 Post Flight Presentation
Feb. 16, 1997; In English; Videotape: 41 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999016919; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of the STS-81 mission, Commander Michael A. Baker, Pilot Brent W. Jett Jr, and Mission Specialists John M. Grunsfeld, Marsha S. Ivins, Peter J.K. Wisoff, and Jerry M. Linenger present a video mission overview of their space flight. Images include prelaunch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the “white room” for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. During the presentation the astronauts take turns discussing aspects of the mission including: the SPACEHAB’s double module that provides additional middeck locker space for secondary experiments. During the five days of docked operations with Mir, the crews are seen transferring water and supplies from one spacecraft to the other.

CASI
Space Transportation System Flights; Space Shuttles; Space Shuttle Payloads; Space Shuttle Orbits; Space Shuttle Missions; Payload Retrieval (STS); Booster Rocket Engines; Flight Crews; Spacecraft Modules; Spacecraft
also support advances in orbital drag prediction technology by increasing the understanding of the fundamental flow phenomena in the upper atmosphere. 

CASI

Space Transportation System Flights: Spacecraft Construction Materials; Payloads: Microgravity: Gravitational Effects; Free Molecular Flow; Extravehicular Activity; Bays (Structural Units); Cargo

19990256624 NASA Johnson Space Center, Houston, TX USA

STS-95 Post Flight Presentation
Dec. 15, 1998; In English; Videotape: 42 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–1999011624; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The STS-95 flight crew, Cmdr. Curtis L. Brown, Pilot Steven W. Lindsey, Mission Specialists Scott E. Parazynski, Stephen K. Robinson, and Pedro Duque, and Payload Specialists Chinkai Muki and John H. Glenn present a video mission overview of their space flight. Images include prelaunch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the “white room” for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. The primary objectives, which include the conducting of a variety of science experiments in the pressurized SPACEHAB module, the deployment and retrieval of the Spartan free-flyer payload, and operations with the HST Orbiting Systems Test (HOST) and the International Extreme Ultraviolet Hitchhiker (IEH) payloads are discussed in both the video and still photo presentation. 

CASI

Space Transportation System Flights; Spacecraft: Payloads; Launching; Space Flight; Space Shuttle; International Space Station; Manned Space Flight

1999025586 NASA Johnson Space Center, Houston, TX USA

STS-88 Crew Interview: Frederick "Rick" Sturckow
Dec. 17, 1998; In English; Videotape: 26 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999011623; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Frederick Sturckow discusses the seven-day mission that will be highlighted by the mating of the U.S.-built Node 1 station element to the Functional Energy Block (FGB) which will already be in orbit, and two spacewalks to connect power and data transmission cables between the Node and the FGB. Node 1 will be the first Space Station hardware delivered by the Space Shuttle. He also discusses the assembly sequence. The crew will conduct a series of rendezvous maneuvers similar to those conducted on other Shuttle missions to reach the orbiting FGB. Once the two elements are docked, Ross and Newman will conduct two scheduled spacewalks to connect power and data cables between the Node, PMAs and the FGB. The day following the spacewalks, Endeavour will undock from the two components, completing the first Space Station assembly mission.

CASI

Space Shuttle Missions: Space Shuttles: International Space Station; Unity Connecting Module: Zarya Control Module; Large Space Structures; International Cooperation

1999025592 NASA Johnson Space Center, Houston, TX USA

STS-87 Mission Highlights Resources Tape
Dec. 15, 1998; In English; Videotape: 1 hour 28 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998062053; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The STS-87 mission the flight crew, Commander Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takuo Doi, and Payload Specialist Leonid K. Kadenyuk present an overview of their mission. STS-87 will fly the U.S. Microgravity Payload (USMP-4), the Spartan-201, the Orbital Acceleration Research Experiment (OARE), the EVA Demonstration Flight Test 5 (EDFT-05). The objective of the observations are to investigate the mechanisms causing the heating of the solar corona and the acceleration of the solar wind which originates in the corona. While flying separately in the cargo bay, the Orbital Acceleration Research Experiment (OARE) is an integral part of USMP-04. It is a highly sensitive instrument designed to acquire and record data of low-level aerodynamic acceleration along the orbiter’s principal axes in the free-molecular flow regime at orbital altitudes and in the transition regime during re-entry. OARE data will support advances in space materials processing by providing measurements of the low-level, low frequency disturbance environment affecting various microgravity experiments. OARE data will

also support advances in orbital drag prediction technology by increasing the understanding of the fundamental flow phenomena in the upper atmosphere.

CASI

Space Transportation System Flights: Spacecraft Construction Materials; Payloads: Microgravity: Gravitational Effects; Free Molecular Flow; Extravehicular Activity; Bays (Structural Units); Cargo

1999025625 NASA Johnson Space Center, Houston, TX USA

STS-88 Post Flight Presentation
Dec. 16, 1998; In English; Videotape: 34 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999023680; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of the STS-88 mission, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, Jerry L. Ross, James H. Newman, and Sergei K. Krikalev, present a video mission overview of their space flight. Images include prelaunch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the “white room” for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Once the seven-day mission begins, the astronauts comment on the mating of the U.S.-built Node 1 station element to the Functional Energy Block (FGB) which was already in orbit, and two EVAs that were planned to connect power and data transmission cables between the Node and the FGB. The crew can also be seen conducting a series of rendezvous maneuvers similar to those conducted on other Shuttle missions to reach the orbiting FGB.

CASI

Space Shuttle Missions: Space Shuttles: Extravehicular Activity; Astronauts

1999025620 NASA Johnson Space Center, Houston, TX USA

STS-88 Crew Interview: Nancy Currie
Dec. 17, 1998; In English; Videotape: 30 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999023679; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Nancy Currie discusses the seven-day mission that will be highlighted by the mating of the U.S.-built Node 1 station element to the Functional Energy Block (FGB) which will already be in orbit, and two spacewalks to connect power and data transmission cables between the Node and the FGB. Node 1 will be the first Space Station hardware delivered by the Space Shuttle. She also discusses the assembly sequence. The crew will conduct a series of rendezvous maneuvers similar to those conducted on other Shuttle missions to reach the orbiting FGB. Once the two elements are docked, Ross and Newman will conduct two scheduled spacewalks to connect power and data cables between the Node, PMAs and the FGB. The day following the spacewalks, Endeavour will undock from the two components, completing the first Space Station assembly mission.

CASI

Space Shuttle Missions: Space Shuttles: International Space Station; Unity Connecting Module: Zarya Control Module; Large Space Structures; International Cooperation
conduct two scheduled spacewalks to connect power and data cables between the Node, PMAs and the FGB. The day following the spacewalks, Endeavour will undock from the two components, completing the first Space Station assembly mission.

CASI
Space Shuttle Missions; Space Shuttles; International Space Station; Zarya Control Module; Unity Connecting Module; Space Station Modules; Large Space Structures

1999025628 NASA Johnson Space Center, Houston, TX USA
STS–88 Crew Interview: Robert Cabana
Dec. 17, 1998; In English; Videotape: 37 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999011627; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Commander Robert D. Cabana discusses the seven-day mission that will be highlighted by the mating of the U.S.-built Node 1 station element to the Functional Energy Block (FGB) which will already be in orbit, and two spacewalks to connect power and data transmission cables between the Node and the FGB. Node 1 will be the first Space Station hardware delivered by the Space Shuttle. He also discusses the assembly sequence. The crew will conduct a series of rendezvous maneuvers similar to those conducted on other Shuttle missions to reach the orbiting FGB. Once the two elements are docked, Ross and Newman will conduct two scheduled spacewalks to connect power and data cables between the Node, PMAs and the FGB. The day following the spacewalks, Endeavour will undock from the two components, completing the first Space Station assembly mission.

CASI
Space Shuttle Missions; Space Shuttles; International Space Station; Unity Connecting Module; Zarya Control Module; Large Space Structures; International Cooperation

1999025629 NASA Johnson Space Center, Houston, TX USA
STS–88 Crew Interview: Jim Newman
Dec. 17, 1998; In English; Videotape: 42 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999011626; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Jim Newman discusses the seven-day mission that will be highlighted by the mating of the U.S.-built Node 1 station element to the Functional Energy Block (FGB) which will already be in orbit, and two spacewalks to connect power and data transmission cables between the Node and the FGB. Node 1 will be the first Space Station hardware delivered by the Space Shuttle. He also discusses the assembly sequence. The crew will conduct a series of rendezvous maneuvers similar to those conducted on other Shuttle missions to reach the orbiting FGB. Once the two elements are docked, Ross and Newman will conduct two scheduled spacewalks to connect power and data cables between the Node, PMAs and the FGB. The day following the spacewalks, Endeavour will undock from the two components, completing the first Space Station assembly mission.

CASI
Space Shuttle Missions; Space Shuttles; Space Transportation System; International Space Station; Large Space Structures; Orbital Workshops; Unity Connecting Module; Zarya Control Module

1999025630 NASA Johnson Space Center, Houston, TX USA
STS–88 Crew Interview: Jerry Ross
Dec. 17, 1998; In English; Videotape: 54 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999011625; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Jerry Ross discusses the seven-day mission that will be highlighted by the mating of the U.S.-built Node 1 station element to the Functional Energy Block (FGB) which will already be in orbit, and two spacewalks to connect power and data transmission cables between the Node and the FGB. Node 1 will be the first Space Station hardware delivered by the Space Shuttle. He also discusses the assembly sequence. The crew will conduct a series of rendezvous maneuvers similar to those conducted on other Shuttle missions to reach the orbiting FGB. Once the two elements are docked, Ross and Newman will conduct two scheduled spacewalks to connect power and data cables between the Node, PMAs and the FGB. The day following the spacewalks, Endeavour will undock from the two components, completing the first Space Station assembly mission.

CASI
Space Shuttle Missions; Space Shuttles; International Space Station; Unity Connecting Module; Space Station Modules; Large Space Structures

1999025761 NASA Johnson Space Center, Houston, TX USA
STS–95 Mission Highlights Resources Tape
June 06, 1999; In English; Videotape: 1 hour 25 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999032784; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

The STS-95 flight crew, Commander Curtis L. Brown, Pilot Steven W. Lindsey, Mission Specialists Scott E. Parazynski, Stephen K. Robinson, and Pedro Duque, and Payload Specialists Chiaki Mukai and John H. Glenn present a video overview of their space flight. They are seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is in the ‘white room’ for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Once on orbit the primary objectives include conducting a variety of science experiments in the pressurized SPACEHAB module, the deployment and retrieval of the Spartan free-flyer payload, and operations with the Hubble Space Telescope (HST) Orbirng Systems Test (HOST) and the International Extreme Ultraviolet Hitchhiker (IEH) payloads being carried in the payload bay.

CASI
Discovery (Orbiter); Space Flight; Space Shuttle Boosters; Space Transportation System Flights; Hubble Space Telescope; Paylload Retrieval (STS)
1999/03/25846 NASA Johnson Space Center, Houston, TX USA
STS-88 Mission Highlights Resources Tape, Tape: A
Feb. 26, 1999; In English; Videotape: 54 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1999037063; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
The STS-88 flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev present a video overview of their space flight. This is the first of three videos which show the highlights of the Endeavour mission. Important visual images include pre-launch activities such as the eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also included are various panoramic views of the shuttle on the pad. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Once on-orbit crew members are seen delivering and connecting the UNITY Connecting Module to the ZARYA Control Module.
CAS
Endeavour (Orbiter); Space Flight; Space Shuttle Boosters; Space Transportation System Flights; Manned Space Flight

1999/04/17339 NASA Johnson Space Center, Houston, TX USA
STS-91 Flight Day 1 Highlights and Crew Activities Report
Jun. 03, 1998; In English; Videotape: 20 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1998358182; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this first day of the STS-91 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Dominic L. Purifwll Gorie, and Mission Specialists Franklin R. Chang-Diaz, Janet Lynn Kavandi, Wendy B. Lawrence, Valery Victorovitch Ryumin and Andrew S. W. Thomas, can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is re-elected in the "white room" for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters.
CAS
Booster Rocket Engines; Space Transportation System Flights; Spacecrews; Launching: Space Flight; Space Missions; Space Shuttles; Countdown

1999/04/18387 NASA Johnson Space Center, Houston, TX USA
STS-96 Crew Training
May 03, 1999; In English; Videotape: 12 min. 33 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1999054988; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The training for the crew members of the STS-96 Discovery Shuttle is presented. Crew members are Kent Rominger, Commander, Rick Husband, Pilot; Mission Specialists, Tamara Jernigan, Ellen Ochoa, and Daniel Barry; Julie Payette, Mission Specialist (CSA); and Valery Ivanovich Tokarev, Mission Specialist (RSA). Scenes show the crew sitting and talking about the Electrical Power System; actively taking part in virtual training in the EVA Training VR (Virtual Reality) Lab; using the Orbit Space Vision Training System; being dropped in water as a part of the Bail-Out Training Program; and taking part in the crew photo session.
CAS
Astronaut Training: Training Simulators; In-Flight Simulation

1999/04/19229 NASA Johnson Space Center, Houston, TX USA
STS-86 Post Flight Presentation
Mar. 22, 1999; In English; Videotape: 19 min. 22 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1999064004; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The Crew of STS-86 Atlantis Shuttle, Commander James D. Wetherbee, Pilot Michael J. Bloomfield, Mission Specialists Vladimir G. Titov, Scott E. Parazynsky, Jean-Loup J. M. Chretien, Wendy Lawrence, and David Wolf, narrate the footage of their mission to the Mir International Space Station. Scenes include crew suit up, walk out to the transfer vehicle, strap-in to the shuttle, start of the main engine, ignition of the rocket boosters, and separation of the solid rocket boosters. The crew of Atlantis participates in an exchange of gifts with the members of Mir, and a space walk to recover experiments outside the Mir Space Station. A beautiful panoramic view of Mir above South America is seen. Scenes also depict the closing of Mir's hatch, Atlantis' separation from Mir, and the reentry of the Atlantis Space Shuttle into the Earth's atmosphere.
CAS
Atlantis (Orbiter); Manned Space Flight; Spacecrews; Mir Space Station; International Space Station

1999/04/1938 NASA Johnson Space Center, Houston, TX USA
Historical Footage of John Glenn Friendship 7
Feb. 20, 1962; In English; Videotape: 16 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1999064003; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The Friendship mission launch on the 20th day of February marked the first time that an American attempts to orbit the Earth. Historical footage of John Glenn's suit up, ride out to the launch pad, countdown, liftoff, booster engine cutoff, and separation of the booster engine escape tower is shown. Views of the Earth, Glenn's manual control of the electrical fly-by-wire system, and the recovery of the landing vehicle from the ocean are presented.
CAS
Mercury Ma-6 Flight; Friendship 7; Launch Vehicles; Earth Orbits

1999/04/1931 NASA Johnson Space Center, Houston, TX USA
STS-91 Post Flight Presentation
Jun. 22, 1998; In English; Videotape: 16 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1999064002; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Footage of the Crew of STS-91 Discovery Shuttle, Commander Charles J. Precourt, Pilot Dominic L. Purifwll Gorie, Mission Specialists Wendy B. Lawrence, Franklin R. Chang-Diaz, Janet L. Kavandi, and Valery Victorovitch Ryumin, is shown. Scenes include the crew suit up, walk out to the transfer vehicle, and strap-in to the shuttle. Also presented are scenes of the start of the main engine, ignition of the solid rocket boosters, panoramic views of the Earth as the shuttle takes off, and the separation of the solid rocket boosters. The crew of Discovery opens the payload bay doors to the Mir International Space Station, completes SPACEHAB tunnel leak checks, goes crew in Mir Space Station, and transfers materials to Mir. Beautiful panoramic views of the Moon, and Mir above Cape Canaveral are seen. Scenes also include the crew of Discovery sharing meals, and exercising. The film ends with the reentry of the Discovery Space Shuttle into the Earth's atmosphere.
CAS
Discovery (Orbiter); Manned Space Flight; Spacecrews; Mir Space Station; International Space Station

1999/04/5852 NASA Johnson Space Center, Houston, TX USA
STS-96 ED Highlights and Crew Activities Report: Flight Day 05
May 31, 1999; In English; Videotape: 24 min. 19 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1999068295; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this fifth day of the STS-96 Discovery mission, the flight crew, Commander Kent V. Rommger, Pilot Rick D. Husband, and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev are seen performing logistics transfer activities within the Discovery/International Space Station orbiting complex. The crew transfers supplies, equipment, and water. Payette and Tokarev perform maintenance activities on the storage batteries in the Zarya module. Barry and Tokarev install acoustic insulation around some of the fans inside Zarya. Jernigan and Husband install shelving in 2 soft stowage racks. Husband and Barry troubleshoot and perform maintenance activities on the Early Communications System. At the end of the workday, Rommger, Jernigan, and Barry discussed the progress of the mission with NBC's "Today," CBS "This Morning," and CNN.
CAS
Discovery (Orbiter); Spacecrews: International Space Station; Zarya Control Module; Spacecrew Transfer
On this fourth day of the STS-96 Discovery mission, the flight crew, Commander Kent V. Rominger, Pilot Rick D. Husband, and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev are seen performing final preparations for their space walk. Views of the crew helping Barry and Jernigan suit up for their mission is also presented. Ochoa uses the robot arm to maneuver Jernigan up to the space station module. During the space walk Barry and Jernigan move two cranes, and three bags containing handrails and tools to the outside of the Unity module. They also install a thermal cover on a Unity trunnion pin, inspect peeling paint on Zarya and one of the two Early Communications System antennas on Unity.

CASI
Discovery (Orbiter); Spacecrews; International Space Station

On this third day of the STS-96 Discovery mission, the flight crew, Commander Kent V. Rominger, Pilot Rick D. Husband, and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev are seen executing the very first docking with the International Space Station. Also shown are views of the docking taken from both the Unity and Discovery. Final preparation for the mission’s space walk is also presented. Jernigan and Barry check the tools and the emergency rescue back-packs they will need for their space walk. Ochoa and Jernigan perform leak and pressurization checks and open the hatch to the Unity module. Ochoa and Tokarev store docking targets and lights and check the hatch seals in the narrow passageway. Rominger and Husband remove and store four electronic boxes around the Unity module.

CASI
Discovery (Orbiter); Spacecrews; International Space Station; Spacecraft Docking; Manned Space Flight; Unity Connecting Module

On this second day of the STS-96 Discovery mission, the flight crew, Commander Kent V. Rominger, Pilot Rick D. Husband, and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev are seen preparing for the docking with the International Space Station (Unity and Zarya modules). Ochoa and Payette open the tunnel and hatches leading to the SPACEHAB module in the payload bay. Payette and Tokarev place equipment in the module to create space in Discovery’s cabin. Jernigan, Barry, Payette and Husband test three spacesuits. Ochoa and Payette also test a 50-foot robot arm. And Jernigan and Ochoa extend the outer ring of Discovery’s Orbiter Docking System.

CASI
Discovery (Orbiter); Spacecrews; International Space Station; Unity Connecting Module; Zarya Control Module; Spacecraft Docking

On this first day of the STS-96 Discovery mission, the flight crew, Commander Kent V. Rominger, Pilot Rick D. Husband, and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev are seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is ready in the ‘white room’ for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters.

CASI
Discovery (Orbiter); Manned Space Flight; Spacecrews

On this seventh day of the STS-96 Discovery mission, the flight crew, Commander Kent V. Rominger, Pilot Rick D. Husband, and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev are seen completing the transfer of material and equipment to the International Space Station. The astronauts install parts of a wireless strain gauge system, clean filters and check smoke detectors. The crew participates in a variety of news conferences with media representatives. Payette accepts a congratulatory call from Canadian Prime Minister Jean Chretien and answers questions from schoolchildren in Ottawa.

CASI
Discovery (Orbiter); International Space Station; Rendezvous Spacecraft; Spacecraft Docking; Manne Space Flight; Conferences; Teleconferencing

On this eighth day of the STS-96 Discovery mission, the flight crew, Commander Kent V. Rominger, Pilot Rick D. Husband, and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev are seen performing logistics transfer activities within the Discovery/International Space Station orbiting complex. Ochoa, Jernigan, Husband and Barry devote a significant part of their day to the transfer of bags of different sizes and shapes from the SPACEHAB module in Discovery’s cargo bay to resting places inside the International Space Station. Payette and Tokarev complete the maintenance on the storage batteries. Barry and Tokarev complete installation of the remaining sound mufflers over the fans in Zarya. Barry then measures the sound levels at different positions inside the module. Rominger and Tokarev conduct a news conference with Russian reporters from the Mission Control Center in Moscow.

CASI
Discovery (Orbiter); International Space Station; Unity Connecting Module; Zarya Control Module; Spacecraft Docking; Space Rendezvous; Rendezvous Spacecraft; Manned Space Flight; Space Logistics; Stowage (Onboard Equipment); Portable Equipment

On this seventh day of the STS-96 Discovery mission, the flight crew, Commander Kent V. Rominger, Pilot Rick D. Husband, and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev are seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is ready in the ‘white room’ for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters.

CASI
Discovery (Orbiter); Manned Space Flight; Spacecrews

On this eighth day of the STS-96 Discovery mission, the flight crew, Commander Kent V. Rominger, Pilot Rick D. Husband, and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev are seen completing the transfer of material and equipment to the International Space Station. The astronauts install parts of a wireless strain gauge system, clean filters and check smoke detectors. The crew participates in a variety of news conferences with media representatives. Payette accepts a congratulatory call from Canadian Prime Minister Jean Chretien and answers questions from schoolchildren in Ottawa.

CASI
Discovery (Orbiter); International Space Station; Rendezvous Spacecraft; Spacecraft Docking; Manne Space Flight; Conferences; Teleconferencing
Communications System on Unity. Views of the Orbiter docking system are also seen.

**CASl**

**Discovery (Orbiter): International Space Station; Rendezvous Spacecraft; Spacecraft Docking; Space Rendezvous; Manned Space Flight; Unity Connecting Module**

19990453131 NASA Johnson Space Center, Houston, TX USA

**STS-96 FD Highlights and Crew Activities Report: Flight Day 10**

Jun. 05, 1999; In English; Videotape: 15 min. 57 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VP-1999074605; No Copyright; Avail: CASl; B02, Videotape-Beta; V02, Videotape-VHS

On this tenth day of the STS-96 Discovery mission, the flight crew, Commander Kent V. Rominger, Pilot Rick D. Husband, and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev are seen making final preparation for their return to Earth. Rominger, Husband, and Ochoa checkout the flight control systems, perform hot-fired tests and verify the performance of Discovery’s small steering jets. Jernigan and Tokarev stow all the equipment used in the mission. Payette deploys a small student-built payload called STARSHINE. The crew also tests all the communications channels.

**CASl**

**Discovery (Orbiter): Spacecraft: Manned Space Flight: Crew Procedures (Inflight); Return to Earth Space Flight**

19990853264 NASA Johnson Space Center, Houston, TX USA

**STS-96 FD Highlights and Crew Activities Report: Flight Day 09**

Jun. 04, 1999; In English; Videotape: 14 min. 15 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VP-1999068288; No Copyright; Avail: CASl; B01, Videotape-Beta; V01, Videotape-VHS

On this ninth day of the STS-96 Discovery mission, the flight crew, Commander Kent V. Rominger, Pilot Rick D. Husband, and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev are seen as they prepare to depart from the International Space Station. After the undocking of the spacecraft, Husband navigated the spacecraft around the International Space Station. Images of the crew removing centerline cameras, tracking the solar arrays and beautiful panoramic views of the Station above the Earth are seen.

**CASl**

**Discovery (Orbiter): Spacecraft: Manned Space Flight: Return to Earth Space Flight: Crew Procedures (Inflight)**

19990453904 NASA Langley Research Center, Hampton, VA USA

**Dan Goldin Presentation: Pathway to the Future**

Apr. 05, 1999; In English; Videotape: 87 min. 39 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VP-1999064054; No Copyright; Avail: CASl; B04, Videotape-Beta; V04, Videotape-VHS

In the "Path to the Future" presentation held at NASA's Langley Center on March 31, 1999, NASA's Administrator Daniel S. Goldin outlined the future direction and strategies of NASA in relation to the general space exploration enterprise. NASA's Vision, Future System Characteristics, Evolutions of Engineering, and Revolutionary Changes are the four main topics of the presentation. In part one, the Administrator talks in detail about NASA's vision in relation to the NASA Strategic Activities that are Space Science, Earth Science, Human Exploration, and Aeronautics & Space Transportation. Topics discussed in this section include: space science for the 21st century, flying in mass atmosphere (mass plane), exploring new worlds, interplanetary internet, earth observation and measurements, distributed information-system-in-the-sky, science enabling understanding and application, space station, macrogravity, science and exploration strategies, human mass mission, advance space transportation program, general aviation revitalization, and reusable launch vehicles. In part two, he briefly talks about the future system characteristics. He discusses major system characteristics like resiliency, self-sufficiency, high distribution, ultra-efficiency, and autonomy and the necessity to overcome any distance, time, and extreme environment barriers. Part three of Mr. Goldin's talk deals with engineering evolution, mainly evolution in the Computer Aided Design (CAD)/Computer Aided Engineering (CAE) systems. These systems include computer aided drafting, computerized solid models, virtual product development (VPD) systems, networked VPD systems, and knowledge enriched networked VPD systems. In part four, the last part, the Administrator talks about the need for revolutionary changes in communication and networking areas of a system. According to the administrator, the four major areas that need cultural changes in the creativity process are human-centered computing, an infrastructure for distributed collaboration, rapid synthesis and simulation tools, and life-cycle integration and validation. Mr. Goldin concludes his presentation with the following maxim "Collaborate, Integrate, Innovate or Stagnate and Evaporate." He also answers some questions after the presentation.

**CASl**

Conferences; NASA Programs; Mission Planning; Technological Forecasting: Systems Engineering; Aerospace Sciences; Space Exploration

19990854654 NASA Johnson Space Center, Houston, TX USA

**STS-96 Mission Highlights, Part 1**

Jul. 07, 1999; In English; Videotape: 50 min. 30 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VP-1999087306; No Copyright; Avail: CASl; B03, Videotape-Beta; V03, Videotape-VHS

In this first part of a three-part video mission-highlights set, the flight of the STS-96 Space Shuttle Orbiter Discovery is reviewed. The flight crew consists of Kent V. Rominger, Commander; Rick D. Husband, Pilot; and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette (Canadian), and Valery Ivanovich Tokarev (Russian). The primary goals of this mission were to work on logistics and resupply the International Space Station (ISS). This is the first flight to dock to the International Space Station. The primary payloads are the Russian cargo crane, known as STRELA, which the astronauts mount to the exterior of the Russian station segment, the SPACEHAB Oceanreeving Space System Box (SROSS), and a U.S. built crane called the ORU Transfer Device (OTD). Other payloads include the Student Tracked Atmospheric Research Satellite for Heuristic International Networking Equipment (STARSHINE), the Shuttle Vibration Forces Experiment (SVE), and the Orbiter Integrated Vehicle Health Monitoring - HEIDIS Technology Demonstration (IVHM-HTD). The traditional pre-launch breakfast, being suited up, entry into the Shuttle, and views of the liftoff from several different vantage points are shown. In-flight footage includes views from the robot arm conducting a television survey of Discovery's payload bay and the flawless docking of the Unity module with the International Space Station. During the docking, camera views from both the ISS and Discovery are presented. These activities make up the first three Flight Days of STS-96.

**CASl**

**Discovery (Orbiter): Space Shuttle Missions: International Space Station: Spacecraft Docking: Spacecraft**

19990854655 NASA Johnson Space Center, Houston, TX USA

**STS-96 Mission Highlights, Part 2**

Jul. 07, 1999; In English; Videotape: 55 min. 51 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VP-1999087307; No Copyright; Avail: CASl; B03, Videotape-Beta; V03, Videotape-VHS

In this second part of a three-part video mission-highlights set, on-orbit spacecraft activities performed on the STS-96 Space Shuttle Orbiter Discovery and the International Space Station are reviewed. The flight crew consists of Kent V. Rominger, Commander; Rick D. Husband, Pilot; and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette (Canadian), and Valery Ivanovich Tokarev (Russian). The primary goals of this mission were to work on logistics and resupply the International Space Station. This second part in the mission series features video from Flight Day 4-7 (FD 4-7). FD 4 of STS-96 presents astronauts Tammy Jernigan and Dan Barry completing the second longest space walk in shuttle history. Footage includes Jernigan and Barry transferring and installing two cranes from the shuttle’s payload bay to locations on the outside of the station. The astronauts enter the International Space Station delivering supplies and prepare the outpost to receive its first resident crew, scheduled to arrive in early 2000 on FD 5. The video also captures the crew involved in logistics transfer activities within the Discovery/ISS orbiting complex. FD 6 includes footage of Valery Tokarev and Canadian astronaut Julie Payette charging out the final six battery recharge controller units for two of
Zarya’s power-producing batteries and all crew members’ involvement in logistics transfer activities from the SPACEHAB module to designated locations in the International Space Station. With the transfer work of FD 6 all but complete, the astronauts conduct some additional work, installing parts of a wireless strain gauge system that will help engineers track the effects of adding modules to the station throughout its assembly. Moving the few remaining items from Discovery to the ISS, then closing a series of hatches within the station’s modules leading back to the shuttle are the primary activities contained in FD 7. Final coverage features Discovery’s astronauts finishing their work inside the International Space Station, closing all of the hatches and readying the shuttle’s small thrusters to be fired to raise the entire complex’s orbit in preparation for the undocking and departure set for FD 8.

CASI
Discovery (Orbiters); Space Shuttle Missions; International Space Station; Spacecrews; Spacecraft Maintenance; Extravehicular Activity; Spacecraft Modules; Space Shuttle Payloads

19990854656 NASA Johnson Space Center, Houston, TX USA
STS-96 Mission Highlights, Part 3
Jul. 07, 1999; In English; Videotape: 41 min. 58 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999087308; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

In this third part of a three-part video mission-highlights set, spacecrew operations between the STS-96 Space Shuttle Orbiter Discovery and the International Space Station, as well as ISS reentry and landing is reviewed. The flight crew consists of Kent V. Rominger, Commander; Rick D. Husband, Pilot; and Mission Specialists Ellen Ochoa, Tamara Jernigan, Daniel T. Barry, Julie Payette (Canadian), and Valery Ivanovich Tokarev (Russian). The primary goals of this mission were to work on logistics and resupply the International Space Station. This third part of the three-part series includes footage from Flight Days 8–11 (FD 8–11) of the mission. FD 8 includes the crew members moving the last items from Discovery into the International Space Station (ISS), closing the final hatch on the orbiter and commanding a series of 17 pulses of Discovery’s reaction control system jets to boost the station’s orbit. Discovery undocks from the station, performs a 2 1/2 lap flyaround of the station, before Husband fires Discovery’s jets in a final burst to move Discovery away from the station, concluding six days of docked operations. After the flyaround, Husband fires Discovery’s jets to depart the station’s vicinity. Beginning FD 9, as Discovery departs from the station, Mission Specialists Tammy Jernigan and Dan Barry pack away the space suit gear they used during their spacewalks early in the mission, while Commander Kent Rominger and Pilot Rick Husband practice landings on a laptop computer program. Mission Specialists Julie Payette and Valery Tokarev help to stow gear and repurpose the shuttle’s cabin to its standard 14.7 pounds per square inch. The crew also readies to deploy a small student-built payload called STARSHPINE (Student Tracked Atmospheric Research Satellite for Heuristic International Networking Equipment). In and around landing preparations and the STARSHPINE deploy, the crew stows all equipment used throughout the mission. The STARSHPINE satellite ejects from a canister in Discovery’s payload bay on FD 10. FD 11 is completed as Discovery swoops out of the darkness as Commander Kent Rominger sets the shuttle and its crewmates down on Runway 15 at the Shuttle Landing Facility in Florida to successfully complete the first shuttle mission of the year. Several different views of the landing are highlighted in the video.

CASI
Discovery (Orbiters); Space Shuttle Missions; International Space Station; Spacecrews; Spacecraft Landing; Spacecraft Reentry

19990854914 NASA Johnson Space Center, Houston, TX USA
STS-93 Crew Interview
Jul. 23, 1999; In English; Videotape: 60 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999089463; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This tape is an interview with Eileen M. Collins. In July 1999, she became the first female shuttle commander in NASA history. It was her third mission to space. She was the pilot of two previous space missions. In this interview she discussed the different telescopes that have been used in prior missions. She also talked about the functions of the new telescope “Chandra” that have been used in this mission.

Derived from text
Space Missions: Space Shuttle Missions; Spacecrews

19990856553 NASA Johnson Space Center, Houston, TX USA
STS–93 Flight Day 1 Highlights and Crew Activities
Jul. 23, 1999; In English; Videotape: 23 min. 6 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999088229; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-93 Columbia mission, the flight crew, Commander Eileen Collins, Pilot Jeff Ashby and Mission Specialists Candy Coleman, Steve Hawley and Michael Tognini deployed the Chandra X-Ray Observatory into space. This was done after a full night of work and preparation. Chandra will study the invisible, and often violent mysteries of x-ray astronomy. Commander Collins maneuvered Columbia to a safe distance away from the telescope as an internal timer counted down to the first of a two-phase ignition of the Inertial Upper Stage. After switching to internal battery power until its solar rays are deployed, the telescope reaches an oval orbit one-third the distance to the Moon to conduct its astronomical observations. Since Chandra is safely on its way and the major objective of their mission is successfully completed, the astronauts end their long day and begin an eight hour sleep period.

CASI
Columbia (Orbiters); Manned Spacecraft; Spacecrews; Space Transportation System Flights

19990856554 NASA Johnson Space Center, Houston, TX USA
STS–93 Flight Day 3 Highlights and Crew Activities
Jul. 24, 1999; In English; Videotape: 22 min. 21 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999088231; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Commander Eileen Collins, Pilot Jeff Ashby, and Mission Specialists Candy Coleman, Steve Hawley and Michael Tognini were awakened with the song “Brave New Girls” performed by Teresa. Steve Hawley, the resident astronomer, continued to work with the Southwest Ultraviolet Imaging System (SWUIS) and collected images of targets associated with Mercury, Venus, Jupiter and the Moon. Collins and Ashby maneuvered Columbia in support of various experiments including observations made with the SWUIS telescope or the Midcourse Space Experiment (MSX), which used sophisticated sensors to collect ultraviolet, infrared, and visible light data of firings of the shuttle’s orbital maneuvering system engines or primary reaction control system jets. Collins also conducted a conversation with students at the Harbor View Elementary School in Corona Del Mar, California using the Shuttle Amateur Radio Experiment (SAREX) system. She also checked experiments associated with the Cell Culture Module (CCM) and the Biological Research in Canister (BRIC) payloads.

CASI
Space Transportation System; Spacecrews; Imaging Techniques: Manned Spacecraft; Spaceborne Experiments; Space Transportation System Flights

19990856555 NASA Johnson Space Center, Houston, TX USA
STS–93 Flight Day 2 Highlights and Crew Activities
Jul. 24, 1999; In English; Videotape: 18 min. 4 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999088230; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Following an eight hour sleep period, the five member flight crew, Commander Eileen Collins, Pilot Jeff Ashby, and Mission Specialists Candy Coleman, Steven Hawley and Michael Tognini awakened to begin their second day in space. The main focus of Flight Day 2 activities was to activate the secondary payloads and experiments. Among those efforts was the set-up and first observations using the Southwest Ultraviolet Imaging System (SWUIS), which operates from inside the shuttle cabin. The specific targets observed included the Earth’s moon, Mercury, Venus and Jupiter. A break was taken at
with the Mir International Space Station, and crewmembers dm’ing their space bar.

Barry and Jemigan perform fine deck of the equipment is seen. Also

engine ignition of the solid rocket boosters, and the separation of the solid rocket

narrating the mission highlights. Scenes include walk out to the vehicle.

Dmi	rel T. Barry, Julie Payette, and 

Pilot Rick D. Husband, Mission Specialists Ellen Ochoa, Tamara E. Jemigan,

B02, Videotape-Beta; V02, Videotape-VHS

Flights; Imaging Techniques: Payloads: Manned Spacecraft

1999056588 NASA Johnson Space Center, Houston, TX USA

STS--93 Flight Day 5 Highlights and Crew Activities

Jul. 26, 1999; In English; Videotape: 20 min. 54 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--199908233; No Copyright; Avail: CASI;

B02, Videotape-Beta: V02, Videotape-VHS

Columbia’s crew began packing up experiments and preparing to return to

Earth tomorrow with a touchdown planned for Kennedy Space Center at 10:20

p.m. CDT. Commander Eileen Collins and Pilot Jeff Ashby checked out the

cockpit instruments, displays and flight control systems. They also test fired the

38 small steering jets. Everything was in good shape and ready for the trip back

Earth. Also, Collins and Ashby were joined by the rest of the crew for a press

conference, fielding questions from reporters in Houston, Florida and Massachus-

setts.

CASI

Space Transportation System; Spacecrews; Space Transportation System Flights: Touchdown; Manned Spacecraft

1999056589 NASA Johnson Space Center, Houston, TX USA

STS--93 Flight Day 4 Highlights and Crew Activities

Jul. 25, 1999; In English; Videotape: 20 min. 48 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--199908232; No Copyright; Avail: CASI;

B02, Videotape-Beta: V02, Videotape-VHS

The five astronauts aboard the Space Shuttle Columbia began their fourth

flight day preparing to make additional celestial observations through the

shuttle’s windows and continue work with a variety of instruments. Pilot Jeff

Ashby and Mission Specialists Steve Hawley and Michael Tognini set up an

exercise treadmill and the Treadmill Vibration Information System (TVIS) which

measures vibrations and changes in microgravity levels caused by

on-orbit workouts. Astronomer Hawley again made observations of Venus, Jupiter

and the Moon with the Southwest Ultraviolet Imaging System (SWUIS) as

Commander Eileen Collins and Pilot Jeff Ashby put the shuttle in the proper

orientation for his observations. Tognini and Collins checked the bioprocess-

ing experiments, and harvested mouse-ear crescent plants as part of the Plant

Growth in Microgravity experiment. Collins and Ashby once again fired the

shuttle’s engines so that the sensors of the Midcourse Space Experiment (MSX)

satellite were able to collect ultraviolet, infrared and visible light data. Columbia

was orbiting at an altitude of 182 statute miles with all of its systems in excellent

condition.

CASI

Space Transportation System; Manned Spacecraft; Imaging Techniques: Spaceborne Experiments; Gravitational Effects: Space Transportation System Flights; Spacecrews

1999058798 NASA Johnson Space Center, Houston, TX USA

STS--96 Post Flight Presentation

Sep. 08, 1999; In English; Videotape: 15 min. 31 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--1999129646; No Copyright; Avail: CASI;

B02, Videotape-Beta: V02, Videotape-VHS

The crew of STS-96 Discovery Shuttle, Commander Kent V. Rominger,
Pilot Rick D. Husband, Mission Specialists Ellen Ochoa, Tamara E. Jernigan,
Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev, are shown

narrating the mission highlights. Scenes include walk out to the transfer vehicle,

and launch of the shuttle. Also presented are scenes of the start of the main

engine, ignition of the solid rocket boosters, and the separation of the solid rocket

boosters. Footage of Payette preparing the on-board camera equipment, while

Barry and Jernigan perform routine checks of the equipment is seen. Also

presented are various pictures of the shuttle in its orbit, the docking of the shuttle

with the Mir International Space Station, and crewmembers during their space

walk. Beautiful panoramic views of the Great Lake, Houston, and a combined

view of Italy and Turkey are seen. The crew of Discovery is shown performing a

javelin ball experiment, tumbling, unlocking, performing transfer operations,

and deploying the STARSHINE educational satellite. The film ends with the

reentry of the Discovery Space Shuttle into the Earth’s atmosphere.

CASI

Discovery (Orbiter); Manned Space Flight: Mir Space Station; International Space Station: Spacecraft Docking: Unity Connecting Module; Zarya Control Module

19990116268 NASA Johnson Space Center, Houston, TX USA

STS--93 Post Flight Presentation

Nov. 08, 1999; In English; Videotape: 16 min.,18 sec. playing time, in color with sound

Report No.(s): NONP--NASA--VT--1999020513; No Copyright; Avail: CASI;

B02, Videotape-Beta; V02, Videotape-VHS

An overview of Flight STS-93 is presented. The primary objective of the

STS-93 mission was to deploy the Advanced X-Ray Astrophysics Facility (AXAF),

also known as the Chandra X-ray Observatory. The mission flew on the

Columbia Shuttle, on July 22, 1999. This facility is the most sophisticated X-ray

observatory ever built. Other payloads on STS-93 were: (1) the Midcourse Space

Experiment (MSX), (2) Shuttle Ionospheric Modification with Pulsed Local

Exhaust (SIMPLEX), (3) Southwest Ultraviolet Imaging System (SWUIS), (4)

Gelation of Sol: Applied Microgravity Research (GOSAMR), Space Tissue

Loss-B (STL-B), (5) Light Weight Flexible Solar Array Hinge (LFSAH), (6) Cell

Culture Module (CCM), and (7) the Shuttle Amateur Radio Experiment-II

(SAREX-II). (8) EarthKam, (9) Plant Growth Investigations in Microgravity

(PGIM), (10) Commercial Generic Bioprocessing Apparatus (CGBA), (11)

Micro-Electrical Mechanical System (MEMS), and (12) the Biological Research

in Canisters (BRIC). The crew was: Eileen M. Collins, Mission Commander; the

first female shuttle commander; Jeffrey S. Ashby, Pilot; Steven A. Hawley,

Mission Specialist; Catherine G. Coleman, Mission Specialist; Michel Tognini

(CNES), Mission Specialist. The video contains views of life aboard the space

shuttle. This mission featured both a night landing and a night landing at the

Kennedy Space Center.

CASI

Space Transportation System; X Ray Astrophysics Facility; Space Shuttle Missions; Crew Procedures (InFlight)

19990116476 NASA Johnson Space Center, Houston, TX USA

STS--103 Crew Training

Sep. 08, 1999; In English; Videotape: 29 min. 17 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--1999020514; No Copyright; Avail: CASI;

B02, Videotape-Beta; V02, Videotape-VHS

The Hubble Space Telescope (HST) team is preparing for NASA’s third

scheduled service call to Hubble. This mission, STS-103, will launch from

Kennedy Space Center aboard the Space Shuttle Discovery. The seven flight

crew members are Commander Curtis L. Brown, Pilot Scott J. Kelly; European

Space Agency (ESA) astronaut Jean-Francois Clervoy who will join space

walkers Steven L. Smith, C. Michael Foale, John M. Grunsfeld, and ESA

astronaut Claude Nicollier. The objectives of the HST Third Servicing Mission

(SM3A) are to replace the telescope’s six gyroscopes, a Fine-Guidance Sensor,

an S-Band Single Access Transmitter, a spare solid-state recorder and a high-

voltage/temperature kit for protecting the batteries from overheating. In addition,

the crew plans to install an advanced computer that is 20 times faster and has six

times the memory of the current Hubble Space Telescope computer. to prepare

for these extravehicular activities (EVAs), the SM3A astronauts participated in

Crew Familiarization sessions with the actual SM3A flight hardware. During

these sessions the crew spent long hours rehearsing their space walks in the

Guidance Navigation Simulator and NRL (Neutral Buoyancy Laboratory). Using

space gloves, flight Space Support Equipment (SSE), and Crew Aids and Tools

(CATs), the astronauts trained with and verified flight orbital replacement unit

(ORU) hardware. The crew worked with a number of trainers and simulators,

such as the High Fidelity Mechanical Simulator, Guidance Navigation Simu-

lator, System Engineering Simulator, the Alt Shroud Door Trainer, the Forward

Shuttle/Light Shield Simulator, and the Support Systems Module Dock Doors

Simulator. They also trained and verified the flight Orbital Replacement Unit Carrier
Astronaut Training; Hubble Space Telescope; Discovery (Orbiter); Space Transportation System; Extravehicular Activity; Space Maintenance; Flight Crews

STS-41G TCDT
Sept. 15, 1984; In English; Videotape: 20 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–1999207906; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The crew of STS-41G Challenger Shuttle, Pilot Jon A. McBride, Mission Specialists Kathryn D. Sullivan, Sally K. Ride and David C. Leestma, and Payload Specialists Marc Garneau, and Paul D. Scully-Power are seen driving in the Astro-van to pick up the Commander of the mission Robert L. Crippen. Footage of the crew arriving at the launch pad, departing the Astro-van and boarding the shuttle to perform a trial countdown demonstration test are shown. Members of the Challenger team are seen exiting the shuttle, and answering questions from reporters. Live footage of the flight control room, and several panoramic views of the shuttle on the launch pad are also seen.

CASI
Checkout; Prefiring Tests; Prelaunch Tests; Ground Tests; Test Firing; Space Shuttle Mission 41-G: Challenger (Orbiter); Space Transportation System; Space Transportation System Flights

STS-26 SRB LRFRT Forward Center Segment Joint Inspection
Ap. 27, 1988; In English; Videotape: 21 min. 36 sec. playing time, in color, with sound Report No.(s): NONP–NASA–VT–1999207911; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage of a system inspection done in the development of the STS-26 Space Transportation System Spacecraft is seen. The engineering team performs the inspection by lowering a member of the team into the center segment joint. The team member wore an oxygen mask while carrying out the process.

CASI
Inspection; Checkout; Space Transportation System

STS-51C Launch and Landing
Jan. 27, 1985; In English; Videotape: 50 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–1999207923; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This NASA KSC video release is comprised of live photos covering the day launch and landing of STS-51C/Discovery. The flight crew members were: Thomas K. Mattingly II, Commander; Lonner J. Shriffer, Pilot; Ellison S. Onizuka, Mission Specialist; James F. Buchli, Mission Specialist; and Gary E. Payton, Payload Specialist. The launch video is presented from several different vantage points and covers the countdown from the launch pad, main engine ignition, liftoff, and solid rocket booster separation. The landing footage contains final descent and approach, landing gear deployment, and touchdown, which was also captured from different locations including a helicopter. STS-51C carried the DoD 85-1 payload and was the first mission dedicated to the Department of Defense.

CASI
Space Shuttle Mission 51-C: Discovery (Orbiter); Spacecraft Landing; Spacecraft Launching

STS-26/Discovery Preparations for Launch
September 1988; In English; Videotape: 2 hr. playing time, in color, with sound Report No.(s): NONP–NASA–VT–1999207925; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This NASA Kennedy Space Center two-part video release is comprised of footage covering STS-26 launch preparations from the arrival of the Tracking and Data Relay Satellite (TDRS) at the Orbiter Processing Facility (OPF) to the lift and mate of the external tanks. The STS-26 flight crew include: Frederick H. (Rick) Hauck, mission commander; Richard O. Covey, pilot; John M. (Mike) Lounge, mission specialist; David C. Hilmers, mission specialist; and George D. (Pink) Nelson, mission specialist. The primary payload of STS-26 is the TDRS while the secondary payloads include the Physical Vapor Transport of Organic Solids (PVTOS); Protein Crystal Growth (PCG); Infrared Communications Flight Experiment (IRCE); Aggregation of Red Blood Cells (ARC); Isoelectric Focusing Experiment (IEF); Mesoscale Lightning Experiment (MLE); Phase Partitioning Experiment (PPE); Earth-Limb Radiance Experiment (ELRAD); Automated Directional Solidification Furnace (ADSF) and two Shuttle Student Involvement Program (SSIP) experiments. Launch preparation footage includes flight crew arrival at KSC, rollout of Discovery to Pad B, OV-103 Discovery power-up, main engine unpacking and installation, solid rocket boosters’ arrival prep and stacking, and tilt skirt to lift segment mating.

CASI
Space Shuttle Missions; Launching Sites; Launching Pads; Launching Bases

STS-93 Mission Highlights Resource Tape
Nov. 29, 1999; In English; Videotape: 1 hr. 28 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–1999207904; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The STS-93 flight crew, Commander Eileen M. Collins, Pilot Jeffrey S. Ashby, and Mission Specialists Steven A. Hawley, Catherine G. Coleman, and Michel Tognoni are seen performing pre-launch activities such as crew suit-up, and ride out to the launch pad for an early morning launch. Also, included are various panoramic views of the shuttle on the pad. The crew is seen in the
White Room for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Once on-orbit the primary objective is to deploy the Advanced X-ray Astrophysics Facility. Throughout the presentation, the astronauts take turns narrating particular aspects of the mission with which they are involved. Coleman and Tognini command Chandra to spring-eject from its cradle in the payload bay. The crew then work on the various experiments being carried out in flight. They successfully set up the first observatory using the Southwest Ultraviolet Imaging System (SWUIS). The SWUIS is used to image planets and other solar system bodies in order to explore their atmospheres and surfaces in the ultraviolet (UV) region of the spectrum. Tognini conducts a ham radio conversation with Jean-Pierre Hagueno on the Mid Space Station. Towards the end of the mission Ashley, Hawley and Tognini set up an exercise treadmill and the Treadmill Vibration Information System (TVIS). The live footage ends with the reentry of Columbia into the Earth’s Atmosphere. The night landing includes touchdown, deployment of the drag chute and crew departure from the vehicle.

CASI

Columbia (Orbiter); Manned Space Flight; Space Transportation System; Space Transportation System Flights; X Ray Astrophysics Facility; Spaceborne Astronomy; X Ray Astronomy; Solar System

STS-51B Launch and Landing
May 6, 1985; In English; Videotape: 20 min. 25 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--1999207907; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage of various isolated launch views is seen. Views of the Space Shuttle Challenger are shown from different camera sites such as the VAB (Vehicle Assembly Building) roof, Pad Perimeter, Helicopter, Convoy, and Midfield. Also shown from different cameras is the re-entry and landing of the shuttle at Kennedy Space Center (KSC). Footage also includes the ground recovery crew as they travel to the spacecraft. Challengers crew, Commander Robert E. Overmyer, Pilot Frederick D. Gregory, Mission Specialists Donald L. Lind, Norman E. Thagard, and William E. Thornton, and Payload Specialists Lodewijk van den Berg, and Taylor G. Wang are also seen leaving the craft.

CASI

Challenger (Orbiter); Space Shuttle Mission 51-B; Space Transportation System; Spacecraft Launching

STS-51G Mission Highlights Resource Tape
Jun. 24, 1985; In English; Videotape: 40 min. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--1999207983; No Copyright; Avail: CASI; B03, Videotape-Beta; Vo3, Videotape-VHS

The STS-51G flight crew, Commander Daniel C. Brandenstein, Pilot John O. Creighton, Mission Specialists Shannon W. Lucid, John M. Fabian, and Steven R. Nagel, and Payload Specialists Patrick Baudry and Sultan Salaman Al-Saud are seen performing pre-launch activities such as eating of the traditional breakfast, ride out to the launch pad, and crew suit-up for an early morning launch. Also, included are various panoramic views of Discovery on the pad. The main objective of this mission is to deploy three communication satellites. The satellites being deployed are MORE LOS-A, for Mexico; ARABSAT-A, for the Arab Satellite Communications Organization; and TELSTAR-3D, for AT&T. The crew also remove the SPAR-TAN-1 satellite. Scenes include the crew in the mess deck via video link with Mission Control Center in celebration of the 10th anniversary of the American in space. Al-Saud also spoke with his father in Saudi Arabia via video link. Views of certain experiments are also seen. Al-Saud is seen conducting the postural experiment, and Baudry is seen conducting the equilibrium experiments. Panoramic views of the Hawaiian Island Archipelago, and Wadi Habavvah, Saudi Arabia are also visible from the shuttle. Live footage ends with the re-entry of the vehicle into the Earth’s Atmosphere, an early morning touchdown at Edwards Air Force Base and crew departure from the craft.

CASI

Space Transportation System; Space Transportation System Flights; Discovery (Orbiter); Space Shuttle Mission 51-G; Saudi Arabian Space Program
gyroscopes, transistors, and computers. Also discussed is Brown's responsibility during any of the planned space walks scheduled for this mission.

**CASI**

*Hubble Space Telescope: Maintenance; Replacing; Gyroscopes; Computers; Transistors*

---

**STS-103 Crew Interviews: Scott Kelly**

Sep. 09, 1999; In English; Videotape: 26 min. 45 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT–1999213437; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage of a preflight interview with Pilot Scott J. Kelly is seen. The interview addresses many different questions including why Kelly became an astronaut, the events that led to his interest, any role models that he had, and his inspiration. Other interesting information that this one-on-one interview discusses is an explanation of the why this required mission to service the Hubble Space Telescope must take place at such an early date, replacement of the gyroscopes, transistors, and computers. Also discussed are the Chandra X Ray Astrophysics Facility, and a brief touch on Kelly's responsibility during any of the four space walks scheduled for this mission.

**CASI**

*Hubble Space Telescope: Replacing; Gyroscopes; Transistors; Computers; Discussion; Spacecrews; Crew Procedures (Inflight)*

---

**STS-103 Crew Interviews: John Grunsfeld**

Sep. 09, 1999; In English; Videotape: 31 min. 58 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT–1999208158; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Mission Specialist John M. Grunsfeld is seen. The interview addresses many different questions including why Grunsfeld became an astronaut, and the events that led to his interest. Other interesting information that this one-on-one interview discusses is an explanation of the why this required mission to service the Hubble Space Telescope must take place at such an early date, and a brief touch on Grunsfeld's responsibility during any of the four space walks scheduled for this mission.

**CASI**

*Hubble Space Telescope: Space Maintenance; Crew Procedures (Inflight); Spacecrews; Discussion*

---

**STS-26: Preparations for Launch**

Jun. 01, 1988; In English; Videotape: 59 min. 45 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT–1999207915; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Preparations for launch of STS-26 are shown. They include: (1) VAB to OPR high bay rollover; (2) Main engine unpacking and installation; (3) OMS pod installation; (4) Crew hatch removal; (5) Modified crew hatch installation; (6) Nose cap installation; (7) 17 inch disconnect work; (8) Ka-band antenna stow and deploy; (9) Tile work; (10) Oasis payload installation; (11) Solid rocket boosters arrival, props and stacking; (13) Modified SRB segments: Arrival via train at KSC RSFP; (14) AFT segment rotation to vertical in RSFP; (15) AFT skirt to AFT segment mating; (16) SRB grain inspection; (17) Lift AFT segment; and (18) Lift and mate external tank.

**CASI**

*Space Transportation System; Launching; Solid Propellant Rocket Engines; Space Shuttle Boosters; Payloads; Inspection*

---

**STS 41-D: Post-Flight Press Conference with Highlights from JSC**

Sep. 12, 1984; In English; Videotape: 61 min. playing time, in color, with sound

Report No.(s): NONP-NASA-VT–1999207918; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Commander Henry W. Hartsfield, STS 41-D mission by listing the following firsts: (a) first Discovery flight; (b) first flight for a commercial payload specialist; (c) first SYNCOM satellite deployed from an orbiter; and (d) first to deploy 3 satellites. This was also the heaviest stack at lift-off and the heaviest payload. The footage concludes with a film of the mission highlights.

**CASI**

*Conferences; Discovery (Orbiter); Space Transportation System; Spacecrews*

---

**Galileo Press Conference from JPL, Parts 1 and 2**

Dec. 08, 1992; In English; Videotape: Running time 1 hr., 22 min., in color, with sound

Report No.(s): NONP-NASA-VT–2000001065; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This two-tape Jet Propulsion Laboratory (JPL) video production presents a Dec. 8, 1992 press conference held at JPL to discuss the final Galileo spacecraft encounter with Earth before beginning its journey to Jupiter. The main theme of the conference was centered on the significance of the 2nd and final Earth/Moon flyby as being the spacecraft's last planetary encounter in the solar system before reaching Jupiter, as well as final flight preparations prior to its final journey. Each person of the five member panel was introduced by Robert MacMillan (JPL Public Information Mgr.) before giving brief presentations including slides and viewgraphs covering their area of expertise regarding Galileo's current status and future plans. After the presentations, the media was given an opportunity to ask questions of the panel regarding the mission. Mr. Wesley Huntress (Director of Solar System Exploration (NASA)), William J. O'Neill (Galileo Project Manager), Neal E. Auman, Jr. (Galileo Mission Director), Dr. Torrence V. Johnson (Galileo Project Scientist) and Dr. Ronald Greeley (Member, Imaging Team, Colorado St. Univ.) made up the panel and discussed topics including: Galileo’s interplanetary trajectory; project status and performance review; instrument calibration activities; mission timelines; lunar observation and imaging; and general lunar science. Also included in the last three minutes of the video are simulations and images of the 2nd Galileo/Moon encounter.

**CASI**

*Galileo Project; Galileo Spacecraft; Interplanetary Flight; Space Exploration*

---

**Galileo Press Conference from JPL, Parts 1 and 2 (second tape)**

Dec. 08, 1992; In English; Videotape: Running time 1 hr., 22 min., in color, with sound

Report No.(s): NONP-NASA-VT–2000001065; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This two-tape Jet Propulsion Laboratory (JPL) video production presents a Dec. 8, 1992 press conference held at JPL to discuss the final Galileo spacecraft encounter with Earth before beginning its journey to Jupiter. The main theme of the conference was centered on the significance of the 2nd and final Earth/Moon flyby as being the spacecraft's last planetary encounter in the solar system before reaching Jupiter, as well as final flight preparations prior to its final journey. Each person of the five member panel was introduced by Robert MacMillan (JPL Public Information Mgr.) before giving brief presentations including slides and viewgraphs covering their area of expertise regarding Galileo's current status and future plans. After the presentations, the media was given an opportunity to ask questions of the panel regarding the mission. Mr. Wesley Huntress (Director of Solar System Exploration (NASA)), William J. O'Neill (Galileo Project Manager), Neal E. Auman, Jr. (Galileo Mission Director), Dr. Torrence V. Johnson (Galileo Project Scientist) and Dr. Ronald Greeley (Member, Imaging Team, Colorado St. Univ.) made up the panel and discussed topics including: Galileo’s interplanetary trajectory; project status and performance review; instrument calibration activities; mission timelines; lunar observation and imaging; and general lunar science. Also included in the last three minutes of the video are simulations and images of the 2nd Galileo/Moon encounter.

**CASI**

*Galileo Project; Galileo Spacecraft; Interplanetary Flight; Space Exploration*

---

**STS-103 Crew Interviews: Mike Foale**

Sep. 09, 1999; In English; Videotape: 48 min. 50 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT–1999213442; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Mission Specialist C. Michael Foale is seen. The interview addresses many different questions including why Foale became an astronaut, the events that led to his interest. Other interesting information that this one-on-one interview discusses is an explanation of the why this required mission to service the Hubble Space Telescope must take place at such an early date, and a brief touch on Foale's responsibility during any of the four space walks scheduled for this mission.

**CASI**

*Hubble Space Telescope: Maintenance*

---

**STS-103 Crew Interviews: Steven Smith**

Sep. 09, 1999; In English; Videotape: 27 min. 45 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT–1999213439; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage of a preflight interview with Mission Specialist Steven L. Smith is seen. The interview addresses many different questions including why Brown became an astronaut, the events that led to his interest, any role models that he had, and his inspiration. Other interesting information that this one-on-one interview discusses is an explanation of the why this required mission to service the Hubble Space Telescope must take place at such an early date, replacement of the gyroscopes, transistors, and computers. Also discussed is Smith's responsibility during any of the planned space walks scheduled for this mission.

**CASI**

*Hubble Space Telescope; Maintenance; Replacing; Computers; Gyroscopes; Transistors*
STS-103 Flight Day 3 Highlights and Crew Activities Report
Dec. 22, 1999; In English; Videotape: 1 min, 45 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1999213297; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Highlights of the third day of the STS-103 mission on board the space shuttle Discovery are shown in this videotape. The mission was led by Commander Curtis L. Brown, with Pilot Scott J. Kelly, and Mission Specialists Steven L. Smith, Jean-Francois Clervoy, John M. Grunsfeld, Michael Foale, and Claude Nicollier. The main purpose of the mission was to service the Hubble Space Telescope (HST). The primary objective of the mission was to replace all six of the gyroscopes that make up the three Rate Sensor Units. In addition the astronauts installed a new computer. During the third day when Discovery reached a point about 35 feet from Hubble, astronaut Jean-Francois Clervoy used the robot arm to capture the telescope's grapple fixture located midway up the HST structure. The approach to the HST is described and the actual maneuver aimed at retrieving the telescope is also described. The video includes actual live views of the HST in the shuttle's service bay, the shuttle, and shots of Johnson mission control.

CASI

Discovery (Orbiter); Hubble Space Telescope; Space Transportation System; Orbital Servicing; Payload Retrieval (STS); Orbital Rendezvous

STS-99 Crew Interviews: Janet L. Kavandi
Aug. 09, 1999; In English; Videotape: 18 min., 43 sec., running time, in color, with sound
Report No.(s): NONP--NASA--VT--1999208099; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

This NASA JSC video release is one in a series of space shuttle astronaut interviews and was recorded Aug. 9, 1999. Mission Specialist, Janet L. Kavandi, Ph.D. provides answers to questions regarding her role in the Shuttle Radar Topography Mission (SRTM), mission objectives, which center on the three-dimensional mapping of the entire Earth’s surface, shuttle imaging radar, payload mast deploy and retraction, data recording vs. downlinking, the fly cast maneuver, applications of recorded data, international participation (DLR), the National Imaging and Mapping Agency (NIMA), and EarthCam (educational middle school project). The interview is summed up by Dr. Kavandi explaining that the mission’s objective, if successful, will result in the most complete high-resolution digital topographic database of the Earth.

CASI

Space Shuttle Missions; Astronauts; Shuttle Imaging Radar; Earth Observations (From Space)

STS-41D Post Flight Press Conference with Highlights
Sep. 12, 1984; In English; Videotape: 61 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1999207908; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

The crew, Commander Henry W. Hartsfield, Jr, Pilot Michael L. Coats, Mission Specialists Judith A. Resnik, Steven A. Hawley, and Richard M. Mullane, and Payload Specialist Charles D. Walker are seen participating in a panel discussion. Live footage of the Press Conference begins with a brief introduction of all the crew, followed by highlights of the flight, a selection of slides and still pictures, and ends with a question and answer segment. The highlights consist of the astronauts walk out to the Astro-Van, panoramic views of the Discovery on the launch pad, main engine start, ignition of the solid rocket boosters, liftoff, and separation of the boosters. Images of the opening of the sun shield and the deployment of the three communication satellites (Satellite Business System (SBS-D), SYNCOM IV-2, and TELSTAR) are also seen. The crew is seen working on experiments, dumping the wastewater, eating supper, and sleeping. Concluding the live footage are slides, and stills of various areas around the world, including the Libyan Desert, Angola, Namibia, and Australia. The Press Conference ends with questions from Houston, NASA Headquarter, Kennedy Space Center, and Marshall Space Flight Center.

CASI

Conferences; Astronauts; Spaceviews; Deployment; Syncom 4 Satellite; Telstar Project

STS-103 Crew Activities Report: Flight Day 7 Highlights
Dec. 28, 1999; In English; Videotape: 21 min. 9 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000001113; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Today Discovery’s astronauts began preparing the spacecraft for it’s scheduled return to Earth by checking out the flight control system and reaction control jets that support re-entry. Later in the day the astronauts began stowing equipment used during the past week and start buttoning up on-orbit systems. The Ku-band antenna which provides most of the capacity for data and television relay was stowed around 8:45 p.m. The recently refurbished Hubble Space Telescope moves slowly through it’s checkout sequence before resuming science operations. Both the flight control system (FCS) and the reaction control jets (RCJ) were without issue, with all systems ready to support Discovery’s return to Earth.

CASI

Spaceviews; Astronauts; Flight Control; Space Transportation System; Data Links; Jet Control; Entry; Hubble Space Telescope

STS-103 VIP Site Saturn Center, Shuttle Liftoff
Dec. 10, 1999; In English; Videotape: 3 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000008225; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This NASA KSC video release presents footage of the VIP gathering before and during the STS-103 launch at the Saturn Center at Kennedy Space Center. Images of the Saturn Center, the playing of the national anthem and the crowd’s reactions during liftoff are included.

CASI

Space Shuttle Missions; Liftoff (Launching); Cape Kennedy Launch Complex

STS-103 Payload Being Uncovered HST--Hubble Servicing Mission
Aug. 17, 1999; In English; Videotape: 1 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000008221; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Live footage of Discovery’s construction crew removing the plastic covering from the Payload Bay is seen.

CASI

Space Shuttle Payloads; Hubble Space Telescope

STS-103 In VAB
Nov. 05, 1999; In English; Videotape: 3 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000008220; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Live footage of the fully constructed Discovery Orbiter mated to the external tank and solid rocket boosters in the VAB (Vehicle Assembly Building) high bay 1 is seen.

CASI

Discovery (Orbiter); Space Transportation System

STS-103 Flight Crew Departs from Shuttle Landing Facility in T-38 for Aerobatics Flight, Discovery
Dec. 15, 1999; In English; Videotape: 3 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000008216; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This NASA KSC video release presents footage of two of the STS-103 crew members during flight crew training prior to a NASA T-38 aerobatics flight. The two crew members are shown inside the T-38 as it moves slowly across a runway.

CASI

Space Flight Training; T-38 Aircraft; Aerobatics
The interview addresses many different questions including why Mohri became an astronaut, the events that led to his interest, his career path, and then finally, his selection by NASA as an astronaut. Other interesting information that this one-on-one interview discusses is the purpose for the Shuttle Radar Topography Mission (SRTM). Specific interest is on the importance of this SRTM flight, the knowledge that we will gain from the 3D topographic map of the Earth, and the reason why this 3D data is being recorded instead of downloaded. The two antennas that will be taking the pictures, the involvement of the National Imagery and Mapping Agency (NIMA), and EARTHCAM, a student-controlled camera on the Endeavour Orbiter, Mohri’s responsibility during this 24 hour mission, and his secondary experiments with high definition TV cameras are also discussed.

CASI

while the shuttle heads to Australia, and some beautiful panoramic views of the Earth are also seen.

CASI

Crew Procedures (Inflight); Spacecrafts; Firing (Igniting); Orbital Maneuvers

Orbital Space Tests

20000811835 NASA Johnson Space Center, Houston, TX USA
STS--103 Crew Activity Report/Flight Day 4 Highlights
Dec. 28, 1999; In English; Videotape: 21 min. 56 sec. playing time, in color, with sound Report No.(s): NONP--NASA--VT--2000001112; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Live footage of the first of the three-scheduled space walks is seen. Mission Specialists Steven L. Smith and John M. Grunsfeld are seen setting up tools, and replacing the Rate Sensor Units. Grunsfeld then replaces Hubble’s batteries in the instrument bay, while Smith places covers on the handrails. Grunsfeld and Smith then perform their second task of installing six Voltage/Temperature Improvement Kits. They are also seen taking pictures, and putting away the equipment.

CASI

Crew Procedures (Inflight); Spacecrafts; Hubble Space Telescope; Electric Batteries; Remote Sensors; Spacecraft Maintenance

20000811037 NASA Johnson Space Center, Houston, TX USA
STS--9 Crew Interviews: Gorrie
Aug. 04, 1999; In English; Videotape: 21 min. 50 sec. playing time, in color, with sound Report No.(s): NONP--NASA--VT--2000008264; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Live footage of a preflight interview with Pilot Dominic L. Padwell Gorrie is seen. The interview addresses many different questions including why Gorrie became an astronaut, the events that led to his interest, and his career path. Other interesting information that this one-on-one interview discuses is the purpose for the Shuttle Radar Topography Mission (SRTM). The main interest is on the importance of this SRTM flight, the knowledge we will learn gain from the 3D topographic map of the Earth, and the possible similarity to the tethered Satellite System Flight. The two antennas that will be taking the pictures, the involvement of the National Imagery and Mapping Agency (NIMA), mass deployment and retraction, gravity gradient force, flight cast maneuvers, EARTHCAM, a student-controlled camera on the Endeavour Orbiter, and Gorrie’s responsibility during this 24 hour mission.

CASI

Shuttle Imaging Radar: Infrared Radar: Radar Imagery; Topography: Relief Maps; Earth Surface

20000811024 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS--103 Discovery Launch Scrub Press Conference
Dec. 16, 1999; In English; Videotape: 30 min. playing time, in color, with sound Report No.(s): NONP--NASA--VT--2000008137; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

A press conference held on December 16, 1999, to explain the reason behind NASA’s decision to delay the Discovery’s launching by a period of 24 hrs is presented. According to Ron Dittemore, Space Shuttle Program Manager, the STS-103 team delayed the launch because they need extra time to check one vendor’s manufacturing processes, after an x-ray inspection revealed that an improper weld rod was used to weld one of the pressuring lines (called NPS lines) in the ET (external tank). Mr. Dittemore explained that since it is in the ET (not a major load carrying structure and rebuild after each flight), it did not pose any danger to the STS-103 flight. However, the same vendor also manufactured some parts of the orbiter and the team wanted to make sure that the quality of the vendor’s manufacturing processes is robust before launching the orbiter to space. He also answered some reporters’ questions.

CASI

Discovery (Orbiter); Spacecraft Launching; Spacecraft Maintenance; Spacecraft Structures

20000811225 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS--103 HST Blacklight and Whitelight Inspections
Aug. 27, 1999; In English; Videotape: 4 min. playing time, in color, with sound Report No.(s): NONP--NASA--VT--2000008202; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Live footage of the STS-103 payload inspections using the blacklight and whitelight technique is shown.

CASI

Discovery (Orbiter); Space Shuttle Payloads; Inspection

20000811226 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS--103 Crew at Breakfast, Suiting, Departing O&C
Dec. 19, 1999; In English; Videotape: 5 min., playing time, in color, with sound Report No.(s): NONP--NASA--VT--2000008205; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The Hubble Space Telescope (HST) team is preparing for NASA’s third scheduled service call to Hubble. This mission, STS-103, will launch from Kennedy Space Center aboard the Space Shuttle Discovery. The seven flight crew members for STS-103 are: Commander Curtis L. Brown (his sixth flight), Pilot Scott J. Kelly and European Space Agency (ESA) astronaut Jean-Francois Clervoy (his third flight) will join space walkers Steven L. Smith (his third flight), C. Michael Foale (his fifth flight), John M. Grunsfeld (his third flight) and ESA astronaut Claude Nicollier (his fourth flight). This current video presents a live footage of the seven STS-103 crewmembers eating breakfast, suiting, and departing the O&C (Operations and Checkout) before the 6:50 p.m. liftoff.

CASI

Discovery (Orbiter); Spacecrafts; Crew Procedures (Preflight); Preflight Operations

20000811227 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS--103 Discovery: Hubble Servicing Mission Press Showing PHSF
Oct. 14, 1999; In English; Videotape: 8 min. playing time, in color, with sound Report No.(s): NONP--NASA--VT--2000008206; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Live footage of the Discovery’s payload at the PHSF (Payload Hazardous Servicing Facilities) is shown. Also included is Dr. John Comptel, Associate Director of the Hubble Space Telescope, briefing on the Hubble servicing mission.

CASI

Space Shuttle Payloads; Discovery (Orbiter); Orbital Servicing: Ground Support Equipment

20000811229 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS--103 HST Hubble Hardware Arrival
Aug. 12, 1999; In English; Videotape: 9 min. playing time, in color, with sound Report No.(s): NONP--NASA--VT--2000008208; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Live footage of the STS-103 Hubble hardware arrival at Kennedy Space Center and its ground transportation to the SLF (Shuttle Landing Facility) is shown.

CASI

Discovery (Orbiter); Space Shuttle Payloads; Ground Handling

20000811230 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS--103 Payload Door Closure: Hubble Repair: Discovery
Nov. 24, 1999; In English; Videotape: 5 min. playing time, in color, with sound Report No.(s): NONP--NASA--VT--2000008212; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Live footage of the Discovery’s cargo bay door closure is shown. Discovery’s payload include an Orbital Replacement Unit Carrier that contains the tools and replacement parts necessary to service the HST and Flight Support System that will hold the telescope during servicing.

CASI

Discovery (Orbiter); Space Shuttle Payloads; Doors
Involvement of the International partners, mass deployment and retraction, is on the importance of this SRTM flight, the knowledge we will gain from the 3D topographic map of the Earth, and the reason why this 3D data is being recorded for the Shuttle Radar Topography Mission (SRTM). Specific interest is on the purpose for the Shuttle Radar Topography Mission (SRTM). The main interest is on the importance of this SRTM flight, the knowledge that we will gain from the 3D topographic map of the Earth, and the possible similarity to the Tethered Satellite System Flight. The two antennas that will be taking the pictures, the involvement of the International partners, mass deployment and retraction, gravity gradient force, flight test maneuvers, EARTHcam, a student-controlled camera on the Endeavour Orbiter, and Thiele’s responsibility during this 24 hour mission are also discussed.

CASI
Shuttle Imaging Radar: Radar Imagery; Radar Maps; Topography; Relief Maps; Earth Surface

STS-96 Crew Interview: Kent Rominger
Mar. 17, 1999; In English; Videotape: 33 min. 58 sec. playing time, in color, with sound
Report No(s): NONP–NASA–VT–1999213303; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Live footage of a preflight interview with Commander Kent V. Rominger is seen. The interview addresses many different questions including why Rominger became an astronaut, the events that led to his interest, and his career path. Other interesting information that this one-on-one interview discusses is the logistics and outfitting mission, why it is important to send equipment to the International Space Station (ISS) before the astronauts, the Integrated Cargo Carrier. Rominger mentions Discovery’s anticipated docking with the ISS, spacewalk plans for the supply and equipment transfers, and an experiment designed to evaluate the system that will transfer oxygen, nitrogen and water between the ISS and the spacecraft. A fly-around mission, and the deployment of the Student Tracked Atmospheric Research Satellite for Heliometric International Networking Equipment (STARSHINE) are also discussed.

CASI
Crew Procedures (Inflight); Space Logistics; Consumables (Spacexcrew Supplies); Stowage (Onboard Equipment); Onboard Equipment; Portable Equipment; Materials Handling

Oper. No A4495 Columbus, STS–93 Chandra – Breakfast, Suiting, and Walkout
Jul. 22, 1999; In English; Videotape: 3 min. playing time, in color, with sound
Report No(s): NONP–NASA–VT–2000008173; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The primary objective of the STS-93 mission was to deploy the Advanced X-ray Astrophysical Facility, which had been renamed the Chandra X-ray Observatory in honor of the late Indian-American Nobel Laureate Subrahmanyan Chandrasekhar. The mission was launched at 12:31 on July 23, 1999 onboard the space shuttle Columbia. The mission was led by Commander Eileen Collins. The crew was Pilot Jeff Ashby and Mission Specialists Cathy Coleman, Steve Hawley and Michel Tognini from the Centre National d’Etudes Spatiales (CNES). This videotape shows the astronauts after breakfast getting into spacesuits, walking out to board the bus, and boarding the bus prior to launch.

CASI
Astronauts; Spacexcrews; Crew Procedures (Preflight); Preflight Operations

STS-93 Columbia, Chandra moved to Payload Canister in the VPF
Jun. 19, 1999; In English; Videotape: 6 min playing time, in color, with sound
Report No(s): NONP–NASA–VT–2000008271; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The primary objective of the STS-93 mission was to deploy the Advanced X-ray Astrophysical Facility, which had been renamed the Chandra X-ray Observatory in honor of the late Indian-American Nobel Laureate Subrahmanyan Chandrasekhar. The mission was launched at 12:31 on July 23, 1999 onboard the space shuttle Columbia. The mission was led by Commander Eileen Collins. The crew was Pilot Jeff Ashby and Mission Specialists Cathy Coleman, Steve Hawley and Michel Tognini from the Centre National d’Etudes Spatiales (CNES). This videotape shows the loading of the payload canister in the Vertical Processing Facility (VPF). Clean-suited technicians move the Chandra X-ray Observatory into the payload canister.

CASI
Space Transportation System; X Ray Astrophysics Facility; Space Shuttle Payloads; Preflight Operations; Protective Clothing
Live footage of the Payload Bay door closing is seen.

The primary objective of the STS-93 mission was to deploy the Advanced X-ray Astrophysical Facility, which had been renamed the Chandra X-ray Observatory in honor of the late Indian-American Nobel Laureate Subrahmanyan Chandrasekhar. The mission was launched at 12:31 on July 23, 1999 onboard the space shuttle Columbia. The mission was led by Commander Eileen Collins. The crew was Pilot Jeff Ashby and Mission Specialists Cady Coleman, Steve Hawley, and Michel Tognoni from the Centre National d’Etudes Spatiales (CNES). This videotape shows parts of a crew briefing and an inspection tour of the clean room. The astronauts are shown examining some of the equipment and tools that they will use during the mission.

Live footage of the inspection of several different parts needed for STS-103 is presented. Some of the things inspected include a latch, and Velcro materials for stability. The astronauts turned the latch on a small door, opened the door then closed it again.

Live footage of a preflight interview with Pilot Rick D. Husband is seen. The interview addresses many different questions including why Husband became an astronaut, the events that led to his interest, and his career path. Other interesting information that this one-on-one interview discusses is the logistics and supply mission, why it is important to send equipment to the International Space Station (ISS), and the Integrated Cargo Carrier (ICC). Husband mentions Discovery’s anticipated docking with the ISS, her scheduled space walk with Daniel T. Barry, plans for the supply and equipment transfers, and a fly-around maneuver to take pictures of the ISS.

Live footage of a preflight interview with Mission Specialist Ellen Ochoa is seen. The interview addresses many different questions including why Ochoa became an astronaut, the events that led to her interest, and her career path through research and engineering. Other interesting information that this one-on-one interview discusses is the logistics and supply mission, why it is important to send equipment to the International Space Station (ISS), and the Integrated Cargo Carrier (ICC). Ochoa mentions Discovery’s anticipated docking with the ISS, her role during the scheduled space walk with Tamara E. Jernigan and Daniel T. Barry, and plans for the supply and equipment transfers. Ochoa also discusses her involvement in a Volatile Removal Assembly (VRA) experiment to remove contaminants from the water, the undocking of the spacecraft from the ISS, and a fly-around maneuver to take pictures of the ISS.

This NASA KSC video release presents a press conference that discusses the commercial development and NASA science mid-deck payloads of Discovery STS-26. Larry Delucas (Univ. Alabama-Birmingham, Center for Macromolecular Crystallography), Chris Poudsiadly (3-M Co., Marshall Space Flight Center’s (MSFC’s) Rep. for Material Processing) and Ed Valentine present discussions of the science and commercial development that surround the Physical Vapor Transport of Organic Solids-2 (PVTO-S-2) payload. Their presentations are followed by a question and answer period for journalists from scientific journals.

This interview addresses many different questions including why Barry became an astronaut, the events that led to his interest, and his career path as a pilot. Other interesting information that this one-on-one interview discusses is this logistics and outfitting mission, why it is important to send equipment to the International Space Station (ISS) before the astronauts, and the Integrated Cargo Carrier. Husband mentions Discovery’s anticipated docking with the ISS, the space walk with Mission Specialist Tamara E. Jernigan, and Daniel T. Barry, plans for the supply and equipment transfers, and an experiment designed to evaluate the system that will transfer oxygen, nitrogen and water between the ISS and the spacecraft. A fly-around mission, and the deployment of the Student Trackd Atmospheric Research Satellite for Heuristical Networking Equipment (STARSHINE) are also discussed.

Live footage of a preflight interview with Mission Specialist Daniel T. Barry is seen. The interview addresses many different questions including why Barry became an astronaut, the events that led to his interest, and his career path as a pilot. Other interesting information that this one-on-one interview discusses is the logistics and supply mission, why it is important to send equipment to the International Space Station (ISS), and the Integrated Cargo Carrier. Barry mentions Discovery’s anticipated docking with the ISS, the space walk with Mission Specialist Daniel T. Barry, plans for the supply and equipment transfers, and a fly-around maneuver to take pictures of the ISS.
Barry became an astronaut, and the events that led to his interest. Other interesting information that this one-on-one interview discusses is the logistics and supply mission, why it is important to send equipment to the International Space Station (ISS), and the Integrated Cargo Carrier (ICC). Barry mentions Discovery's anticipated docking with the ISS, his scheduled space walk with Tamara E. Jemigan, plans for the supply and equipment transfers, and his responsibility during this transfer. A fly-around maneuver to take pictures of the ISS, and the deployment of the student Tracked Atmospheric Research Satellite for Heuristic International Network Equipment (STARSHINE) are also discussed.

CASI
International Space Station; Spacecraft Docking; Stowage (Onboard Equipment); Space Logistics; Transferring; Materials Handling

STS-96 Crew Interview: Julie Payette
Mar. 18, 1999; In English; Videotape: 28 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999213301; No Copyright; Avail: CASI; B03, Videotape-Beta; VO3, Videotape-VHS

Live footage of a press conference held with (French Canadian) Mission Specialist Julie Payette is seen. The interview addresses many different questions including why Payette wanted to be an astronaut, the events that led to her interest, and her career path. Other interesting information that this one-on-one interview discusses is this logistics and supply mission, why it is important to send equipment to the International Space Station (ISS) before the astronauts, and the Integrated Cargo Carrier. Payette mentions Discovery's anticipated docking with the ISS, the space walk with Mission Specialists Tamara E. Jemigan, and Daniel T. Barry and her responsibility as IV (intra-vehicular) crew-member. She also mentions plans for the supply and equipment transfers, the change out of battery chargers, her involvement in the installation of mufflers, the Canadian Space Vision Systems, and the future automatic docking of the Service Module to the Zarya Module of the ISS. A fly-around mission, and the deployment of the student Tracked Atmospheric Research Satellite for Heuristic International Network Equipment (STARSHINE) are also discussed.

CASI
International Space Station; Service Module (ISS); Zarya Control Module; Spacecraft Docking; Space Logistics; Stowage (Onboard Equipment); Transferring; Materials Handling

STS-96: Crew Arrival at the KSC Shuttle Landing Facility
Apr. 26, 1999; In English; Videotape: 8 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000010552; No Copyright; Avail: CASI; B01, Videotape-Beta; VO1, Videotape-VHS

The crew (Commander Kent V. Rominger, Pilot Rick D. Husband, and Mission Specialists Ellen Ochoa, Tamara E. Jemigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev) arrive via fighter jets and assemble. A brief speech about the crew’s duties during their mission is given by Commander Rominger.

CASI
Spacecrafts; Space Transportation System; Space Missions

STS-88: Flight Crew During Breakfast, Suiting, and Departure from the Operations and Checkout Building
Dec. 03, 1998; In English; Videotape: 4 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000010561; No Copyright; Avail: CASI; B01, Videotape-Beta; VO1, Videotape-VHS

The crew (Commander Robert D. Cabana, Pilot Frederick W. Stuedal, and Mission Specialists Nancy J. Currie, Jerry L. Ross, James H. Newman and Sergei K. Krikalev) begin with breakfast, then proceed to the suiting room. After suiting up, the astronauts board the bus in preparation for departure.

CASI
Space Shuttle Missions; Space Transportation System Flights

STS-26 Preflight Press Briefing: Shuttle System Changes, Part 2 of 9
Aug. 22, 1988; In English; Videotape: 56 min., 41 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999207916; No Copyright; Avail: CASI; B03, Videotape-Beta; VO3, Videotape-VHS

This NASA KSC video release presents a press conference that discusses the major system changes implemented on the shuttle in preparation for the launch of Discovery STS-26. Richard A. Colonna (Mgr. Orbiter and GFE Projects office) and an unidentified colleague present discussions involving hazard analysis, landing safety, launch abort crew escape and major modifications made to the Space Shuttle Boosters. Their presentations are followed by a question and answer period for journalists from scientific journals.

CASI
Space Shuttle Boosters; Space Shuttle Missions; Discovery (Orbiter); Safety Management

STS-26 Preflight Press Briefing: Crew Escape/Crew Systems
Aug. 22, 1988; In English; Videotape: 56 min., 34 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999207914; No Copyright; Avail: CASI; B03, Videotape-Beta; VO3, Videotape-VHS

This NASA KSC video release presents part of a press conference held prior to Discovery flight STS-26, the first shuttle mission flown following the 51-L Challenger accident. The five member panel present individual viewgraph discussions followed by a question and answer period for the benefit of scientists. William A. Chandler (Asst. to the Dir. of Engineering and the NSTS program) gives a brief overview of the crew escape system followed by Steven Nagel’s (Astronaut) presentation on crew equipment. Robert Rice (Crew Escape System Manager) describes the flight test program and the innovative pyrotechnics system test program. Tim Pelischek (Pole Design Team) gives an assessment of the critical design review and Ricardo Machin reviews aerodynamic flight tests performed at Texas A&M and California. The second part of the video includes Robert Crippen’s (Deputy Dir. of Operations, Kennedy Space Center) overview of NASA Management, the organizational changes and actions taken to meet the Rogers’ Commission recommendations.

Author
Safety Devices; Spacecrafts; Space Transportation System Flights; Launch Escape Systems
prior to Discovery flight STS-26, the first shuttle mission flown following the 51-L Challenger accident. The video includes presentations by Gerald Smith (Solid Rocket Booster (SRB) Project Manager) and Joe Lombardo (Space Shuttle Main Engine (SSME) Project Manager) discussing the major changes that were made to the SRB and SSME between 51-L and STS-26. Mr. Smith’s talk centered on the changes and redesigns made to the solid rocket motor field joint, the case to nozzle joint, the SRB aft skirt, and the ET aft attach ring. Mr. Lombardo discusses test data evaluation, SSME inspections and the SSME heat exchanger in particular.

Author: Space Transportation System Flights: Space Shuttle Main Engine: Space Shuttle Boosters

2000012424 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-26 Preflight Press Briefing: Flight Crew and TDRS, Part 7 of 9

Aug. 22, 1998; In English; Videotape: 47 min., 48 sec., playing time, in color, with sound

Report No.(s): NONP-NASA-VT-199907991; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This NASA KSC video release presents part of a press conference held prior to Discovery flight STS-26, the first shuttle mission flown following the 51-L Challenger accident. The first portion of the video presents the 5 member flight crew, (Frederick H. Hauck, Commander, Richard O. Covey, Pilot, John M. Lounge, Mission Specialist, George D. Nelson, Mission Specialist, and David C. Hilmera, Mission Specialist) answering questions posed by scientific journalists. Inquiries are made regarding the approximately 250 changes implemented on the orbiter and boosters, failures that occurred during 51-L, astronaut attitudes about flying the first mission since the Challenger accident, and the issue of range safety. The second part of the video includes viewgraph presentations given by Dr. Dale W. Harris (TDRS Project Manager, Goddard Space Flight Center(GSFC)) and Gary A. Morse (Network Director, GSFC) that discuss the primary payload, the NASA Tracking and Data Relay Satellite-3 (TDRS-3) that is attached to an Inertial Upper Stage (IUS), and is the second TDRS deployed.

Author: Space Transportation System Flights: TDR Satellites: Discovery (Orbiters): Spacecrews

2000012426 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-91: Flight Crew Meets with Family and Friends at Launch Complex 39A

Jun. 01, 1998; In English; Videotape: 3 min. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-2000010562; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The crew (Commander Charles J. Precourt, Pilot Dominic L. Pudwill Gorie, Mission Specialists Wendy B. Lawrence, Franklin R. Chang-Diaz, Janet L. Kavandi and Valery Victorovich Ryumin) take time from their busy schedule to chat with friends and family, at a distance. They also pose for group and single pictures.

CASI Spacecrews; Space Transportation System Flights: Space Shuttle Missions; Conversation

2000012885 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-93 Columbia, Fit Check and Pre Pak in the O&C for Challenger

Jun. 22, 1999; In English; Videotape: 10 min. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-20000068276; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-93 mission was to deploy the Advanced X-ray Astrophysical Facility, which had been renamed the Chandra X-ray Observatory in honor of the late Indian-American Nobel Laureate Subrahmanyan Chandrasekhar. The mission was launched at 12:31 on July 23, 1999 onboard the space shuttle Columbia. The mission was led by Commander Eileen Collins. The crew was Pilot Jeff Ashby and Mission Specialists Cathy Coleman, Steve Hawley and Michel Tognini from the Centre National d'Etudes Spatiales (CNES). This videotape shows the astronauts getting into spacesuits, and inspecting the equipment.

CASI Astronauts; Space Suits; Spacecrews

2000012886 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-93 Crew Interview: Jeff Ashby

Jun. 23, 1999; In English; Videotape: 29 min. 42 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-1999208163; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage of a preflight interview with Pilot Jeffrey S. Ashby is presented. The interview addresses many different questions including why Ashby wanted to be an astronaut, how he feels about being the rookie on this launch, and what he expects to feel when he lifts off. Other interesting information that this one-on-one interview discusses is the deployment of the Chandra satellite, why people care about x ray energy, whether or not Chandra will complement the other X Ray Observatories currently in operation, and his responsibilities during the major events of this mission. The Southwest Research Ultraviolet Imaging System (SWUIS) on board Columbia, and the two observatories presently in orbit (Gamma Ray Observatory, and Hubble Space Telescope) are also discussed.

CASI Deployment: X Ray Astrophysics Facility: Spaceborne Astronomy; X Ray Astronomy: Gamma Ray Observatory; Hubble Space Telescope

2000012889 NASA Johnson Space Center, Houston, TX USA

STS-93 Crew Training

Jun. 28, 1999; In English; Videotape: 38 min. 6 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-1999208162; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage of the STS-93 crewmembers shows Commander Eileen M. Collins, Pilot Jeffrey S. Ashby, Mission Specialists Steven A. Hawley, Catherine G. Coleman, and Michel Tognini going through various training activities. These activities include Bail Out Training NBL, Emergency Egress Training, Earth
Astronaut Training; Training Simulators; Training Devices; Flight Simulators; Ejection Training; Bailout; T-38 Aircraft

20000012870 NASA Johnson Space Center, Houston, TX USA

STS-93 Crew Interview: Michel Tognini

Jun. 23, 1999; In English; Videotape: 44 min., 22 sec., playing time, in color, with sound

Report No.(s): NONP--NASA--VT--1999208161; No Copyright; Avail: CASI; B03; Videotape-Beta; V03; Videotape-VHS

This NASA Johnson Space Center (JSC) video release presents a one-on-one interview with Mission Specialist 3, Michel Tognini (Col., French Air Force and Centre National d'Etudes Spatiales (CNES) Astronaut). Subjects discussed include early influences that made Michel want to be a pilot and astronaut, his experience as a French military pilot and his flying history. Also discussed were French participation in building the International Space Station (ISS), the STS-93 primary mission objective, X-ray observation using the Advanced X-ray Astrophysics Facility (AXAF), and failure scenarios associated with AXAF deployment. The STS-93 mission objective was to deploy the Advanced X-ray Astrophysics Facility (AXAF), later renamed the Chandra X-Ray Observatory in honor of the late Indian-American Nobel Laureate Subrahmanyan Chandrasekhar.

CASI Space Shuttle Missions; Space Transportation System Flights; X Ray Astrophysics Facility; Deployment

20000012871 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-26 Preflight Press Briefing: 5 Man Crew, Part 6 of 9

Aug. 22, 1988; In English; Videotape: 1 hr., 2 min., 29 sec., playing time, in color, with sound

Report No.(s): NONP--NASA--VT--1999207912; No Copyright; Avail: CASI; B04; Videotape-Beta; V04; Videotape-VHS

This NASA KSC video release presents part of a press conference held prior to Discovery flight STS-26, the first shuttle mission flown following the 51-L Challenger accident. The video opens with a statement from Commander Frederick H. Hauck, and the introductions of crew members, Richard O. Covey, Pilot, and mission specialists, John M. Lounge, George D. Nelson, and David C. Hilmers. Some of the questions posed by scientific journalists addressed the following subjects: launch preparation in the month prior to flight, astronaut family anxieties in light of the Challenger accident, extent of safety measures made prior to flight, flight readiness firing, the crew escape system, civilians in space, conservative mission design, astronaut selection, mission turnaround and launch rate, and the ability to maintain a high level of scrutiny regarding safety on future missions.

CASI Space Transportation System Flights; Space Shuttle Missions; Spacecrafts; Safety Management; Mission Planning; Astronauts

20000012872 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-114/1-B Post Flight Press Conference

Feb. 21, 1984; In English; Videotape: 1 hr., 2 min., 24 sec., playing time, in color, with sound

Report No.(s): NONP--NASA--VT--1999207910; No Copyright; Avail: CASI; B04; Videotape-Beta; V04; Videotape-VHS

This NASA KSC video release begins with opening remarks from Mission Commander Vance D. Brand followed by the other 4 spacecraft panel members (Robert L. Gibson, Pilot, and Mission Specialists, Bruce McCandless II, Ronald E. McNair, Robert L. Stewart) commenting on a home-video that includes highlights of the entire flight from take-off to landing. This video includes actual footage of the deployment of the Westar-VI and PALAPA-B2 satellites as well as preparation for and the actual EVA's that featured a Spacepak that enabled the astronauts to move outside the orbiter unthethered. This video is followed by a slide presentation made-up of images taken from approximately 2000 still photographs taken during the mission. All of the slides are described by members of the space crew and include images of the Earth seen from Challenger. A question and answer period rounds out the video, which include problems encountered with the deployment of the satellites as well as the possibilities of sending civilians into space.

CASI Space Transportation System Flights; Space Shuttle Mission 41-B; Spacecrafts

20000012873 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-86: Flight Crew Departing from the Skid Strip at Cape Canaveral Air Station after Mission Completion

Oct. 07, 1997; In English; Videotape: 6 min. running time, in color, with sound

Report No.(s): NONP--NASA--VT--2000010559; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The crew (Commander James D. Wetherbee, Pilot Michael J. Bloomfield, Mission Specialists Vladimir G. Titov, Scott E. Parazynski, Jean-Loup M. Chretien, Wendy B. Lawrence, and David A. Wolf) are shown speaking to the press as they board a small plane for departure after their return from the space mission.

CASI Space Missions; Spacecrafts; Space Transportation System Flights

20000012874 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-93 Preflight Press Briefing: 5 Man Crew, Part 1 of 9

Jan. 19, 2000; In English; Videotape: 38 min. 54 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2000010586; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage of the STS-99 crew members shows Commander Kevin R. Kregel, Pilot Dominic L. Puttwill Gorie, Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri, and Gerhard P.J. Thiele going through various training exercises. These exercises include Post Landing Egress, SRIII (Shuttle Radar Topography Mission) Deploy and Mapping Activities, HDTV (High Definition Television) Camera Training, and Atecnt Simulation. Footage also includes the six-member crew participating in a photo session.

CASI Spacecrafts; Astronaut Training; Ejection Training; Bailout; Training Simulators

20000012875 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-93: Crew Watches the Installation of Chandra’s Solar Panel in the VPF

Mar. 24, 1999; In English; Videotape: 5 min. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2000010624; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The crew (Commander Eileen M. Collins, Pilot Jeffrey S. Ashby, Mission Specialists Steven A. Hawley, Catherine G. Coleman, and Michael Tognim) are dressed in cleanroom suits while overseeing the solar panel installation.

CASI Space Transportation System: Spacecrafts; Solar Reflectors

20000013156 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-93: Columbia Flight Crew Arrival on FSS 195’ Level, Walk Across OAA and Ingress into White Room

Jun. 24, 1999; In English; Videotape: 10 min. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2000008274; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-93 mission was to deploy the Advanced X-ray Astrophysical Facility, which had been renamed the Chandra X-ray Observatory in honor of the late Indian-American Nobel Laureate Subrahmanyan Chandrasekhar. The mission was launched at 12:31 on July 23, 1999 onboard the space shuttle Columbia. The mission was led by Commander Eileen Collins. The crew was Pilot Jeff Ashby and Mission Specialists Cady Coleman, Steven A. Hawley and Michel Tognini from the Centre National d'Etudes Spatiales (CNES). This video opens with a view of the shuttle on the launch pad. It then shows the flight crew arrival on the 195 foot level of the fixed service structure (FSS), walks across the orbiter access arm (OAA) into the white room, where the crew is assisted in putting on the final stages of their space suits, and then their crawl into the orbiter.

CASI Spacecrafts; Crew Procedures (Preflight); Astronauts; Preflight Operations
X Ray Astrophysics Facility; CASI

video assisting the NASA flight crew in SPACEHAB training. Members of the Japanese Space Agency (NASDA) are included in the various Shuttle science missions along with several of the joint Shuttle-Mir experiments, cargo and crew activities. SEACEHAB modules have supported module SPACEHAB stored at the KSC launch complex. The SPACEHAB Parazynski, and Stephen K. Robinson become families with the spacecraft Specialist, John H. Glenn, Payload Specialist, and mission specialists, Scott E. Lindsey, Pedro Duque (ESA), Cinaki Mukai (NASDA) Payload Specialist, and Michel 'Foguini, standing in front of an M-113 armored personnel carrier, and posing for photographs. Footage also includes the crew sitting up and walking out to the Astro-Van from the Operations and Checkout (O&C) Building.


case 013266 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-93: Crew Watch the Installation of Chandra's Solar Panel in the VPF

Mim. 24, 1999; In English; Videotape: 5 min. playing time, in color, with sound Report No.(s): NONP-NASA–VT-2000008270; No Copyright; AVail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the crewmembers, Commander Eileen M. Collins, Pilot Jeffrey S. Ashby, and Mission Specialists Steven A. Hawley, Catherine G. Coleman and Michel Tognini, watching the installation of Chandra's Solar Panel in the Vertical Processing Facility (VPF) at Kennedy Space Center. Crewmembers ask the engineers questions about different components in order to familiarize themselves.

CASI

Installing; X Ray Astrophysics Facility; Panels


case 013267 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-93: Chandra Flight Crew During Breakfast, Suiting and Departing the O&C Building

Jul. 21, 1999; In English; Videotape: 4 min. playing time, in color, with sound Report No.(s): NONP-NASA–VT-2000008269; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the crewmembers, Commander Eileen M. Collins, Pilot Jeffrey S. Ashby, and Mission Specialists Steven A. Hawley, Catherine G. Coleman and Michel Tognini, sitting around the traditional breakfast table with the traditional cake, talking and having their photographs taken. Footage also includes the crew suit up and walking out to the Astro-Van from the Operations and Checkout (O&C) Building.

CASI

X Ray Astrophysics Facility; Flight Crews; Crew Procedures (Preflight)


case 013268 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-93: Columbia, Flight Crew Training with M-113 for Chandra

Jun. 22, 1999; In English; Videotape: 11 min playing time, in color, with sound Report No.(s): NONP-NASA–VT-2000008265; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the crewmembers, Commander Eileen M. Collins, Pilot Jeffrey S. Ashby, and Mission Specialists Steven A. Hawley, Catherine G. Coleman, and Michel Tognini, standing in front of an M-113 armored personnel carrier vehicle, and posing for photographs. Footage also includes the crew inside the vehicle getting quick instructions on how to operate the vehicle. They are also seen taking turns in driving the vehicle, and taking photographs and recording each other as one member of the crew drives the vehicle.

CASI

Astronaut Training; Military Vehicles; X Ray Astrophysics Facility


case 013242 Biometics Corp., Cocoa Beach, FL USA

STS-95: Discovery Flight Crew at SPACEHAB

Jul. 17, 1998; In English; Videotape: 4 min. playing time, in color, with sound Report No.(s): NONP-NASA–VT–2000010630; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This NASA Kennedy Space Center (KSC) sponsored video release presents members of the STS-95 flight crew; Curtis L. Brown, Commander, Steven W. Lindsey, Pilot, Pedro Duque (ESA), Chakri Mukai (NASA) Payload Specialist, John H. Glenn, Payload Specialist, and mission specialists, Scott E. Parazynski, and Stephen K. Robinson becoming familiar with the spacecraft module SPACEHAB stored at the KSC launch complex. The SPACEHAB module being flown on STS-95 provides additional pressurized workspace for experiments, cargo and crew activities. SPACEHAB modules have supported various Shuttle science missions along with several of the joint Shuttle-Mir missions. Members of the Japanese Space Agency (NASA) are included in the video assisting the NASA flight crew in SPACEHAB training.

CASI

Spacecraft Modules; Spacecrafts; Space Flight Training


case 013358 NASA Johnson Space Center, Houston, TX USA

STS-93: Crew Interview – Cadyn Coleman

Jun. 23, 1999; In English; Videotape: 34 min. 39 sec. playing time, in color, with sound Report No.(s): NONP-NASA–VT–199908160; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Mission Specialist Cadyn Coleman is presented. The interview addresses many different questions including why Coleman wanted to be an astronaut, why she wanted to become a chemist, and how this historic flight (first female Commander of a mission) will influence little girls. Other interesting information that this one-on-one interview discusses is the deployment of the Chandra satellite, why people care about x-ray energy, whether or not Chandra will complement the other X Ray Observatories currently in operation, and her responsibilities during the major events of this mission. Coleman mentions the Inertial Upper Stage (IUS) rocket that will deploy Chandra, and the design configuration of Chandra that will allow for the transfer of information. The Southwest Research Ultraviolet Imaging System (SWUIS) Telescope on board Columbia, the Plant Growth Investigation in Microgravity (PGIM) experiment, and the two observatories presently in orbit (Gamma Ray Observatory, and Hubble Space Telescope) are also discussed.

CASI

Inertial Upper Stage; Upper Stage Rocket Engines; Deployment; X Ray Astrophysics Facility; X-Ray Astronomy; Downlinking; Information Transfer


case 013359 NASA Johnson Space Center, Houston, TX USA

STS-93: Crew Interview – Steve Hawley

Jun. 23, 1999; In English; Videotape: 1 hr. 4 min. 12 sec. playing time, in color, with sound Report No.(s): NONP-NASA–VT–199908159; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Live footage of a preflight interview with Mission Specialist Steven A. Hawley is presented. The interview addresses many different questions including why Hawley wanted to be an astronaut, his career path, and how this historic flight (first female Commander of a mission) draws attention from the media. Other interesting information that this one-on-one interview discusses is the deployment of the Chandra satellite, why people care about x-ray energy, whether or not Chandra will complement the other X Ray Observatories currently in operation, and his responsibilities during the major events of this mission. Hawley mentions the Inertial Upper Stage (IUS) rocket that will deployed the Chandra Telescope, and the design configuration of Chandra to gather and transfer information. The Southwest Research Ultraviolet Imaging System (SWUIS) Telescope on board Columbia, the Plant Growth Investigation in Microgravity (PGIM) and Gelation of Sols: Applied Microgravity Research (GOSAMR) experiments, and the two observatories presently in orbit (Gamma Ray Observatory, and Hubble Space Telescope) are also discussed.

CASI

Inertial Upper Stage; Upper Stage Rocket Engines; Deployment; X Ray Astrophysics Facility; X-Ray Astronomy; Information Transfer


case 013402 StellaCom, Inc., Rosslyn, VA USA

Delta FUSE, Fairing Installation at Launch Complex 17A

Jun. 19, 1999; In English; Videotape: 7 min. playing time, in color, with sound Report No.(s): NONP-NASA–VT–2000010629; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This NASA Kennedy Space Center (KSC) video release presents footage of the June 19, 1999 installation of the fairing around the FUSE Ultraviolet Spectroscopic Explorer (FUSE) spacecraft. The spacecraft was previously fitted in operation, and her responsibilities during the major events of this mission. Coleman mentions the Inertial Upper Stage (IUS) rocket that will deploy Chandra, and the design configuration of Chandra that will allow for the transfer of information. The Southwest Research Ultraviolet Imaging System (SWUIS) Telescope on board Columbia, the Plant Growth Investigation in Microgravity (PGIM) and Gelation of Sols: Applied Microgravity Research (GOSAMR) experiments, and the two observatories presently in orbit (Gamma Ray Observatory, and Hubble Space Telescope) are also discussed.

CASI

Inertial Upper Stage; Upper Stage Rocket Engines; Deployment; X Ray Astrophysics Facility; X-Ray Astronomy; Information Transfer


case 013403 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-88 Endeavor: Crew Arrival at the Shuttle Launch Facility

Nov. 04, 1998; In English; Videotape: 3 min. 24 sec. playing time, in color, with sound Report No.(s): NONP-NASA–VT–2000010628; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The STS-88 crew (Commander Robert D. Cabana, Pilot Frederick W.
Sturckow, Mission Specialists Nancy J. Currie, Jerry L. Ross James H. Newman, and Sergei K. Krikalev) are shown arriving at the facility in fighter jet aircraft. They assemble for group photos, then depart.

CASI

Launching Bases: Space Transportation System: Spacecrews

2000013404 NASA Kennedy Space Center, Cocoa Beach, FL USA
Fuse Lift to Payload Adapting Fixture (PAF) at Hangar A&E
May 04, 1999; In English; Videotape: 2 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000010622; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Live footage shows the placing of the Fuse Lift onto the Adapter Ring.
CASI
Payloads: Adapters: Fixtures

2000013406 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-93: Crew Visit and Departure
Feb. 09, 1999; In English; Videotape: 4 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000010558; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Live footage of the STS-93 crewmembers shows Commander Eileen M. Collins, Pilot Jeffrey A. Ashby, Mission Specialists Steven A. Hawley, Catherine G. Coleman, and Michel Tognini observing and speaking with the engineers about some installations. Footage also shows the crew boarding the T-38 jet and departing from the Shuttle Landing Facility (SLF).
CASI
Landing Sites: Spacecrews: T-38 Aircraft

2000013407 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-96: Expedition Crew #2 and 4 Work in Node #1 at the SSPF
May 03, 1998; In English; Videotape: 3 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000010554; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Live footage of the crewmembers of STS-96, Commander Kent V. Rominger, Pilot Rick D. Husband, Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev, shows them in the node of the vehicle at the Space Station Processing Facility (SSPF). Scenes include the engineer explaining and the crew asking questions as to what certain labels mean. Footage also includes the crew observing the nose of the vehicle.
CASI
Flight Crews: Crew Procedures (Preflight): Astronaut Training

2000013401 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-93: Columbia/Chandra Crew Press Conference
Jan. 21, 1999; In English; Videotape: 20 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000010827; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

This videotape consists of six different segments. The first segment is a close-up shot from Near-Earth Asteroid Rendezvous (NEAR) of the asteroid Eros. The second presents close-up shots of the Chandra telescope in the clean room. The third segment is an animated film showing the deployment of the Chandra telescope from the shuttle payload bay; and views of the elliptical orbit patterns that the telescope is planned to take. The fourth segment shows TRW Executive Vice President & General Manager, Systems & Information Technology Group, Donald Winter announcing the delivery of the Chandra Telescope to NASA. The fifth part was announced on the tape as an interview of Carolyn Griner, the Deputy Director of Marshall Space Flight Center, but this is not on the tape. The sixth segment shows views of the fourth USA Microgravity Payload (USMP-4) experiments. After shots of the STS-87 liftoff, the tape has views of the Isothermal Dendrite Growth Experiment (IDGE), views of the payload bay, and some further views of the astronauts working on one of the experiments in the payload.
CASI
Asteroid Missions: Space Shuttle Payloads: X Ray Astrophysics Facility: Microgravity

2000013409 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-93: CEWT with Crew in the OPF-3
Nov. 13, 1998; In English; Videotape: 10 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000010879; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-93 mission was to deploy the Advanced X-ray Astrophysical Facility, which had been renamed the Chandra X-ray Observatory in honor of the late Indian-American Nobel Laureate Subrahmanyan Chandrasekhar. The mission was launched at 12:31 on July 23, 1999 onboard the space shuttle Columbia. The mission was led by Commander Eileen Collins. The crew was Pilot Jeff Ashby and Mission Specialists Cady Coleman, Steven Hawley and Michel Tognini from the Centre National d'Etudes Spatiales (CNES). This videotape shows parts of a crew briefing and an inspection tour of the clean room. The astronauts are shown examining some of the equipment and tools that they will use during the mission. Views of the empty payload shuttle bay are presented.
CASI
Spacecrews: Clean Rooms: Crew Procedures (Preflight): Preflight Operations: Inspection

2000013501 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-95: Post Landing and Crew Walkaround of the Orbiter at the Shuttle Landing Facility
Nov. 07, 1998; In English; Videotape: 5 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000008277; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

After landing, the STS-95 crew (Commander Curtis L. Brown, Pilot Steven W. Lindsey, Mission Specialists Scott E. Parazynski, Stephen K. Robinson, Pedro Duque, Payload Specialists Chikiti Mukai and the legendary John H. Glenn) descend from the Space Shuttle. Commander Brown congratulates the crew and team photos are taken. The crew does a walkaround inspection of the spacecraft, then boards the bus for departure from the facility.
CASI
Space Transportation System: Spacecrews: Inspection

2000013502 NASA Kennedy Space Center, Cocoa Beach, FL USA
NASA Administrator Dan Goldin Speaks to the Press at the Shuttle Landing Facility After the Landing of STS-95
Nov. 07, 1998; In English; Videotape: 5 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000008275; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The landing of STS-95 is shown and Dan Goldin answers questions from the press. The significance of John Glenn being aboard this flight was stressed along with the importance of information gathered to help in future construction of the Space Station.
CASI
Space Transportation System: Landing: Lectures

2000013706 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-96: Crew Training at SPACEHAB
Feb. 11, 1999; In English; Videotape: 7 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000010556; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the crewmembers of the STS-96 mission, Commander Kent V. Rominger, Pilot Rick D. Husband, Mission Specialists Julie Payette, Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, and Valery Ivanovich Tokarev, checking out equipment inside the SPACEHAB module. The crewmembers are also seen participating in a review as a part of the familiarization activities for their mission.
CASI
Spacecrews: Astronaut Training: Spacecraft Modules
Live footage shows the SPACEHAB Double MOD/ICC (International Cargo Carrier) going into the Payload Bay.

CASI

Spacecraft Modules; Space Station Payloads; Bays (Structural Units); Aircraft Compartments

20000013725 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-95: Discovery Flight Crew Arrives at the Shuttle Landing Facility for TCDT
Oct. 06, 1998; In English; Videotape: 4 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000008266; No Copyright; Avail: CASI;
B01, Videotape-Beta: V01, Videotape-VHS

Live footage shows the night landing of the STS-96 crewmembers, Commander Curtis L. Brown, Pilot Steven W. Lindsey, Mission Specialists Scott E. Parazynski, Stephen K. Robinson and Pedro Duque, and Payload Specialists Chiaki Mukai (NASA) and John H. Glenn. Footage also includes Mission Commander Curtis L. Brown greeting the media at the Shuttle Landing Facility after the crew's arrival aboard T-38 jets.

CASI
Night; Aircraft Landing; T-38 Aircraft; Flight Training

20000013938 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-93: Crew Arrival and PR Location
Feb. 08, 1999; In English; Videotape: 4 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000010555; No Copyright; Avail: CASI;
B01, Videotape-Beta: V01, Videotape-VHS

The primary objective of the STS-93 mission was to deploy the Advanced X-ray Astrophysical Facility, which had been renamed the Chandra X-ray Observatory in honor of the late Indian-American Nobel Laureate Subrahmanyan Chandrasekhar. The mission was launched at 12:31 on July 23, 1999 onboard the space shuttle Columbia. The mission was led by Commander Eileen Collins. The crew was Pilot Jeff Ashby and Mission Specialists Cady Coleman, Steve Hawley and Michel Tognini from the Centre National d'Études Spatiales (CNES). This videotape shows the astronauts arriving at Kennedy and an inspection in the clean room.

CASI
Astronauts; Spacecrews; Clean Rooms; Preflight Operations; Crew Procedures (Preflight)

20000014070 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-93: Columbia / Chandra Mission Overview (from JSC)
Jul. 07, 1999; In English; Videotape: 1 hr. 34 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000008133; No Copyright; Avail: CASI;
B04, Videotape-Beta: V04, Videotape-VHS

A press briefing held on July 7, 1999 reviews the progress of the Chandra X-ray Observatory project. The tape begins with an animated view of the launch of the Chandra X-ray Observatory from the shuttle, as it was planned. Next is a press briefing. Bryan Austin, the Lead Flight Director, discusses the five day mission and the reason for the shortened length, due to the added weight from the Chandra Observatory. He also reviews the other payloads, and activities that will take place during the mission. Kenneth Ledbetter, Science Director Mission Development, discusses the 4 great observatories and the role of each. They are the Hubble, which observed visible light; Compton Gamma Ray Observatory; the Chandra, and the Space Infrared Telescope Facility. A time line of the expected operational lifetime of each of the 4 great observatories is shown. Specific information about the Chandra Telescope is reviewed. The last press briefing presenter is Fred Wujtchik, who is the Chandra Program Manager. He reviews the Chandra's components, and acknowledges a few of the many companies that contributed to its building. He also reviews the orbital activation and checkout sequences. Question that follows, center around contingency plans if some part of the planned sequence is not successful. The costs are reviewed, and concerns about the Initial Upper Stage, the propulsion unit required to take the Chandra to its high orbit are addressed. The Chandra is planned to take an elliptical orbit, which is higher than the other space telescopes, thus far launched due to the requirement to avoid Earth generated X rays.

CASI
Launchings; Mission Planning; Spaceborne Telescope; X Ray Astrophysics Facility; Payload Integration; Prelaunch Summaries; Space Shuttle Payloads; X Ray Astronomy; Orbital Maneuvers; Orbit Insertion; Satellite Orbits; Orbital Mechanics; Payload Delivery (STS)

20000014123 StellaCom Inc., Roslyn, VA USA
STS-96: SPACEHAB Double MOD into PGHM at Launch Complex 39B
Apr. 27, 1999; In English; Videotape: 3 min., 10 sec., playing time in color, with sound
Report No.(s): NONP--NASA--VT--2000010636; No Copyright; Avail: CASI;
B01, Videotape-Beta: V01, Videotape-VHS

This NASA Kennedy Space Center (KSC) video release presents the SPACEHAB double module moving into the Payload Ground Handling Mechanism (PGHM) which is located in the Payload Change-out Room of Launch Complex 39B at the Kennedy Space Center. PGM is used to remove or insert the shuttle payload from the Orbiter.

CASI
Space Shuttle Payloads; Ground Handling; Payload Integration

20000014128 NASA Kennedy Space Center, Cocoa Beach, FL USA
Dateline Moon: 30 Years Later
Jul. 20, 1999; In English; Videotape: 44 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000008130; No Copyright; Avail: CASI;
B03, Videotape-Beta: V03, Videotape-VHS

This NASA Kennedy Space Center video release presents a revisitation of the Apollo 11 mission on the 50th anniversary of the July 20, 1969 event in which Neil Armstrong became the first human to set foot on the Moon. Tim Russert moderates the “Newseum” program in which, the crew of Apollo 11: Commander Neil A. Armstrong, Command Module pilot Michael Collins, Lunar Module pilot Edwin E. Aldrin, Jr. discuss the mission. School children present in the audience as well students linked via satellite from New York City pose questions to the astronauts regarding many facets of the mission including space suits used during the mission, international cooperation vs. competition regarding the International Space Station and spaceship in general, anxieties or fears of the astronauts prior to the mission, and the overall effect that Apollo 11 had on the world.

CASI
Apollo 11 Flight; Lunar Landing; Lunar Flight; Astronauts

20000014222 NASA Kennedy Space Center, Cocoa Beach, FL USA
President Clinton's Arrival at CCAS and Visit to KSC for Launch of STS-95
Oct. 29, 1998; In English; Videotape: 6 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000010634; No Copyright; Avail: CASI;
B01, Videotape-Beta: V01, Videotape-VHS

Live footage shows President Bill Clinton and First Lady Hillary Rodham Clinton arriving in Airforce 1 on the Skid Strip, viewing the launch, and tracking the plume of Space Shuttle Discovery, on mission STS-95. The viewing takes place on the roof of the Launch Control Center (LCC). Also present on the roof to watch this event are Astronaut Robert Cabana and Eileen Collins (both in flight suit), and the NASA Administrator Daniel Goldin. The President is shown giving a speech to the Launch Team and shaking hands with employees in the LCC.

CASI
Viewing; Spacecraft Launching

20000014223 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-96 Press Briefing and MODE-1 Egress Training for TCDT
Apr. 28, 1999; In English; Videotape: 8 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000010625; No Copyright; Avail: CASI;
B01, Videotape-Beta: V01, Videotape-VHS

Live footage shows the members of the STS-96 crew. Commander Kent V. Rominger, Pilot Rick D. Husband, and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Danil T. Barry, Julie Payette and Valery Ivanovich Tokarev participating in a Press Conference and Egress Training for a Terminal Countdown Demonstration Test. Scenes of Capt. Steve Kelly, Fire Services, explaining the
emergency egress procedure to the STS-96 crew is presented. Mission Specialist Tokarev is shown releasing a slide-wire basket. Mission Specialist Barry is also seen in the evacuation seat with the Training Officer Gino Tucker behind him. The TCDT activities include simulated countdown exercises and inspection of the mission payloads in the orbiter’s payload bay.

CASI
Astronaut Training: Egress; Conferences

2000014562 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-96 Discovery, Bench Review and SPACEHAB Familiarization at SPACEHAB
Apr. 02, 1999; In English; Videotape: 6 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000010623; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Live footage shows members of the STS-96 crew, Commander Kent V. Rominger, Pilot Rick D. Husband, and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette and Valery Ivanovich Tokarev participating in familiarization activities, and bench review at SPACEHAB. Commander Kent V. Rominger and Mission Specialists Julie Payette and Ellen Ochoa are seen checking out and reviewing equipment use with Chris Jakoika, Boeing SPACEHAB, inside the SPACEHAB module.

CASI
Reviewing; Training Evaluation; Astronaut Training; Spacecraft Modules

2000014368 NASA Kennedy Space Center, Cocoa Beach, FL USA
Apollo 12 Mission Summary and Splashdown
Jul. 09, 1999; In English; Videotape: 1 hr. 5 min. 18 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000068135; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS
This NASA Kennedy Space Center (KSC) video release presents footage of the November 14, 1969 Apollo-12 space mission begun from launch complex pad 39-A at Kennedy Space Center, Florida. Charles Conrad, Jr., Richard F. Gordon, Jr., and Alan L. Bean make up the three-man spacecrew. The video includes the astronaut’s pre-launch breakfast, President Nixon, his wife, and daughter arriving at Cape Kennedy in time to see the launch, as well as countdown and liftoff. After the launch, President Nixon gives a brief congratulatory speech to the members of launch control at KSC. The video also presents views of the astronauts and spacecraft in space as well as splashdown of the command module on November 24, 1969. The video ends with the recovery, by helicopter and additional personnel, of the spacecrew from the command module floating in the waters of the Atlantic.

CASI
Apollo 12 Flight: Lunar Flight

20000114438 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-93: Chandra Crew Arrival
Jul. 16, 1999; In English; Videotape: 15 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000081441; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
The primary objective of the STS-93 mission was to deploy the Advanced X-ray Astrophysical Facility, which had been renamed the Chandra X-ray Observatory in honor of the late Indian-American Nobel Laureate Subrahmanyan Chandrasekhar. The mission was launched at 12:31 on July 23, 1999 onboard the space shuttle Columbia. The mission was led by Commander Eileen Collins. The crew was Pilot Jeff Ashby and Mission Specialists Cathy Coleman, Steve Hawley and Michel Tognoni from the Centre National d’Études Spatiales (CNES). This videotape shows the astronauts arrival at Kennedy Space Center a week before the launch. Each of the astronauts gives brief remarks, beginning with Eileen Collins, the first woman to command a space mission.

CASI
Astronauts: Spacecress: Crew Procedures (Preflight)

2000015363 NASA Johnson Space Center, Houston, TX USA
STS 163: Post Flight Crew Presentation
Feb. 09, 2000; In English; Videotape: 15 min., 24 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000015184; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
The crew (Commander Curtis L. Brown, Pilot Scott J. Kelly, Mission Specialists Steven L. Smith, C. Michael Foale, John M. Grunsfield, Claude Nicollier, and Jean-Francois Clervoy) narrate a video presentation of the STS-163 mission highlights. The mission’s primary objective is servicing the Hubble Space Telescope.

CASI
Space Transportation System Flights: Space Missions: Spacecress

2000015365 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–37 Post-flight Crew Press Conference, Part 2
Apr. 19, 1991; In English; Videotape: 14 min., 10 sec., playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000013420; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This NASA Kennedy Space Center video release presents a continuation of the April 19, 1991 STS-37 post-flight crew press conference from Johnson Space Center (JSC). Part 2 of the conference continues the question and answer period of Part 1 with Steven R. Nagel, Commander, Kenneth D. Cameron, Pilot, Jerry L. Ross, Mission Specialist 1, Jay Apt, Mission Specialist 2, and Linda M. Godwin, Mission Specialist 3 fielding questions posed by scientific journalists from JSC and other NASA centers. Topics discussed include: the necessary Extravehicular Activity (EVA) to free the Gamma Ray Observatory high gain antenna, communication between Atlantis and space station MIR, HAM radio contacts with Earth, and EVA contingency planning. Part 1 of the press conference can be found in Report Number NONP–NASA–VT–2000013419. 2

CASI
Space Transportation System Flights: Space Shuttle Missions: Astronauts: Spacecress

2000015366 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–37 Post-flight Crew Press Conference, Part 1
Apr. 19, 1991; In English; Videotape: 1 hr., 2 min., 11 sec., playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000013419; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS
This NASA Kennedy Space Center video release presents the April 19, 1991 STS-37 post-flight crew press conference from Johnson Space Center (JSC). The video begins with Steven R. Nagel, Commander applauding the efforts of everyone involved in the very smooth shuttle mission and introducing the rest of the crew seated to his right: Kenneth D. Cameron (1), Pilot, Jerry L. Ross, Mission Specialist 1, Jay Apt, Mission Specialist 2, and Linda M. Godwin, Mission Specialist 3. A video presenting mission highlights and on-board activities including liftoff footage, and the deployment of the primary payload, Gamma Ray Observatory (GRO), is shown. The GRO high-gain antenna failed to deploy on command and had to be manually freed and deployed by astronauts Ross and Apt during an unscheduled contingency space walk, the first since April 1985. After the mission summary video is shown, a slide show that includes pictures of Earth from Atlantis, and views of the GRO is presented and is followed by a question and answer period with questions posed by scientific journalists from JSC and other NASA centers. Part 2 of the press conference can be found in Report Number NONP–NASA–VT–2000013420. 2

CASI
Space Transportation System Flights: Space Shuttle Missions: Astronauts

2000017963 NASA Johnson Space Center, Houston, TX USA
STS–99 Flight Day Highlights and Crew Activities Report
Feb. 12, 2000; In English; Videotape: 16 min. 52 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000015187; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
Live footage shows the Blue Team (second of the dual shift crew), Dominic L. Padwill Gerie, Janice E. Voss and Mamoru Mohri, beginning the first mapping swath covering a 140-mile-wide path. While Mohri conducts mapping opera-
Astronaut training, simulations, and flight operations were a central focus of the STS-95 mission, which was led by Commander Steven H. Lindsey. The mission was characterized by the deployment of the Gamma Ray Observatory, the launch of the Chandra X-ray Observatory, and the ground-breaking efforts of Commander Collins and Mission Specialist Coleman, among other highlights.

The STS-95 mission included a variety of in-flight crew procedures, and the crew members demonstrated proficiency in operating various space shuttle equipment. The crew also engaged in conferences, discussions, and press conferences, which included interviews and press briefings about their experiences.

The crew members worked in various locations, including the Press Room and the Launch Control Center, to address questions and provide updates to media outlets.

Throughout the mission, the crew engaged in a range of activities, from pre-flight preparations to post-flight debriefings, all of which were covered in detailed reports and videos.

The mission's primary objective was the deployment of the Advanced X-ray Astrophysical Facility, which was renamed the Chandra X-ray Observatory in honor of the late Indian-American Nobel Laureate Subrahmanyan Chandrasekhar. The mission was launched at 12:31 on July 23, 1999, onboard the space shuttle Atlantis.
20000020775 NASA Johnson Space Center, Houston, TX USA
STS-99: Flight Day 05 Highlights and Crew Activities Report
Feb. 25, 2000; In English; Videotape: 22 min. 44 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--2000022122; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

During day 5 Endeavour gathers data four times faster than its advanced data communications system can send it to Earth. Pilot Dom Gorie and Mission Specialists Jonce Voss and Mamoru Mohri transmit television coverage of Voss using an inflatable globe to explain the mapping of Earth land surfaces. Mohri is shown taking photos out the commander’s window, while Gorie is changing a tape on a payload high rate recorder. Mapping operations continued smoothly, with both radar and orbiter systems working flawlessly.
CASI
Space Transportation System: Data Transmission; Television Systems; Spacecrews

20000020774 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-96 Crew Training, Mission Animation, Crew Interviews, STARSHINE, Discovery Rollout and Repair of Heat Damage
May 21, 1999; In English; Videotape: 1 hr. 5 min playing time, in color, with sound
Report No.(s): NONP-NASA-VT--2000002128; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

Live footage shows the crewmembers of STS-96, Commander Kent V. Rominger, Pilot Rick D. Husband, Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette and Valery Ivanovich Tokarev during various training activities. Scenes include astranaut suit-up, EVA training in the Virtual Reality Lab, Orbiter space vision training, bailout training, and crew photo session. Footage also shows individual crew interviews, repair activities to the external fuel tank, and Discovery’s return to the launch pad. The engineers are seen sanding, bending, and painting the foam used in repairing the tank.

Astronaut Training: Training Simulators; Flight Simulation; Flight Training; Ejection Training; Bailout; Virtual Reality; Computerized Simulation; Extravehicular Activity; International Space Station

20000020779 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-37 Mission Overview: Lead Flight Director Briefing
Feb. 25, 1991; In English; Videotape: 1 hr. 2 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--2000013428; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

This NASA Kennedy Space Center (KSC) video release presents a Johnson Space Center (JSC) press conference featuring Chuck Shaw, Lead Flight Director discussing the STS-37 Atlantis shuttle mission. Topics presented include overall mission objectives, flight crew, flight directors, primary payload (Gamma Ray Observatory (GRO)), Extravehicular Activities (EVA) Development Flight Experiment (EFDE), secondary payloads, Development Test Objectives (DTO’s), Detailed Supplementary Objectives (DSO’s), and flight day activities. Certain flight day activities including the Gamma Ray Observatory deployment and EVA movements and translations are presented as computerized simulations. The video ends with a summary of the key points of STS-37 and a question and answer period with questions posed from Johnson as well as other NASA centers. Questions include topics involving EVA safety, emergency EVAs, and what determines the day of primary payload deployment.
CASI
Space Transportation System Flights; Gamma Ray Observatory; Extravehicular Activity

20000020788 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-96 TCDT Crew Arrival
Apr. 28, 1999; In English; Videotape: 9 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--2000010632; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the crewmembers of STS-96, Commander Kent V. Rominger, Pilot Rick D. Husband, Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette and Valery Ivanovich Tokarev, arriving at the Shuttle Landing Facility in T-38 aircraft for Terminal Countdown Demonstration Test (TCDT) activities. Rominger speaks briefly to introduce the other crewmembers and their designated responsibilities.
CASI
Crew Procedures (Preflight); Astronaut Training; T-38 Aircraft; Arrivals; Landing

20000020789 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta Fuselage 2nd Stage Erection at Launch Complex 17A
Jun. 07, 1999; In English; Videotape: 4 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--2000010633; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows workers removing the protective covering from the second stage fuse. Scenes shows the lifting to the fuse onto the launch complex.
CASI
Construction: Aircraft Production; Production Engineering

20000021110 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99 Crew Activities Report / Flight Day 11 Highlights
Feb. 21, 2000; In English; Videotape: 19 min. 6 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--2000022621; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth’s surface using the Shuttle Radar Topography Mission (STRM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth’s surface. The mission was launched at 12:51 on February 11, 2000 onboard the space shuttle Endeavour. The mission was led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri, the National Space Development Agency (Japanese Space Agency) and Gerard P. J. Thiele, from DARPA (German space Agency). The astronauts finished the mapping operations early on day 11, and then retracted the 200 foot long mast into its payload bay canister. The mast, the longest rigid structure ever deployed in space, supported the external antennas during the mapping operation. The videotape shows the mast folding into the canister. The final stowage was delayed when the three latches on the lid of the canister failed to engage as expected. After a few procedures were executed the mast canister was sealed, on the third attempt, as shown on the videotape. The video also contains several views from the STRM. They include a computerized animation of a flight from Pasadena to Palmade, a still view of Fiji, a view of the San Francisco Bay Area, and another of Pasadena.
CASI
Endeavour (Orbiter); Rigid Structures; Shuttle Imaging Radar; Earth Observations (From Space); Topography; Folding Structures

20000021173 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99 Crew Activities Report / Flight Day 06 Highlights
Feb. 16, 2000; In English; Videotape: 25 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--2000022120; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unvalued 3-D images of the Earth's Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour. The mission was led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pavulat Horie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri, the National Space Development Agency (Japan Space Agency) and Gerhard P. J. Thiele, from DARA (German Space Agency). This tape shows some of the activities on board the shuttle during day six of the mission, by the end of day six, the mission to map 32 million square miles of the Earth's surface was about 67.2 percent complete. On this video tape there is discussion about the attempts to conserve propellant, to allow for the completion of the planned mapping. There is discussion by Mamoru Mohri about the mission, and Gerhard Thiele answers questions from the German Press about the mission. New radar images from the SRTM of the Kamchatka Peninsula and northwestern Mongolia are shown. There are shots of Endeavour’s 200-foot mast, which required troubleshooting due to a bulky small thruster.

CASI Endeavour (Orbit): Radar Imagery: Shuttle Imaging Radar: Topography: Earth Observations (From Space): Spacecrews

20000021242 NASA Johnson Space Center, Houston, TX USA STS-99 Crew Activities Report / Flight Day 07 Highlights Feb. 17, 2000; In English; Videotape: 23 min. 10 sec. playing time, in color, with sound Report No.(s): NONP-NASA–VT–2000021242; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows the Blue Team of STS-99, Pilot Dominic L. Pavulat Horie, and Mission Specialists Mamoru Mohri and Janet E. Voss, participating in a discussion with the Launch Control Center (LCC). Gorie and Mohri are also seen speaking with the Prime Minister of Japan. The Blue Team also answers questions from students. Footage also includes various shots of the mass hanging from the shuttle, the star tracker, the X- and C-band panels on the shuttle, and the dumping of water from the shuttle. Still shots of the (Shuttle Radar Topography Mission) SRTM Coverage Map are also presented. Places shown include the San Andreas Fault, San Gabriel Mountains, Simi Valley, Las Angeles, New Zealand, New Mexico, and Hokkaido Japan.


20000021274 NASA Kennedy Space Center, Cocoa Beach, FL USA STS-88 Endeavour: TCDT–Press Q & A at KSCNF Auditorium Nov. 05, 1998; In English; Videotape: 45 min. 12 sec. playing time, in color, with sound Report No.(s): NONP-NASA–VT–2000008136; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage of the (Terminal Countdown Demonstration Test) TCDT shows the crew of STS-88, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Cur Ud, Jerry L. Ross, James R. Newman, and Sergey K. Krkalov, participating in a press conference. The moderator Bruce Buckingham is seen introducing Bob Cabana, who then introduces the rest of the crewmembers. Cabana explains the mission and addresses the flight day activities. He includes the building of the Node 1 station element to the Functional Energy Block (FGB) which will already be in orbit, and two space-walks to connect power and data transmission cables. The crewmembers took turn answering questions from both the audience and via radio communication with the Johnson Space Center.


20000021385 NASA Johnson Space Center, Houston, TX USA STS–99 Crew Activities Report / Flight Day 08 Highlights Feb. 18, 2000; In English; Videotape: 24 min. 23 sec. playing time, in color, with sound Report No.(s): NONP–NASA–VT–2000022260; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows the Red Team of STS-99, Commander Kevin R. Kregel and Mission Specialists Janet L. Kavandi and Gerhard P. J. Thiele, participating in interviews with the Launch Control Center (LCC). Kregel discusses the mapping system, and Thiele speaks about the antenna. The Red Team completes the flight cast maneuver for the day. Footage also shows the Red Team, Pilot Dominic L. Pavulat Horie and Mission Specialists Janet E. Voss and Mamoru Mohri, participating in discussion with the LCC. Voss explains how the equipment works, while Mohri and Gorie discuss the mass. Also seen is the entire crew gathered on the flight deck participating in an interview with the LCC.

CASI Spacecraft Maneuvers: Radar Antennas: Radar Maps: Relief Maps: Topography: Earth Surface

20000021367 NASA Kennedy Space Center, Cocoa Beach, FL USA STS–93/ Chandra Science Briefing Jul. 19, 1999; In English; Videotape: 36 min. 20 sec. playing time, in color, with sound Report No.(s): NONP–NASA–VT–2000006138; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video shows a press briefing, reviewing the type of information which scientist hope to get from the Chandra X-Ray Telescope. The telescope is scheduled to be launched during the STS-93 flight. The participants in the briefing are: Don Savage, of NASA Headquarters; Ed Weiler, Associate Administrator for Space Sciences; Alan Bunner, Chandra Project Scientist and Michael Turner, an astrophysicist at the University of Chicago. After the introduction by Mr. Savage, the broad scientific goals of the Chandra mission are reviewed by Dr. Weiler. This is followed by an acknowledgement of many of the people who participated in the development of the Chandra Telescope. This is followed by a discussion of the astrophysics and the information which the telescope should provide. Mrs. Chandrasekhar, the widow of Subrahmanyan Chandrasekhar, was in the audience. She was introduced and spoke briefly about the late Nobel Laureate astrophysicist.

CASI Astrophysics; X Ray Astrophysics Facility: Spaceborne Astronomy: X Ray Astronomy

20000023223 NASA Kennedy Space Center, Cocoa Beach, FL USA STS–37/Atlantis/GRO Apr. 11, 1991; In English; Videotape: 55 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–2000013422; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The primary objective of the STS-37 mission was to deploy the Gamma Ray Observatory. The mission was launched at 9:22:44 am on April 5, 1991, onboard the space shuttle Atlantis. The mission was led by Commander Steven Nagel. The crew was Pilot Kenneth Cameron and Mission Specialists Jerry Ross, Jay Apt, and Linda Godwin. This video tape shows the crew having breakfast on the launch day. It then shows the crew's final preparations and the entry into the shuttle. The countdown and launch is shown including the shuttle separation from the solid rocket boosters. The launch is reshown from different camera views. Some of the other camera views were in black and white. The deployment of the Gamma Ray Observatory is shown, including an unscheduled spacewalk to deploy the high gain antenna. The landing at Edwards Air Force Base is shown. The landing is also shown from several different camera views.

CASI Gamma Ray Observatory: Spacecrews: Launching: Extravehicular Activity: Horizontal Spacecraft Landing

20000024783 NASA Kennedy Space Center, Cocoa Beach, FL USA STS–99 Atlantis, Shuttle Radar Topography Mission (SRTM) in the MPPF with Technicians working Mar. 22, 1999; In English; Videotape: 1 min. playing time, in color, no sound except background noise Report No.(s): NONP–NASA–VT–2000027997; No Copyright; Avail: CASI;
Gerhard R J. Thiele from DARA (German Space Agency). This tape shows the National Space Development Agency (Japanese Space Agency), and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri and led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudwill and launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour. The mission was the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth’s Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour, and led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). This tape shows the arrival of the crew at Kennedy Space Center. After arrival, each of the crew makes a brief statement to the assembled press.

CASI
Spacecrews: Space Shuttle Payloads; Space Transportation System; Astronauts; Crew Procedures (Preflight)

STS-99 Crew departs SLC after TCDT
Jan. 17, 2000; In English; Videotape: 7 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–2000027984; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth’s surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth’s Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour, and led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). This tape shows the astronauts boarding jet planes at the Shuttle Landing Facility after the Terminal Countdown Demonstration Test.

CASI
Astronauts: Spacecrews; Jet Aircraft; Preflight Operations

STS-99 Rollover from OPF-2 to VAB
Dec. 02, 1999; In English; Videotape: 4 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–2000027983; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth’s surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth’s Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour, and led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). This tape shows the Endeavour Space Shuttle being rolled over from the Orbiter Processing Facility to the Vertical Assembly building.

CASI
Endeavour (Orbiter); Space Shuttles; Space Transportation System; Preflight Operations

STS-99 Rollout to SRTM 39A
Dec. 14, 1999; In English; Videotape: 5 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–2000027980; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth’s surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth’s Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour, and led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). This tape shows the Endeavour Space Shuttle being rolled over from the Orbiter Processing Facility to the Vertical Assembly building.

CASI
Endeavour (Orbiter); Launching; Space Transportation System

STS-99 SRTM Lift and Insert into Canister
Jul. 19, 1999; In English; Videotape: 4 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–2000027776; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth’s surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth’s Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour, and led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). This tape shows the Endeavour Space Shuttle being rolled over from the Orbiter Processing Facility to the Vertical Assembly building.
The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth's Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour, and led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). This videotape shows clean room technicians working on a part of the 200 foot long mast that will hold the SRTM in position during the mission. This videotape also shows the lowering of the SRTM into the canister.

CASI

Beams (Supports); Clean Rooms; Shuttle Imaging Radar

20000225249 NASA Kennedy Space Center, Cocoa Beach, FL USA STS-99 Crew Activities Report / Flight Day 10 Highlights
Feb. 20, 2000; In English; Videotape: 26 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000022259; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth's Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour, and led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). This videotape shows the activities of the tenth day of the mission. During this day the mapping of the Earth continued. Each of the astronauts gives a brief statement about the mission or some other point of interest. Some of the equipment and supplies on board the shuttle are shown, including the medical supplies. The videotape ends showing some of the images released during the day from the SRTM. These include views of Oahu, Hawaii; Miquelon Island and St. Pierre Island, Newfoundland; Kamchatka, and Baikal, Russia; Oberpfaffenhofen, Germany; Katmandu, Nepal; and Cotopaxi, Ecuador.

CASI

Astronauts: Shuttle Imaging Radar; Space Transportation System: Spacesuirs; Endeavour (Orbiters); Crew Procedures (Inflight)

2000025314 NASA Kennedy Space Center, Cocoa Beach, FL USA STS-99 Flight Day 10 Highlights and Crew Activities Report
Feb. 14, 2000; In English; Videotape: 26 min. 18 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000022213; No Copyright; Avail: CASI; B02, Videotape-Beta: V02, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth's Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour, and led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). On the fourth day of the mission the blue team's Dominic Gorie led off the day's tape with a brief memorial to Charles Schultz, as he spoke of some of the vessels that were named for characters in Peanuts, and called to mind the Silver Snoopy, one of the highest awards NASA bestows. Janice Voss answered a couple of questions sent over the internet about a problem with a small thruster on the end of the 200 foot long mast. Mamoru Mohri talks about the EarthCam. Gerhard Thiele and Janet Kavandi describe the process of achieving the digital map of the entire world. At the end of the videotape some of the recently released views from the SRTM are shown. These include shots of the South Island of New Zealand.

CASI

Endeavour (Orbiters); Shuttle Imaging Radar; Space Transportation System; Topography; Spacesuirs

2000025326 NASA Kennedy Space Center, Cocoa Beach, FL USA STS-99 Prelaunch Press Briefing
Jan. 30, 2000; In English; Videotape: 12 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000027998; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth's Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour, and led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). This videotape shows a press briefing about a mechanical problem that the shuttle was having. There was discussion about possibly scrubbing the launch due to the problem with the Enhanced Master Event Controller. A problem with a fuel pump part had also become evident and there was discussion about the impact that this could have on the flight.

CASI

Endeavour (Orbiters); Space Transportation System; Preflight Operations; Prelaunch Problems; Spacecraft Reliability
where they will practice emergency exit procedures as part of the Terminal Countdown Demonstration Test (TCDT), a dress rehearsal for launch.

CASI
Space Transportation System: Spacecrews; Preflight Operations; Crew Procedures (Preflight); Prelaunch Tests; Astronauts

20000025450 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99 Crew Activities Report / Flight Day 09 Highlights
Feb. 20, 2000; In English; Videotape: 28 min. 52 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000022263; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth's Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour, and led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). This tape shows the activities of the ninth day of the mission. The announcement of the decision to extend the SRTM for 9 hours is made to the crew. This means that almost all (i.e., 99.9%) of the target area of the Earth will be imaged, at least once. Some shots of the 200 foot long mast where the outboard antennas are located are shown. Mamoru Mohri is shown changing a data tape, while he explains the rationale for recording rather than transmitting the data. Gerhard Thiele speaks to the German press. At the end of this tape are images generated from the SRTM. These are views of Oahu, Molokai, Lanai and west Maui, Hawaii; Dallas, Texas; Sathlah, Oman; and Tasmania, Australia. Animations showing the topography around Hokkaido, Japan and Brazil are also shown.

CASI
High Resolution; Shuttle Imaging Radar; Space Transportation System; Spacecrews; Topography

20000025466 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99 Crew Arrives for Second Launch Attempt, SRTM Mission, Endeavour
Feb. 07, 2000; In English; Videotape: 5 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000027995; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth's Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour, and led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). This tape shows the procedures (Preflight); Ingress (Spacecraft Passageway); Spacecrews; Crew Procedures (Preflight)

20000025467 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99 Commander and Pilot for the SRTM Mission, Practice Flight in the Shuttle Training Aircraft
Feb. 09, 2000; In English; Videotape: 5 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000027978; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth's Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour, and led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). This tape shows Commander Kregel and Pilot Gorie getting on board the Shuttle Training Aircraft and practicing approaches for the shuttle landing.

CASI
Spacecrews; Training Aircraft; Crew Procedures (Preflight); Horizontal Spacecraft Landing

20000025543 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99 SRTM Moved from the SSPF to the OPF #2
Jul. 21, 1999; In English; Videotape: 10 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000027994; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the move of the Shuttle Radar Topography Mission (SRTM) system from the Space Station Processing Facility (SSPF) to the Orbiter Processing Facility (OPF).

CASI
Shuttle Imaging Radar; Radar Imagery; Radar Maps; Relief Maps; Topography; Earth Surface

20000025544 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99 Lift and Mate to External Tank in VAB, Endeavour, SRTM Mission
Dec. 03, 1999; In English; Videotape: 9 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000027992; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the lift of the external tank to the Endeavour orbiter system of STS-99 in the Vehicle Assembly Building (VAB).

CASI
Space Transportation System; Space Transportation System Flights; Endeavour (Orbiter)

20000025577 NASA Kennedy Space Center, Cocoa Beach, FL USA
TCDT STS-99 Crew at FSS/White Room
Jan. 14, 2000; In English; Videotape: 11 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000027977; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS


CASI
Astronaut Training; Ingress (Spacecraft Passageway); Spacecrews; Crew Procedures (Preflight)

20000025657 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99 Countdown Status Briefing
Feb. 08, 2000; In English; Videotape: 23 min., 26 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000027977; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth's Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour, and led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). This tape shows the procedures (Preflight); Prelaunch Tests; Astronauts
conditions for the launch. Discussion after the statements concerned a possible problem with a cable, and the possibility of a further delay to the launch.

CASI
Countdown: Endeavour (Orbiter); Launching: Prelaunch Summaries; Prelaunch Problems; Prelaunch Tests

20000026827 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99 Countdown Status Briefing
Feb. 09, 2000; In English; Videotape: 19 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000027993; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Live footage shows the participants in the Press Conference disclosing the status of the STS-99 flight. The panelists consists of NASA's test Director Steve Altmus, the STS-99 Payload Manager Scott Higgenbotham, and the Shuttle Weather Officer Ed Prisecac. Joel Wells NASA's Public Affairs introduces each panelist as they discuss the problems with the left hand ignition cable, the potential change of the GPS receiver, payload status, and favorable weather conditions. The panel members also answered questions from members of the audience. Also shown are various shots of the launch pad.

CASI
Conferences: Countdown; Spacecraft Launching; Checkout; Spacecraft Maintenance; Ignition; Cables (Ropes); Global Positioning System; Receivers; Weather

200000275058 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99 Countdown Status Briefing
Feb. 08, 2000; In English; Videotape: 27 min., 27 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000025575; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth's Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour. This tape presents a pre-launch briefing for the press held on Jan. 28, 2000. Statements were given by Doug Lyons, Shuttle Test Director; Scott Higgenbotham, STS-99 Payload Director and Ed Prisecac, Shuttle Weather Officer. Doug Lyons reported on the checkout of the equipment. Scott Higgenbotham reviewed the steps required to assemble and test the SRTM instrumentation and equipment. Ed Prisecac gave the weather forecast for the expected launch day. The questions concerned a possible problem with a part onboard the shuttle and the likely impact this might have on the launch.

CASI
Countdown: Endeavour (Orbiter); Launching: Prelaunch Summaries; Prelaunch Tests; Prelaunch Problems

20000027567 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99 CEIT at the OFP High Bay--2, Endeavour, SRTM Mission
Jul. 28, 1999; In English; Videotape: 7 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000027990; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Live footage shows the rollout of STS-99 to the VAB (Vehicle Assembly Building), the rollback of Discovery to the OPF (Orbiter Processing Facility) High Bay 2, Discovery ET Disconnect Door Hinges (Cracks), Discovery ET Disconnect Door Hinges (Edited) and Discovery in the OPF Building), the rollback of Discovery to the OPF (Orbiter Processing Facility) High Bay 2, Discovery ET Disconnect Door Hinges (Cracks), Discovery ET Disconnect Door Hinges (Edited) and Discovery in the VAB.

CASI
Discovery (Orbiter); Space Transportation System; Space Transportation System Flights; Spacecraft Maintenance

20000027588 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99 Crew News Conference/ESA Call Flight Day 8
Feb. 18, 2000; In English; Videotape: 26 min. 51 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000025577; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Live footage shows the crewmembers of STS-99, Commander Kevin R. Kregel, Pilot Dominic L. Padwill Gorie, Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri, and Gerhard P.J. Thiele, participating in a press conference. The crew answer questions from U.S. and Japanese reporters at various NASA Centers, and Headquarters. Discussions include the nitrogen gas line problem, the deployment of the mass, and what would happen if the mass has to be jettisoned. Thiele, Kregel, Kavandi and Voss also answer questions from German Research Minister Edelgard Bulmann. The NASA Administrator Daniel Goldin along with Bulmann also congratulates the crew on the success of the mission and the potential benefits of the resulting high-resolution maps.

CASI
Conferences: Teleconferencing; Video Communication

20000026829 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99 Crew News Conference/ESA Call Flight Day 8
Feb. 18, 2000; In English; Videotape: 26 min. 51 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000025577; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Live footage shows the crewmembers of STS-99, Commander Kevin R. Kregel, Pilot Dominic L. Padwill Gorie, Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri, and Gerhard P.J. Thiele, participating in a press conference. The crew answer questions from U.S. and Japanese reporters at various NASA Centers, and Headquarters. Discussions include the nitrogen gas line problem, the deployment of the mass, and what would happen if the mass has to be jettisoned. Thiele, Kregel, Kavandi and Voss also answer questions from German Research Minister Edelgard Bulmann. The NASA Administrator Daniel Goldin along with Bulmann also congratulates the crew on the success of the mission and the potential benefits of the resulting high-resolution maps.

CASI
Conferences: Teleconferencing; Video Communication

20000026829 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99 Crew News Conference/ESA Call Flight Day 8
Feb. 18, 2000; In English; Videotape: 26 min. 51 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000025577; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Live footage shows the crewmembers of STS-99, Commander Kevin R. Kregel, Pilot Dominic L. Padwill Gorie, Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri, and Gerhard P.J. Thiele, participating in a press conference. The crew answer questions from U.S. and Japanese reporters at various NASA Centers, and Headquarters. Discussions include the nitrogen gas line problem, the deployment of the mass, and what would happen if the mass has to be jettisoned. Thiele, Kregel, Kavandi and Voss also answer questions from German Research Minister Edelgard Bulmann. The NASA Administrator Daniel Goldin along with Bulmann also congratulates the crew on the success of the mission and the potential benefits of the resulting high-resolution maps.

CASI
Conferences: Teleconferencing; Video Communication

20000026829 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99 Crew News Conference/ESA Call Flight Day 8
Feb. 18, 2000; In English; Videotape: 26 min. 51 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000025577; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Live footage shows the crewmembers of STS-99, Commander Kevin R. Kregel, Pilot Dominic L. Padwill Gorie, Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri, and Gerhard P.J. Thiele, participating in a press conference. The crew answer questions from U.S. and Japanese reporters at various NASA Centers, and Headquarters. Discussions include the nitrogen gas line problem, the deployment of the mass, and what would happen if the mass has to be jettisoned. Thiele, Kregel, Kavandi and Voss also answer questions from German Research Minister Edelgard Bulmann. The NASA Administrator Daniel Goldin along with Bulmann also congratulates the crew on the success of the mission and the potential benefits of the resulting high-resolution maps.

CASI
Conferences: Teleconferencing; Video Communication
Astronauts: Shuttle Imaging Radar; Space Transportation System; Space Transportation System Flights: Spacecross

20000027606 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99 Pre-Launch Press Conference
Jan. 29, 2000; In English; Videotape: 49 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–2000025581; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows the participants in the Pre-Launch Press Conference disclosing the status of the STS-99 flight. The panelists include Altemus, NASA Test Director; and Ed Priselac, Meteorologist. The briefing opens with an announcement by Mr Diller that there were no further developments with the engine problems, and requests that questions about that issue be held for another press briefing. Steve Altemus summarized the situation and the steps to be taken. Scott Higginbotham reported that there were no problems with the mission hardware. Ed Priselac reported favorable weather for tanking and launch, and at emergency landing sites.

CASI
Endeavour (Orbital) Launching; Shuttle Imaging Radar; Space Transportation System

20000027609 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99 / Endeavour SRTM Science Briefing and Applications from JSC
Jan. 21, 2000; In English; Videotape: 1 hr. 24 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000025574; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth’s surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth’s Surface. This videotape shows a science press briefing. The panel members are Michael Kobrick, the SRTM Project Scientist at JPL; Thomas Hennes, SRTM Program Manager at the National Imagery and Mapping Agency; Diane Evans, the Director of the Earth Sciences Program at NASA; and Marian Werner, XSAR Project Manager for the DLR, Deutche Zentrum fur Luft- und Raumfahrt, Germany’s National Aerospace Research Center. Michael Kobrick explained the mechanics of interferometric measurements of the Earth. He explained and demonstrated with a scale model the deployable mast’s use. He also explained the importance of the attitude and orbit determination algorithm. A brief animated video showing how four beams would give a 225 km wide swath of the Earth topography was viewed. Thomas Henning discussed some of the usage of the digital terrain elevation data for flood relief planning, cell phone station placement, military planning for command and control centers, and flight simulation. He explained that public access to the most precise data would be limited. Diane Evans described data usage in flood prediction, earthquake fault identification and archeology. Marian Werner described the German and Italian input to the project. The questions from the press concerned the time to process this data, and the reasons for the limited access to the more precise data.

CASI
Digital Data; Earth Sciences; High Resolution; Shuttle Imaging Radar; Space Transportation System; Terrain; Topography; Satellite Observation; Remote Sensing; Radar Geology; Radar Imagery; Space Shuttle Payloads

20000027607 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99 Post-Launch Press Conference
Feb. 11, 2000; In English; Videotape: 33 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000025578; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows the participants in the Post-Launch Press Conference disclosing the status of the STS-99 flight. The panelists consist of Bill Gerstenmaier, Acting Manager of Launch Integration and Dave King, Director of Shuttle Operations at KSC (Kennedy Space Center). Joel Wells, of NASA’s Public Affairs Office, introduces each panelist as they discuss the mapping to the Earth, and improve safety of the Shuttle. The panelists also answer questions from the audience about the countdown. Also shown are various night shots of the Shuttle on the launch pad.

CASI
Spacecraft Launching; Postlaunch Reports; Conferences; Shuttle Imaging Radar; Radar Imagery; Topography; Earth Surface; Flight Safety

20000027608 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99 Countdown Status Briefing
Jan. 29, 2000; In English; Videotape: 21 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000025576; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth’s surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth’s Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour. This tape shows a pre-launch briefing. The panel members are Scott Higginbotham, SRTM Payload Manager; Steve Altemus, NASA Test Director; and Ed Priselac, Meteorologist. The briefing opens with an announcement by Mr Diller that there were no further developments with the engine problems, and requests that questions about that issue be held for another press briefing. Steve Altemus summarized the situation and the steps to be taken. Scott Higginbotham reported that there were no problems with the mission hardware. Ed Priselac reported favorable weather for tanking and launch, and at emergency landing sites.

CASI
Prelaunch Summaries; Spacecraft Launching; Conferences; Hardware; Prelaunch Tests; Weather; Flight Plans

20000027610 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99 / Endeavour Mission Overview
Jan. 30, 2000; In English; Videotape: 1 hr. 7 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000025572; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth’s surface using the Shuttle Radar Topography Mission (SRTM). This radar system will produce unrivaled 3-D images of the Earth’s Surface. This videotape presents a mission overview press
briefing. The panel members are Dr. Ghassem Asrar, NASA Associate Administrator Earth Sciences; General James C. King, Director National Imagery and Mapping Agency (NIMA); Professor Achim Bachem, Member of the Executive Board, Deutschen Zentrum fur Luft- und Raumfahrt (DLR), the German National Aerospace Research Center; and Professor Sergio DeNittis, President of the Italian Space Agency. Dr. Asrar opened with a summary of the history of Earth Observations from space, relating the SRTM to this history. This mission, due to cost and complexity, required partnership with other agencies and nations, and the active participation of the astronauts. General King spoke to the expectations of NIMA, and the use of the Synthetic Aperture Radar to produce the high resolution topographic images. Dr. Achim Bachem spoke about the international cooperation that this mission required, and some of the commercial applications and companies that will use this data. Dr. DeNittis spoke of future plans to improve knowledge of the Earth using satellites. Questions from the press concerned use of the information for military actions, the reason for the restriction on access to the higher resolution data, the mechanism to acquire that data for scientific research, and the cost sharing from the mission's partners. There was also discussion about the mission's length.

CASI

International Cooperation: Shuttle Imaging Radar: Earth Observations (From Space): Topography

STS-99 Countdown Status Briefing
Jan. 30, 2000; In English; Videotape: 18 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP-NASA- VT-2000025579; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

After an introduction by Bruce Buckingham (NASA Public Affairs), participants Jeff Spalding (NASA Test Director, Scott Higgimbitham (STS-99 Payload Manager), and Ed Prescel (Shuttle Weather Officer) proceed with the countdown status briefing. They expressed that the opening countdown was proceeding well and servicing of the cryotanks was completed. The launch pad closeouts continued and the tanking process was in progress. There was a card failure in the data handling processor, so a backup system was used.

CASI

Space Transportation System: Space Shuttle Missions: Countdown: Launching

STS-103 Mission Highlights Resource Tape (1 of 2)
Mar. 01, 2000; In English; Videotape: 1 hr. 29 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT-2000036030; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The STS-103 flight crew, Commander Curtis L. Brown, Pilot Scott J. Kelly, Mission Specialists Steven L. Smith, C. Michael Foale, John M. Grunsfeld, Claude Nicollier, and Jean-Francois Clervoy, are seen performing pre-launch activities such as crew suit-up, and ride out to the launch pad for a night launch. Also, included are various panoramic views of the shuttle on the pad. The crew is suited in the White Room for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Once on-orbit the primary objective is to capture and service the Hubble Space Telescope. Included are various live shots of the payload bay showing the flight support system, the orbiter replacement unit carrier and the forward fixture that house the new Fine Guidance System (FGS). Smith and Grunsfeld replaces and changes the sensor units during the first space walk of this mission. The second space walk by Nicollier and Foale includes the changing of the computer and installation of the FGS. This is tape 1 of 2, tape 2 has a report number of NONP-NASA–VT-2000036031.

CASI


STS-71/Mir/Spacelab Landing at KSC
Jul. 07, 1995; In English; Videotape: 57 min. 27 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT-2000036562; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage of various day landing views of the Spacecraft Atlantis are shown from different camera sites. Also shown is the re-entry and landing of the spacecraft at Kennedy Space Center. Footage also includes touchdown, drag chute deployment, nose gear touchdown, and the ground recovery crew as they travel to the spacecraft. Atlantis crew; Commander Robert L. Gibson, Pilot Charles J. Precourt, Mission Specialists Ellen S. Baker, Bonnie J. Dunbar, Gregory J. Harbaugh, and the ground crew, from Mir-18 Norman E. Thagard, Vladimir Dezhurov, and Gennady Stekalov are also seen leaving the craft. Included is a phone conversation between President Clinton and the crew.

CASI

Spacecraft Landing: Touchdown: Reentry: Descent: Drag Chutes

STS-71/Mir/Spacelab Mission Update
Jul. 03, 1995; In English; Videotape: 19 min. 46 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT-2000036561; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows the crewmembers of STS-71 and Mir 18. Commander Robert L. Gibson, Pilot Charles J. Precourt, Mission Specialists Ellen S. Baker, Bonnie J. Dunbar, Gregory J. Harbaugh, Mir-19 crew upload Anatoly Solovyev and Nikolai Budarin, and Mir-18 crew download Norman E. Thagard, Vladimir Dezhurov, and Gennady Stekalov, on board the Russian Space Station Mir and the Atlantis spacecraft complex. The ten-member crew is shown participating in an interview. An animation of the undocking and fly-around of the Atlantis spacecraft is presented. Also shown is the commander of the STS-79 mission, discussing the undocking of the Atlantis spacecraft.

CASI

Mir Space Station: Space Transportation System: Space Transportation System Flights: Atlantis (Orbiter): Space Laboratories: Space Station Modules: Spacecraft Docking

STS-30 Post Flight Press Conference
May 18, 1989; In English; Videotape: 58 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT-2000036554; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows the crewmembers of STS-30, Commander David M. Walker, Pilot Ronald J. Grabe, Mission Specialists Norman E. Thagard, Mary L. Cleave and Mark C. Lee, participating in the Post Flight Press Conference. The astronauts took turns narrating the footage taken from the inside of the cockpit during lift-off. The crew answer questions from the audience as well as some of the NASA Centers. Included are various stills of Magellan, and some ground shots of the Florida Peninsula, Bahamas, North West Nicaragua, California, the Himalayan Mountains, the Canary Islands, Houston, Dust Storms across the Sahara, and some waves in the South China Seas.

CASI

Conferences: Postflight Analysis: Spacecraft Launching: Magellan Ultraviolet Astronomy Satellite: Spaceborne Astronomy: Liftoff (Launch)

STS-99 Crew News Conference
Jan. 21, 2000; In English; Videotape: 36 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT-2000025582; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The Shuttle Crew (Mission Commander Kevin R. Kregel, Pilot Dominic L. Padwill Gonic, Mission Specialists Janet L. Kavandi, Janice E. Voss, Manoru Mohri, and Gerhard P.J. Thiele) are shown in a live news conference presenting the mission objectives of STS-99. The main objective is to obtain the most
complete high-resolution digital topographic database of Earth. This project is named the Shuttle Radar Topography Mission (SRTM).

CASI

Spacecrafts; Conferences; Space Shuttle Missions

20000034669 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-37 Landing
Apr. 11, 1991; In English; Videotape: 45 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2000013429; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
Live footage shows the STS-37 Spacecraft as it re-enters the Earth’s atmosphere for a morning landing. The Atlantis spacecraft is seen making a 270-degree turn in its approach attempts to land on runway 33 at Edwards Air Force Base. Also shown are the touchdown of the main and nose gears, and Atlantis' rollout on the runway. The STS-37 crewmembers, Commander Steven R. Nagel, Pilot Kenneth D. Cameron, Mission Specialists Jerry L. Ross, Jay Apt, and Linda M. Godwin, are shown departing the vehicle, posing for photographs, and boarding the Astrovan. Included are also various landing from many different cameras.

CASI

Touchdown; Spacecraft Landing; Approach; Flight Paths; Landing Gear

20000039725 NASA Johnson Space Center, Houston, TX USA
STS–103 Mission Highlights Resource Tape (2 of 2)
Mar. 01, 2000; In English; Videotape: 58 min. 36 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000036031; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
The STS-103 flight crew, Commander Curtis L. Brown, Pilot Scott J. Kelly, Mission Specialists Steven L. Smith, C. Michael Foale, John M. Grunsfeld, Claude Nicollier, and Jean-Francois Clervoy, are seen passing over the Vezuvin and Florida Peninsulas. Smith and Grunsfeld replace and change the S-band single transmission cables during the third and final space walk of this mission. Crewmembers are also seen taking video documentation of the solar arrays. Footage presented includes the release of the Hubble Space Telescope, thruster firings and orbit adjust burn over the Central Indian Ocean and Australia. Also shown is the night landing of Discovery at Kennedy Space Center, crew depart from the vehicle, and short statements made by the crew. This is tape 2 of 2; tape 1 has a report number of NONP-NASA-VT-2000036030.

CASI

Space Transportation System; Space Transportation System Flights; Hubble Space Telescope; Maintenance; Checkout; Replacing; Equipment Specifications

20000031349 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-37/GRO Crew Arrival and TCDT Activities
Mar. 19, 1991; In English; Videotape: 13 min. 32 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000013431; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Live footage shows the night arrival of the T-38 training aircraft. The crewmembers of STS-37, Commander Steven R. Nagel, Pilot Kenneth D. Cameron, Mission Specialists Jerry L. Ross, Jay Apt, and Linda M. Godwin, are seen participating in the Terminal Countdown Demonstration Tests (TCDT). The crew made statements and answer questions from the press. The shuttle is also shown on the pad.

CASI

Astronaut Training; Equipment Specifications; T-38 Aircraft; Crew Procedures (Preflight)

20000031397 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–30 Launch Highlights and Continuous Record from T–9 Mins. 19890428; In English; Videotape: 36 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000036565; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
The primary objective of the STS-30 mission was to deploy the Magellan/ Venus radar mapper spacecraft and attached Inertial Upper Stage (IUS). The commander of the mission was David M. Walker. The crew was pilot, Ronald J. Grabe, and mission specialists, Normen E. Thagard, Mary L. Clavio, and Mark C. Lee. The mission was launched on May 4, 1989, after the April 28 launch attempt was scrubbed due to a problem with a liquid hydrogen recirculation pump on the number one main engine and a vapor leak in the four-inch liquid hydrogen recirculation line between the orbiter and the external tank. This videotape shows the crew breakfast on April 28, and the final preparations for launch. It also shows the crew boarding the shuttle. After the countdown is halted at T-31 seconds the crew leaves the orbiter.

CASI

 Countdown: Launching; Space Transportation System; Spacecrews; Prelaunch Problems; Space Vehicle Checkout Program

20000031615 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–31: APU Controller Removal
Apr. 11, 1990; In English; Videotape: 2 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000039787; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
The launch April 10 of the STS-31 was scrubbed at T-4 minutes due to a faulty valve in auxiliary power unit (APU) number one. The auxiliary power unit is a hydrogen-fueled, turbine-driven power unit that generates mechanical shaft power to drive a hydraulic pump that produces pressure for the orbiter’s hydraulic system. This video shows the removal of the STS-31’s auxiliary power unit (APU).

CASI

Auxiliary Power Sources; Controllers; Spacecraft Power Supplies; Spacecraft Maintenance; Discovery (Orbiter); Hydraulic Equipment

20000031616 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–31: Hubble Space Telescope Lift to Vertical
Oct. 09, 1989; In English; Videotape: 10 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000039777; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
The footage shows the lifting of the Hubble Space Telescope (HST) to a vertical position in the Kennedy Space Center. HST is a 2.4-meter reflecting telescope that will be deployed in low-Earth orbit (600 kilometers) by the crew of the space shuttle Discovery (STS-31) on 25 April 1990.

CASI

Hubble Space Telescope; Space Shuttle Payloads; Ground Handling; Discovery (Orbiter)

20000031891 NASA Johnson Space Center, Houston, TX USA
STS–101 Crew Training
Mar. 27, 2000; In English; Videotape: 32 min. 4 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000039941; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
Live footage shows the crewmembers of STS-101, Commander James D. Halsell Jr., Pilot Scott J. Horowitz, and Mission Specialists Susan J. Helms, Yuri Vladimirovich Usachev, James S. Voss, Mary Ellen Weber, and Jeffrey N.
Williams, participating in various crew training. Footage includes the crew Photo Session, crew Compartment Bailout Training, SAFER EVA Virtual Reality Training, ISS ingress Training, Shuttle Simulator Rendezvous Training, EVA Preparation, and ISS Stowage Training.

CASI Astronaut Training: Ejection Training; Ballistic: Virtual Reality: Spacecraft Cabins; Training Simulators

2000031892 NASA Johnson Space Center, Houston, TX USA
STS--101 Crew Interview / Scott Horowitz
Mar. 20, 2000; In English; Videotape: 38 min. 22 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000039860; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Pilot Scott J. Horowitz is seen. The interview addresses many different questions including why Horowitz became an astronaut, the events that led to his interest, any role models that he had, and his inspiration. Other interesting information that this one-on-one interview discusses is the reaction and reason for the splitting of the objectives for STS-101 with STS-106. Horowitz also mentions the scheduled spacewalk, docking with the International Space Station (ISS), the new glass cockpit of Atlantis, the repairs of equipment and change of the batteries. Horowitz also discusses his responsibilities during the spacewalk, and docking of the spacecraft. He stresses that he will have an added challenge during the spacewalk, his inability to see where he needs to place the Extravehicular Activities (EVA) crew.

CASI Crew Procedures (Preflight): Space Transportation System: Space Transportation System Flights

2000031946 NASA Johnson Space Center, Houston, TX USA
STS--101 Crew Interview / Mary Ellen Weber
Mar. 23, 2000; In English; Videotape: 28 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000039851; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Live footage of a preflight interview with Mission Specialist Mary Ellen Weber is seen. The interview addresses many different questions including why Weber became an astronaut, the events that led to her interest in chemistry and sky diving. Other interesting information that this one-on-one interview discusses is the reaction and reasons for the change of the mission objectives. Weber also mentions the scheduled spacewalk, docking with the International Space Station (ISS), the repairs of equipment and change of the batteries, and the installation of handrails. Weber also discusses her responsibilities during the spacewalk, and docking of the spacecraft.

CASI Crew Procedures (Preflight): Spacecrews

2000032035 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS--34 Galileo PCR at Pad & Galileo in Atlantis
Sep. 12, 1989; In English; Videotape: 7 min. 50 sec. playing time, in color, no sound except background noise
Report No.(s): NONP--NASA--VT--2000039781; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-34 mission was the deployment of the Galileo spacecraft and the attached Inertial Upper Stage. This videotape shows the Galileo in the Payload Clean Room in preparation for the six year trip to Jupiter. There are also views of the spacecraft in the Atlantis Payload Bay.

CASI Clean Rooms: Galileo Spacecraft: Space Transportation System

2000032136 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS--31 Mission Highlights Resource Tape, Part 1
Jun. 01, 1999; In English; Videotape: 55 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000039772; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

The primary objective of mission STS-31 was to deploy the Hubble Space Telescope. The commander of the mission was Loren J. Shriver. The crew was pilot Charles F. Bolden, and Mission Specialist, Steven A. Hawley, Brace McCandless II, and Kathryn D. Sullivan. The mission was launched on April 24, 1990. This videotape shows the astronauts at their pre-launch breakfast, their final preparations for launch and boarding the Shuttle Discovery. It shows the launch and the detachment of the rocket boosters. It shows the deployment of the Hubble Telescope and the unfurling of its Solar Arrays. Other payloads include the Protein Crystal Growth (PCG) experiment, and the Radiation Monitoring Equipment III, to measure gamma ray levels in the crew cabin. The videotape shows many shots of the Kennedy Mission Control room and the shuttle cockpit. The videotape finally shows the landing at Edwards Air Force Base, and the crew disembarking the shuttle.

CASI Hubble Space Telescope; Spacecrews; Space Transportation System: Payload Delivery (STS) Space Shuttle Payloads

2000032447 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS--31: Hubble IST Science
Apr. 08, 1990; In English; Videotape: 42 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000039780; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

The primary objective of STS-31 was to deploy the Hubble Space Telescope (HST). This videotape presents a press briefing about the scientific goals of the HST program. The panel members were Dr. Weiler, HST program scientist; Dr. Boggs from NASA Goddard, the Center managing the HST Program; and Dr. Bahrall, President Elect of the American Astronomical Union. Dr. Weiler opened the panel discussion by introducing other HST scientists who were in the audience. Dr. Bahrall explained the four major areas that astronomers hope to better understand using the HST data: (1) The size and age of the universe; (2) quasars as flashlights to understanding other features of the universe; (3) planets around other stars; and (4) weather on other planets of our Solar System. Other areas in which he hopes to have some understanding are galaxies under quasars, black holes, and missing matter. After his remarks, Dr. Bahrall presented a plaque to Charles Pellarin, who helped initiate the series of astrophysics telescopes. The HST is the first of these "Great Observatories." After the presentation, questions from the press were answered.

CASI Universe: Hubble Space Telescope: Spaceborne Astronomy: Astrophysics

2000032462 NASA Johnson Space Center, Houston, TX USA
STS--101: Crew Interview / Jeffrey N. Williams
Mar. 21, 2000; In English; Videotape: 36 min. 36 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000039942; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Mission Specialist Jeffrey N. Williams is seen. The interview addresses many different questions including why Williams became an astronaut, the events that led to his interest, any role models that Williams had, and his inspiration. Other interesting information that this one-on-one interview discusses is his reaction to and the reasons for the change of the mission objectives. Williams also mentions the scheduled spacewalk that he will perform, docking with the International Space Station (ISS), the repairs of equipment, and the change of the batteries.

CASI Crew Procedures (Preflight): Spacecrews; Astronauts; Space Transportation System: Space Transportation System Flights: Atlantis (Orbiter)

2000032463 NASA Johnson Space Center, Houston, TX USA
STS--101: Crew Interview / James S. Voss
Mar. 21, 2000; In English; Videotape: 31 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000039855; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Mission Specialist James S. Voss is seen. The interview addresses many different questions including why Voss became an astronaut, the individuals who influenced him, and the events that led to his interest. Other interesting information that this one-on-one interview discusses is his reaction to and the reasons for the change of the mission objectives. Voss also mentions the scheduled spacewalk that he will perform with Jeffrey N. Williams, docking with the International Space Station (ISS), the
repaired equipment, and the change of the batteries. Voss explains why himself, Susan J. Helms, and Yuri Vladimirovich Usachev are the perfect choice for this mission because of their certification from Russia to work on the Zarya Control Module.

CASI

Space Transportation System; Space Transportation System Flights; Atlantis (Orbiter); Crew Procedures (Preflight); Spacecrews; Talking

STS–101: Crew Interview / Susan J. Helms
Mar. 23, 2000; In English; Videotape: 34 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000039853; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Live footage of a preflight interview with Mission Specialist Susan J. Helms is seen. The interview addresses many different questions including why Helms became an astronaut, the individuals who influenced her, and the events that led to her interest. Other interesting information that this one-on-one interview discusses is his reaction to and the reasons for the change of the mission objectives. Susan also mentions the docking with the International Space Station (ISS), the repairs of equipment, the change of the batteries, and the transfer of equipment. Susan explains why she, James S. Voss, and Yuri Vladimirovich Usachev are the perfect choice for this mission because of their experience with the ISS modules. She also discusses what the ISS means to her as well as to the human efforts to explore space.

CASI

Space Transportation System; Space Transportation System Flights; Atlantis (Orbiter); Crew Procedures (Preflight); Spacecrews; Talking

STS–31: Hubble in VP Lift to Work Platform
Oct. 10, 1989; In English; Videotape: 13 min. 45 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2000039784; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This videotape shows the Hubble Space Telescope being moved in the clean room Vertical Processing Facility (VPF) to the work platform. The Hubble Space Telescope was deployed on April 25, 1990 from the space shuttle Discovery during STS–31.

CASI

Clean Rooms; Hubble Space Telescope; Controlled Atmospheres; Assembling

STS–35: Astro–1 BBXRT Problem Area
Aug. 31, 1990; In English; Videotape: 5 min. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2000043342; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of STS–35 was to conduct observations in ultraviolet and X-ray astronomy with the ASTRO–1 observatory. Astro–1 consisted of four telescopes: Hopkins Ultraviolet Telescope (HUT); Wisconsin Ultraviolet Photo-Polarimeter Experiment (WUPPE); Ultraviolet Imaging Telescope (UIT); and Broad Band X-ray Telescope (BBXRT). This videotape shows work on the BBXRT in the clean room. Two days before a scheduled September 1 launch data, the antennas box on the BBXRT malfunctioned and had to be changed and retested.

CASI

Astronomics; X-Ray Telescopes; Clean Rooms

STS–34: Galileo Processing
Aug. 10, 1989; In English; Videotape: 13 min. 45 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2000433499; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This videotape shows work being done on the Galileo spacecraft in the clean room, Vertical Processing Facility (VPF). It also shows the spacecraft being lifted to a work platform in the VPF. The deployment of Galileo on its trip to Jupiter was the primary objective of the STS–34 mission.

CASI

Clean Rooms; Galileo Spacecraft; Assembling

STS–35: Astronaut Departure
May 30, 1990; In English; Videotape: 10 min. 30 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2000043341; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS–35 mission was the round-the-clock observations of the celestial sphere in ultraviolet and X-ray astronomy with ASTRO–1. The mission was commanded by Vance D. Brand. The crew consisted of the pilot Guy S. Gardner, the mission Specialists Jeffery Hoffman, John Lounge, and Robert Parker, and the payload specialists Samuel Durnance, and Ronald Parse. This videotape shows the astronauts leaving the Kennedy Space Center after one of the attempts to launch the mission was scrubbed due to hydrogen leaks aboard the shuttle Columbia.

CASI

Astronauts; Spacecrews; Preflight Operations

STS–32: LDEF Move from SAEF II to Hanger "C" CCAFS
May 14, 1990; In English; Videotape: 9 min. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2000039779; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

One of the primary objectives of STS–32 was to retrieve the Long Duration Exposure Facility (LDEF) from space. The LDEF was designed to provide long-term data on the space environment and its effects on space systems and operations. This videotape shows the LDEF being moved from the Spacecraft Assembly and Encapsulation Facility to Hanger C in the Cape Canaveral Air Force Station after it had been retrieved from space. There are many views of the environment around the Kennedy Space Facility.

CASI

Long Duration Exposure Facility; Cape Kennedy Launch Complex

STS–35: Post Launch News Conference
Dec. 02, 1990; In English; Videotape: 24 min. 38 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000043333; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows the question and answer session of the Post Launch News Conference. The Panelists address questions from NASA Centers such as Goddard Space Flight Center and Kennedy Space Center (KSC), and from various audience participants. The status of the launch of STS–35 is discussed. Also discussed are the liquid oxygen malfunctions, helium leakage, and photographic optical tracking during the daytime.

CASI

Conferences; Postlaunch Reports; Space Transportation System; Space Transportation System Flights; Columbia (Orbiter)
Jeffrey N. Williams, his feeling once he steps into the International Space Station crew. Usachev also mentions the scheduled space-walk of James S. Voss and one-on-one interview discusses his reaction and integration into STS-101 mission, and the events that led to his interest. Other interesting information includes why Usachev became a cosmonaut, the individuals who influenced him, and the repairs of equipment, his handling of the hand held laser, and the change of the batteries.

CASI: Commander; Russian Space Program; Spacecraft; Talking; Crew Procedures (Preflight); Space Transportation System; Space Transportation System Flights; Atlantis (Orbiter)

NASA Johnson Space Center, Houston, TX USA

STS-29: Pre-Launch Preparations/Launch and Landing
Mar. 15, 1989; In English; Videotape: 57 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–2000036553; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Live footage shows the crewmembers of STS-29, Commander Michael L. Coats, Pilot John E. Blaha, and Mission Specialists James F. Bagian, James F. Buchli, and Robert C. Springer, participating in Terminal Countdown Demonstration Tests. The astronauts are seen on the launch pad, learning about the shuttle and its safety features. They are also shown putting on disposable masks and going into an emergency eye wash and emergency showers.

CASI: Crew Procedures (Preflight); Spacecrews; Astronauts; Space Transportation System; Space Transportation System Flights; Discovery (Orbiter)

NASA Johnson Space Center, Houston, TX USA

STS-29: TCDT
Feb. 08, 1989; In English; Videotape: 37 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000036551; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Live footage shows the crewmembers of STS-29, Commander Michael L. Coats, Pilot John E. Blaha, and Mission Specialists James F. Bagian, James F. Buchli, and Robert C. Springer, participating in Terminal Countdown Demonstration Tests. The astronauts are seen on the launch pad, learning about the shuttle and its safety features. They are also shown putting on disposable masks and going into an emergency eye wash and emergency showers.

CASI: Astronaut Training; Crew Procedures (Preflight); Preflight Operations
Live footage shows the Apollo 11 crew. Commander Neil A. Armstrong, Lunar Module Pilot Edwin E. Aldrin, Jr., and Command Module Pilot Michael Collins, preparing for their mission. The crewmen are seen getting their medical examinations, suiting up, and walking out to the Astrovan. Scenes include a brief view of the Launch Control Center (LCC), ignition, liftoff, and shell and engine skirt separation. The most important images are those of the moon landing and astronauts walk on the moon. Also shown are the parachute landing of the shuttle and the celebration of the world.

**CASI**

**Apollo 11 Flight; Lunar Exploration; Lunar Flight; Lunar Landing**

20000033784 NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS-33: At Pad B – IEA Removal; STS-32: In the VAB HIB 1 – IEA Removal**
Nov. 14, 1989; In English; Videotape: 4 min. 6 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-20000043788; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The STS-33 at Pad B Integrated Electronic Assembly (IEA) is shown. The STS-32 IEA removal in the Vehicle Assembly Building (VAB) High Bay 1 (H.B.1) is also presented. The change out of the bay that they found in boosters is the purpose for the video.

**CASI**

**Space Transportation System: Spacecraft Electronic Equipment**

20000033785 NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS-33: Removal of the IEA at Pad B and Inspection at the ARF**
Nov. 15, 1989; In English; Videotape: 7 min. 19 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-20000039789; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage of the removal of the Integrated Electronics Assembly (IEA) from the STS-33 is presented. The IEA is then inspected at United Space Boosters, Inc. (U.S.B.I.).

**CASI**

**Space Transportation System: Spacecraft Electronic Equipment**

20000033819 NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS-35: ASTRO-1 Assembly at O&C**
Apr. 03, 1989; In English; Videotape: 5 min. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-20000043445; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the assembly of the ASTRO-1 payload for STS-35. The assembly occurred in the Operations and Checkout Building.

**CASI**

**Astro Missions (STS): Spaceborne Astronomy; Spaceborne Telescopes; Spacelab Payloads: Assembling**

20000033833 NASA Dryden Flight Research Center, Edwards, CA USA

**X-43 Composite Tape, March 99 - March 00**
Dec. 16, 1999; In English; Videotape: 7 min. 26 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-20000045251; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows Project Manager Joel Sitz participating in an interview about the X-43 project. Sitz mentions several tests that will be performed on the X-43. He also mentions that the main objective of this project is to validate the design code for hypersonic air breathing vehicles. He discusses the projected data collection to prove that the predictions that were made in the laboratories and wind tunnels are correct. Scenes include the roll of the X-43 and an animation of the flight.

**CASI**

**X-43 Vehicle; Hypersonic Flight; Air Breathing Boosters: Air Breathing Engines: Airframes**

20000033861 NASA Dryden Flight Research Center, Edwards, CA USA

**X-33, X-34, X-37 Press Conference (Tape 2)**
Aug. 24, 1999; In English; Videotape: 34 min. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-20000043974; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows Project Managers Susan Turner, MSFC and David Manley, Boeing Co. participating in the X-37 Briefing. NASA's Public Affairs June Malone introduced these panelists who went on to discuss the vehicle and its secondary payload. Manley mentions the X-37 capabilities, main propulsion system, its lithium ion batteries, hot core surfaces, and its fly by wire system. Turner mentions the on-board operations, the deployment of the solar arrays, and the autonomous navigation and landing system. Also included is an animation of the X-37 vehicle during flight and the secondary payload release into orbit.

**CASI**

**X-37 Vehicle: Reusable Launch Vehicles: Recoverable Launch Vehicles: Conferences**

20000034043 NASA Kennedy Space Center, Lompoc, CA USA

**STS-34: Mission Overview Briefing**
Sep. 05, 1989; In English; Videotape: 43 min. 21 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-20000043982; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows Mill Helfin, the Lead Flight Director participating in the STS-34 Mission Briefing. He addresses the primary objective, and answered questions from the audience and other NASA Centers. Helfin also mentions the Shuttle Solar Backscatter Ultraviolet secondary payload, and several experiments. These experiments include Growth Hormone Crystal Distribution (Plants), Polymer Morphology, Sensor Technology Experiment, Mesoscale Lightning Experiment, Shuttle Student Involvement Program "Ice Crystals", and the Air Force Maui Optical Site. (Orbit 10)

**CASI**

**Space Transportation System: Space Transportation System Flights: Atlantis**

20000034044 NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS-31: Mission Highlights, Part 2**
Jun. 21, 1999; In English; Videotape: 27 min. 25 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-20000043976; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows the crewmembers of STS-31, Commander Loren J. Shriver, Pilot Charles F. Bolden, Jr., and Mission Specialists Steven A. Hawley, Bruce Mccandless II, and Kathryn D. Sullivan, participating in a press conference. The crew is seen answering questions about the Hubble Space Telescope from participating audience as well as from various NASA Centers.

**CASI**

**Space Transportation System; Space Transportation System Flights; Discovery (Orbit 1); Teleconferencing; Telecommunication: Conferences**

20000034072 NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS-35/ASTRO-1: Editors Work Tape**
May 25, 1990; In English; Videotape: 35 min. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-20000043337; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows preparation for the Astro-1 mission. Scenes include Payload Bay door closing, Reloover to the Vehicle Assembly Building (VAB) from OFP, the STS-35/Astro rollout to Pad-A, Broad Band X-Ray Telescope (CCXRT) Servicing, and crew arrival for the Terminal Countdown Demonstration Tests (TCDT). The crewmembers of STS-35, Commander Vance D. Brand, Pilot Guy S. Gardner, and Mission Specialists Jeffrey A. Hoffman, John M. Lounge, Robert A. Parker, Samuel T. Durrance, and Ronald A. Parise, are shown participating in various training activities. Activities include driving the M113
vehicle, participating in emergency training, and addressing the press upon arrival at Kennedy Space Center.

**CASI**

**Crew Procedures (Preflight): Astronaut Training; Astro Missions (STS); Spacelab Payloads**

2000034973 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-35/Army: Launch T-20 Through Orbit with Replays (Tap 2 of 2) Dec. 02, 1990; In English; Videotape: 35 min. 25 sec. playing time, in color, with some sound
Report No.(s): NONP–NASA–VT–2000043335; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Live footage shows the Launch Control Center (LCC) communicating with the STS-35 Space Shuttle. Scenes include various playback launch views of STS-35. Also shown are panoramic views of the Shuttle on the launch pad, main engine start, ignition, liftoff and booster separation and various Long Range Tracker views.

Author

**Launching Bases: Communicating; Spacelab Payloads; Astro Missions (STS); Spacelab Astronomy**

2000034985 NASA Johnson Space Center, Houston, TX USA
STS-35: Mission Highlights Resource Tape Feb. 27, 1995; In English; Videotape: 1 hr. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000043350; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Live footage shows the crewmembers of STS-35, Commander Vance D. Brand, Pilot Guy S. Gardner, Mission Specialists Jeffrey A. Hoffman, John M. Lounge, and Robert A. Parker, and Payload Specialists Samuel T. Durmance, and Ronald A. Parse, participating in the traditional breakfast prior to launch. The crew is seen suitting up, and walking out to the Astro-Van for their 1 a.m. launch. Also shown are some beautiful panoramic shots of the shuttle on the launch pad, main engine start, ignition, liftoff, and various shots of the Launch Control Center (LCC). The crew is also shown during flight performing some routine functions such as operating the trash compactor, eating, and getting into and out of their sleeping quarters. The crew is seen taking part in a conversation with the Secretary of State, and the Foreign Minister of the Soviet Union. Footage also includes the landing of Columbia, its rollout on the runway, and its crew as they depart from the vehicle.

**CASI**

**Space Transportation System: Space Transportation System Flights: Columbia (Orbiter); Astro Missions (STS); Spacelab Astronomy: Spacelab Payloads**

2000034909 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-34: Galileo TCDT, 15-15 Sep. 1989 Sep. 15, 1989; In English; Videotape: 38 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000039773; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Live footage shows the crewmembers of STS-34, Commander Donald E. Williams, Pilot Michael J. McCulley, and Mission Specialists Franklin R. Chang-Diaz, Shannon W. Lucid, and Ellen S. Baker, participating in the orbiter access arm, main engine start, ignition, and liftoff. The crew is also shown doing in-flight procedures such as experiments and equipment changes. The landing of Atlantis at Edwards Air Force Base is also seen.

**CASI**

**Astronaut Training; T-38 Aircraft; Space Transportation System: Space Transportation System Flights: Atlantis (Orbiter)**

2000034925 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-30: Mission Highlights Reel Mar. 22, 1990; In English; Videotape: 58 min. 42 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000036555; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Live footage shows the crewmember of STS-30, Commander David M. Walker, Pilot Ronald J. Grabe, and Mission Specialists Norman E. Thagard, Mary L. Cleave, and Mark C. Lee, participating in the traditional breakfast, suitting up and walking out to the Astro-van. Scenes include the retraction of the orbiter access arm, main engine start, ignition, and liftoff. The crew is also shown doing in-flight procedures such as experiments and equipment changes. The landing of Atlantis at Edwards Air Force Base is also seen.

**CASI**

**Crew Procedures (Inflight); Crew Procedures (Preflight); Spaceborne Experiments; Maintenance**

2000036516 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-34: Galileo Payload Canister Doors Closing in VPF Aug. 24, 1989; In English; Videotape: 9 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000043348; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Live footage shows the closing of the Payload Bay doors in the Vertical Processing Facility (VPF) at Kennedy Space Center.

**CASI**

**Payloads: Bays (Structural Units); Doors: Aircraft compartments; Closing**

2000037725 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-36: Breakfast / Suit-Up / C-7 Ex / Launch and Landing at Edwards Mar. 05, 1990; In English; Videotape: 58 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000043344; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Live footage shows the crew members of STS-36, Commander John O. Creighton, Pilot John H. Casper, and Mission Specialists Richard M. Mullane, David C. Hilmers, and Pierre J. Thoat, having the traditional breakfast, suitting up, and walking out to the Astro-Van. Scenes include panoramic views of the shuttle on the pad, main engine start, ignition, liftoff, and booster separation. The landing of Atlantis at Edwards Air Force Base is also seen. Several playback views from different cameras of both the launch and landing are also presented.

**CASI**

**Space Transportation System; Space Transportation System Flights: Atlantis (Orbiter)**

2000037771 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-36: Isolated Camera Breakfast Suit-up Walkout Feb. 28, 1990; In English; Videotape: 3 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000043343; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Live footage shows the crew members of STS-36, Commander John O. Creighton, Pilot John H. Casper, Mission Specialists Richard M. Mullane, David C. Hilmers, and Pierre J. Thoat, having a traditional breakfast. The crew is also shown suitting up, and walking out to the Astronaut-van from the Operations and Checkout Building.

**CASI**

**Spacelacom: Crew Procedures (Preflight); Preflight Operations**

2000037771 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-31: Hubble Space Telescope Post Launch Press Conference from Kennedy Space Center Apr. 24, 1990; In English; Videotape: 17 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000039778; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video presents a post-launch press conference on the STS-31 Hubble Space Telescope. Dick Young, Kennedy Space Center Public Affairs, introduces the panel. The panel consists of Robert Steck, Kennedy Space Center Launch Director, and George T. SASsen, Director Shuttle Engineer. The STS-31 launch was accomplished with very few problems. Terminal count was resumed, and stopped at 31 seconds because the software sensed that a valve was not positioned correctly. The valve was positioned correctly, the count was resumed, and the launch was carried out safely and successfully. George T. SASsen explains, in detail, how the problem was corrected.

**CASI**

**Hubble Space Telescope: Space Transportation System: Spacecraft Launching**
Report No.(s): NONP NASA VT

STS-35/ASTRO-1: Day-1 Down-links

Dec. 27, 1989; In English; Videotape: 1 hr. 2 min. 24 sec. playing time, in color, with sound
Report No.(s): NON-P-NASA-VT-2000036557; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Live footage shows Flight Director Milt Heflin, and the Magellan Project Manager, John Gerpheide, participating in a panel discussion. They discuss the objectives of the Magellan Project, the way in which Magellan will gather images, the Venus Orbiting Imaging Radar, and STS-30. Gerpheide presents an animation of Venus and discusses its variation to that of the Earth. Both Heflin and Gerpheide took turns answering the questions from the audience as well as those from NASA Headquarters, and Kennedy Space Center.

CASI
Magellan Project (NASA); Magellan Spacecraft (NASA); Imaging Radar; Radar Imaging; Space Exploration; Venus Orbiting Imaging Radar (Spacecraft); Venus Probes

STS-36: TGS Isolated Video Playbacks

May 04, 1989; In English; Videotape: 15 min. 20 sec. playing time, in color, with partial sound
Report No.(s): NON-P-NASA-VT-2000036556; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows isolated playbacks of the launch of STS-36 from various tracking cameras.

CASI
Playbacks; Tracking (Position); Spacecraft Tracking; Cameras

STS-40: Lightning Strikes at Pad 39A

Jun. 24, 1995; In English; Videotape: 1 min 30 sec. playing time, in color, without sound
Report No.(s): NON-P-NASA-VT-2000036558; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video presentation shows the STS-71 after lightning struck Pad 39A.

CASI
Lightning; Space Transportation System; Mir Space Station

STS-34: Atlantis Stacking Activities in the VAB

Aug. 22, 1989; In English; Videotape: 9 min. 45 sec. playing time, in color, with sound
Report No.(s): NON-P-NASA-VT-2000039786; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-35 mission was the round-the-clock observations of the celestial sphere in ultraviolet and X-ray astronomy with Astro-1. The mission was commanded by Vance D. Brand. The crew consisted of the pilot Guy S. Gardner, mission specialists Jeffery Hoffman, John Lounge, and Robert Parker, and payload specialists Samuel Durance, and Ronald Parise. This videotape opens with a view of the shuttle on the pad at night in preparation for a night launch. The astronauts are introduced as they finish their pre-launch breakfast. The next shots are of those of the astronauts getting into their spacesuits, and boarding the bus to be taken to the pad. The astronauts are next seen climbing into the shuttle. The launch of the shuttle is shown from 19 different camera angles.

CASI
Launchings, Spacecraft; Columbia (Orbiter)

STS-35/ASTRO-1: Ingress / Depart O & C / Ingress / Launch with Isolated Views

Dec. 02, 1990; In English; Videotape: 34 min. 50 sec. running time, in color, with sound
Report No.(s): NON-P-NASA-VT-2000043336; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The primary objective of the STS-35 mission was the round-the-clock observations of the celestial sphere in ultraviolet and X-ray astronomy with Astro-1. The mission was commanded by Vance D. Brand. The crew consisted of the pilot Guy S. Gardner, mission specialists Jeffery Hoffman, John Lounge, and Robert Parker, and payload specialists Samuel Durance, and Ronald Parise. This videotape opens with a view of the shuttle on the pad at night in preparation for a night launch. The astronauts are introduced as they finish their pre-launch breakfast. The next shots are of those of the astronauts getting into their spacesuits, and boarding the bus to be taken to the pad. The astronauts are next seen climbing into the shuttle. The launch of the shuttle is shown from 19 different camera angles.

CASI
Launchings, Spacecraft; Columbia (Orbiter)

STS-35/ASTRO-1: Departure

Dec. 02, 1990; In English; Videotape: 1 hr. 9 sec. playing time, in color, with sound
Report No.(s): NON-P-NASA-VT-2000043340; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows views of the ASTRO-1 observatory telescopes, moving into position. These views are shown from the right rear camera in the payload area. The telescopes are the Hopkins Ultraviolet Telescope (HUT), Wisconsin Ultraviolet Photo-Polarimeter Experiment (WUPPE), Ultraviolet Imaging Telescope (UIT), and the Broad Band X-Ray Telescope (BBXRT).

CASI
Astro Missions (STS); Spaceborne Astronomy; Spaceborne Telescopes; Downlinking

STS-37: Downlinks M. E. T.

Apr. 05, 1991; In English; Videotape: 34 min. 34 sec. playing time, in color, with sound
Report No.(s): NON-P-NASA-VT-2000013424; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows the crewmembers of STS-37, Commander Steven R. Nagel, Pilot Kenneth D. Cameron, and Mission Specialists Jerry L. Ross, Jay Apt, and Linda M. Godwin, participating in a question and answer segment with students at the Launch Control Center (LCC). The crew is also seen working in the zero-gravity environment and taking photographs of the space environment. Also seen are some beautiful shots of the Atlantis orbiter with the Earth as its background.

CASI
Downlinking; Communication Satellites; Ground Stations; Space Transportation System; Space Transportation System Flights; Atlantis (Orbiter)

STS-37: TSDT Pad B Atlantis GRO (3 of 3)

Aug. 24, 1989; In English; Videotape: 34 min. 50 sec. playing time, in color, with sound
Report No.(s): NON-P-NASA-VT-2000039775; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows panels answering questions from various NASA Centers. The panels take turns fielding questions from NASA Headquarters, Goddard Space Flight Center, and Kennedy Space Center.

CASI
Conferences; Postflight Analysis

STS-37: TCDT Pad B Atlantis GRO

Mar. 20, 1991; In English; Videotape: 40 min. 48 sec. playing time, in color, with sound
Report No.(s): NON-P-NASA-VT-2000013417; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows panels answering questions from various NASA Centers. The panels take turns fielding questions from NASA Headquarters, Goddard Space Flight Center, and Kennedy Space Center.

CASI
Conferences; Postflight Analysis

STS-37: TCDT Pad B Atlantis GRO (3 of 3)

Apr. 05, 1991; In English; Videotape: 34 min. 34 sec. playing time, in color, with sound
Report No.(s): NON-P-NASA-VT-2000013424; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows the crewmembers of STS-37, Commander Steven R. Nagel, Pilot Kenneth D. Cameron, and Mission Specialists Jerry L. Ross, Jay Apt, and Linda M. Godwin, participating in a question and answer segment with students at the Launch Control Center (LCC). The crew is also seen working in the zero-gravity environment and taking photographs of the space environment. Also seen are some beautiful shots of the Atlantis orbiter with the Earth as its background.

CASI
Downlinking; Communication Satellites; Ground Stations; Space Transportation System; Space Transportation System Flights; Atlantis (Orbiter)

STS-37: TCDT Pad B Atlantis GRO (2 of 2)

Mar. 20, 1991; In English; Videotape: 40 min. 48 sec. playing time, in color, with sound
Report No.(s): NON-P-NASA-VT-2000013418; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows panels answering questions from various NASA Centers. The panels take turns fielding questions from NASA Headquarters, Goddard Space Flight Center, and Kennedy Space Center.

CASI
Conferences; Postflight Analysis
CASI arrive on Mars on December 3, 1999 to record the geological composition of the hour's and once stability was achieved, will configure itself for mapping. On Cape Canaveral. Its 9-month journey to Mars will circle the planet every two soils. The weather and deploys a robotic rover flint analyzes samples of Mars' rocks and Pathfinder, launched on December 4, malfunctioned on August 22, 1993. Daniel Goldin, NASA Administrator says he is looking for faster, better, cheaper missions to Mars since

---

CASI

---

**CASI**

---

200000393110 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-37: TCDT Pad B Atlantis GRO (2 of 3)

Mar 20, 1991; In English; Videotape: 55 min. 49 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000013417; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows the remaining two crewmembers of STS-37, Mission Specialists Jerry L. Ross, and Jay Apt, entering the White Room, putting on their life preservation vest, and then entering the launch vehicle. Video playbacks, of the crew during the earlier stage of the Terminal Countdown and Demonstration Test, and the processing of the primary payload (Gamma Ray Observatory) are also shown. Scenes showing the arrival of Ross at Kennedy Space Center in the F-18 aircraft, the crew on the launch complex during familiarization activities, and training with the M-131 vehicle are presented. Also shown are some beautiful panoramic views of the shuttle on the pad. This is tape 2 of 3. Tape 1 has a report # of NONP-NASA-VT-2000013416, and tape 3 has a report # of NONP-NASA-VT-2000013418.

CASI Crew Procedures (Preflight); Astronaut Training; Training Simulators; Flight Simulation; Flight Tests; Prelaunch Tests; Preflight Operations; Test Firing

---

200000393111 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-37: TCDT Pad B Atlantis GRO (1 of 3)

Mar 20, 1991; In English; Videotape: 1 hr. 1 min. 32 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000013416; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Live footage shows the crewmembers of STS-37, Commander Steven R. Nagel, Pilot Kenneth D. Cameron, and Mission Specialists Jerry L. Ross, Jay Apt, and Linda M. Godwin, participating in Terminal Countdown Demonstration Test. The crew is seen in the breakfast room, in the Operations and Checkout Building suiting up and walking out to the Astronaut-Van. Scenes include the drive out to the launch pad, the boarding of the crew on the elevator, crew entrance in the White Room, and the ingress of the crew into the launch vehicle. Linda and Jerry are seen standing on the Gantry (bridge) looking out as they want to enter the White Room to finish suiting up to enter the vehicle. Also shown are some beautiful panoramic views of the shuttle on the pad. This is tape 1 of 3. Tape 2 has a report # of NONP-NASA-VT-2000013417, and tape 3 has a report # of NONP-NASA-VT-2000013418.

CASI Crew Procedures (Preflight); Astronaut Training; Training Simulators; Flight Simulation; Flight Tests; Prelaunch Tests; Preflight Operations; Test Firing

---

200000393757 NASA Kennedy Space Center, Cocoa Beach, FL USA
Mars Surveyor '98 Animation From JPL
Jun. 16, 1997; In English; Videotape: 19 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000010563; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video presents live animation of the Mars Surveyor Program. NASA is looking for faster, better, cheaper missions to Mars since the Mars Observer malfunctioned on August 22, 1993. Daniel Goldin, NASA Administrator says that NASA will perform flyby missions, orbiters, landers, and sample returns to look for evidence of life on Mars. The first mission to Mars, the Mars Global Surveyor, was launched on November 7, 1996, to provide geological, topographical, and atmospheric maps from its polar orbit about Mars. The second, the Mars Pathfinder, launched on December 4, 1996, photographs terrain, monitors weather and deploys a robotic rover that analyzes samples of Mars' rocks and soils. The third, the Mars Surveyor '98, includes two separate, launched spacecraft, the orbiter and the lander. The Orbiter was launched December 9 from Cape Canaveral. Its 9-month journey to Mars will circle the planet every two hours and once stability was achieved, will configure itself for mapping. On January 3, 1999, the lander was on an 11-month journey to Mars, scheduled to arrive on Mars on December 3, 1999 to record the geological composition of the landing site from its SSI (Surface Stereo Imager).

CASI

---

**FLP**

---

**FLP**

---

**FLP**

---

**FLP**

---

200000393758 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-31: Mission Highlights Resource Tape, Part 2
June 1990; In English; Videotape: 25 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000039768; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The primary objective of STS-31 was the deployment of the Hubble Space Telescope (HST). The flight was commanded by Loren J. Shriver. The pilot was Charles F. Bolden, Jr., and the mission specialists were Steven A. Hawley, Bruce McCandless II, and Kathryn D. Sullivan. This videotape shows an inflight press conference that occurred after the deployment of the HST. The press gathered at the Goddard Space Flight Center and the Kennedy Space Center, asked questions mainly about the deployment of the HST.

CASI Hubble Space Telescope: Space Shuttle Payloads

---

200000442955 NASA Johnson Space Center, Houston, TX USA
STS-101: Crew Interview – Jim Halsell
Mar. 24, 2000; In English; Videotape: 36 min. 9 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000039861; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The objective of STS-101 will be the servicing of the International Space Station, to ensure that it will be ready to receive a crew later in 2000. The crew, commanded by James D. Halsell, will include Pilot Scott J. Horowitz, Mission Specialists Mary Ellen Weber, Jeffrey N. Williams, James S. Voss, Susan J. Helms and Yuri V. Usachev. This videotape provides live coverage of the first press conference that occurred after the deployment of the HST. The press gathered at the Goddard Space Flight Center and the Kennedy Space Center, asked questions mainly about the deployment of the HST.

CASI International Space Station; Space Transportation System; Spacecraft Docking; Orbital Rendezvous: Spacecraft Maintenance; Replacing: Space Station Power Supplies

---

200000452202 NASA Johnson Space Center, Houston, TX USA
STS-101 Crew Activity Report Flight Day 02 Highlights
May 20, 2000; In English; Videotape: 13 min., 51 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000065770; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary mission objective for STS-101 was to deliver supplies to the International Space Station, perform a space walk, and rebolt the station from 230 statute miles to 250 statute miles. The commander of this mission was, James D. Halsell. The crew was Scott J. Horowitz, the pilot, and mission specialists Mary Ellen Weber, Jeffrey N. Williams, James S. Voss, Susan J. Helms, and Yuri Vladimirovich Usachev. This videotape provides live coverage of an interview with the mission commander Jim Halsell. He describes the influences on his life that led him to become a NASA astronaut, and the importance of the mission. He discusses the new glass cockpit design, he describes the flight plan and the docking maneuver. An important feature of this mission is the replacement of electric components, voltage and current regulators on the space station. Commander Halsell also describes the role of each crew member during the re-supply and refitting of the Space Station and reviews the priorities.

CASI International Space Station; Robot Arms: Space Shuttle Orbits; Space Transportation System

---

200000452455 NASA Johnson Space Center, Houston, TX USA
STS-101: CAR / Flight Day 03 Highlights
May 21, 2000; In English; Videotape: 12 min. 32 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000065772; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary mission objective for STS-101 was to deliver supplies to the International Space Station, perform a space walk, and rebolt the station from 230 statute miles to 250 statute miles. The commander of this mission was, James D. Halsell. The crew was Scott J. Horowitz, the pilot, and mission specialists
Mary Ellen Weber, Jeffrey N. Williams, James S. Voss, Susan J. Helms, and Yuri Vladimirivich Usachev. This videotape shows the activities of the third day of the mission. The video begins with the launch of STS-101, the crew arriving at the International Space Station, and performing a space walk.

The primary mission objective for STS-101 was to deliver supplies to the International Space Station, perform a space walk, and reboost the station from 230 statute miles to 250 statute miles. The commander of this mission was, James D. Halsell. The crew was Scott J. Horowitz, the pilot, and mission specialists Mary Ellen Weber, Jeffrey N. Williams, James S. Voss, Susan J. Helms, and Yuri Vladimirivich Usachev. This videotape shows the activities of the fifth day of the mission.

The day’s activities started with the opening of the hatch to the space station. Helms and Usachev then opened the hatch to the station’s Unity Connecting Module. The crew also placed docking throughout the Zarya Control Module to improve air circulation and prevent problems with stale air. Helms and Usachev are shown replacing two of six batteries to be replaced in this mission in the Zarya module. The crew began moving supplies into the space station. There are several shots of the interior of the space station.

Author
Launching: Space Transportation System Flights: Spacecraft Launching; Spacecrews: Space Shuttle Crews; Preflight Operations

Report No.(s): NONP NASA-VT–2000068735; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Magellan Press Conference (2 of 2) May 19, 2000; In English; Videotape: 17 min. 12 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000066688; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Magellan Ultraviolet Astronomy Satellite: Spaceborne Astronomy: Magellan Project (NASA) May 22, 2000; In English; Videotape: 20 min. 34 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000066874; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Magellan Ultraviolet Astronomy: Space Shuttle Missions: Space Shuttle Orbites: Electric Batteries: Scientists: International Space Station May 23, 2000; In English; Videotape: 15 min. 58 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000066743; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The primary mission objective for STS-101 was to deliver supplies to the International Space Station, perform a space walk, and reboost the station from 230 statute miles to 250 statute miles. The commander of this mission was, James D. Halsell. The crew was Scott J. Horowitz, the pilot, and mission specialists Mary Ellen Weber, Jeffrey N. Williams, James S. Voss, Susan J. Helms, and Yuri Vladimirivich Usachev. This videotape shows the activities of the fifth day of the mission. The day’s activities started with the opening of the hatch to the space station. Helms and Usachev then opened the hatch to the station’s Unity Connecting Module. The crew also placed docking throughout the Zarya Control Module to improve air circulation and prevent problems with stale air. Helms and Usachev are shown replacing two of six batteries to be replaced in this mission in the Zarya module. The crew began moving supplies into the space station. There are several shots of the interior of the space station.
a concern and one of the reasons for the mission. One of the new batteries was shown being installed in the Zarya Control Module.

CASI
International Space Station: Spacecruises; Supplying: Space Station Modules; Spacecraft Maintenance: Installing; Logistics; Space Parts: Handling Equipment

2000056609 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-101: Crew Activity Report/Flight Day 8 Highlights
May 26, 2000; In English; Videotape: 17 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000073122; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eighth day of the STS-101 Atlantis mission, the flight crew, Commander James D. Halsell Jr., Pilot Scott J. Horowitz, and Mission Specialists Mary Ellen Weber, Jeffrey N. Williams, James S. Voss, Susan J. Helms, and Yuri Vladimirovich Usachev are seen closing up the hatches to the ISS. Halsell, Horowitz, and Weber are seen participating in a question and answer session with Launch Control Center (LCC). Weber explains the transfer of goods and supplies and Horowitz discusses the re-boost maneuver. Also shown is the crew gathered together on the mid-deck fielding questions from LCC. Scene shows Voss checking behind panels for evidence of smoke or odor.

CASI
Space Transportation System; Space Transportation System Flights; International Space Station; Spacecraft Docking; Hatches: Closing

2000056993 NASA Johnson Space Center, Houston, TX USA
STS-101: Crew Activity Report/Flight Day 9 Highlights
May 27, 2000; In English; Videotape: 14 min. 46 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000073124; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this ninth day of the STS-101 Atlantis mission, the flight crew, Commander James D. Halsell Jr., Pilot Scott J. Horowitz, and Mission Specialists Mary Ellen Weber, Jeffrey N. Williams, James S. Voss, Susan J. Helms, and Yuri Vladimirovich Usachev prepares to undock Atlantis from the International Space Station (ISS). Atlantis is seen as it undocks form the ISS over Kazakhstan. Halsell, Usachev, and Weber are seen participating in a communication link with Russia.

CASI
Space Transportation System; Space Transportation System Flights

2000056994 NASA Johnson Space Center, Houston, TX USA
STS-101: Crew Activity Report/Flight Day 10 Highlights
May 28, 2000; In English; Videotape: 18 min. 42 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000073123; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video presents a report from the Space Shuttle Atlantis Crew. The crew consists of James D. Halsell Jr., Mission Commander; Scott Horowitz, Pilot; and Mission Specialists Mary Ellen Weber, Jeffrey N. Williams, James S. Voss, Susan J. Helms, and Yuri Vladimirovich Usachev. The crew made preparations for the Space Shuttle Atlantis mission to Earth. Weber gave a general overview of refurbishments done to the International Space Station such as maintenance of the electrical system, one to three thousands of pounds of new hardware supplied to ISS, and a supply of personal hygiene products. Also live animation of the Spacehab Module is given where supplies bound for the Space Station are stored.

CASI
International Space Station; Spacecruises; Space Transportation System; Spacecraft Maintenance

2000057318 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-101 / Atlantis EVA briefing
Mar. 27, 2000; In English; Videotape: 26 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000067143; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The primary mission objective for STS-101 was to deliver supplies to the International Space Station, perform a space walk, and reboost the station from 230 statute miles to 250 statute miles. The commander of this mission was James D. Halsell. The crew was Scott J. Horowitz, the pilot, and mission specialists Mary Ellen Weber, Jeffrey N. Williams, James S. Voss, Susan J. Helms, and Yuri Vladimirovich Usachev. This videotape is a press briefing by Scott Horowitz, STS-101 Lead EVA Officer, about the planned Extravehicular Activity planned for the fourth day of the mission. The work that this EVA is to accomplish is the repair of a crane and the installation of a beam on Unity. The astronauts will also replace antennae and install hand rails and cables. The astronauts who are scheduled to perform the EVA activities are Williams and Voss. They will be assisted by Weber, who will operate the Shuttle’s robotic arm, and Scott Horowitz. The spacewalk is scheduled to take 6 hours. The videotape includes some views of the astronauts training in an underwater environment. Mr. Bleisath answered questions from the press after he completed the briefing.

CASI
Extravehicular Activity; International Space Station; Space Transportation System; Spacecruises; Space Maintenance

2000057548 NASA Kennedy Space Center, Cocoa Beach, FL USA
DELTA/WIND Pre-Launch Press Conference
Oct. 31, 1994; In English; Videotape: 41 min. 6 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000078315; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows the participants in the Pre Launch Press Conference discussing the status of the Delta/Wind flight. The panelists consists of Jim Womack NASA Launch Manager from KSC (Kennedy Space Center), Dan Miller NASA Delta Launch Vehicle Manager from GSFC (Goddard Space Flight Center), Bill Huddleston NASA Wind Program Manager from NASA HQ (Headquarter), and Joel Tumbiolo Launch Weather Officer from USAF (USA Air Force). Panelists’ discuss launch vehicle specification - the first Russian instrument in an American spacecraft, the total cost of the mission, and the weather condition. The panelists also answer questions from the audience and NASA HQ about the Delta/Wind launch.

CASI
Conferences: Delta Launch Vehicle; Prelaunch Summaries; Reports; Mission Planning

2000057549 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta/Wind Launch
November 1, 1994; In English; Videotape: 1 hr. 2 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000078316; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This NASA Kennedy Space Center (KSC) video release presents live footage of the successful Delta II/WIND spacecraft launch from Pad 17B at the Eastern Test Range, Cape Canaveral Air Station, FL. Footage of engineering activity from launch control as well as narrative information concerning spacecraft configuration, equipment, instruments and objectives is also presented. WIND is the first of two NASA spacecraft in the Global Geospace Science initiative and part of the ISTP Project. WIND is positioned in a sunward, multiple double-lunar swingby orbit with a maximum apogee of 250Re during the first two years of operation. This will be followed by a halo orbit at the Earth-Sun L1 point. The main scientific objectives of the WIND mission are to provide complete plasma, energetic particle, and magnetic field input for magnetospheric and solar-wind studies. The WIND spacecraft includes KONUS, the first Russian instrument to fly on an American satellite since civil space cooperation between the U.S. and Russia was resumed in 1987.

CASI
Delta Launch Vehicle: Launch Vehicle Configurations; Payloads; Liftoff (Launching); Rocket Launching

2000057550 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta/Wind Launch with Isolated Cameras from Continuous Recording
Nov. 01, 1994; In English; Videotape: 38 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000078317; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The Wind spacecraft represents one of NASA’s contributions to the International Solar Terrestrial Program (ISTP), an international effort to quantify the

119
effects of solar energy on the Earth’s magnetic field. Wind will provide continuous measurement of the solar wind, particularly charged particles and magnetic field data. The specific objectives of Wind are to: (1) provide complete plasma, energetic particle, and magnetic field input for magnetospheric and ionospheric studies; (2) determine the magnetospheric output to interplanetary space in the upstream region; (3) investigate basic plasma processes occurring in the near-Earth solar wind; and (4) provide baseline ecliptic plane observations to be used in heliospheric studies. This videotape shows the pre-launch countdown of the Wind spacecraft aboard a Delta 7925 on November 1, 1994. After the countdown and launch, the tape shows the activity in the Telemetry Room at Kennedy Space Center, where people are following the progress of the spacecraft. Following the activity in the telemetry room, there are different replays of the launch from different locations. After showing the replays of the launch, the video returns to the Telemetry Room when an important stage in the launch and flight is achieved.

CASI
Solar Wind: Lift-off (Launching); Countdown

20000057515 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–101: Atlantis Orbiter Upgrade Briefing
Mar. 27, 2000; In English; Videotape: 54 min. 45 sec. playing time, in color, with sound
Report No.(s): NON–NASA–VT–2000076142; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Live footage shows panelists, Manager of the Space Shuttle Program Development, Elric McHenry, and the Associate Program Manager for Space Shuttle Upgrades, Andy Allen, giving an overview of the new upgrades on the STS-101 Orbiter. McHenry and Allen speak about the changes and modernization of Atlantis. The panelists’ mentions all the new capabilities of the new glass cockpit. They emphasize the redesign of the engine, specifically, the ability to shut down automatically. They also discuss future implementation of a smart cockpit.

CASI
Revisions: Upgrading; Improvement; Cockpits; Pilot Support Systems; Engine Design

20000060867 NASA Kennedy Space Center, Cocoa Beach, FL USA
RADARSAT Launch
Nov. 01, 1995; In English; Videotape: 2 hrs. 30 min. playing time, in color, with sound
Report No.(s): NON–NASA–VT–2000078318; No Copyright; Avail: CASI; B05, Videotape-Beta; V05, Videotape-VHS
This segment of the launch begins with pre-recorded footage of X-band antenna testing and transporting of the spacecraft to the launch pad. There is also pre-recorded footage of Delta II load testing and installation on the launcher. The footage returns to “live” coverage and resumes the countdown to launch.

CASI
Spacecraft Launching; Load Tests; Microwave Antennas; Radarsat; Launchers

20000063811 NASA Johnson Space Center, Houston, TX USA
STS 101: Post Flight Presentation
Jun. 21, 2000; In English; Videotape: 15 min. 7 sec. playing time, in color, with sound
Report No.(s): NON–NASA–VT–2000087291; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The crew (Mission Commander James D. Halsell, Jr., Pilot Scott J. Horowitz, and Mission Specialists Mary Ellen Weber, Jeffrey N. Williams, James S. Yoss, Susan J. Helms, and Yuri Vladimirovich Usachev) describe the highlights of the STS 101 Mission. The primary scenes reviewed include the spacewalk, incremental assembly/upgrades, space station rendezvous, suit testing, critical replacement and repairs to suspect batteries, and reboosting the station from 230 statute miles to 250 statute miles.

CASI
Space Transportation System Flights; Spacecrafts; Space Stations; Space Transportation System

200000886114 NASA Johnson Space Center, Houston, TX USA
STS–186 Crew Interviews: Scott D. Altman
Jul. 19, 2000; In English; Videotape: 30 min. 10 sec. playing time, in color, with sound
Report No.(s): NON–NASA–VT–2000111953; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Live footage of a preflight interview with Pilot Scott D. Altman is seen. The interview addresses many different questions including why Altman became a pilot, the events that led to his interest, his career path through the Navy, and then finally, his selection by NASA as an astronaut. Other interesting information discussed in this one-on-one interview was his work on the movie set of "Top Gun," the highlights of his Navy career, and possible shorter time frame turn-arounds for missions. Altman also mentions the scheduled docking with the new International Space Station (ISS) after the arrival of the Zvezda Service Module.

CASI
Crew Procedures (Preflight); Spacecrafts; Astronauts; Talking

200000800135 NASA Johnson Space Center, Houston, TX USA
STS–186 Crew Interviews: Richard A. Mastracchio
Jul. 20, 2000; In English; Videotape: 26 min. 20 sec. playing time, in color, with sound
Report No.(s): NON–NASA–VT–2000119594; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This NASA Johnson Space Center (JSC) video production presents an STS-106 pre-launch interview with Russian Cosmonaut/Mission Specialist Yuri Malenchenko, Col. Russian Air Force. Among other topics, Malenchenko discusses his 125-day space mission on Russian Space Station MIR in 1994, and his planned spacewalk to complete the connection between the Russian service module Svezda and the International Space Station (ISS). STS-106 is International Space Station assembly flight ISS-2.A.2b and will utilize the SPACEHAB Double Module and the Integrated Cargo Carrier (ICC) to take supplies to the station. The mission will also include 2 spacewalks.

CASI
International Space Station; Space Transportation System; Spacecrafts; Astronauts; Extravehicular Activity

20000080200 NASA Johnson Space Center, Houston, TX USA
STS–186 Crew Interviews: Yuri Malenchenko
Jul. 20, 2000; In English; Videotape: 1 hr. 5 min. 9 sec. playing time, in color, with sound
Report No.(s): NON–NASA–VT–2000119597; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
This NASA Johnson Space Center (JSC) video production presents an STS-106 pre-launch interview with Russian Cosmonaut/Mission Specialist Yuri Malenchenko, Col. Russian Air Force. Among other topics, Malenchenko discusses his 125-day space mission on Russian Space Station MIR in 1994, and his planned spacewalk to complete the connection between the Russian service module Svezda and the International Space Station (ISS). STS-106 is International Space Station assembly flight ISS-2.A.2b and will utilize the SPACEHAB Double Module and the Integrated Cargo Carrier (ICC) to take supplies to the station. The mission will also include 2 spacewalks.

CASI
International Space Station; Space Transportation System; Spacecrafts; Astronauts; Extravehicular Activity
utilize the SPACEHAB Double Module and the Integrated Cargo Carrier (ICC) to take supplies to the station. The mission will also include 2 spacewalks.

CASI

*International Space Station: Space Transportation System; Space Shuttle Missions; Weightlessness; Cosmonauts*

200000801266 NASA Johnson Space Center, Houston, TX USA

STS-106 Crew Interviews: Daniel Burbank
Jul. 20, 2000; In English; Videotape: 33 min. 51 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000110658; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

This NASA Johnson Space Center (JSC) video production presents an STS-106 pre-launch interview with Mission Specialist Daniel C. Burbank, Lt. Commander, USA Coast Guard (USCG). Among other topics, Burbank discusses how his Coast Guard career evolved into spaceflight, his experiences flying helicopters for the Coast Guard, and his chief duties on the upcoming spaceflight. STS-106 is International Space Station assembly flight ISS-2A.2b and will utilize the SPACEHAB Double Module and the Integrated Cargo Carrier (ICC) to take supplies to the station. The mission will also include 2 spacewalks.

CASI

*International Space Station: Space Transportation System; Space Shuttle Missions; Astronauts*

200000803469 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-40/ELS-1: Lift to Cargo Bay
Mar. 24, 1991; In English; Videotape: 11 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1991118115; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The footage shows the lifting of the solid state micro-accelerometer into Columbia’s cargo bay. This was done in a clean room setting and is part of the In Orbit Technology Demonstration Program.

CASI

*Accelerometers; Bays (Structural Units); Cargo*

200000803700 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-40: Hinge Inspection
Mar. 17, 1991; In English; Videotape: 4 min. 40 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1991118117; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The footage shows hinge inspection for cracks and tolerance checks. Scenes are from both the inspection shop and aboard Columbia.

CASI

*Inspection; Hinges; Cracks; Columbia (Orbiter)*

200000803710 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-41: Discovery Payload Bay Door Investigation
Jun. 04, 1990; In English; Videotape: 3 min. 20 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1990113126; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The brief footage shows the visual inspection of the bay door by 2 technicians. They inspect the layers between the panels for structural defects, and the door, joints, and hinges for wear, cracks, stress, and damage from flight.

CASI

*Doors; Hinges; Inspection; Panels*

200000803484 NASA Johnson Space Center, Houston, TX USA

STS-106 Crew Interviews: Terrence W. Wilcutt
Jul. 19, 2000; In English; Videotape: 25 min. 45 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000110660; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Live footage of a preflight interview with Mission Commander Terrence W. Wilcutt is seen. The interview addresses many different questions including why Wilcutt became an astronaut, the events that led to his interest, and his career both as a High School Mathematics Teacher and as a member of the US Marine Corps. Other interesting information that this one-on-one interview discusses are his responsibilities during docking and undocking of the spacecraft, and possible shorter time frame turnarounds for missions. Wilcutt also mentions the scheduled installation and transfer of equipment into the new International Space Station (ISS).

CASI

*Crew Procedures (Preflight); Spacecrews; Astronauts; Cosmonauts; Talking*

20000080388 NASA Johnson Space Center, Houston, TX USA

STS-106 Crew Interviews: Edward T. Lu
Jul. 19, 2000; In English; Videotape: 34 min. 30 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000111956; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Mission Specialist Edward T. Lu is seen. The interview addresses many different questions including why Lu became interested in the space program, the events that led to his interest, the transition from an engineer to research scientist, and finally to getting selected into the astronaut program. Other interesting information that this one-on-one interview discusses are the main goals of the STS-106 mission, its scheduled docking with the new International Space Station (ISS), making the Zvezda Service Module ready for entrance, and crew training both in the United States and Russia. Lu mentions his responsibilities during the much-anticipated docking as well as his scheduled space-walk with Yuri Ivanovich Malenchenko. Lu also discusses the use of the Robotic Arm during his space-walk, installation of a magnetometer on the Zvezda Module, and work that will have to take place inside the Service Module.

CASI

*Crew Procedures (Preflight); Spacecrews; Astronauts; Cosmonauts; Talking*

20000080451 NASA Johnson Space Center, Houston, TX USA

ISS Expedition 1 Crew Interviews: William M. Shepherd
Jul. 19, 2000; In English; Videotape: 32 min. 47 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000111599; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Commander Bill Shepherd is seen. The interview addresses many different questions including why Shepherd became interested in the space program, the events that led to his interest, the transition from the navy to his selection in the astronaut program. Other interesting information that this one-on-one interview discusses are the main goals of the first Expedition Crew, their scheduled docking with the International Space Station (ISS), making the ISS ready for human inhabitance, and all the specifics that will make his living arrangements difficult. Shepherd mentions his responsibilities during the much-anticipated two-day flight to the ISS, as well as the scheduled space-walk. Shepherd also discusses the crew’s first tasks upon entrance including other scheduled tasks for the first week, docking from cargo ships, and spacecraft delivering equipment or performing Extra Vehicular Activities (EVA). He explains his interpretation of the meaning of mission success, and the implications of having human beings in space.

CASI

*International Space Station: Expeditions; Space Flight; Spacecrews; Astronauts; Cosmonauts; Crew Procedures (Preflight); Talking*

20000080452 NASA Kennedy Space Center, Cocoa Beach, FL USA

Orbiter Umbilical Hinge Door Problem
Feb. 19, 1991; In English; Videotape: 4 min. 14 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1991113527; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

During processing work on the orbiter Discovery at Pad A, significant cracks were found on all four hinge wings on the external tank umbilical drive mechanisms. NASA managers opted to roll back the vehicle to the Vehicle Assembly Building (VAB) on March 7, and then to the Orbiter Processing Facility (OPF) for repair. Hinges were replaced with units taken from orbiter
COLUMBIA, and reinforced. Discovery returned to the pad on April 1. Shown
are the cracked orbiter umbilical door hinges.
CASI
Spacecraft Maintenance: Prelaunch Problems; External Tanks; Cracks; Doors; Hinges; Lags

20000000453 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-39: Bolt Tightening
Jul. 20, 1990; In English; Videotape: 2 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000113533; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The very brief footage shows the torquing of bolts by technicians. They are
aided in their efforts by a diagram that shows the torque sequence and amount
of torque needed for each bolt.
CASI
Bolts: Space Transportation System: Torque

20000000454 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-38: Post Landing News Conference
Nov. 20, 1990; In English; Videotape: 22 min. 37 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000113534; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows the STS-38 Post Landing News Conference. Dick
Young of NASA Public Affairs office is seen introducing the panel members. The
panelists include: Forrest McCartney, Kennedy Space Center’s (KSC) Director;
William B. Lemoine, Associate Administrator Space Flight; and Robert B. Sieck,
Space Shuttle Processing Director. Atlantis lands at KSC, which marks the first
landing since 1985 to this location. The panelists mention the status of the
landing, the success of the flight, and the historic implication that this landing
carries. They also answer questions from the participating audience.
CASI
Conferences: Postflight Analysis; Spacecraft Landing

20000000455 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-39: OMS Pod Thruster Removal/Replace
Feb. 04, 1991; In English; Videotape: 55 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000113535; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Shown is the removal and replacement of the Discovery’s orbital manue-
vering systems (OMS) pod thruster. The OMS engine will be used to propel
Discovery north, off of its previous orbital groundtrack, without changing the
spacecraft’s altitude. A burn with this lateral effect is known as “out-of-plane.”
CASI
Orbital Maneuvers: Pods (External Stores): Replacing: Discovery (Orbiter);
Spacecraft Maintenance; Prelaunch Problems

20000000479 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-39: Landing at KSC
May 06, 1991; In English; Videotape: 55 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000113808; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

The Space Shuttle Discovery landed on May 6, 1991, 2:55:35 p.m. EDT at
the Shuttle Landing Facility after traveling more than 3,500,000 miles on a
successful eight-day mission. Rollout distance and time were 9,235 feet and 56
secs respectively. The landing weight was 211,512 lbs. Landing was diverted to
KSC because of unacceptably high winds at the planned landing site, Edwards
Air Force Base, California. Absent were: Commander Michael L. Conti; Pilot
L. Elaine Hammond, Jr.; and Mission Specialists Guion S. Bluford Jr., Gregory
J. Harbaugh, Richard J. Hieb, Donald R. McMonagle, and Charles L. Veach. This
was the 40th flight in the Space Shuttle program and the 12th for the orbiter
Discovery. The landing was the 7th Shuttle landing in Florida. After landing at
the Shuttle Landing Facility, the STS-39 crew posed for a photo in front of
Discovery.
CASI
Discovery (Orbiter); Spacecraft Landing; Space Transportation System Flights;
Space Missions

20000000488 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-39: Payloads in Canister at VPF
Feb. 05, 1991; In English; Videotape: 8 min. 17 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000118023; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Discovery spent about 15 weeks in the processing facility undergoing
about 22 modifications and routine testing. Shown are STS-39 primary payloads
installed in Discovery’s payload bay in the Orbiter Processing Facility (OPF).
Payloads installed in the OPF include the Critical Ionization Velocity payload
and the Chemical Release Observatory.
CASI
Space Shuttle Payloads: Discovery (Orbiter); Spacecraft Maintenance;
Preflight Operations

20000000530 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-39 Discovery in the VAB and Columbia Tow From IB-2
Feb. 09, 1991; In English; Videotape: 8 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000118016; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The orbiter Discovery sits inside the Vehicle Assembly Building (VAB)
after its reliver from the Orbiter Processing Facility (OPF). In the VAB,
Discovery will be mated with an external tank and solid rocket boosters for its
launch. Shown also is Columbia orbiter being towed from the High Bay 2.
CASI
Discovery (Orbiter); Ground Handling; Spacecraft Maintenance; Columbia
(Orbiters); Attyfield Surface Movements

20000000532 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-39 Discovery Rollback to the OPF High Bay #2 (Shots of Doors)
Mar. 14, 1991; In English; Videotape: 4 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000118014; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Shown is Discovery rolling back to the Orbiter Processing Facility (OPF)
High Bay 2 for repair. High Bay 2, located west of the Vehicle Assembly Building
(VAB), is used for external tank (ET) checkout and storage and as a contingency
storage area for orbiters.
CASI
Discovery (Orbiter); Spacecraft Maintenance; Ground Handling

20000000731 NASA Johnson Space Center, Houston, TX USA
ISS Expedition 1 Crew Interviews: Sergei K. Krikalev
Jul. 19, 2000; In English; Videotape: 1 hr. 1 min. 38 sec. playing time, in color,
with sound
Report No.(s): NONP–NASA–VT–2000116600; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

Live footage of a preflight interview with Flight Engineer Sergei K.
Krikalev is seen. The interview addresses many different questions including
why Krikalev became a cosmonaut, the events that led to his interest, the transi-
tion from being an engineer to being selected as a Russian cosmonaut. Other
interesting information that this one-on-one interview discusses are the main
goals of the first Expedition Crew, their scheduled docking with the International
Space Station (ISS), making the ISS ready for human inhabitation, and all the
specifics that will make his living arrangements difficult. Krikalev mentions his

122
responsibilities during the much-anticipated two-day flight to the ISS, as well as the possibility of his spacewalk. Krikalev also discusses the crew's first tasks upon entrance including other scheduled tasks for the first week, docking from cargo ships, and spacecraft delivering equipment or performing Extra Vehicular Activities (EVA). He explains his opinion of the implications of having human beings in space.

CASI Crew Procedures (Preflight); Spacecrews; Cosmonauts; Talking

20000818732 NASA Johnson Space Center, Houston, TX USA ISS Expedition 1 Crew Interviews: Yuri P. Gidzenko Jul. 19, 2000; In English; Videotape: 38 min. 35 sec. playing time, in color, with sound Report No.(s): NONP--NASA--VT--2000111586; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Soyuz Commander Yuri P. Gidzenko is seen. The interview addresses many different questions including why Gidzenko became interested in the space program, the events that led to his interest, the transition from being a military pilot to being selected as a Russian cosmonaut. Other interesting information that this one-on-one interview discusses are the main goals of the first Expedition Crew, their scheduled docking with the International Space Station (ISS), making the ISS ready for human inhabitation, and all the specifics that will make his living arrangements difficult. Gidzenko mentions his responsibilities during the much-anticipated two-day flight to the ISS on the Soyuz spacecraft, as well as the possibility of his spacewalk. Gidzenko also discusses the crew's first tasks upon entrance including other scheduled tasks for the first week, docking from cargo ships, and spacecraft delivering equipment or performing Extra Vehicular Activities (EVA). He explains his opinion of the implications of having human beings in space.

CASI Crew Procedures (Preflight); Spacecrews; Cosmonauts; Talking

20000818733 NASA Kennedy Space Center, Cocoa Beach, FL USA STS-40 TCĐT May 07, 1991; In English; Videotape: 7 min. playing time, in color, with some sound Report No.(s): NONP--NASA--VT--2000111819; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the crew of STS-40, Commander Bryan D. O'Connor, Pilot Sidney M. Gutierrez, Mission Specialists James P. Bagian, Tamara E. Jernigan, M. Rhea Seddon, and Payload Specialists F. Drew Gaffney, and Millie-Hughes Fulford, as they arrive at Kennedy Space Center (KSC). The crew arrives on 1-38 jets for Terminal Countdown and Demonstration Tests (TCĐT) at KSC. O'Connor is seen addressing the audience. Footage also shows the crew sitting around the table for their traditional breakfast, crew suit-up, and departure.

CASI Spacecrews; Crew Procedures (Preflight); Astronaut Training

20000818755 NASA Kennedy Space Center, Cocoa Beach, FL USA STS-41 Ulysses: Ulysses -- The Movie Jan. 01, 1990; In English; Videotape: 26 min. 30 sec. playing time, in color, with sound Report No.(s): NONP--NASA--VT--2000111823; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Footage shows animation of the planned activities of the Ulysses mission. These activities range from Ulysses' deployment from the spacecraft to the orbits around the red giant. The Ulysses spacecraft mission is to explore the polar regions of the Sun.

CASI Ulysses Mission; Deployment; Air Launching; Mission Planning; Polar Regions; Sun

20000818756 NASA Kennedy Space Center, Cocoa Beach, FL USA STS-40 Get Away Special Experiment Preflight Briefing May 15, 1991; In English; Videotape: 11 min. 47 sec. playing time, in color, with some sound Report No.(s): NONP--NASA--VT--2000111822; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the preflight briefing of the Get Away Special Experiment for STS-40. The focus of the discussion is the payloads that STS-40 will carry. Some of the experiments that are scheduled include crystal growth, melting and re-growth of gallium nitride, fluid behaviors, ecological alteration of plants, growth of semiconductors, thermal transfer, flux behavior, orbit stability, and the effects of cosmic rays on floppy disks. Also shown is a video release of the STS-40/SL-1 mission. The STS-40 crew, Commander Bryan D. O'Connor, Pilot Sidney M. Gutierrez, Mission Specialists James P. Bagian, Tamara E. Jernigan, M. Rhea Seddon, and Payload Specialists F. Drew Gaffney, and Millie-Hughes Fulford, are seen while they exercise and perform their experiments.

CASI Space Transportation System; Columbia (Orbiter); Get Away Specials (NTS); Spaceborne Experiments; Spacelab Payloads

20000832216 NASA Kennedy Space Center, Cocoa Beach, FL USA STS-41 Ulysses TCĐT Activities Sep. 10, 1990; In English; Videotape: 28 min. playing time, in color, with sound Report No.(s): NONP--NASA--VT--20001122912; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows the crewmembers of STS-41, Commander Richard N. Richards, Pilot Robert D. Cabana, Mission Specialists William M. Shepherd, Bruce E. Melnick, and Thomas D. Akers, participating in Terminal Countdown Demonstration Tests (TCĐT). The astronauts are seen participating in many different activities including the traditional breakfast, suit-up, simulated training in the crew module, and a dry run of launch and emergency egress training.

CASI Spacecrews: Astronauts; Crew Procedures (Preflight); Astronaut Training; Training Simulators

20000833563 NASA Kennedy Space Center, Cocoa Beach, FL USA STS-40 SRB/MLP Rollout to Pad B Jun. 11, 1990; In English; Videotape: 8 min. 20 sec. playing time, in color, with some sound Report No.(s): NONP--NASA--VT--2000111827; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the rollout preparations of the SRB/MLP. Also shown is the rollout of SRB/MLP to Pad B.

CASI Preparation; Preflight Operations; Spacecraft Launching

20000833636 NASA Kennedy Space Center, Cocoa Beach, FL USA STS-40/SL-1: Move from Work Stand to Canister Mar. 21, 1991; In English; Videotape: 12 min., 45 sec. playing time, in color, with some sound Report No.(s): NONP--NASA--VT--2000111821; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows preparation of the SL-1 in the work area for launch.
Live footage shows the SLS-1 (Spacelab Life Science) payload being lifted by a crane from the work stand to the canister.

CASIS PASLOAD Transfer; Preflight Operations

STS-106 Crew Training
Jul. 27, 2000; In English; Videotape: 22 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–2000111587; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage of the STS-106 crewmembers shows Commander Terrence W. Wilcutt, Pilot Scott D. Altman, Mission Specialists Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov going through various training activities. These activities include SpaceLab Training at Kennedy Space Center (KSC), Pre-Post Operations, Post Launch Operations, Rendezvous, Bailout, and Post Landing Egress Training at Johnson Space Center (JSC). The crew is also seen participating in a group photograph session.

CASI
Apexx; Astronauts; Cosmonauts; Crew Procedures (Preflight); Astronaut Training

STS-41 UlSsuses Launch (10/06/90), UlSsuses Deployment (10/06/90), Landing (10/09/90)
Oct. 10, 1990; In English; Videotape: 1 hr. 1 min. 30 sec. playing time, in color, with sound Report No.(s): NONP–NASA–VT–2000122915; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Live footage shows the crewmembers of STS-41, Commander Richard N. Richards, Pilot Robert D. Cabana, Mission Specialists William M. Shepherd, Bruce E. Melnick, and Thomas D. Akers, participating in the traditional activities the day of their flight. The crew are seen eating breakfast, suit-up, walking out to the Astronaut-Van, putting on life vests in the ‘White Room’ area, and entering the crew module of the Discovery Orbiter. Footage also includes the deployment of the Ulysses satellite. The Discovery spacecraft is seen as it approaches and lands at Edwards Air Force Base. Also shown are several scenes from different cameras of both launching and landing of the STS-41 spacecraft.

CASIS UlSsuses Mission; Deployment; Payload Delivery (STS); Space Transportation System; Space Transportation System Flights; Discovery (Orbiter)

STS-42/Discovery/IML-1 Admiral Richard Truly Press Briefing
Jan. 22, 1992; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–2000122913; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

A press briefing is presented by Admiral Richard Truly about the STS-42 Discovery International Microgravity Laboratory-1 (IML). He describes the launch that took place on the morning of January 22, 1992. It was NASA’s first launch of 1992 following the Challenger disaster. Life Sciences and materials science microgravity experiments were flown on the STS-42 to study the behavior of materials and living things in microgravity. The briefing ends with a short question and answer period.

CASI
Microgravity; Space Transportation System; Space Shuttles; Spaceborne Experiments

STS-106 Crew Activity Report/Flight Day Highlights Day 2
Sep. 09, 2000; In English; Videotape: 13 min. 51 sec. playing time, in color, with sound Report No.(s): NONP–NASA–VT–2000131282; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

STS-106 was launched on Sept 8, 2000 at 8:45 a.m. The crew was commanded by Terrence W. Wilcutt, the pilot was Scott D. Altman. The mission specialists were Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov. During the 11-day mission, the crew spent a week inside the International Space Station (ISS) unloading supplies from both the double SPACEHAB cargo module in the rear of the Atlantis cargo bay and from a Russian Progress M-1 resupply craft docked to the aft end of the Zvezda Service Module. The videotape shows the activities of the second day of the flight and the preparations for docking with the ISS. Shown on the video are shots of the flight deck on the shuttle, the shuttle payload arm, and shots of the crew eating lunch.

CASI
Cargo; International Space Station; Space Shuttle Payloads; Space Station Payloads; Unloading; Supplying; Crew Procedures (Inflight)

STS-106 Crew Activity Report/Flight Day 1 Highlights
Sep. 08, 2000; In English; Videotape: 17 min. 36 sec. playing time, in color, with sound Report No.(s): NONP–NASA–VT–2000131281; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-106 Atlantis mission, the flight crew, Commander Terrence W. Wilcutt, Pilot Scott D. Altman, and Mission Specialists Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov are seen performing pre-launch activities. They are shown sitting around the breakfast table with the traditional cake, suit-up, and riding out to the launch pad. The final inspection team is seen as they conduct their final check of the space shuttle on the launch complex. Also, included are various panoramic views of the shuttle on the pad. The crew is realized in the ‘white room’ for their mission. After the closing of the hatch and
arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters.

**CASI**

**Spacecraft Launching:** Atlantis (Orbiter); Manned Space Flight; Space Transportation System; Space Transportation System Flights

---

**STS–106 Crew Activities Report/Flight Day 3 Highlights**

Sep. 10, 2000; In English; Videotape: 18 min. 10 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000131280; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this third day of the STS-106 Atlantis mission, the flight crew, Commander Terrence W. Wilcutt, Pilot Scott D. Altman, and Mission Specialists Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov are seen as they approach the International Space Station (ISS). Also shown are views of the rendezvous taken from both the Zarya Control Module and the Atlantis spacecraft. Final preparation for the docking includes checking of tools and equipment needed to support the rendezvous and docking, as well as equipment for the scheduled space walk. After docking over Western Kazakhstan, the Zarya and Zvezda Service Module is seen from the external cameras of Atlantis. Also shown is footage of the crew before and during the rendezvous.

**CASI**

**Space Transportation System:** Space Transportation System Flights; International Space Station

---

**STS–106 Crew Activities Report/Flight Day 4 Highlights**

Sep. 11, 2000; In English; Videotape: 20 min., 56 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000155182; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fourth day of the STS-106 Atlantis mission, the flight crew, Commander Commander Terrence W. Wilcutt, Pilot Scott D. Altman, and Mission Specialists Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov are seen preparing for the scheduled space walk. Lu and Malenchenko are seen coming through the hatch of the International Space Station (ISS). Also shown are Lu and Malenchenko attaching a magnetometer and boom to Zvezda. Mastracchio operates the robot arm moving the extravehicular activity (EVA) crew outside of the ISS.

**CASI**

**International Space Station:** Service Module (Iss); Space Transportation System; Space Transportation System Flights; Manned Space Flight; Atlantis (Orbiter)

---

**STS–106 Crew Activities Report/Flight Day 5 Highlights**

Sep. 12, 2000; In English; Videotape: 22 min., 24 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000155181; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fifth day of the STS-106 Atlantis mission, the flight crew, Commander Terrence W. Wilcutt, Pilot Scott D. Altman, and Mission Specialists Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov are seen participating in several activities. Malenchenko and Wilcutt are seen opening the hatches of the Zvezda Service Module and the Zarya Control Module, and finally, the transfer chamber of Zvezda. Burbank and Mastracchio are seen transferring food and equipment, and removing the manual docking system of Zarya. Lu, Burbank and Malenchenko are also seen opening the hatch interfaces. Footage also shows the entire interior of the International Space Station (ISS) complex.

**CASI**

**International Space Station:** Service Module (Iss); Zarya Control Module; Space Transportation System; Space Transportation System Flights

---

**STS–106 Crew Activities Report/Flight Day 6 Highlights**

Sep. 13, 2000; In English; Videotape: 20 min., 8 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000136103; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this sixth day of the STS-106 Atlantis mission, the flight crew, Commander Commander Terrence W. Wilcutt, Pilot Scott D. Altman, and Mission Specialists Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov are seen participating in several outfitting and transferring activities. Burbank and Morukov replace batteries in Zarya, while Lu and Malenchenko install three batteries and electrical equipment inside the Zvezda Service Module. Footage of Wilcutt participating in an interview concludes the events of the day.

**CASI**

**Zarya Control Module; International Space Station; Service Module (Iss)**

---

**STS–106 Crew Activities Report/Flight Day 7 Highlights**

Sep. 14, 2000; In English; Videotape: 21 min., 6 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000157382; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this seventh day of the STS-106 Atlantis mission, the flight crew, Commander Commander Terrence W. Wilcutt, Pilot Scott D. Altman, and Mission Specialists Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov are seen participating in several outfitting activities. Burbank and Morukov remove and replace a fourth battery in Zarya. Lu and Malenchenko finish installing the third and final battery and other electrical equipment inside the Zvezda Service Module. While Altman and Wilcutt perform a series of jet firings, Altman is shown as he narrates a tour of the Zvezda Service Module. Scenes also include Lu and Malenchenko unpacking the Russian-made Orbital space suits, Burbank and Wilcutt participating in an interview, and a beautiful night shot of the International Space Station (ISS) and Atlantis complex above the Earth.

**CASI**

**International Space Station; Zarya Control Module; Service Module (Iss)**

---

**STS–92 Flight Day Highlights and Crew Activities: Day 9**

Oct. 20, 2000; In English; Videotape: 21 min., 44 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000157382; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this ninth day of the STS-92 mission, the flight crew, Commander Brian Duffy, Pilot Pamela A. Melroy, and Mission Specialists Koschi Wakata, Leroy Chiao, Peter J.K. Wisoff, Michael E. Lopez-Alegria, and William S. McArthur...
participate in an audio interview while scenes are shown of the International Space Station (ISS) and the Earth.

CASI

International Space Station: Discovery (Orbiter); Service Module (Iss); Unity Connecting Module; Zarya Control Module

20000112950 NASA Johnson Space Center, Houston, TX USA
STS-92 Crew Interview/W. McArthur
Sep. 14, 2000; In English; Videotape: 55 min. 31 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000138906; No Copyright; Avail: CASI; B03, Videotape-Beta: V03, Videotape-VHS

The STS-92 Mission Specialist William S. McArthur is seen being interviewed. He answers questions about his inspiration to become an astronaut and gives details on the mission, including overviews of the Z1 truss, the third pressurized mating adapter (PMA-3), and his spacewalks. He shares his thoughts on the international collaboration of space exploration, the contributions of the Russians, the role of STS-92 in preparing the International Space Station (ISS) for its first resident crew, and the importance of the ISS and the Space Shuttle in the future.

CASI

International Space Station: Astronauts: Prelaunch Summaries

20000112965 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-43 IUS Lift to Workstand at the VPF
Apr. 29, 1991; In English; Videotape: 9 min., 13 sec. playing time, in color, without sound
Report No.(s): NONP--NASA--VT--2000148072; No Copyright; Avail: CASI; B01, Videotape-Beta: V01, Videotape-VHS

Footage filmed at the Vertical Processing Facility (VPF) shows the inertial upper stage (IUS) being lifted to the workstand.

CASI

Inertial Upper Stage; Space Transportation System

20000112966 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-46 TCST Sliding Training and Photo Session
Jun. 15, 1992; In English; Videotape: 22 min. 26 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000148079; No Copyright; Avail: CASI; B02, Videotape-Beta: V02, Videotape-VHS

The crew of STS-46, Commander Loren J. Shriver, Pilot Andrew M. Allen, Payload Specialist Franco Malerba, Mission Specialists Jeffrey A. Hoffman, Franklin R. Chang-Diaz, Claude Nicollier, and Marsha S. Ivins are seen introducing themselves and discussing the mission during a photo session. The crew then answers questions from the press.

CASI

Atlantis (Orbiter); Prelaunch Summaries: Crew Procedures (Preflight)

20000112967 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-47 Mission Overview
Aug. 10, 1992; In English; Videotape: 42 min., 18 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000152239; No Copyright; Avail: CASI; B03, Videotape-Beta: V03, Videotape-VHS

Flight Director Mit Heflin gives an overview of the goals of the Space Shuttle Endeavour. He describes the crew, the role of the orbiter, the planned experiments, and the timeline of activities on board. Mission Manager Aubrey King introduces the Spacelab-J mission. He discusses the planned experiments and Japanese involvement in development. Heflin and King then take questions from the press.

CASI

Endeavour (Orbiter); Spacelab; Prelaunch Summaries; Spaceborne Experiments

20000114422 NASA Johnson Space Center, Houston, TX USA
STS-92 Crew Activity Report/Flight Day 11 Highlights
Oct. 22, 2000; In English; Videotape: 16 min. 37 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000159448; No Copyright; Avail: CASI; B02, Videotape-Beta: V02, Videotape-VHS

On this eleventh day of the STS-92 mission, the flight crew, Commander Brian Duffy, Pilot Pamela A. Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter J.K. Wisoff, Michael E. Lopez-Alegria, and William S. McArthur participate in an audio interview while footage of the Earth is seen. Michigan and the northern USA can be identified.

CASI

International Space Station: Discovery (Orbiter); Service Module (Iss); Unity Connecting Module; Zarya Control Module

20000114428 NASA Johnson Space Center, Houston, TX USA
STS-92 Crew Activity Report/Flight Day 10 Highlights
Oct. 21, 2000; In English; Videotape: 17 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000157386; No Copyright; Avail: CASI; B02, Videotape-Beta: V02, Videotape-VHS

On this tenth day of the STS-92 mission, the flight crew, Commander Brian Duffy, Pilot Pamela A. Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter J.K. Wisoff, Michael E. Lopez-Alegria, and William S. McArthur prepare for the unlocking of Discovery from the International Space Station (ISS) as Lopez-Alegria seen closing the hatch on the Unity Module. A slow sweep of the outside of the ISS shows the space station in detail against the backdrop of a dark Earth where the lights of a city shine. Lopez-Alegria closes the outer hatch and Discovery undocks from the ISS. As the two separate, the ISS is seen orbiting across a beautiful dark blue Earth.

CASI

International Space Station: Discovery (Orbiter); Service Module (Iss)

20000114429 NASA Johnson Space Center, Houston, TX USA
STS-92 Crew Activity Report/Flight Day 8 Highlights
Oct. 19, 2000; In English; Videotape: 18 min. 32 sec. playing time, in color, with sound; No Copyright; Avail: CASI; B02, Videotape-Beta: V02, Videotape-VHS

On this eighth day of the STS-92 mission, the flight crew, Commander Brian Duffy, Pilot Pamela A. Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter J.K. Wisoff, Michael E. Lopez-Alegria, and William S. McArthur prepare for the fourth and final spacewalk of the mission. Scenes are shown of Lopez-Alegria and Wisoff during their 6 hour 56 minute spacewalk against a backdrop of the Earth. Central America and Florida are easily seen and North Carolina can be identified through the clouds. Lopez-Alegria and Wisoff prepare a latch assembly that will later hold the solar array truss while Wakata operates the arm.

CASI

International Space Station: Service Module (Iss); Discovery (Orbiter)

20000114430 NASA Johnson Space Center, Houston, TX USA
Crew Activity Report/Flight Day 6 Highlights
Oct. 17, 2000; In English; Videotape: 18 min. 9 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000157383; No Copyright; Avail: CASI; B02, Videotape-Beta: V02, Videotape-VHS

On this sixth day of the STS-92 mission, the flight crew, Commander Brian Duffy, Pilot Pamela A. Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter J.K. Wisoff, Michael E. Lopez-Alegria, and William S. McArthur continue working on the exterior of the International Space Station (ISS) to prepare the station for its first resident crew. Lopez-Alegria and Wisoff perform the second of four spacewalks to maneuver the third pressurized mating adapter (PMA-3) into its new location on the Unity module.

CASI

International Space Station: Service Module (Iss); Discovery (Orbiter); Unity Connecting Module; Zarya Control Module
**STS-92 Crew Activity Report/Flight Day 2 Highlights**

Oct. 13, 2000; In English; Videotape: 17 min. 22 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2000157376; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this second day of the STS-92 mission, the flight crew, Commander Brian Duffy, Pilot Pamela A. Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter J.K. Wisoff, Michael E. Lopez-Alegria, and William S. McArthur continue to approach the International Space Station (ISS) in the Discovery Orbiter. Wakata and Duffy are congratulated and questioned by Japanese dignitaries. A panoramic view of the Earth is seen as Discovery orbits.

CASI

*International Space Station; Discovery (Orbiter); Service Module (ISS); Unity Connecting Module; Zarya Control Module*

---

**STS-92 Crew Activity Report/Flight Day 3 Highlights**

Oct. 15, 2000; In English; Videotape: 21 min. 52 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2000157375; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this third day of the STS-92 mission, the flight crew, Commander Brian Duffy, Pilot Pamela A. Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter J.K. Wisoff, Michael E. Lopez-Alegria, and William S. McArthur give an overview of the day’s accomplishments. Footage of the third pressurized mating adapter (PMA-3), the common berthing mechanism (CBM), and the installed Z1 truss are shown.

CASI

*International Space Station; Discovery (Orbiter); Service Module (ISS); Unity Connecting Module; Zarya Control Module*

---

**STS-92 Crew Activity Report/Flight Day 5 Highlights**

Oct. 16, 2000; In English; Videotape: 17 min. 29 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2000157374; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fifth day of the STS-92 mission, the flight crew, Commander Brian Duffy, Pilot Pamela A. Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter J.K. Wisoff, Michael E. Lopez-Alegria, and William S. McArthur prepare for the first of four spacewalks. McArthur and Chiao are seen shortly before suiting up and Wakata is seen at the controls for the robotic arm. Footage is shown of the spacewalk where McArthur and Chiao remove the S-band Antenna Subassembly (SASA). Duffy gives an overview of the day’s accomplishments.

CASI

*International Space Station; Discovery (Orbiter); Service Module (ISS); Unity Connecting Module; Zarya Control Module*

---

**STS-50 Countdown Status**

Jun. 23, 1992; In English; Videotape: 20 min. 16 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2000152241; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

George Diller of the NASA Public Affairs Office introduces Mike Leinbach, NASA Shuttle Test Director, Russ Lunnem, Kennedy Space Center (KSC) USML Payload Manager, and Ed Prisecar, U.S. Airforce/KSC Weather Officer to give a briefing on the countdown status for STS-50. Leinbach gives an overview of the countdown status for STS-50. Leinbach and Prisecar describe the current weather as well as the conditions needed for launch. They also take questions from the press.

CASI

*Countdown; Prelaunch Summaries; Spacecraft Launching; Prelaunch Tests; Prelaunch Problems*

---

**STS-58 Crew Arrival**

Jun. 22, 1992; In English; Videotape: 16 min. 54 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2000152240; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The crew of STS-58, Commander Richard N. Richards, Pilot Kenneth D. Bowersox, Payload Commander Bonnie J. Dunbar, Mission Specialists Ellen S. Baker and Carl J. Meade, and Payload Specialists Lawrence J. DeLucas and Eugene H. Trinh are seen landing T-38 aircraft at Kennedy Space Center for a terminal countdown and demonstration test. They are introduced by Richards and each makes a brief statement about his or her expectations for the upcoming Columbia mission.

CASI

*Payload Specialists; Space Transportation System; Prelaunch Summaries; Crew Procedures (Preflight)*

---

**STS-46 Unedited Eureca Solar Array Deploy**

Jan. 01, 1992; In English; Videotape: 62 min. 22 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2000148081; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Dick Young of the NASA Public Affairs Office introduces Brewster Shaw, Deputy Director of the Space Shuttle Program, and Robert B. Sieck, Launch Director of the Kennedy Space Center. Shaw briefly describes the successful launch of STS-47 and Sieck gives an overview of the problems solved before launch. Shaw and Sieck also answer questions from the press.

CASI

*Prelaunch Problems; Spacecraft Launching; Endeavour (Orbiter); Postlaunch Reports*

---

**STS-44 TCDT Activities**

Nov. 01, 1991; In English; Videotape: 11 min. 3 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2000148080; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The crew of STS-44, Commander Frederick D. Gregory, Pilot Terence T. Henricks, Mission Specialists F. Story Musgrave, Mario Runco, Jr., and James S. Voss are seen landing T-38 aircraft at Kennedy Space Center in a terminal countdown and demonstration test (TCDT). Footage of the crew (including Payload Specialist Thomas J. Henricks) during various stages of training is shown, including training on the use of gas masks and other emergency equipment and suiting up preparatory to liftoff. A brief introduction of the crew is presented by Gregory.

CASI

*Prelaunch Summaries; Crew Procedures (Preflight); Astronaut Training*

---

**STS-92 Crew Interview/B. Duffy**

Sep. 14, 2000; In English; Videotape: 28 min. 47 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2000138909; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The STS-92 Commander Brian Duffy is shown being interviewed. He describes the current weather as well as the conditions needed for launch. He also takes questions from the press.
answers questions about his inspiration to become an astronaut, his training, and
gives details on the mission, including overviews of the Z1 truss, the S-band
antenna, the third pressurized meeting adapter (PMA-3), and the spacewalks. He shares his thoughts on Russia’s contributions to the International Space Station (ISS), the role of STS-92 in preparing the ISS for its first resident crew, and the importance of the ISS in the future.

CASI

*International Space Station: Astronauts; Prelaunch Summaries*

2000114499 NASA Johnson Space Center, Houston, TX USA
STS–92 Crew Interview/P. Wisoff
Sep. 14, 2000; In English; Videotape: 20 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000138907; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

The STS-92 Mission Specialist Peter J.K. Wisoff is seen being interviewed. He answers questions about his inspiration to become an astronaut and gives details on the mission, including overviews of the Z1 truss, the third pressurized meeting adapter (PMA-3), and his spacewalks. He shares his thoughts on the international collaboration of space exploration, the contributions of the Russians, the role of STS-92 in preparing the International Space Station (ISS) for its first resident crew, and the importance of the ISS and the Space Shuttle in the future.

CASI

*International Space Station: Astronauts; Prelaunch Summaries*

2000114500 NASA Johnson Space Center, Houston, TX USA
STS–92 Crew Interview/P. Melroy
Sep. 14, 2000; In English; Videotape: 23 min. 43 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000138903; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

The STS-92 Pilot Pamela A. Melroy is shown being interviewed. She answers questions about her inspiration to become an astronaut and gives details on the mission, including overviews of the Z1 truss, the third pressurized meeting adapter (PMA-3), and the spacewalks. She shares her thoughts on the international collaboration of space exploration, Russia’s contributions, the role of STS-92 in preparing the International Space Station (ISS) for its first resident crew, and the importance of the ISS and the Space Shuttle in the future.

CASI

*International Space Station: Astronauts; Prelaunch Summaries*

2000114501 NASA Johnson Space Center, Houston, TX USA
STS–106 Crew Activity Report/Flight Day 8 Highlights
Sep. 15, 2000; In English; Videotape: 20 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000136107; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

On this eighth day of the STS-106 Atlantis mission, the flight crew, Commander Terrence W. Wilcutt, Pilot Scott T. Altman, and Mission Specialists Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov move into the second half of preparing the International Space Station (ISS) for its first resident crew. Lu and Malenchenko are seen installing the power converters in the Zvezda module and components of the primary oxygen generation system. Mastracchio and Wilcutt move supplies and logistics from the payload of Atlantis to the ISS. Wilcutt and Altman participate in several interviews and the crew wishes the Olympics in Sydney good luck in their endeavors. Scenes also include external views of the ISS and images of Earth, including Sydney, Australia.

CASI

*International Space Station: Space Transportation System; Service Module (Iss); Space Transportation System Flights; Spacecraft Maintenance*

2000114879 NASA Johnson Space Center, Houston, TX USA
STS–92 Crew Interview/M. Lopez–Alegría
Sep. 14, 2000; In English; Videotape: 25 min. 59 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000138910; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

The STS-92 Mission Specialist Michael Lopez-Alegria is seen being interviewed. He answers questions about his inspiration to become an astronaut and gives details on the mission, including overviews of the Z1 truss, the third pressurized meeting adapter (PMA-3), and his spacewalks. He shares his thoughts on the international collaboration of space exploration, the role of STS-92 in preparing the International Space Station (ISS) for its first resident crew, and the importance of the ISS and the Space Shuttle in the future.

CASI

*International Space Station: Astronauts; Prelaunch Summaries*

2000114880 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–81 ACTS/TOS Payload Briefing
Jul. 06, 1995; In English; Videotape: 56 min. 31 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000152239; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Richard Godfrey, Project Manager of Lewis Research Center, gives an overview on the Advanced Communications Technology Satellite (ACTS). Al Hughes, Manager of Upper Stage Projects at Marshall Space Flight Center, gives an overview of the Transfer Orbit Station (TOS). They also answer questions from the press.

CASI

*Transfer Orbits; ACTS; Postlaunch Reports; Space Transportation System*

2000114881 NASA Johnson Space Center, Houston, TX USA
STS–92 Crew Activity Report/Flight Day 3 Highlights
Oct. 14, 2000; In English; Videotape: 17 min. 38 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000157387; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

On this third day of the STS-92 mission, the flight crew, Cmdr. Brian Duffy, Pilot Pamela A. Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter J.K. Wisoff, Michael E. Lopez-Alegria, and William S. McArthur prepare for their dock with the International Space Station (ISS). External views of the docking process are shown with the Earth as a backdrop. The crew is seen opening the outward hatch between Discovery and the ISS.

CASI

*International Space Station; Discovery (Orbiter); Service Module (Iss)*
Mariana Long with the Center for Macromolecular Crystallography gives an overview of commercial protein crystal growth. She describes the applications of protein crystallography and explains why it is better to grow the crystals in space. She shows the results of experiments that have been performed on twelve previous Space Shuttle flights.

**CAS1**

Crystallography; Protein Crystal Growth; Crystals; Spaceborne Experiments

---

**2000116074** NASA Kennedy Space Center, Cocoa Beach, FL USA  
**STS-46 Post Launch News Conference**  
Jul. 31, 1992; In English; Videotape: 18 min. 4 sec. playing time, in color, with sound  
Report No.(s): NONP–NASA–VT–2000152229; No Copyright; Avail: CASI;  
B02, Videotape-Beta: V02, Videotape-VHS  
Dick Young introduces Brewer Shaw, Deputy Director of the Space Shuttle Program, and Robert B. Sieck, Launch Director of Kennedy Space Center. Shaw and Young give an overview of the launch of the spaceship Atlantis and answer questions from the press.

**CAS1**  
Atlantis (Orbiter): Prelaunch Summaries: Spacecraft Launching

---

**2000116075** NASA Kennedy Space Center, Cocoa Beach, FL USA  
**STS-46 Crew Training**  
Jul. 21, 1998; In English; Videotape: 25 min. 23 sec. playing time, in color, with sound  
Report No.(s): NONP–NASA–VT–2000152242; No Copyright; Avail: CASI;  
B02, Videotape-Beta: V02, Videotape-VHS  
The crew of STS-46, Commander Loren J. Shriver, Pilot Andrew M. Allen, and Mission Specialists Franklin R. Chang-Diaz, Jeffrey A. Hoffman, Claude Nicollier, Marsa S. Ivins, and Franco Malerba are seen at various stages of their training. Footage includes firefighting training, helmet fit and T-38 checkout, bailout training in the weightless environment training facility, and remote manipulator training. The crew uses a computer simulation and the shuttle engineering simulator to practice using the tethered satellite system.

**CAS1**  
Spacecrews; Astronaut Training; Crew Procedures (Preflight)

---

**2000116076** NASA Johnson Space Center, Houston, TX USA  
**STS-92 Crew Activity Report/Flight Day 7 Highlights**  
Oct. 18, 2000; In English; Videotape: 22 min. 9 sec. playing time, in color, with sound  
Report No.(s): NONP–NASA–VT–2000157373; No Copyright; Avail: CASI;  
B02, Videotape-Beta: V02, Videotape-VHS  
On this seventh day of the STS-92 mission, the flight crew, Commander Brian Duffy, Pilot Pamela A. Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter J.K. Wisotzki, Michael E. Lopez-Alegria, and William S. McArthur continue work on the Z1 truss and the third pressurized mating adapter (PMA-3) on the International Space Station (ISS). Footage is seen of Chiao’s and McArthur’s spacwalk while they install two DC-DC converter units and attach a second tool storage box on the Z1 truss.

**CAS1**  
International Space Station; Service Module (ISS); Discovery (Orbiter); Spacecraft Maintenance

---

**2000116068** NASA Kennedy Space Center, Cocoa Beach, FL USA  
**STS-39/Breakfast, Suit-Up, Depart O&C, Launch, On-Orbit, and Landing**  
May 01, 1991; In English; Videotape: 60 min. 33 sec. playing time, in color, with sound  
Report No.(s): NONP–NASA–VT–2000118015; No Copyright; Avail: CASI;  
B03, Videotape-Beta: V03, Videotape-VHS  
Footage of various stages of the Discovery mission is shown, including shots of the crew at breakfast, getting suited up, and departing to board the orbiter. The launch is shown from many vantage points, as is the landing. Discovery, its payload (Space Test Payload 1), and Earth are shown from space while Discovery orbits.

**CAS1**  
Spacecraft Launching: Discovery (Orbiter); Crew Procedures (Preflight); Spacecraft Landing

---

**2000118230** NASA Kennedy Space Center, Cocoa Beach, FL USA  
**STS-43 Astronaut Interview in Space**  
Aug. 06, 1991; In English; Videotape: 24 min. 36 sec. playing time, in color, with sound  
Report No.(s): NONP–NASA–VT–2000122919; No Copyright; Avail: CASI;  
B02, Videotape-Beta: V02, Videotape-VHS  
The crew of STS-43, Commander John E. Blaha, Pilot Michael A. Baker, and Mission Specialists Shannon W. Lucid, James C. Adamson, and G. David Low are interviewed. They answer questions about the International Space Station, their expectations for the flight, what it is like to be in space, observing Earth from their vantage point, how the day-to-day activities are progressing, and the legacy of their flight.

**CAS1**  
Astronauts; Spacecrews; Spaceborne Experiments

---

**2000118231** NASA Kennedy Space Center, Cocoa Beach, FL USA  
**STS-43 Atlantis/Breakfast & Suit-Up, Depart O&C, Ingress, Launch with Isolated Views, TDRS-E Deploy, and Landing with Isolated Views**  
Aug. 11, 1991; In English; Videotape: 61 min. 8 sec. playing time, in color, with sound  
Report No.(s): NONP–NASA–VT–2000122918; No Copyright; Avail: CASI;  
B04, Videotape-Beta: V04, Videotape-VHS  
Footage of various stages of the STS-43 Atlantis launch is shown, including shots of the crew at breakfast, getting suited up, and departing to board the orbiter. The launch is shown from many vantage points, as is the landing. Atlantis is shown from space and the deployment of the fifth Tracking and Data Relay Satellite (TDRS-E) is also shown.

**CAS1**  
Deployment; Spacecraft Launching; Spacecraft Landing; Crew Procedures (Preflight)

---

**2000118232** NASA Kennedy Space Center, Cocoa Beach, FL USA  
**STS-43 TDRS at the PCCR/Cannister Doors Opening**  
Jun. 17, 1991; In English; Videotape: 9 min. 8 sec. playing time, in color, with sound  
Report No.(s): NONP–NASA–VT–2000122917; No Copyright; Avail: CASI;  
B01, Videotape-Beta: V01, Videotape-VHS  
Footage shows the cannister doors opening to reveal the Tracking and Data Relay Satellite (TDRS) for the Atlantis mission.

**CAS1**  
TDR Satellites; Atlantis (Orbiter)

---

**2000118233** NASA Kennedy Space Center, Cocoa Beach, FL USA  
**STS-42 Discovery/Breakfast, Suit-Up, Depart O&C, Ingress, Launch, On-Orbit, and Landing**  
Jan. 30, 1990; In English; Videotape: 59 min. 18 sec. playing time, in color, with sound  
Report No.(s): NONP–NASA–VT–2000122914; No Copyright; Avail: CASI;  
B03, Videotape-Beta: V03, Videotape-VHS  
Footage of various stages of the Discovery mission is shown, including shots of the crew at breakfast, getting suited up, and departing to board the orbiter. The launch is shown from many vantage points, as is the landing. The crew is shown performing various micro-gravity experiments while in orbit.

**CAS1**  
Spacecraft Launching; Microgravity; Spaceborne Experiments; Prelaunch Summaries; Crew Procedures (Preflight); Spacecraft Landing

---

**2000118234** NASA Kennedy Space Center, Cocoa Beach, FL USA  
**STS-42 Preflight Background Briefing Living Life Sciences (MSFC)**  
Jan. 10, 1992; In English; Videotape: 62 min. 26 sec. playing time, in color, with sound  
Report No.(s): NONP–NASA–VT–2000122909; No Copyright; Avail: CASI;  
B04, Videotape-Beta: V04, Videotape-VHS  
A panel of scientists give an overview of the experiments that are to take place on-board the STS-42 Discovery mission. Ronald J. White, International Microgravity Laboratory (IML) Program Scientist, gives a general description of why going into space with IML is so important. Robert Snyder, IML Mission Scientist, describes other aspects of the microgravity environment. Millard
At/ant_is' (Orbiter; Postmission Analysis Crew Procedures (Preflight), Tetkened Satellites Deployment, EURECA (ESA), Spacecraft Launching; CASI

Sea emd cenral South America. Atlantis' landing is also shown.

crew's activities and the Earth are shown, including lbotage taken over the Red

ered Satellite System's (TSS) pre-deploy and deployment are shown. Shoks of the

launch of Adantis_ The European Retrievable Carrier's (EURECA) and the Teth-

shown. Footage shows tile pre-launch activities (crew breakfast and suit-up) and

B03, Videotape-Beta; V03, Videotape-VHS

Report No.(s): NONP NASA VT 2000H8098; No Copyright; Avail: CASI;

Jul. 01, 1992; In English; Videotape: 50 rain. 25 sec. playing time, in color, with

CASI

Gravitational Effects: Gravitational Physiology; Life Sciences; Microgravity;
Prelaunch Summaries; Spaceborne Experiments

2000118238 NASA Kennedy Space Center, Cocom Beach, FL USA
STS-47 Spacelab-J Landing at KSC SLF
Sep. 20, 1992; In English; Videotape: 32 min. 19 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000152214; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Footage is shown of Endeavour’s approach and landing at Kennedy Space Center (KSC). The KSC crew then checks around the orbiter for toxic leaks before transport vehicles approach Endeavour.

CASI

Spacelab: Endeavour (Orbiter): Spacecraft Landing

2000118240 NASA Kennedy Space Center, Cocom Beach, FL USA
STS-43 Atlantis Main Engine #3 Computer Controller Removal and Replacement
Jul. 27, 1991; In English; Videotape: 4 min. 37 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP--NASA--VT--2000148102; No Copyright; Avail: CASI; B01, Videotape-Beta; V02, Videotape-VHS

Footage is shown of the removal of Atlantis’ main engine number three. The new engine is then lifted into place.

CASI

Spacecraft Components: Atlantis (Orbiter): Replacing: Engines

2000118241 NASA Kennedy Space Center, Cocom Beach, FL USA
STS-45/Atlas--1 TCDT Activities
Apr. 02, 1992; In English; Videotape: 24 mm. 4 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000148090; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows EURECA-II being lifted and maneuvered into place. The crew of STS-46 Atlantis then inspects the module.

CASI

Installing: EURECA (ESA); Atlantis (Orbiter)

2000118242 NASA Kennedy Space Center, Cocom Beach, FL USA
STS-46 Mission Highlights Resource Tape
Jul. 01, 1992; In English; Videotape: 50 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000148098; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Scenes of the mission highlights for the STS-46 Atlantis mission are shown. Footage shows the pre-launch activities (crew breakfast and suit-up) and launch of Atlantis. The European Retrievable Carrier’s (EURECA) and the Tethered Satellite System’s (TSS) pre-deploy and deployment are shown. Shots of the crew’s activities and the Earth are shown, including footage taken over the Red Sea and central South America. Atlantis’ landing is also shown.

CASI

Deployment: EURECA (ESA); Spacecraft Launching; Spacecraft Landing; Crew Procedures (Preflight); Tethered Satellites

2000118243 NASA Kennedy Space Center, Cocom Beach, FL USA
STS-47/Spacelab-J Installation into Payload Bay of Endeavour OFF HB--3
Jul. 14, 1992; In English; Videotape: 7 min. 5 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP--NASA--VT--2000148097; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the lowering of Spacelab-J into the payload of Endeavour in a clean room.

CASI

Installing: Spacelab: Endeavour (Orbiter)

2000118244 NASA Kennedy Space Center, Cocom Beach, FL USA
STS-45/Atlas--1 TCDT Activities
Feb. 01, 1992; In English; Videotape: 21 min. 38 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000148091; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Footage shows three T-38 aircraft coming in for landing at Kennedy Space Center (KSC) and jetting on the runway. The crew of Atlantis gets out of the cockpits and are introduced by Commander Charles F. Bolden to the press. The crew is also shown learning about the Atlas-01 module before suiting up to board Atlantis.

CASI

T-38 Aircraft: Crew Procedures (Preflight): Astronaut Training: Atlantis (Orbiter)

2000118245 NASA Kennedy Space Center, Cocom Beach, FL USA
STS-46/Eureka Guidance Installation/Astronaut Inspection
Dec. 06, 1991; In English; Videotape: 13 min. 49 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000148090; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows EURECA-II being lifted and maneuvered into place. The crew of STS-46 Atlantis then inspects the module.

CASI

Installing: EURECA (ESA); Atlantis (Orbiter)

2000118252 NASA Johnson Space Center, Houston, TX USA
STS--97 Crew Training
Nov. 09, 2000; In English; Videotape: 12 min. 38 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000167604; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The crew of STS-97, Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Turner, Carlos I. Noriega, and Marc Gameau are shown during various stages of their training. Footage shows them during a food tasting, during emergency bailout training, spacewalk training, and de-orbit preparation.

CASI

Spacecrews: Bailout; Astronaut Training: Crew Procedures (Preflight)

2000118253 NASA Johnson Space Center, Houston, TX USA
STS--92 Crew Activity Report/Flight Day 1 Highlights
Oct. 12, 2000; In English; Videotape: 18 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000157388; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-92 mission, the flight crew, Commander Brian Duffy, Pilot Pamela A. Melroy, and Mission Specialists Koschi Wakata, Leroy Chiao, Peter J.K. Wisoff, Michael E. Lopez-Alegria, and William S. McArthur are shown during their pre-launch activities. Footage shows the crew at breakfast, getting suited up, leaving for the launch pad, and boarding Discovery. The launch is also shown.

CASI

Spacecraft Launching: Crew Procedures (Preflight); Discovery (Orbiter)
Footage of various stages of the STS-45 Atlantis launch is shown, including shots of the crew at breakfast, getting suited up, and departing to board the Orbiter. The launch is shown from many vantage points, as is the landing. Atlantis is shown orbiting Earth and the crew gives an overview of the experiments that will take place during the mission.

CASI
Launching: Atlantis (Orbiter); Spacecraft Launching; Spacecraft Landing; Crew Procedures (Preflight); Spaceborne Experiments

STS-106 Crew Activities Report/Flight Day 10 Highlights
Sep. 17, 2000; In English; Videotape: 18 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000136104; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this tenth day of the STS-106 Atlantis mission, the flight crew, Commander Commander Terrence W. Wilcutt, Pilot Scott D. Altman, and Mission Specialists Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov are shown preparing for their departure from the International Space Station (ISS). Crewmembers are shown closing the hatches of the Zarya, Unity and Zvezda modules. They are also shown packing up trash and packing materials into the Russian Progress ship.

CASI
Spacecrews: Crew Procedures (Inflight); Spacecraft Docking; Closing; Hatches

STS–43 TCID
Jul. 03, 1990; In English; Videotape: 62 min. 26 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000122920; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Footage is seen of the simulated ignition of Atlantis’ main engines up until about 30 seconds before ignition. The crew’s activities of the days before are seen, including emerging from two T-38 aircraft cockpits, suiting up, and leaving for the pad. The Tracking and Data Relay Satellite (TDRS) is seen close-up in the test cell in the Vertical Processing Facility.

CASI
Ignition; Prelaunch Tests; Spacecraft Launching; Crew Procedures (Preflight)

STS–47/Vice President Dan Quayle’s Visit to KSC for Launch
Sep. 12, 1992; In English; Videotape: 45 min. 19 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000118114; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Footage shows the arrival of Vice President Dan Quayle to the Kennedy Space Center (KSC) for the launch of Endeavour. He is shown greeting the crowd on the runway and later, in the control room, thanking the KSC employees for all their hard work. He also wishes the Endeavour crew good luck shortly before the launch.

CASI
Integrated Mission Control Center; Personnel; Ground Based Control
Footage is shown of the slow rollback of Atlantis, travelling from pad A to the Vehicle Assembly Building (VAB).

CASI

Atlantis (Orbiter): Space Shuttles

STS-38 Atlantis Crew Arrival
Nov. 13, 1990; In English; Videotape: 18 min. 14 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT-2000113531; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Footage shows the Atlantis crew maneuvering and landing five T-38 aircrafts at Kennedy Space Center and greeting the crowd on the runway.

CASI

Atlantis (Orbiter): Crew Procedures (Preflight); T-38 Aircraft

STS-38 Rollout to Pad A
Jun. 18, 1999; In English; Videotape: 5 min. 11 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT-2000113528; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage is shown of the slow rollout of Atlantis on pad A. Different close-up and panoramic shots of the orbiter are shown against a backdrop of the sunset.

CASI

Atlantis (Orbiter): Prelaunch Tests

STS-97 Crew Interviews: Michael J. Bloomfield
Nov. 01, 2000; In English; Videotape: 38 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT-2000165429; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Pilot Michael J. Bloomfield is shown. The interview addresses many different questions including why Bloomfield became interested in the space program, the events and people that influence him and ultimately led to his interest, and his vigorous training in the astronaut program. Other interesting information that this one-on-one interview discusses are the main goals of the STS-97 mission, its scheduled docking with the new International Space Station (ISS), and its delivery of the first set of U.S.-provided solar arrays, batteries, and radiators. Bloomfield briefly discusses his responsibilities during the much-anticipated docking as well as during the scheduled space-walks.

CASI

Crew Procedures (Preflight); Flight Crews; Pilots (Personnel); Talking

STS-97 Crew Interviews: Brent W. Jett Jr.
Nov. 01, 2000; In English; Videotape: 45 min. 23 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT-2000165434; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Commander Brent W. Jett Jr. is shown. The interview addresses many different questions including why Jett became interested in the space program, the events that led to his interest, and his vigorous training in the astronaut program. Other interesting information that this one-on-one interview discusses are the main goals of the STS-97 mission, its scheduled docking with the new International Space Station (ISS), and its delivery of the first set of U.S.-provided solar arrays, batteries, and radiators. Jett mentions his responsibilities during the much-anticipated docking as well as during the scheduled space-walks.

CASI

Crew Procedures (Preflight); Flight Crews; Talking

STS-38: Landing at Kennedy Space Center/Crew Exit
Nov. 20, 1990; In English; Videotape: 18 min. 48 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT-2000113530; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage of the STS-38 touchdown at Kennedy Space Center is shown. The crew exits the spacecraft and is greeted by NASA personnel. The five member crew consists of Commander Richard Covey, Pilot Frank L. Culbertson, Mission Specialists: Robert C. Springer, Carl J. Meade, and Charles D. Gemar.

CASI

Space Transportation System: Spacecraft Landing; Touchdown: Spacecru

STS-92 Crew Training
Sep. 28, 2000; In English; Videotape: 43 min. 33 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT-2000148106; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Footage shows the crew of STS-92, Commander Brian Duffy, Pilot Pamela A. Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter J.K. Wisoff, Midrael E. Lopez-Alegria, and William S. McArthur during various parts of their training. Clips are seen of the Shuttle bailout training, Shuttle arm and extravehicular activity (EVA) training at the Virtual Reality Lab, EVA training at the Neutral Buoyancy Lab, Shuttle operations training, EVA prep and post training in the Full Fuselage Trainer, ascent and post insertion training in the Guidance Navigation Simulator, and Mission Specialist Wakata in the Shuttle Engineering Dome and training on the Manipulator Development Facility.

CASI

Training Devices: Spacecru; Astronaut Training; Crew Procedures (Preflight)

STS-97 Crew Interview: Marc Garneau, MS2
Nov. 01, 2000; In English; Videotape: 48 min. 24 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT-2000165432; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The STS-97 Mission Specialist Marc Garneau is seen being interviewed. He answers questions about his inspiration to become an astronaut, his career path, and his training. He gives details on the mission’s goals and significance, its payload, the rendezvous with the International Space Station (ISS), and what it will be like to work knowing there is already a crew on board the ISS.

CASI

International Space Station; Astronauts; Prelaunch Summaries

STS-97 Crew Interview: Joseph Tanner, MS1
Nov. 01, 2000; In English; Videotape: 43 min. 37 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT-2000165431; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The STS-97 Mission Specialist Joseph Tanner is seen being interviewed. He answers questions about his inspiration to become an astronaut, his career path, and his training. He gives details on the mission’s goals and significance, its payload, the rendezvous with the International Space Station (ISS), and what it will be like to work knowing there is already a crew on board the ISS.

CASI

International Space Station; Astronauts; Prelaunch Summaries

STS-97 Crew Interview: Carlos Noriega, MS3
Nov. 03, 2000; In English; Videotape: 45 min. 53 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT-2000165430; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The STS-97 Mission Specialist Carlos Noriega is seen being interviewed. He answers questions about his inspiration to become an astronaut, his career path, and his training. He gives details on the mission’s goals and significance, its payload, the rendezvous with the International Space Station (ISS), and what it will be like to work knowing there is already a crew on board the ISS.

CASI

International Space Station; Astronauts; Prelaunch Summaries
path, and his training. He gives details on the mission’s goals and significance, its payload, the rendezvous with the International Space Station (ISS), and what it will be like to work knowing there is already a crew on board the ISS.

**CASI**

**Prelaunch Summaries: International Space Station; Astronauts**

---

**2001001525** NASA Johnson Space Center, Houston, TX USA

STS-97 Crew Activity Report/Flight Day 3 Highlights

Dec. 03, 2000; In English; Videotape: 22 min. 3 sec. playing time, in color, with sound

Report No.(s): NONP-NASA–VT–2000177365; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this third day of the STS-97 mission, Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Tanner, Carlos I. Noriega, and Marc Garneau continue to approach the International Space Station (ISS) in the Endeavour Orbiter. Footage shows the docking of Endeavour with the ISS and the solar array truss on the robotic arm against a backdrop of Earth.

**CASI**

**Endeavour (Orbiter): International Space Station; Solar Arrays; Spacecraft Docking**

---

**2001001526** NASA Johnson Space Center, Houston, TX USA

STS-97 Crew Activity Report/Flight Day 4 Highlights

Dec. 04, 2000; In English; Videotape: 29 min. 33 sec. playing time, in color, with sound

Report No.(s): NONP-NASA–VT–2000177366; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fourth day of the STS-97 Endeavour mission, Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Tanner, Carlos I. Noriega, and Marc Garneau remain docked with the International Space Station (ISS) as Noriega and Tanner are seen during their spacewalk. The astronauts help Jett guide the P6 solar array truss into place in the ISS. Footage shows the deployment of the ISS’s solar wings.

**CASI**

**International Space Station; Deployment; Solar Arrays; Crew Procedures (Inflight); Installing; Extravehicular Activity**

---

**2001001527** NASA Johnson Space Center, Houston, TX USA

STS-97 Crew Activity Report/Flight Day 1 Highlights

Dec. 04, 2000; In English; Videotape: 19 min. 16 sec. playing time, in color, with sound

Report No.(s): NONP-NASA–VT–2000177363; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-97 mission, Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Tanner, Carlos I. Noriega, and Marc Garneau are seen at breakfast and while suiting up. The launch of the Endeavour Orbiter is shown.

**CASI**

**Endeavour (Orbiter); Crew Procedures (Preflight); Spacecraft Launching**

---

**2001001528** NASA Johnson Space Center, Houston, TX USA

STS-97 Crew Activity Report/Flight Day 2 Highlights

Dec. 02, 2000; In English; Videotape: 14 min. 33 sec. playing time, in color, with sound

Report No.(s): NONP-NASA–VT–2000177362; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this second day of the STS-97 mission, Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Tanner, Carlos I. Noriega, and Marc Garneau continue to approach the International Space Station (ISS) in the Endeavour Orbiter. External views of Endeavour are seen against a backdrop of Earth, and the camera installed on the robotic arm pans of the payload bay. Tanner and Noriega are shown in the airlock inspecting their spacesuits.

**CASI**

**Endeavour (Orbiter); Air Locks; Payloads; Crew Procedures (Inflight)**

---

**2001001529** NASA Johnson Space Center, Houston, TX USA

STS-97 Crew Activity Report/Flight Day 5 Highlights

Dec. 05, 2000; In English; Videotape: 24 min. playing time, in color, with sound

Report No.(s): NONP-NASA–VT–2000177361; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fifth day of the STS-97 mission, Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Tanner, Carlos I. Noriega, and Marc Garneau are seen answering questions about the mission and accomplishments thus far. Footage shows the International Space Station’s (ISS) solar wing being deployed. Exterior views of the ISS are shown against a backdrop of Earth.

**CASI**

**International Space Station; Deployment; Crew Procedures (Inflight); Solar Cells**

---

**2001001553** NASA Johnson Space Center, Houston, TX USA

STS-97 Crew Activity Report/Flight Day 10 Highlights

Dec. 10, 2000; In English; Videotape: 23 min. 25 sec. playing time, in color, with sound

Report No.(s): NONP-NASA–VT–2000179199; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this tenth day of the STS-97 mission, Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Tanner, Carlos I. Noriega, and Marc Garneau are seen saying goodbye to the International Space Station’s (ISS) resident crew (Commander Bill Shepherd, Pilot Yuri Gidzenko and Flight Engineer Sergei Krikalev) and sealing the hatches between the Endeavour Orbiter and the ISS. Footage shows the ISS against a rotating Earth as it passes over China.

**CASI**

**International Space Station; Spacecrews; Crew Procedures (Inflight)**

---

**2001001554** NASA Johnson Space Center, Houston, TX USA

STS-97 Crew Activity Report/Flight Day 7 Highlights

Dec. 06, 2000; In English; Videotape: 20 min. 19 sec. playing time, in color, with sound

Report No.(s): NONP-NASA–VT–2000179198; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this seventh day of the STS-97 mission, Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Tanner, Carlos I. Noriega, and Marc Garneau answer questions about the mission and accomplishments thus far. Footage shows Tanner and Noriega in the airlock preparing for the next day’s spacewalk.

**CASI**

**International Space Station; Crew Procedures (Inflight)**

---

**2001001555** NASA Johnson Space Center, Houston, TX USA

STS-97 Crew Activity Report/Flight Day 6 Highlights

Dec. 06, 2000; In English; Videotape: 23 min. 8 sec. playing time, in color, with sound

Report No.(s): NONP-NASA–VT–2000179197; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this sixth day of the STS-97 mission, Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Tanner, Carlos I. Noriega, and Marc Garneau remained docked with the International Space Station (ISS) on the Endeavour Orbiter. Tanner and Noriega are seen during their spacewalks, studying the solar wing and moving the S-band antenna assembly.

**CASI**

**Extravehicular Activity; International Space Station**

---

**2001001556** NASA Johnson Space Center, Houston, TX USA

STS-97 Crew Activity Report/Flight Day 9 Highlights

Dec. 08, 2000; In English; Videotape: 22 min. 33 sec. playing time, in color, with sound

Report No.(s): NONP-NASA–VT–2000179196; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this ninth day of the STS-97 mission, Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Tanner, Carlos I.
Noriega, and Marc Garneau are shown meeting the resident International Space Station (ISS) crew (Commander Bill Shepherd and Cosmonaut Yuri Gidzenko and Sergei Krikalev) for the first time. The two crews answer questions about the ISS and future missions, and what it is like living on the ISS.

CASI
International Space Station: Spacecrews

20010102011 NASA Johnson Space Center, Houston, TX USA
STS-97 Crew Activity Report/Flight Day 1 Highlights
Dec. 07, 2000; In English; VHS: 23 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT-2000179195; No Copyright; Avail: CASI; B02, Videotape-Beta; V01, Videotape-VHS

On this eleventh day of the STS-97 mission, Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Tanner, Carlos I. Noriega, and Marc Garneau remain docked with the International Space Station (ISS) on board the Endeavour Orbiter. Jett and Bloomfield are seen performing a check of the shuttle flight controls in preparation for tomorrow's landing. Jett, Noriega, and Tanner answer questions about the mission and the goals fulfilled. Footage shows the Earth at night as the camera on Endeavour sweeps the Mediterranean coastline, outlined by city lights, showing Spanish/French border, the French Riviera, the Alps, Italy, Switzerland, and the German/Austrian border.

CASI
International Space Station: Crew Procedures (Inflight)

20010102011 NASA Johnson Space Center, Houston, TX USA
STS-97 Crew Activity Report/Flight Day 8 Highlights
Dec. 07, 2000; In English; VHS: 23 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT-2000179195; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eighth day of the STS-97 mission, Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Tanner, Carlos I. Noriega, and Marc Garneau remain docked with the International Space Station (ISS) on board the Endeavour Orbiter. Tanner and Noriega are seen preparing for their spacewalks. Footage shows them removing debris from the outer shield of the Unity Module during their spacewalks.

CASI
Extravehicular Activity: International Space Station: Space Debris

200101010950 NASA Kennedy Space Center, Cocoa Beach, FL USA
Rollout of Endeavour at Palmdale, California (Part 1 of 2)
Apr. 25, 1991; In English; VHS: 62 min. 29 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT-2000152226; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Footage shows the rollout ceremonies for Endeavour, including the display of colors, invocation, and speeches by Samuel Joab Witherspoon Jr., Executive Vice-President and CEO of Rockwell International, and Richard H. Truly, Administrator for NASA, and Senator Jake Garn (Utah). The tape ends during the speech by Senator Garn and continues on part two (Input Processing ID 2000152226, Document ID 20010010951). Endeavour rolls out to music provided by the band on-site.

CASI
Endeavour (Orbiter): Prelaunch Summaries

200101010951 NASA Kennedy Space Center, Cocoa Beach, FL USA
Rollout of Endeavour at Palmdale, California (Part 2 of 2)
Apr. 25, 1991; In English; VHS: 18 min. 14 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT-2000152226; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

A continuation of the video ‘Rollout of Endeavour at Palmdale, California (Part 1 of 2)’ (Input Processing ID 2000152226, Document ID 20010010951). Senator Jake Garn (Utah) concludes his speech during the rollout ceremonies for the Endeavour Orbiter. Congressman Tom Lewis (Florida) and Dr. Robert Duce of the University of Rhode Island also give speeches. Commander Daniel C. Brandenstein introduces the crew of STS-49, Pilot Kevin P. Chilton, and Mission Specialists Pierre J. Thuot, Kathryn C. Thornton, Richard J. Hieb, Thomas D. Akers, and Bruce E. Melnick, and gives an overview of the Endeavour Orbiter and the mission objectives.

CASI
Endeavour (Orbiter): Prelaunch Summaries

200101010952 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-56 Atlas-2/Breakfast, Suit-up, Depart O&C, Launch, On Orbit, Landing with ISOS
Apr. 17, 1993; In English; VHS: 61 min. 56 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT-20001001568; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Footage of various stages of the STS-56 Discovery launch is shown, including shots of the crew at breakfast, getting suited up, and departing to board the Orbiter. The launch is shown from many vantage points, as is the landing. The deployment of Spartan-201 is seen against a backdrop of northeast Africa and Egypt. Kentucky is seen at night, as are New York City, Atlanta, and Philadelphila.

CASI
Spacecraft Launching: Spacecraft Landing: Crew Procedures (Prelaunch); Crew Procedures (Inflight); Discovery (Orbiter); Spartan Satellites

200101010985 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-55 Crew Arrival
Mar. 17, 1993; In English; VHS: 6 min. 46 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT-20001001577; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The crew of STS-55, Pilot Terence T. Henricks, Mission Specialists Jerry L. Ross, Charles J. Precourt, and Dr. Bernard A. Harris Jr., and Payload Specialists Dr. Ulrich Walter and Hans Schlegel are introduced by Commander Steven R. Nagel, who comments on the mission and the liftoff delay. Each of the crewmembers gives a brief statement about their role and expectations for the mission.

CASI
Spacecrews: Crew Procedures (Prelaunch); Prelaunch Problems

200101011122 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-56 Astronaut Crew Arrival at KSC for Launch
Apr. 02, 1993; In English; VHS: 11 min. 56 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT-20001001567; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The crew of STS-56, Commander Kenneth D. Cameron, Pilot Stephen S. Oswald, and Mission Specialists C. Michael Foale Ph.D., Kenneth D. Cockrell, and Ellen Ochoa, is seen arriving and disembarking from T-38 aircraft. Commander Cameron introduces the crew and each member gives a brief statement about the mission.

CASI
Spacecrews: Crew Procedures (Prelaunch); Prelaunch Summaries

200101011123 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-56 Atlas-2/TCDT Activities
Mar. 18, 1993; In English; VHS: 22 min. 56 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT-20001001571; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The crew of STS-56, Commander Kenneth D. Cameron, Pilot Stephen S. Oswald, and Mission Specialists C. Michael Foale Ph.D., Kenneth D. Cockrell, and Ellen Ochoa are seen landing the T-38 aircraft as part of the terminal countdown and demonstration test (TCDT). The crew is introduced by Commander Cameron and each member gives a brief statement about the upcoming mission and answers questions from the press. The crew is seen during various stages of training, including emergency egress training.

CASI
Crew Procedures (Prelaunch); Astronaut Training
5) acecrew.s; CASI ORFEI JS--Sf_S, etc.), and answers questions from the press.

Overview of the mission activities, objectives, and payload (ACTS-TOS, Bursch, and Carl E. Walz, in a preflight conference. Each crew member gives an overview of the STS-56 Discovery mission, including details on the Space Shuttle, the payloads (ACTS-TOS, ORFEUS-SPAS, etc.), the crew, mission objectives, and the spacecraft operations. They then answer questions from the press.

CASI

Columbia (Orbiter); Prelaunch Summaries

STS-56 Launch Attempt Press Conference

Apr. 06, 1993; In English; Videotape: 7 min. 9 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001001578; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Gary Cohen, Lead Flight Director, gives an overview of the STS-56 Columbia mission activities, objectives, payload, crew, and Space Shuttle operations. Dr. H. Dodeck, D-2 Mission Manager, discusses Germany’s contributions to the mission and describes the German aeronautics facilities. They then answer questions from the press.

CASI

Discovery (Orbiter); Failure; Spacecraft Launching; Prelaunch Problems

STS-56 Preflight Briefs/Mission Overview from MSPC

Mar. 19, 1993; In English; Videotape: 46 min. 42 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001001579; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Dick Young introduces Dr. Jack Kaye, Program Scientist for NASA, Breyer, Shaw, Deputy Program Manager Space Shuttle, and Robert Sieck, Kennedy Space Center (KSC) Launch Director in a press conference regarding the failed launch attempt of the Discovery Orbiter. The hardware problem causing the failure is discussed, and questions from the press are answered.

CASI

Discovery (Orbiter); Removal of Engine 2 at Pad B

STS-49 Endeavour Landing

May 16, 1992; In English; Videotape: 51 min. 7 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000152227; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Footage shows the landing of the Endeavour Orbiter from various vantage points, including the deployment of the drag chute, which is used for the first time. The crew of STS-49, Commander Daniel C. Brandenstein, Pilot Kevin P. Chilton, and Mission Specialists Pierre J. Thuot, Kathryn C. Thornton, Richard J. Hieb, Thomas D. Akers, and Bruce E. Melnick, are seen exiting the Orbiter. Footage of the landing taken with the infrared camera is seen.

CASI

Endeavour (Orbiter); Drag Chute; Spacecraft Landing

STS-49 Endeavour/Removal of Engine 2 at Pad B

Apr. 14, 1992; In English; Videotape: 5 min. 35 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP--NASA--VT--2000152225; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the removal of Engine 2 from the the Endeavour Orbiter at Pad B.

CASI

Endeavour (Orbiter); Spacecraft Equipment; Spacecraft Power Supplies; Removal

STS-49 Endeavour/Compiled Video for Editors

May 01, 1992; In English; Videotape: 40 min. 6 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000152222; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Compiled footage includes shots taken of the rollout of Endeavour at Palmdale, CA, the departure and arrival of Endeavour for Kennedy Space Center (KSC), main engine three installation, solid rocket booster (SRB) segment lift and stack at the Vehicle Assembly Building (VAB), external tank mate to SRB, Inertial rotation at the Vertical Processing Facility (VPF), Endeavour rollover from the Orbiter Processing Facility (OPF) to VAB, rollout to Pad B, and the flight readiness firing (FRF). The crew is seen during the Terminal Countdown
and Demonstration Test (TCDT) training activities, at breakfast, suit up, and exiting the Operations and Checkout (O&C) Building.

CASI Endeavour (Orbiter); Checkout: Prelaunch Tests; Crew Procedures (Preflight)

2001011180 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–49 Endeavour Overview
Apr. 07, 1992; In English; Videotape: 41 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000152221; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Daniel Germany, Manager, Orbiter and GFE Projects, Johnson Flight
Center, gives an overview of the STS-49 Endeavour mission. He discusses
Endeavour’s successful firing test, the upcoming launch, and the Endeavour
Orbiter’s recent enhancements. He then answers questions from the press.

CASI Endeavour (Orbiter); Prelaunch Summaries

2001011186 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–47 Astronaut Crew at Pad B for TCDT, Emergency Egress Training,
and Photo Opportunity
Aug. 26, 1992; In English; Videotape: 37 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000152218; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

The crew of STS-47, Commander Robert L. Gibson, Pilot Curtis L. Brown,
Payload Commander Mark C. Lee, Mission Specialists N. Jan Davis, Jay Apl,
and Mae C. Jemison, and Payload Specialist Mamoru Mohri are seen during
emergency egress training. Then Commander Gibson introduces the members
of the crew and they each give a brief statement about the mission and answer ques-
tions from the press.

CASI Astronaut Training: Prelaunch Summaries; Crew Procedures (Preflight)

2001011187 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–50 Crew Briefing
May 26, 1992; In English; Videotape: 48 min. 4 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP–NASA–VT–2000152217; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Commander Richard N. Richards introduces the crew of STS-50, Pilot
Kenneth D. Bowersox, Payload Commander Bonnie J. Dunbar, Mission Specialist
Ellen S. Baker and Carl J. Meade, and Payload Specialists Lawrence J. Del-
Lucas and Eugene H. Trinh, in a preflight conference. Each crew member
gives an overview of the mission’s activities, objectives, and payload
(USML-01), and answers questions from the press.

CASI Spacecrews; Crew Procedures (Preflight); Prelaunch Summaries

2001011188 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–49 Endeavour/Breakfast/Suit–up/Depart O&C/Launch/On-Orbit/
Landing with ISOS
May 01, 1992; In English; Videotape: 58 min. 48 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000152212; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Footage of various stages of the STS-46 Endeavour launch is shown,
including shots of the crew at breakfast, getting suited up, and departing to board
the Orbiter. The launch is seen from many vantage points, as is the landing.
On-orbit activities are shown, such as the Intelsat rescue and deployment on
flight day 7, and some of the Space Station assembly techniques.

CASI Endeavour (Orbiter); Intelsat Satellites; Spacecraft Launching; Rescue Opera-
tions; Crew Procedures (Preflight); Crew Procedures (Inflight)

2001011189 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–46 Eureca/TSS/Compiled Tape for Editors
Jul. 17, 1992; In English; Videotape: 58 min. 26 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP–NASA–VT–2000148094; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Compiled footage shows shots of the Tethered Satellite System (TSS) lift
in the Operations and Checkout (O&C) Building, TSS move onto satellite
assembly section, the EURECA arrival and offload at Kennedy Space Center
(KSC), EURECA instrument and tracker installation, the solar panel battery
installation, and EURECA high-gain antenna deploy. The astronaut crew
is seen at the O&C building for the TSS site test, and Atlantis rolls out to Pad B.

CASI EURECA (E): Tethered Satellites; Atlantis (Orbiter)

2001011190 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–43 Crew Briefing
Jun. 26, 1991; In English; Videotape: 44 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000148092; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Commander John E. Blaha introduces the crew of STS-43, Pilot Michael
A. Baken, and Mission Specialists Shannon W. Lucid, James C. Adamson, and
G. David Low, in a preflight conference. Each crew member gives an overview
of the mission objectives and experiments and answers questions from the press.

CASI Spacecrews; Crew Procedures (Preflight); Spaceborne Experiments; Prelaunch
Summaries

2001011191 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–46 Standard Mission Handout Tape
Aug. 08, 1992; In English; Videotape: 61 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000148088; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

Footage of various stages of the STS-46 Atlantis launch is shown,
including shots of the crew at breakfast, getting suited up, and departing to board
the Orbiter. The launch is shown from many vantage points, as is the landing.
The EURECA deployment and the Tethered Satellite System (TSS-1) deployment
and retrieval are seen.

CASI EURECA (E5): Spacecraft Launching; Spacecraft Landing; Crew Procedures
(Preflight); Atlantis (Orbiter)

2001011192 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–44 Astronaut Crew Briefing
Oct. 28, 1991; In English; Videotape: 27 min. 59 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000148085; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Commander Frederick D. Gregory introduces the crew of STS-44, Pilot
Terence T. Henricks, Mission Specialists F. Story Musgrave, Mario Runco, Jr.,
and James S. Voss, and Payload Specialists Thomas J. Reenen, in a preflight
conference. Each crew member gives an overview of the mission objectives,
experiments, and his role in the mission. They then answer questions from the
press.

CASI Crew Procedures (Preflight); Prelaunch Summaries

2001011193 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–43 TDRS–E Sharp Edge Inspection at VPF
Jul. 22, 1991; In English; Videotape: 2 min. 5 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP–NASA–VT–2000148077; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Footage shows the inspection of the Tracking and Data Relay Satellite (TDRS) at the Vertical Processing Facility (VPF).


STS-56 Atlas-2/Spartan O&C and Hangar AO
Feb. 01, 1993; In English; Videotape: 6 min. playing time, in color, with sound (no narration)
Report No.(s): NONP--NASA--VT--2001001580; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Close-up shots are seen of Atlas-2 and Spartan-201, the payload for the Discovery Orbiter.

CASI

STS-56/TCDT O&C Walkout
Mar. 18, 1993; In English; Videotape: 2 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001001591; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
The crew of STS-56, Commander Kenneth D. Cameron, Pilot Stephen S. Oswald, and Mission Specialists C. Michael Foale Ph.D., Kenneth D. Cockrell, and Ellen Ochoa are seen exiting the Operations and Checkout (O&C) Building on their way to the bus that will take them to the launch pad.

CASI

Crew Procedures (Preflight); Spacecrews; Space Transportation System Flights

STS-56 Columbia Rollover from OPF to VAB
Feb. 02, 1993; In English; Videotape: 8 min. 9 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP--NASA--VT--2001001582; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
The Columbia Orbiter is seen during the rollover from the Orbiter Processing Facility (OPF) to the Vehicle Assembly Building (VAB).

CASI

Columbia (Orbiter); Transferring

STS-56 Landing Replays at KSC
Apr. 17, 1993; In English; Videotape: 46 min. 50 sec. playing time, in color, no sound
Report No.(s): NONP--NASA--VT--2001001584; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
The landing of the Discovery Orbiter at Kennedy Space Center (KSC) is shown from many different vantage points, including footage of the landing taken with infrared cameras.

CASI

Discovery (Orbiter); Spacecraft Landing

STS-55 Emergency Egress Training/Photo Opportunity at Pad A
Feb. 11, 1993; In English; Videotape: 22 min. 3 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001001585; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
The crew of STS-55, Commander Steven R. Nagel, Pilot Terence T. Henricks, Mission Specialists Jerry L. Ross, Charles J. Precourt, and Dr. Bernard A. Harris Jr., and Payload Specialists Dr. Ulrich Walter and Hans Schlegel are seen during emergency egress training. Then Commander Nagel introduces the members of the crew and they each give a brief statement about the mission and answer questions from the press.

CASI

Astronaut Training; Prelaunch Summaries; Crew Procedures (Preflight)

STS-55 Downline Waste Water Tank Problem
Apr. 27, 1993; In English; Videotape: 11 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001001586; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Onboard, in-flight close-up shots show the buckling of the waste water tank. Details are given on the problem.

CASI

Buckling; Tanks (Containers); Spacecraft Equipment

STS-92 Z-1 Truss Overview
Sep. 26, 2000; In English; Videotape: 45 min. 11 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001007189; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
Robert Gulev, Launch Package Manager, gives an overview of the launch package of the STS-92 Discovery mission (Z-1 Truss, PMA-3, DDCU, etc.), and gives details on the configuration and equipment positioning on the Z-1 Truss. Simulations show the installation of the DDCU (DC to DC power converter) and the S-band Antenna.

CASI

Simulation: Trusses; Prelaunch Summaries; Spacecraft Equipment

STS-97 Countdown Status
Nov. 29, 2000; In English; Videotape: 17 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001006468; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
Joel Wells, NASA Public Affairs, introduces Steve Altenuus, NASA Test Director, David Flowers, P-6 Truss Integration Engineer, and Ed Prisicale, Shuttle Weather Officer. Mr. Altenuus describes the successful countdown thus far, and some of the prelaunch activities. Mr. Flowers gives an overview of the P-6 Truss and its role on the International Space Station (ISS). Mr. Prisicale gives a forecast for good launching weather. The men then answer questions from the press.

CASI

Countdown, Weather Forecasting; Trusses; Spacecraft Launching

STS-97 ISS Science Payloads Briefing
Nov. 13, 2000; In English; Videotape: 21 min. 2 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001006609; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
John Un, International Space Station (ISS) Lead Increment Scientist, gives an overview of the STS-97 Endeavour mission payload (PV Module P6) and Expedition 1 crew. He describes the research and experimentation to take place on the ISS in the following fields: (1) Life Sciences, (2) Microgravity Research, (3) Commercial, (4) Space Sciences, and (5) Earth Sciences. Observations of
Earth include images of the Aral Sea in central Asia and fires in Mongolia. Mr. Un then answers questions from the press.

CASI

Spaceborne Experiments: Research and Development; International Space Station: Prelaunch Summaries

20010111875 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-92 Extravehicular Activity Overview
Sep. 26, 2000; In English; Videotape: 46 min. 2 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--20010106008; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Daryl Schuck, STS-92 Lead Extravehicular Activity (EVA) Officer, gives an overview of the four EVAs scheduled for the STS-92 mission. He discusses the construction phase of the International Space Station (ISS) and the equipment to be installed onto the ISS, such as the Z-1 Truss, PMA-3 (Third Pressurized Mating Adapter), S-Band Antenna, and the DC to DC Power Converter. Mr. Schuck describes the challenges of the mission, and the activities and objectives of the spacewalkers. He then answers questions from the press.

CASI

Extravehicular Activity; Crew Procedures (Inflight); International Space Station; Prelaunch Summaries

20010111858 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-97 Prelaunch Press Conference
Nov. 29, 2000; In English; Videotape: 43 min. 6 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--20010106007; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS


CASI

Spacecraft Launching; Weather Forecasting; Prelaunch Summaries

20010111860 NASA Johnson Space Center, Houston, TX USA

STS-98 Crew Training
Dec. 26, 2000; In English; Videotape: 10 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--20010104337; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the crew of STS-98 during various phases of their training, including an undocking simulation in the Fixed Bases Shuttle Mission Simulator (SMS), bailout training, and extravehicular activity (EVA) training at the NBL.

CASI

Astronaut Training; Crew Procedures (Inflight); Bailout; Extravehicular Activity

20010111861 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-50 Columbia/EDO Plate Installation
19920316; In English; Videotape: 3 min. 6 sec. playing time, in color, no sound
Report No.(s): NONP--NASA--VT--20010101583; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the installation of the Extended Duration Orbiter (EDO) plate onto the Columbia Orbiter at the Orbiter Processing Facility (OPF).

CASI

Columbia (Orbiter); Installing

20010111862 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-55 Crew Briefing, Part 2 of 2
Feb. 04, 1993; In English; Videotape: 24 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--20010101575; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

A continuation of "STS-55 Crew Briefing, Part 1 of 2", (internal processing ID 2001011306), the crew of STS-55, Commander Steven R. Nagel, Pilot Terence T. Henricks, Mission Specialists Jerry L. Ross, Charles J. Precourt, and Dr. Bernard A. Hart 'is Jr, continue to answer questions from the press about the upcoming Columbia mission.

CASI

Prelaunch Summaries; Columbia (Orbiter)

20010111949 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-106 Countdown Status Briefing
Sep. 07, 2000; In English; Videotape: 16 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000152216; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

George Diller, NASA Public Affairs, introduces Jeff Spaulding, NASA Test Director, Scott Higginbotham, KSC Payload Manager, and Ed Prisesc, Shuttle Weather Officer. Mr. Spaulding discusses the successful countdown thus far and some of the prelaunch activities. Mr. Higginbotham describes the show operations and possible changes in the payload configuration. Mr. Prisesc forecasts good weather for the upcoming launch. The men then answer questions from the press.

CASI

Countdown; Weather Forecasting; Prelaunch Summaries

20010111950 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-44 Prelaunch Activities, O&C and LCC Firing Room
Nov. 24, 1991; In English; Videotape: 6 min. 55 sec. playing time, in color, no sound
Report No.(s): NONP--NASA--VT--2000148100; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The crew of STS-44, Commander Frederick D. Gregory, Pilot Terence T. Henricks, Mission Specialists E. Story Musgrave, Mario Runco, Jr., and James S. Voss, and Payload Specialists Thomas J. Henman, is seen at breakfast and suit up before the launch of Atlantis. Footage shows the LCC Firing room shortly before launch, and the liftoff of Atlantis is seen.

CASI

Spacecraft Launching: Crew Procedures (Preflight); Atlantis (Orbiter)

20010111953 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-47 Crew Briefing
Aug. 11, 1992; In English; Videotape: 32 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001011307; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS


CASI

Spacecrews; Prelaunch Summaries

20010111954 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-55 Crew Briefing, Part 1 of 2
Feb. 04, 1993; In English; Videotape: 62 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001011306; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Commander Steven R. Nagel introduces the crew of STS-55, Pilot Terence T. Henricks, Mission Specialists Jerry L. Ross, Charles J. Precourt, and Dr.
Bernard A. Harris Jr., and Payload Specialists Dr. Ulrich Walter and Hans Schlegel. Each crew member gives an overview of the mission objectives, activities, spaceborne experiments, payload (Spacelab-D2, SAREX-II), and his role in the mission. They then answer questions from the press. The video ends during the questions and continues on 'STS-55 Crew Briefing, Part 2 of 2' (internal processing ID 2001001575).

CASI

**Payloads: Spaceborne Experiments; Prelaunch Summaries**

2001011955 NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS-41 Activity/Rollover Preparations/Lift Preparations in VAB/Mated**

Aug. 28, 1990; In English; Videotape: 8 min. 54 sec. playing time, in color, with sound (no narration)

Report No.(s): NONP--NASA-VT--2001011365; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the preparations for the Discovery Orbiter rollover to the Vehicle Assembly Building (VAB), the lift from the transport, and the mating of Discovery to the External Tank (ET).

CASI

**Discovery (Orbiter): External Tanks**

20010112036 NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS-92 Prelight Briefings Video Feed and International Space Station Overview**

Sep. 26, 2000; In English; Videotape: 71 min. 2 sec. playing time, in color, with sound

Report No.(s): NONP--NASA-VT--2001010759; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The first half of this video is a collection of video feeds from various preflight conferences and simulations show the payload bay and payload equipment. The International Space Station's (ISS) structure is seen, as are close-up shots of the Z-1 truss. Footage shows extravehicular activity (EVA) underwater training. The second half of the video is a preflight conference on the mission objectives concerning the ISS. Tommy Hallaway, Manager, ISS Program, and Robert Cabana, ISS Manager for International Operations, discuss the STS-92 mission in terms of the ISS and the role of ISS in the future. Mr. Cabana gives the status of present and future ISS hardware. The men then answer questions from the press.

CASI

**International Space Station: Payloads; Prelaunch Summaries**

20010112037 NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS-92 Crew News Conference**

Sep. 26, 2000; In English; Videotape: 56 min. playing time, in color, with sound

Report No.(s): NONP--NASA-VT--2001007190; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Commander Brian Duffy introduces the crew of STS-92, Pilot Pamela A. Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter J.K. Wisoff, Michael E. Lopez-Alegria, and William S. McArthur. They discuss the activities for each flight day and give details on the payload (PMA-3, Z-1 truss, etc.). They then answer questions from the press.

CASI

**Payloads: Spacecrews; Prelaunch Summaries**

20010112056 NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS-39 Activities in Orbiter Bay**

Jan. 17, 1991; In English; Videotape: 3 min. 5 sec. playing time, in color, without sound

Report No.(s): NONP--NASA-VT--2000118022; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows people working in the payload of the Discovery Orbiter in the Orbiter Bay.

CASI

**Discovery (Orbiter): Payloads**

20010112057 NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS-46 Special Events Resource Tape, Part 2 of 2**

Nov. 17, 1992; In English; Videotape: 45 min. 41 sec. playing time, in color, with sound

Report No.(s): NONP--NASA-VT--2000148074; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of 'STS-46 Special Events Resource Tape, Part 1 of 2', the STS-46 Atlantis in-flight crew interviews proceed. Claude Nicollier is interviewed (in French) during a European Space Agency (ESA) VIP call and ESA press conference. The entire crew answers questions (in English) in an in-flight crew press conference about the mission.

CASI

**Postlaunch Reports: Atlantis (Orbiter)**

20010112058 NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS-46 Tethered Satellite System Mate to Deployer**

Dec. 18, 1991; In English; Videotape: 6 min. 28 sec. playing time, in color, without sound

Report No.(s): NONP--NASA-VT--2000148075; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Dick Young, NASA Public Affairs, introduces Bob Sieck, Launch Director, Kennedy Space Center, who gives an overview of the successful countdown and launch of the STS-45 Atlantis mission. He then answers questions from the press.

CASI

**Tethered Satellites: Spacecraft Equipment**

20010112059 NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS--45 Post Launch Press Conference**

Mar. 23, 1992; In English; Videotape: 16 min. 15 sec. playing time, in color, with sound

Report No.(s): NONP--NASA-VT--2000148076; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Chuck Shaw, STS-92 Lead Flight Director, and Sally Davis, International Space Station (ISS) Lead Flight Director, give an overview of the STS-92 Discovery mission in this preflight conference. The mission objectives and activities are discussed, including details on the launch, Discovery rendezvous and docking with ISS, the crew, spacewalks, and payload (IMAX, Z-1 Truss, PMA-3, DDCU, etc.). Prelight activities are described and information on the ISS is given. Mr. Shaw and Ms. Davis then answer questions from the press.

CASI

**Spacecraft Launching; Countdown; Postlaunch Reports**

20010112068 NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS--92 Mission Overview**

Sep. 26, 2000; In English; Videotape: 55 min. 15 sec. playing time, in color, with sound

Report No.(s): NONP--NASA-VT--2001006467; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Chuck Shaw, STS-92 Lead Flight Director, and Sally Davis, International Space Station (ISS) Lead Flight Director, give an overview of the STS-92 Discovery mission in this preflight conference. The mission objectives and activities are discussed, including details on the launch, Discovery rendezvous and docking with ISS, the crew, spacewalks, and payload (IMAX, Z-1 Truss, PMA-3, DDCU, etc.). Prelight activities are described and information on the ISS is given. Mr. Shaw and Ms. Davis then answer questions from the press.

CASI

**Prelaunch Summaries: Discovery (Orbiter): Payloads**

200101012010 NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS--56 Post Launch Press Conference**

Apr. 08, 1993; In English; Videotape: 26 min. 13 sec. playing time, in color, with sound

Report No.(s): NONP--NASA-VT--2001001573; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Dick Young, NASA Public Affairs, introduces Brewster Shaw, Deputy Program Manager Space Shuttle, and Bob Sieck, Launch Director, Kennedy Space Center, who give an overview of the successful countdown and launch of the STS-56 Discovery Orbiter. They then answer questions from the press.

CASI

**Countdown; Spacecraft Launching; Postlaunch Reports**

139
socket adapter assembly. He describes the rendezvous between Intelsat and the Endeavour Orbiter. Mr. Virdree then answers questions from the press.

CASI
Endeavour (Orbiter); Intelsat Satellites: Rendezvous

2001012140 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-51 Main Engine Shutdown Playbacks from OTV

Aug. 12, 1993; In English; Videotape: 9 min. 17 sec. playing time, in color, without sound
Report No.(s): NONP-NASA–VT–2000152232; No Copyright; Avail: CASI; B01, Videotape-Beta: V01, Videotape-VHS

The shutdown of the main engines is shown from different vantage points.

CASI
Playbacks; Shutdowns; Space Shuttle Main Engine

2001012141 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-50 TCDT Activities

Jun. 09, 1992; In English; Videotape: 62 min. 39 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–2000152237; No Copyright; Avail: CASI; B04, Videotape-Beta: V04, Videotape-VHS

Terminal Countdown and Demonstration Test (TCDT) activities are shown, such as the STS-50 crew (Commander Richards, Pilot Kenneth D. Bowersox, Payload Commander Bonnie J. Dunbar, Mission Specialists Ellen S. Baker and Carl J. Meade, and Payload Specialists Lawrence J. DeLucas and Eugene H. Trinh) emerging from T-38 aircraft and being introduced by Commander Richards. Emergency egress training is seen, as is the crew's departure from the Operations and Checkout (O&C) Building. Footage shows the launch pad and launch control room as the countdown nears the engine ignition simulation.

CASI
Countdown; Crew Procedures (PreFlight); Launch pads; Columbia (Orbiter); Astronaut Training

2001012142 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-47 Countdown Status Briefing

Sep. 09, 1992; In English; Videotape: 6 min. 22 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–2000152238; No Copyright; Avail: CASI; B01, Videotape-Beta: V01, Videotape-VHS

NASA officials answer questions from the press about the upcoming launch of the STS-47 Endeavour mission.

CASI
Endeavour (Orbiter); Countdown; Spacecraft Launching; Prelaunch Summaries

20010113076 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-44 Post Launch Press Conference

Nov. 24, 1991; In English; Videotape: 21 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–2001015360; No Copyright; Avail: CASI; B02, Videotape-Beta: V02, Videotape-VHS

Dick Young, NASA Public Affairs, introduces Bob Sieck, Launch Director, Kennedy Space Center, who gives an overview of the STS-44 Atlantis countdown and launch. He discusses the hardware problem experienced shortly before liftoff (a replenishing valve for the liquid oxygen on the mobile launch platform had been leaking). He then answers questions from the press.

CASI
Postlaunch Reports: Countdown; Spacecraft Launching; Valves

20010113078 NASA Johnson Space Center, Houston, TX USA

STS-98 Crew Interview: Mark Polansky

Jan. 04, 2001; In English; Videotape: 48 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–20001015361; No Copyright; Avail: CASI; B03, Videotape-Beta: V03, Videotape-VHS

The STS-98 Pilot Mark Polansky is seen being interviewed. He answers questions about his inspiration to become an astronaut, his career path, and his training. He gives details on the mission's goals and significance, and the payload (ORU, PDGF) and hardware it brings to the International Space Station (ISS). Mr. Polansky discusses his role in the mission's spacewalks and activities.

CASI
Payloads; Crew Procedures (Preflight); Prelanding Summaries; Astronaut Training

20010113127 NASA Johnson Space Center, Houston, TX USA

STS-99 Mission Highlights Resource Tape, Part 1 of 2

Oct. 04, 2000; In English; Videotape: 87 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–2000157334; No Copyright; Avail: CASI; B04, Videotape-Beta: V04, Videotape-VHS

An overview of the STS-99 Endeavour mission is given through footage of each flight day. Scenes from flight days one through ten show activities such as astronaut prelaunch procedures (breakfast, suit-up, and boarding Endeavour), launch, and on-orbit activities such as the deployment of the Shuttle Radar Topography Mission (SRTM) instrument. Crewmembers are seen during such everyday activities as brushing their teeth, exercising (bicycle), and emerging from their sleeping bunks. One of the crewmembers shows the contents of the onboard medical kit. See 'STS-99 Mission Highlights Resource Tape, Part 2 of 2' for the activities of flight days 11-12 and the landing of Endeavour.

CASI
Crew Procedures (Preflight); Crew Procedures (Inflight); Endeavour (Orbiter); Earth Observations (From Space); Spacecraft Landing

20010113128 NASA Johnson Space Center, Houston, TX USA

STS-99 Mission Highlights Resource Tape, Part 2 of 2

Oct. 04, 2000; In English; Videotape: 26 min. 13 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–2000157333; No Copyright; Avail: CASI; B02, Videotape-Beta: V02, Videotape-VHS

A continuation of 'STS-99 Mission Highlights Resource Tape, Part 1 of 2', footage shows the activities of flight days 11 and 12. The retraction of the Shuttle Radar Topography Mission (SRTM) is seen, and the landing of Endeavour is seen from several vantage points.

CASI
Crew Procedures (Inflight); Earth Observations (From Space); Endeavour (Orbiter); Spacecraft Landing

20010113129 NASA Johnson Space Center, Houston, TX USA

STS-101 Mission Highlights Resource Tape, Part 2 of 3

Sep. 19, 2000; In English; Videotape: 50 min. 7 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–2000142672; No Copyright; Avail: CASI; B03, Videotape-Beta: V03, Videotape-VHS

A continuation of 'STS-101 Mission Highlights Resource Tape, Part 1 of 3', footage shows the activities of flight days five through ten. The crew of STS-101 (Commander James D. Halsell, Jr. and Mission Specialists Mary Ellen Weber, Jeffrey N. Williams, James S. Voss, Susan J. Helms, and Yuri Vladimirovich Usachev) are seen during ingress between the Atlantis Orbiter and the International Space Station (ISS) and as they transfer equipment from Atlantis to the ISS. The crew is shown working in the Zarya module and leaving ISS just before reconnecting the connecting hatches. Footage shows the successful undocking of Atlantis. The activities of flight day 11 and landing can be seen on 'STS-101 Mission Highlights Resource Tape, Part 3 of 3'.

CASI
Atlantis (Orbiter); International Space Station; Crew Procedures (Inflight); Orbital Assembly; Spacecraft Docking

20010101318 NASA Johnson Space Center, Houston, TX USA

STS-101 Mission Highlights Resource Tape, Part 3 of 3

Sep. 19, 2000; In English; Videotape: 17 min. 55 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–2000142669; No Copyright; Avail: CASI; B02, Videotape-Beta: V02, Videotape-VHS

A continuation of 'STS-101 Mission Highlights Resource Tape, Part 2 of 3', footage shows the activities of flight day 11. The crew of STS-101...
(Commander James D. Halley, Jr. and Mission Specialists Mary Ellen Weber, Jeffrey D. Williams, James S. Voss, Susan J. Helms, and Yuri Vladimirovich Usachev) are seen suiting up in preparation for landing and the nighttime landing of Atlantis is seen from several vantage points. ASAP

**Spacecraft Landing; Atlantis (Orbiter); Crew Procedures (Inflight)**

STS-101 Mission Highlights Resource Tape, Part 1 of 3
Sep. 19, 2000; In English; Videotape: 56 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000142665#1; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

An overview of the STS-101 Atlantis mission is given through footage of each flight day. Scenes from flight days one through four show activities such as astronaut prelaunch procedures (breakfast, suit-up, and boarding Atlantis), launch, and on-orbit activities including the robotic arm checkout, docking with the International Space Station, and Mission Specialists James Voss' and Jeff Williams' spacewalks. See 'STS-101 Mission Highlights Resource Tape, Part 2 of 3' and 'STS-101 Mission Highlights Resource Tape, Part 3 of 3' for the activities of flight days 5 through 11.

**Spacecraft Docking; International Space Station; Atlantis (Orbiter); Spacecraft Launching; Crew Procedures (Preflight); Crew Procedures (Inflight)**

STS-45 Atlas–1 Compiled Processing Footage
Feb. 20, 1992; In English; Videotape: 30 min. 53 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001013662; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Compiled footage shows shots of the Atmospheric Laboratory for Applications and Science's (Atlas-1's) move to the test stand at the Operations and Checkout (O&C) Building, the sharp edge inspection, and the Atlas-1 press showing. The STS-45 Atlantis rollover to the Vehicle Assembly Building (VAB) and subsequent rollout to Pad A are seen.

**Crew; Inspection; Atlantis (Orbiter); Preparation**

STS–63 Commander Wetherbee Explains Five Minute Window and Mir Rendezvous
Jan. 26, 1995; In English; Videotape: 3 min. 18 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001016067; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

In a preflight interview, Commander James B. Wetherbee of the STS-63 Discovery mission gives an overview of the upcoming rendezvous with Mir and the five minute window in which the rendezvous takes place. Computerized simulations show the docking of the Discovery Orbiter with Mir.

**Crew; International Space Station; Crew Procedures (Inflight); Prelaunch Summaries**

STS–52 Post Launch Press Conference
Oct. 22, 1992; In English; Videotape: 35 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001017558; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Dick Young, NASA Public Affairs, introduces Brewster Shaw, Deputy Program Manager Space Shuttle, and Bob Stiek, Launch Director, Kennedy Space Center, who give brief statements about the countdown and launch of the STS-52 Columbia Orbiter. The problems encountered during countdown are discussed, including details on the hydrogen leak in the ground umbilical carrier tank, the 100% exceedance of load on the external tank, and the reasons why the
flight rule for an upper limit of cross winds was waived. The men then answered questions from the press.

CASI

Columbia (Orbiter): Countdown; Leakages; Loads (Forces); Spacecraft Equipment

2001018416 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–52 Astronaut Crew Activities for TCDD
Oct. 02, 1992; In English; Videotape: 10 min. 11 sec. playing time, in color, with sound
Report No.(s): NONP–NAS–VT–2001017556; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Footage shows scenes of the Terrhal Countdowm and Demonstration Test (TCDT) activities for the STS-52 Columbia mission, including shots of emergency egress training and the flight of T-38 aircraft. Commander James B. Wetherbee introduces Pilot Michael A. Baker and Mission Specialist Charles L. Veach, William M. Shepherd, Tamara E. Jernigan, and Steven G. MacLean, and gives a brief overview of the mission. The crew then answers questions from the press.
CASI

Spacecrews; Egress; Emergencies; Astronaut Training; Prelaunch Summaries; Crew Procedures (Preflight)

2001018417 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–52 Laveo/Orbiter Apogee Kick Motor in SAEF–2
May 11, 1992; In English; Videotape: 3 min. 57 sec. playing time, in color, with sound
Report No.(s): NONP–NAS–VT–2001017551; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Footage shows the apogee kick motor being moved via forklift at the Spacecraft Assembly and Encapsulation Facility (SAEF-2).
CASI

Columbia (Orbiter): Spacecraft Equipment

2001018436 NASA Johnson Space Center, Houston, TX USA
STS–102 Crew Interviews/Andy Thomas
Jan. 24, 2001; In English; Videotape: 47 min. 21 sec. playing time, in color, with sound
Report No.(s): NONP–NAS–VT–2001021779; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
STS-102 Mission Specialist Andy Thomas is seen being interviewed. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission’s goals and significance, its payload (ISS-07/5A1 (MPLM-1)), and spacewalks. Thomas discusses the upcoming transfer of the International Space Station’s (ISS) crew Expedition 1 and Expedition 2 and the role of the Mir Space Station in the evolution and success of the ISS.
CASI

International Space Station: Spacecrews: Prelaunch Summaries; Crew Procedures (Inflight)

2001018437 NASA Johnson Space Center, Houston, TX USA
STS–102 Crew Interview/Jim Kelly
Jan. 24, 2001; In English; Videotape: 35 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP–NAS–VT–2001021775; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
STS-102 Pilot Jim Kelly is seen being interviewed. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission’s goals and significance, its payload (ISS-07/5A1 (MPLM-1)), and spacewalks. Kelly discusses the upcoming transfer of the International Space Station’s (ISS) crew Expedition 1 and Expedition 2.
CASI

Spacecrews: Crew Procedures (Inflight); International Space Station; Prelaunch Summaries

200101918493 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–106 Countdown Status Briefing
Sep. 04, 2000; In English; Videotape: 2 min. playing time, in color, with sound
Report No.(s): NONP–NAS–VT–20001023238; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
Joel Wells, NASA Public Affairs, introduces Jeff Spaulding, NASA Test Director, Scott Higgenbotham, Kennedy Space Center Payload Manager, and Ed Prisleae, Shuttle Weather Officer, who give an overview of the successful countdown for the STS-106 Atlantis mission thus far. Prelaunch activities and the payload status are described. The weather forecast for the upcoming launch is given. The men then answer questions from the press.
CASI

Countdown; Spacecraft Launching; Prelaunch Tests; Prelaunch Summaries; Weather Forecasting

200101918492 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–48 Discovery Rollout to Pad
Aug. 12, 1991; In English; Videotape: 3 min. 53 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP–NAS–VT–2001023178; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Footage shows the rollout of the Discovery Orbiter to the launching pad.
CASI

Discovery (Orbiter): Launching Pads

200101918494 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–48 UARS Release
Mar. 10, 1993; In English; Videotape: 3 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NAS–VT–2001023149; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Footage shows the Upper Atmosphere Research Satellite (UARS) at the end of the robotic arm attached to the Discovery Orbiter against a backdrop of Earth. The crew of STS-48, Commander John O. Creighston, Pilot Kenneth S. Reightler, and Mission Specialists James F. Buchli, Charles D. Gernar, and Mark N. Brown are seen during in-flight activities, such as eating and stowage procedures.
CASI

Upper Atmosphere Research Satellite (UARS); Crew Procedures (Inflight)

200101918495 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–55 Hydraulic Work in Att Section of Columbia
Jan. 14, 1992; In English; Videotape: 2 min. 22 sec. playing time, in color, with sound
Report No.(s): NONP–NAS–VT–2001023148; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Footage shows the D-2 Spacelab in the cargo bay of the Columbia Orbiter in the Orbiter Processing Facility (OPF).
CASI

Columbia (Orbiter); Hydraulic Equipment

200101918496 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–59 Rollover to VAB
Apr. 14, 1994; In English; Videotape: 7 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NAS–VT–2001023133; No Copyright; Avail: CASI;
International Space Station: Pre-launch Summaries; Crew Procedures (Flight)

Expedition 2 (the second resident crew of the International Space Station) Flight Engineer Susan Helms is seen being interviewed. She answers questions about her inspiration to become an astronaut and her career path. She gives details on the Space Shuttle mission and goals, including information on the spacewalks and transfer of Expedition crews, and discusses her upcoming stay on the International Space Station (ISS). Helms gives her thoughts on the international cooperation needed to successfully construct the ISS and some of the scientific experiments that will take place on the station.

CASI
Endeavour (Orbiter): Spacecraft Manoeuvres

STS-59 Endeavour RSS Rollback, Edited for Media
Apr. 07, 1994; In English; Videotape: 2 min. 9 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–2001023111; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Footage shows the rollback of the Endeavour Orbiter at the launch pad.

CASI
Endeavour (Orbiter): Launching Sites

STS-106 Countdown Status Briefing
Sep. 05, 2000; In English; Videotape: 21 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023240; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
George Diller, NASA Public Affairs, introduces Steve Altemus, NASA Test Director, Scott Higgenbotham, Kennedy Space Center Payload Manager, and Ed Prisect, Shuttle Weather Officer, who give an overview of the successful countdown for the STS-106 Atlantis mission thus far. Pre-launch activities are described, such as the engine preparations, the communications systems power up, final flight close outs, and payload status. The weather forecast for the upcoming launch is given. The men then answer questions from the press.

CASI
Countdown: Spacecraft Launching

STS–106 Post Launch Press Conference
200101188578 NASA Kennedy Space Center, Cocoa Beach, FL USA

ST-106 Countdown Status Briefing
Sep. 05, 2000; In English; Videotape: 21 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023240; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
George Diller, NASA Public Affairs, introduces Steve Altemus, NASA Test Director, Scott Higgenbotham, Kennedy Space Center Payload Manager, and Ed Prisect, Shuttle Weather Officer, who give an overview of the successful countdown for the STS-106 Atlantis mission thus far. Pre-launch activities are described, such as the engine preparations, the communications systems power up, final flight close outs, and payload status. The weather forecast for the upcoming launch is given. The men then answer questions from the press.

CASI

STS–106 Crew News Conference
Sep. 18, 2000; In English; Videotape: 57 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023329; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

CASI
Service Module (ISS): Spacecrews: Crew Procedures (Inflight)

STS–53 TCDT Training and Press Q&A at Pad A
Nov. 12, 1992; In English; Videotape: 13 min. 59 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023164; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Footage shows the training activities for the crew of STS-53 (Commander David M. Walker, Pilot Robert D. Cabana, and Mission Specialists Guion S. Bluford, James S. Voss, and Michael R. Clifford), including Emergency Egress Training. Commander Walker introduces the crew and they answer questions from the press.

CASI
Spacecrews: Crew Procedures (Preflight): Astronaut Training: Emergencies: Prelaunch Summaries

STS–57 Landing at KSC
Jul. 01, 1993; In English; Videotape: 16 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001016069; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Footage shows the landing of STS-57 Endeavour at Kennedy Space Center (KSC) and the ground crew meeting the orbiter on the runway.

CASI
Endeavour (Orbiter): Spacecraft Landing

International Space Station: Pre-launch Summaries; Crew Procedures (Flight)

STS–106 Expedition 2 Crew Interview: Susan Helms
Jan. 24, 2001; In English; Videotape: 63 min. 32 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001021819; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
Expedition 2 (the second resident crew of the International Space Station) Commander Yury Usachev is seen being interviewed. He answers questions about his inspiration to become a cosmonaut and his career path. He gives details on the Space Shuttle mission and goals, including information on the spacewalks and transfer of Expedition crews, and discusses his upcoming stay on the International Space Station (ISS). Usachev gives his thoughts on the international cooperation needed to successfully construct the ISS and some of the scientific experiments that will take place on the station.

CASI
Space Transportation System Flights: Crew Procedures (Inflight): Prelaunch Summaries

STS–106 Expedition 2 Crew Interview: Yury Usachev
Jan. 24, 2001; In English; Videotape: 53 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001021778; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Expedition 2 (the second resident crew of the International Space Station) Commander Yury Usachev is seen being interviewed. He answers questions about his inspiration to become a cosmonaut and his career path. He gives details on the Space Shuttle mission and goals, including information on the spacewalks and transfer of Expedition crews, and discusses his upcoming stay on the International Space Station (ISS). Usachev gives his thoughts on the international cooperation needed to successfully construct the ISS and some of the scientific experiments that will take place on the station.

CASI
International Space Station: Prelaunch Summaries: Crew Procedures (Inflight)

STS–106 Expedition 2 Crew Interview: Jim Voss
Jan. 24, 2001; In English; Videotape: 57 min. 26 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001021776; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Expedition 2 (the second resident crew of the International Space Station) Flight Engineer Jim Voss is seen being interviewed. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the Space Shuttle mission and goals, including information on the spacewalks and transfer of Expedition crews, and discusses his upcoming stay on the International Space Station (ISS). Voss gives his thoughts on the international cooperation needed to successfully construct the ISS and some of the scientific experiments that will take place on the station.

CASI
International Space Station: Prelaunch Summaries: Crew Procedures (Inflight)
**STS-58 Video Update Day 10: Crew Press Conference and View of California Fires**

Oct. 27, 1993; In English; Videotape: 21 min. 56 sec. playing time, in color, with sound

Report No(s): NONP--NASA--VT--200101665


The footage shows the widespread fires of California from space.

CASI

**Crew Procedures (Inflight): Postlaunch Reports**

**STS-59 Video Update Day 10: Crew Press Conference and View of California Fires**

Nov. 23, 1993; In English; Videotape: 5 min. 14 sec. playing time, in color, no sound

Report No(s): NONP--NASA--VT--200101664

Footage shows the installation of the Space Radar Lab 1 Antenna onto the Endeavour Orbiter.

CASI

**Endeavour (Orbiter): Installing: Radar Antennas: Spacecraft Equipment**

**STS-59 Space Radar Lab 1 Antenna Installed on Pallet**

Jan. 10, 1994; In English; Videotape: 7 min. 40 sec. playing time, in color, no sound

Report No(s): NONP--NASA--VT--200101661

Footage shows the Space Radar Lab 1 being moved to the workstand.

CASI

**Endeavour (Orbiter): Space Laboratories**

**STS-53 TCDT O&C Exit**

Nov. 13, 1992; In English; Videotape: 2 min. playing time, in color, with sound

Report No(s): NONP--NASA--VT--200102316

Footage shows the crew of STS-53 (Commander David M. Walker, Pilot Robert D. Cabana, and Mission Specialists Guion S. Bluford, James S. Voss, and Michael R. Clifford) leaving the Operations and Checkout (O&C) Building during the Terminal Countdown and Demonstration Test (TCDT).

CASI

**Checkout: Spacecrews: Crew Procedures (Preflight)**

**STS-54 Tracking and Data Relay Satellite**

Jun. 06, 1993; In English; Videotape: 27 min. 59 sec. playing time, in color, with sound

Report No(s): NONP--NASA--VT--200102316

George Diller, NASA Public Affairs, introduces Charles Vanek, Tracking and Data Relay Satellite (TDRS) Program Manager, who gives an overview of the TDRS program, satellite design, and TDRS system. He then answers questions from the press.

CASI

**TDR Satellites: Satellite Design**

**STS-54 Crew Arrival for TCDT**

Dec. 14, 1992; In English; Videotape: 12 min. 54 sec. playing time, in color, with sound

Report No(s): NONP--NASA--VT--200102315

Footage shows the crew of STS-54, Commander John H. Casper, Pilot Donald R. McMonagle, and Mission Specialists Mario Runco, Jr., Gregory J. Harbaugh, and Susan J. Helnwein landing and emerging from several T-38 aircraft during the Terminal Countdown and Demonstration Test (TCDT). Commander Casper introduces the crew and they each make a brief statement about the mission.

CASI

**Spacecrews: Crew Procedures (Preflight): Prelaunch Summaries**

**STS-54 IUS Removal from Canister to Test Cell at VPF**

Sep. 22, 1992; In English; Videotape: 7 min. 53 sec. playing time, in color, with sound

Report No(s): NONP--NASA--VT--200102315

Footage shows the removal of the Inertial Upper Stage (IUS) from the canister to the test cell at the Vertical Processing Facility (VPF).

CASI

**Inertial Upper Stage: Canis**

**STS-54 Diffuse X-Ray Spectrometer**

Jan. 06, 1993; In English; Videotape: 37 min. 20 sec. playing time, in color, with sound

Report No(s): NONP--NASA--VT--200102315

Lous Kaluzenoki, Program Scientist, Wilton J. Sanders, Principal Investigator, and Chris Dunker, Diffuse X-Ray Spectrometer (DXS) Mission Manager, each give an overview of the DXS, including the purpose of the DXS, a brief description of the DXS, the scientific objectives of the DXS, and information on the STS-54 Endeavour mission, in which the DXS is part of the payload. The men then answer questions from the press.

CASI

**Endeavour (Orbiter): X-Ray Spectrometers: Payloads: Prelaunch Summaries**

**STS-60 Mission Update**

Feb. 07, 1994; In English; Videotape: 18 min. 15 sec. playing time, in color, with sound

Report No(s): NONP--NASA--VT--200102314

The activities of the STS-60 Discovery mission are reviewed, including
Footage shows the crew of STS-49, Commander Daniel C. Brandenstein, Pilot Kevin R. Chilton, and Mission Specialists Pierre J. Thuot, Kathy C. Sullivan, Houston Museum of Natural Science, give an overview of the space-based experiments that will take place on the STS-54 Endeavour mission. Mr. Vogt discusses the objectives and procedures of the experiments, which are structured around using toys to show the effects of microgravity. Mr. Vogt and Ms. Sullivan then answer questions from the press.

CASI

Spaceborne Experiments: Gravitational Effects

20010018722 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-49 Astronaut Flight Crew

Feb. 22, 1992; In English; Videotape: 5 min. 45 sec. playing time, in color, no sound
Report No.(s): NONP--NASA--VT--2001017555; No Copyright; Avail: CASI; B01, Videotape-VHS

Footage shows close-up shots of the Tracking and Data Relay Satellite (TDRS) in the Endeavour Orbiter’s cargo bay at Launch Pad B. CASI

TDRS Satellites; Cargo

20010018726 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS--48 UARS at PHSF

May 22, 1991; In English; Videotape: 9 min. 21 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP--NASA--VT--2001017549; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the Upper Atmosphere Research Satellite (UARS) being moved at the Payload Hazardous Servicing Facility (PHSF). CASI

Upper Atmosphere Research Satellite (UARS); Payloads

20010018744 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS--54 Firing Room Activities

Feb. 03, 1991; In English; Videotape: 18 min. 34 sec. playing time, in color, no sound
Report No.(s): NONP--NASA--VT--2001023131; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Footage shows the Ground Control Center during Firing Room Activities for the STS-60 Discovery mission. CASI

Ground Based Control; Firing (Igniting)

20010018746 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS--54 Physics of ToYS

Jan. 06, 1993; In English; Videotape: 32 min. 48 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001023121; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Greg Vogt, NASA Headquarters Education Specialist, and Carolyn Sumners, Houston Museum of Natural Science, give an overview of the space-based experiments that will take place on the STS-54 Endeavour mission. Mr. Vogt discusses the objectives and procedures of the experiments, which are structured around using toys to show the effects of microgravity. Mr. Vogt and Ms. Sumners then answer questions from the press.

CASI

Spaceborne Experiments: Gravitational Effects

20010018721 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS--54 Physics of ToYS

Jan. 06, 1993; In English; Videotape: 32 min. 48 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001023121; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Greg Vogt, NASA Headquarters Education Specialist, and Carolyn Sumners, Houston Museum of Natural Science, give an overview of the space-based experiments that will take place on the STS-54 Endeavour mission. Mr. Vogt discusses the objectives and procedures of the experiments, which are structured around using toys to show the effects of microgravity. Mr. Vogt and Ms. Sumners then answer questions from the press.

CASI

Spaceborne Experiments: Gravitational Effects

20010018722 NASA Kennedy Space Center, Cocoa Beach, FL USA

Early Mission Blowups

Jan. 01, 1985; In English; Videotape: 12 min. 47 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP--NASA--VT--2001023108; No Copyright; Avail: CASI; B01, Videotape-VHS

Footage shows the explosions of many early model rockets and aircraft.

CASI

Explosions; Combustion

20010018724 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS--49 Astronaut Flight Crew

Feb. 22, 1992; In English; Videotape: 5 min. 45 sec. playing time, in color, no sound
Report No.(s): NONP--NASA--VT--2001017555; No Copyright; Avail: CASI; B01, Videotape-VHS

Footage shows the crew of STS-49, Commander Daniel C. Brandenstein, Pilot Kevin P. Chilton, and Mission Specialists Pierre J. Thuot, Kathryn C. Thornton, Richard J. Hieb, Thomas D. Akers, and Bruce E. Melnick putting equipment away in compartments in the payload bay of Endeavour. CASI

Compartments; Spaceships; Astronaut Training; Crew Procedures (Preflight)

20010018725 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS--52 Crew Arrival for Launch

Oct. 19, 1992; In English; Videotape: 16 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001017552; No Copyright; Avail: CASI; B02, Videotape-VHS

The crewmembers of STS-52, Commander James B. Wetherbee, Pilot Michael A. Baker, and Mission Specialists Charles L. Veach, William M. Shepherd, Tinyara E. Jernigan, and Steven G. MacLean are seen landing and emerging from several T-38 aircraft. Commander Wetherbee introduces the crew and they each give a brief statement about the upcoming Columbia mission. CASI

Crew Procedures (Preflight); Prelaunch

20010018726 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS--48 UARS at PHSF

May 22, 1991; In English; Videotape: 9 min. 21 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP--NASA--VT--2001017549; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the Upper Atmosphere Research Satellite (UARS) being moved at the Payload Hazardous Servicing Facility (PHSF). CASI

Upper Atmosphere Research Satellite (UARS); Payloads

20010018754 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS--54 TDRS--F in Cargo Bay at Pad B

Jan. 10, 1992; In English; Videotape: 5 min. 12 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001023167; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows close-up shots of the Tracking and Data Relay Satellite (TDRS) in the Endeavour Orbiter’s cargo bay at Launch Pad B. CASI

TDRS Satellites; Cargo

20010018756 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS--48 UARS Edited Flow Tape

Sep. 13, 1991; In English; Videotape: 12 min. 23 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001023176; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the Upper Atmosphere Research Satellite being lifted into place in the payload bay of the Discovery Orbiter. CASI

Discovery (Orbiter); Upper Atmosphere Research Satellite (UARS)

20010018971 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS--52 Columbia/Breakfast, Suit--up, Depart O&C, Launch, On--Orbit, Landing

Nov. 02, 1992; In English; Videotape: 62 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001017546; No Copyright; Avail: CASI; B04, Videotape-VHS

Footage shows various stages of the STS-52 Columbia launch, including shots of the crew at breakfast, getting suited up, and departing to board the Orbiter. The launch is seen from many vantage points, as is the landing. On-orbit activities show the crew during medical experiments using the Lower Body Negative Pressure unit. CASI

Crew Procedures (Preflight); Crew Procedures (Inflight); Spacecraft Launching; Spacecraft Landing; Spaceborne Experiments

20010018972 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS--62 Columbia/Breakfast, Suit--up, Depart O&C, Launch, On--Orbit, Landing

Mar. 18, 1994; In English; Videotape: 62 min. 22 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001016602; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Footage shows various stages of the STS-62 Columbia launch, including shots of the crew at breakfast, getting suited up, and departing to board the Orbiter. The launch is seen from many vantage points, as is the landing. On-orbit activities show the crew performing medical experiments, such as using the Lower Body Negative Pressure unit, and during a demonstration of the effects...
of microgravity using M&Ms and marshmallows. The Gulf of Mexico and a hurricane are seen from the Orbiter.

CASI

Crew Procedures (Inflight); Crew Procedures (Prelaunch); Spacecraft Launching; Spacecraft Landing; Spaceborne Experiments

STS-51 ACTS/TOS and SPAS Deploy 2
Sep. 13, 1993; In English; Videotape: 62 min. 31 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023182; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Footage shows the deployment of the Advanced Communications Technology Satellite/Transfer Orbit Station (ACTS/TOS) and the Shuttle Pallet Satellite (SPAS) as seen from the Discovery Orbiter.

CASI
ACTS: Shuttle Pallet Satellites: Deployment

STS-48 Discovery/Prelaunch Activities with Isolated Views 2
Sep. 12, 1991; In English; Videotape: 48 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023150; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Footage of various stages of the STS-48 Discovery launch is shown, including shots of the crew at breakfast, getting suited up, and departing to board the Orbiter. The launch is seen from many vantage points.

CASI
Crew Procedures (Prelaunch); Spacecraft Launching

STS-54 Astronaut Crew Emergency Egress Training, Press Q&A, TCDT 2
Dec. 15, 1992; In English; Videotape: 26 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023155; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The crew of STS-54, Commander John H. Casper, Pilot Donald R. McMonagle, and Mission Specialists Mario Runco, Jr., Gregory J. Harbaugh, and Susan J. Helms, is seen during a question and answer session with the press and during the Terminal Countdown Demonstration Test (TCDT), including Emergency Egress Training.

CASI
Astronaut Training; Crew Procedures (Prelaunch); Prelaunch Summaries

Ban Joule Hi–8 Footage 2
Sep. 20, 1993; In English; Videotape: 2 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023141; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the exterior of the Ban Joule Hotel.

CASI
Buildings; Recreation

STS-47 Astronaut Crew Training Clip 2
Sep. 01, 1992; In English; Videotape: 30 min. 47 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023132; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The crew of STS-47, Commander Robert L. Gibson, Pilot Curtis L. Brown, Payload Commander Mark C. Lee, Mission Specialists N. Jan Davis, Jay Apt, and Mac C. Jernson, and Payload Specialist Murmuor Mohri, is seen during various parts of their training, including SAREX training in the Full Fuselage Trainer (FTT), firefighting training, a familiarization flight in the KC-135, a food tasting, photo training in the Crew Compartment Trainer, and bailout training in the Weightless Environment Training Facility (WETF) are also shown.

CASI
Astronaut Training; Bailout: Fire Fighting; Training Devices

STS-69 TCDF/Crew Emergency Egress, Walk Down, and Press Showing 2
Jul. 19, 1995; In English; Videotape: 9 min. 13 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023130; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The crew of STS-69, Commander David M. Walker, Pilot Kenneth D. Cockrell, Payload Commander James S. Voss, and Mission Specialists James H. Newman and Michael L. Gemhardt, is seen during emergency egress training and answer questions from the press during the press showing.

CASI
Egress: Crew Procedures (Prelaunch); Astronaut Training; Prelaunch Summaries

STS-60 Discovery/Breakfast, Suit-up, Depart O&C, Launch, On-Orbit, Landing 2
Feb. 11, 1994; In English; Videotape: 53 min. 26 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023126; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Footage of various stages of the STS-60 Discovery launch is shown, including shots of the crew at breakfast, getting suited up, and departing to board the Orbiter. The launch is seen from many vantage points, as is the landing. On-orbit activities show the crew performing medical experiments (metabolic tests, head movement sensory tests), and the deployment of Bremsat, part of the Discovery payload.

CASI
Deployment; Crew Procedures (Inflight); Crew Procedures (Prelaunch); Spaceborne Experiments; Spacecraft Launching; Spacecraft Landing

STS-53 TCDF Activities 2
Oct. 01, 1992; In English; Videotape: 17 min. 46 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023119; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The crew of STS-53, Commander David M. Walker, Pilot Robert D. Cabana, and Mission Specialists Guion S. Bluford, James S. Voss, and Michael R. Clifford, is seen during Terminal Countdown Demonstration Test (TCDF) activities. Included is footage of Emergency Egress Training and a press question and answer session.

CASI
Astronaut Training; Crew Procedures (Prelaunch); Prelaunch Summaries

A New Beginning 2
Feb. 01, 1993; Videotape: 14 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001021125; No Copyright; Avail: CASI;
An overview of the Space Shuttle program is given, including scenes from the assembly, transfer, equipping, rollout, launch, and landing of the Space Shuttle. On-orbit activities are seen, such as satellite deployment and retrieval and spacewalks.

CASI
**Space Shuttles: Spacecraft Launching; Spacecraft Landing**

---

**2001019755 NASA Kennedy Space Center, Cocoa Beach, FL USA**

**STS–59 Endeavour Arrivals and More to MDD**

May 02, 1994; In English; Videotape: 18 min. 19 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–200016066; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Footage shows the arrival and landing of the NASA aircraft that is mated to the Endeavour Orbiter.

CASI
**Endeavour (Orbiter): Arrivals; Aircraft Landing**

---

**2001019755 NASA Kennedy Space Center, Cocoa Beach, FL USA**

**STS–106 ISS Overview Briefing**

Sep. 05, 2000; In English; Videotape: 77 min. 35 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000152215; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Dwayne Brown, NASA Public Affairs, introduces Bob Cabana of NASA, Michael Sinevichkov of PAKA, Vasily Tsiblev of GCTC, Steve Mozes of CSA, Ian Pryke of ESA, and Masaki Komatsu of NASA. Each man gives an overview of the status of the International Space Station (ISS), including details on the current configuration, future missions and what they will bring to the ISS, and each space agency’s contribution to the ISS. They then answer questions from the press.

CASI
**International Space Station: Prelaunch Summaries**

---

**2001019759 NASA Johnson Space Center, Houston, TX USA**

**STS–98 Crew Activity Report/Flight Day 3 Highlights**

Feb. 09, 2001; In English; Videotape: 16 min. 10 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000124843; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this third day of theSTS–98 mission, the Atlantis Orbiter approaches and docks with the International Space Station.

CASI
**Atlantis (Orbiter); International Space Station; Spacecraft Docking**

---

**2001019768 NASA Kennedy Space Center, Cocoa Beach, FL USA**

**STS–49 Columbia/Breakfast, Suit-up, Depart O&C, Launch, On-Orbit, Landing**

May 01, 1994; In English; Videotape: 56 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000123107; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Footage of various stages of the STS–55 Columbia launch is shown, including shots of the crew at breakfast, getting suited up, and departing to board the Orbiter. The launch is seen from many vantage points, as is the landing. On-orbit activities show the crew exercising on the bicycle and doing various medical experiments.

CASI
**Crew Procedures (Inflight); Crew Procedures (Preflight); Spacecraft Launching; Spacecraft Landing; Spaceborne Experiments**
Earth from the Orbiter show the southern Atlantic Ocean, southern African continent, and Indian Ocean. The moon is seen above Earth's atmosphere and a storm is seen on the right side as lightning illuminates the clouds.

CASI
Crew Procedures (Inflight): Spacecraft Landing: Assembling

STS-98 Crew Activity Report/Flight Day 5 Highlights
Feb. 12, 2001; In English; Videotape: 15 min. 11 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001024844; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this fifth day of the STS-98 mission, the crew of Atlantis (Commander Kenneth D. Cockrell, Pilot Mark L. Polansky, and Mission Specialists Robert L. Curbeam, Thomas D. Jones, and Marsha S. Ivins), the Expedition 1 crew (William M. Shepherd, Yuri P. Gidzenko, and Sergei K. Krikalev), and the Expedition 2 crew (James S. Voss, Susan J. Helms, and Yury V. Usachev), are seen opening and entering the Destiny Laboratory Module.

CASI International Space Station: Destiny Laboratory Module

STS-98 Crew Activity Report/Flight Day 6 Highlights
Feb. 13, 2001; In English; Videotape: 15 min. 37 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001024845; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this sixth day of the STS-98 mission, the crew of Atlantis (Commander Kenneth D. Cockrell, Pilot Mark L. Polansky, and Mission Specialists Robert L. Curbeam, Thomas D. Jones, and Marsha S. Ivins), the Expedition 1 crew (William M. Shepherd, Yuri P. Gidzenko, and Sergei K. Krikalev), and the Expedition 2 crew (James S. Voss, Susan J. Helms, and Yury V. Usachev), are seen opening and entering the Destiny Laboratory Module.

CASI International Space Station: Destiny Laboratory Module

STS-98 Crew Activity Report/Flight Day 7 Highlights
Feb. 14, 2001; In English; Videotape: 15 min. 22 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001024846; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this seventh day of the STS-98 mission, the crew of Atlantis (Commander Kenneth D. Cockrell, Pilot Mark L. Polansky, and Mission Specialists Robert L. Curbeam, Thomas D. Jones, and Marsha S. Ivins), the Expedition 1 crew (William M. Shepherd, Yuri P. Gidzenko, and Sergei K. Krikalev), and the Expedition 2 crew (James S. Voss, Susan J. Helms, and Yury V. Usachev), are seen opening and entering the Destiny Laboratory Module.

CASI International Space Station: Destiny Laboratory Module

STS-98 Crew Activity Report/Flight Day 8 Highlights
Feb. 15, 2001; In English; Videotape: 15 min. 37 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001024847; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this eighth day of the STS-98 mission, the crew of Atlantis (Commander Kenneth D. Cockrell, Pilot Mark L. Polansky, and Mission Specialists Robert L. Curbeam, Thomas D. Jones, and Marsha S. Ivins), the Expedition 1 crew (William M. Shepherd, Yuri P. Gidzenko, and Sergei K. Krikalev), and the Expedition 2 crew (James S. Voss, Susan J. Helms, and Yury V. Usachev), are seen opening and entering the Destiny Laboratory Module.

CASI International Space Station: Destiny Laboratory Module

STS-98 Crew Activity Report/Flight Day 9 Highlights
Feb. 16, 2001; In English; Videotape: 15 min. 22 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001024848; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this ninth day of the STS-98 mission, the crew of Atlantis (Commander Kenneth D. Cockrell, Pilot Mark L. Polansky, and Mission Specialists Robert L. Curbeam, Thomas D. Jones, and Marsha S. Ivins), the Expedition 1 crew (William M. Shepherd, Yuri P. Gidzenko, and Sergei K. Krikalev), and the Expedition 2 crew (James S. Voss, Susan J. Helms, and Yury V. Usachev), are seen opening and entering the Destiny Laboratory Module.

CASI International Space Station: Destiny Laboratory Module

STS-98 Crew Activity Report/Flight Day 10 Highlights
Feb. 17, 2001; In English; Videotape: 15 min. 12 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001024849; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this tenth day of the STS-98 mission, the crew of Atlantis (Commander Kenneth D. Cockrell, Pilot Mark L. Polansky, and Mission Specialists Robert L. Curbeam, Thomas D. Jones, and Marsha S. Ivins) answer questions about their mission.

CASI International Space Station: Destiny Laboratory Module

STS-98 Crew Activity Report/Flight Day 11 Highlights
Feb. 18, 2001; In English; Videotape: 15 min. 37 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001024850; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this eleventh day of the STS-98 mission, the crew of Atlantis (Commander Kenneth D. Cockrell, Pilot Mark L. Polansky, and Mission Specialists Robert L. Curbeam, Thomas D. Jones, and Marsha S. Ivins) answer questions about their mission.

CASI International Space Station: Destiny Laboratory Module

STS-98 Crew Activity Report/Flight Day 12 Highlights
Feb. 19, 2001; In English; Videotape: 15 min. 33 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001024851; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this twelfth day of the STS-98 mission, the crew of Atlantis (Commander Kenneth D. Cockrell, Pilot Mark L. Polansky, and Mission Specialists Robert L. Curbeam, Thomas D. Jones, and Marsha S. Ivins) answer questions about their mission.

CASI International Space Station: Destiny Laboratory Module

STS-98 Crew Activity Report/Flight Day 13 Highlights
Feb. 20, 2001; In English; Videotape: 15 min. 37 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001024852; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this thirteenth day of the STS-98 mission, the crew of Atlantis (Commander Kenneth D. Cockrell, Pilot Mark L. Polansky, and Mission Specialists Robert L. Curbeam, Thomas D. Jones, and Marsha S. Ivins) answer questions about their mission.

CASI International Space Station: Destiny Laboratory Module
crew (Commander Kenneth D. Cockrell, Pilot Mark L. Polansky, and Mission Specialist Marsha S. Ivins) and the Expedition 1 crew (William M. Shepherd, Yuri P. Gidzenko, and Sergii K. Krizalev) join Curbeam and Jones to answer questions about the mission.

CASI

Crew Procedures (Inflight); Destiny Laboratory Module; Extravehicular Activity

20010420032 NASA Johnson Space Center, Houston, TX USA

STS–97 Mission Highlights Resource Tape, Part 1

Feb. 15, 2001; In English; Videotape: 25 min. 29 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001028016; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eighth day of the STS-98 mission, Mission Specialists Tom Jones and Bob Curbeam perform their first spacewalks of the mission. They are seen removing and installing the S-Band antenna from the payload bay of Atlantis to the International Space Station (ISS). Jones and Curbeam commemorate the 100th spacewalk and say a few words about the accomplishments of spacewalkers in the past.

CASI

Extravehicular Activity; Crew Procedures (Inflight); International Space Station

200104200281 NASA Johnson Space Center, Houston, TX USA

STS–97 Mission Highlights Resource Tape, Part 2

Feb. 20, 2001; In English; Videotape: 46 min. 57 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001028105; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Various clips give an overview of the STS-97 Endeavour mission. Footage includes Endeavour on the launch pad, the crew of STS-97 (Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Tanner, Carl J. Noriega, and Marc Garneau) suiting up, replays of the nighttime launch, Launch Control Center at Kennedy Space Center during countdown, and the activities of flight days one through three. The activities of flight days four through six can be seen on ‘STS-97 Mission Highlights Resource Tape, Part 2 of 3’ (document ID 2001002082). The activities of flight days seven through eleven and Endeavour’s landing can be found on ‘STS-97 Mission Highlights Resource Tape, Part 3 of 3’ (document ID 2001002083).

CASI

Endeavour (Orbiter); Countdown; Spacecraft Launching; Crew Procedures (Preflight); Crew Procedures (Inflight)

200104200282 NASA Johnson Space Center, Houston, TX USA

STS–97 Mission Highlights Resource Tape, Part 2

Feb. 20, 2001; In English; Videotape: 58 min. 31 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001028104; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of ‘STS-97 Mission Highlights Resource Tape, Part 1 of 3’ (document ID 2001002081), the activities of flight days four through six are seen. Footage includes the spacewalks performed by Noriega and Tanner, the deployment of the Solar Array Blanket Box (SABB), various shots of Endeavour’s payload bay and the International Space Station (ISS), and the deployment of the solar radiators on the ISS. Flight days seven through eleven and Endeavour’s landing are shown in ‘STS-97 Mission Highlights Resource Tape, Part 3 of 3’ (document ID 2001002083).

CASI

Endeavour (Orbiter); International Space Station; Deployment; Crew Procedures (Inflight); Extravehicular Activity

20010211196 NASA Kennedy Space Center, Cocoa Beach, FL USA

The Lighthouse that Never Fails

Jun. 01, 1958; In English; Videotape: 3 min. 58 sec. playing time, black and white, with sound

Report No.(s): NONP–NASA–VT–2001023129; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

A fictional piece of work, the film shows a man taken into space when the lighthouse that he is in launches.

CASI

Lighting Equipment; Launching

200104200968 NASA Johnson Space Center, Houston, TX USA

STS–102 Crew Training

Feb. 27, 2001; In English; Videotape: 37 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001029048; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Footage shows the crew of STS-102, Commander James D. Wetherbee, Pilot James M. Kelly, and Mission Specialist Andrew S. Thomas and Paul Richards, during various parts of their training. Scenes include: (1) neutral buoyancy lab training; (2) undocking/ly-around training in the GNS (Navigation Simulator); (3) crew equipment interface test; (4) Remote Manipulator System (RMS) training in the GNS; and (5) docking training in the GNS.

CASI

Astronaut Training; Crew Procedures (Preflight); Remote Manipulator System; Simulation
STS-102 Crew Activity Report/Flight Day 1 Highlights
Mar. 8, 2001; In English; Videotape: 20 min. 1 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001031588; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The crew of STS-102 (Commander James D. Wetherbee, Pilot James M. Kelly, and Mission Specialists Andrew S. W. Thomas and Paul Richards) and the Expedition 2 crew (James S. Voss, Susan J. Helms, and Yuriy V. Usachev) are seen during the prelaunch breakfast, suiting up, leaving the Operations and Checkout (O&C) Building, and boarding the Discovery Orbiter. The launch of Discovery is seen from the ground and from an onboard camera.
CASI Discovery (Orbiter); Checkout; Spacecraft Launching; Crew Procedures (Inflight)

STS-102 Crew Activity Report/Flight Day 2 Highlights
Mar. 10, 2001; In English; Videotape: 16 min. 36 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001031587; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Footage shows the docking of the Discovery Orbiter with the International Space Station (ISS). The STS-102 crew (Commander James D. Wetherbee, Pilot James M. Kelly, and Mission Specialists Andrew S. W. Thomas and Paul Richards) and the Expedition 2 crew (James S. Voss, Susan J. Helms, and Yuriy V. Usachev) are seen greeting the Expedition 1 crew (William M. Shepherd, Yuri P. Gidzenko, and Sergei K. Krikalev) after Commander Wetherbee opens the hatch connecting Discovery to the ISS.
CASI Discovery (Orbiter); International Space Station; Docking; Spacecraft Procedures (Inflight)

STS-102 Crew Activity Report/Flight Day 2 Highlights
Mar. 9, 2001; In English; Videotape: 21 min. 32 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001031586; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Jim Voss and Yuriy Usachev are seen helping Susan Helms prepare for the Reflex Experiment: Effects of Altered Gravity on the Spinal Cord. External shots show the payload bay of Discovery and as Discovery orbits, China is seen from space. STS-102 Commander Jim Wetherbee and Expedition 2 Commander Yuriy V. Usachev answer questions from the President of the Italian Space Agency during an in-flight interview.
CASI Spaceborne Experiments; Crew Procedures (Inflight); Discovery (Orbiter)

STS-102 Crew Activity Report/Flight Day 7 Highlights
Mar. 14, 2001; In English; Videotape: 22 min. 53 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001033203; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Footage shows STS-102 Mission Specialist Andy Thomas, Expedition 1 crewmember Sergei Krikalev, and Expedition 2 crewmember Susan Helms transferring supplies from the Leonardo Module to the International Space Station (ISS). Then STS-102 Commander Jim Wetherbee joins the crew of Expedition 2 (James Voss, Susan Helms, and Yuriy Usachev) for an on-orbit interview, where they answer questions about the spacewalks performed by Voss and Helms and about living on the ISS.
CASI International Space Station; Crew Procedures (Inflight); Transferring

STS-102 Crew Activity Report/Flight Day 6 Highlights
Mar. 12, 2001; In English; Videotape: 20 min. 54 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001032302; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Footage shows STS-102 Mission Specialists Andrew Thomas and Paul Richards preparing for and performing their spacewalks. The cameras in Discovery's payload bay show Discovery and the robotic arm against a backdrop of Earth.
CASI Discovery (Orbiter); International Space Station; Extravehicular Activity; Crew Procedures (Inflight)

STS-102 Crew Activity Report/Flight Day 5 Highlights
Mar. 12, 2001; In English; Videotape: 16 min. 27 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001032301; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
External shots of Discovery and its payload show the robotic arm lifting and maneuvering the Leonardo Module into place on the Destiny Laboratory Module, which is part of the International Space Station (ISS). Footage shows Expedition 1 Commander Bill Shepherd opening the hatch between Destiny and Leonardo.
CASI Destiny Laboratory Module; International Space Station; Discovery (Orbiter); Payloads

STS-102 Crew Activity Report/Flight Day 9 Highlights
Mar. 16, 2001; In English; Videotape: 20 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001038753; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this ninth day of the STS-102 mission, three crews are on the International Space Station: (1) STS-102 (Commander James Wetherbee, Pilot James Kelly, and Mission Specialists Andrew Thomas and Paul Richards); (2) Expedition 1 (William Shepherd, Yuri Gidzenko, and Sergei Krikalev); and (3) Expedition 2 (James Voss, Susan Helms, and Yuriy Usachev). Mission Specialist Thomas, Commander Shepherd, and Commander Usachev are seen in the Leonardo Module showing items for the trip home on Discovery. Then the three crews are seen together answering questions about the mission during an in-flight interview.
CASI International Space Station; Crew Procedures (Inflight); Space Station Modules

STS-102 Crew Activity Report/Flight Day 8 Highlights
Mar. 15, 2001; In English; Videotape: 19 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001038754; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this eighth day of the STS-102 mission, Discovery Pilot James Kelly and Mission Specialist Andrew Thomas are seen in the Leonardo Module. The Expedition 2 crew (James Voss, Susan Helms, and Yuriy Usachev) work to set up the robotic workstations for the robotic arm. STS-102 Commander Jim Wetherbee, Pilot Kelly, and the Expedition 1 crew (William M. Shepherd, Yuri P. Gidzenko, and Sergei K. Krikalev) answer questions about the mission in an in-flight interview.
CASI International Space Station; Crew Procedures (Inflight)
STS-102 Crew Activity Report/Flight Day 10 Highlights
Mar. 17, 2001; In English; Videotape: 17 min. 32 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001038755; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this 10th day of the STS-102 mission, Pilot James Kelly and Mission Specialists Andrew Thomas and Paul Richards are seen in the Destiny Laboratory Module as they answer questions about the mission in an in-flight interview. CASI
Destiny Laboratory Module; International Space Station; Crew Procedures (Inflight)

STS-102 Crew Activity Report/Flight Day 11 Highlights
Mar. 18, 2001; In English; Videotape: 17 min. 33 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001038756; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this 11th day of the STS-102 mission, Discovery Mission Specialist Andrew Thomas and Expedition 1 Commander Bill Shepherd are seen closing the hatch of the Leonardo Module. External shots show the Leonardo Module undocking from the International Space Station (ISS) and being moved via robotic arm into the payload bay of Discovery. CASI
International Space Station; Hatches; Space Station Modules; Crew Procedures (Inflight)

STS-102 Crew Activity Report/Flight Day 12 Highlights
Mar. 19, 2001; In English; Videotape: 15 min. 58 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001038757; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this 12th day of the STS-102 mission, the Expedition 1 crew, William Shepherd, Yuri Gidzenko, and Sergei Krikalev, answers questions about their extended mission and the International Space Station (ISS). CASI
International Space Station; Hatches; Space Station Modules; Crew Procedures (Inflight)

STS-102 Crew Activity Report/Flight Day 13 Highlights
Mar. 20, 2001; In English; Videotape: 15 min. 13 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001038758; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this 13th day of the STS-102 mission, the Expedition 1 crew, William Shepherd, Yuri Gidzenko, and Sergei Krikalev, answers questions about their extended mission and the International Space Station (ISS). CASI
International Space Station; Hatches; Space Station Modules; Crew Procedures (Inflight)

STS-102 Crew Activity Report/Flight Day 14 Highlights
Mar. 21, 2001; In English; Videotape: 15 min. 21 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001038759; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this 14th day of the STS-102 mission, Discovery Mission Specialist John Phillips is seen being interviewed. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission's goals and significance, the rendezvous and docking of Endeavour with the International Space Station (ISS), the mission's spacewalks, and installation and capabilities of the Space Station robotic arm, UHF antenna, and Raffaello Logistics Module. Phillips then discusses his views about space exploration as it becomes an international collaboration. CASI
Extravehicular Activity; Prelaunch Summaries; Antennas; Installing; Orbital Rendezvous; Robot Arms; Spacecraft Docking

STS-102 Crew Activity Report/Flight Day 15 Highlights
Mar. 22, 2001; In English; Videotape: 22 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001038760; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this 15th day of the STS-102 mission, Discovery Pilot Jim Kelly is shown maneuvering the robotic arm as he helps Helms and Voss to install the Third Pressurized Mating Adapter (PMA-3) to the Unity Module on the International Space Station (ISS). CASI
International Space Station; Space Station Modules; Crew Procedures (Inflight); Extravehicular Activity; Installing

STS-100 Crew Interview: Umberto Guidoni
Apr. 03, 2001; In English; Videotape: 25 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001047823; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this 100th mission Specialist Umberto Guidoni is seen being interviewed. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission's goals and significance, the rendezvous and docking of Endeavour with the International Space Station (ISS), the mission's spacewalks, and installation and capabilities of the Space Station robotic arm, UHF antenna, and Raffaello Logistics Module. Guidoni then discusses his views about space exploration as it becomes an international collaboration. CASI
Extravehicular Activity; Prelaunch Summaries; Antennas; Installing; Orbital Rendezvous; Robot Arms; Spacecraft Docking

STS-100 Crew Interview: Kent Rominger
Apr. 03, 2001; In English; Videotape: 25 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001047825; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this 100th mission Specialist Kent Rominger is seen being interviewed. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission's goals and significance, the rendezvous and docking of Endeavour with the International Space Station (ISS), the mission's spacewalks, and installation and capabilities of the Space Station robotic arm, UHF antenna, and Raffaello Logistics Module. Rominger then discusses his views about space exploration as it becomes an international collaboration. CASI
Extravehicular Activity; Prelaunch Summaries; Antennas; Installing; Orbital Rendezvous; Robot Arms; Spacecraft Docking

STS-100 Crew Interview: John Phillips
Apr. 03, 2001; In English; Videotape: 25 min. 21 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001047826; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this 100th mission Specialist John Phillips is seen being interviewed. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission's goals and significance, the rendezvous and docking of Endeavour with the International Space Station (ISS), the mission's spacewalks, and installation and capabilities of the Space Station robotic arm, UHF antenna, and Raffaello Logistics Module. Phillips then discusses his views about space exploration as it becomes an international collaboration. CASI
Extravehicular Activity; Prelaunch Summaries; Antennas; Installing; Orbital Rendezvous; Robot Arms; Spacecraft Docking

STS-100 Crew Interview: Jeff Ashby
Apr. 03, 2001; In English; Videotape: 18 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001047827; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this 100th mission Specialist Jeff Ashby is seen being interviewed. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission's goals and significance, the rendezvous and docking of Endeavour with the International Space Station (ISS), the mission's spacewalks, and
installation and capabilities of the Space Station robotic arm, UHF antenna, and Raffaello Logistics Module. Ashby then discusses his views about space exploration as it becomes an international collaboration.

CAS1
Extravehicular Activity; Prelaunch Summaries; Installing; Orbital Rendezvous; Robot Arms; Spacecraft Docking

STS-100 Crew Interview: Scott Parazynski
Apr. 03, 2001; In English; Videotape: 42 min. 48 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001047877; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-100 Mission Specialist Scott Parazynski is seen being interviewed. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission’s goals and significance, the rendezvous and docking of Endeavour with the International Space Station (ISS), the mission’s spacewalks, and installation and capabilities of the Space Station robotic arm, UHF antenna, and Raffaello Logistics Module. Parazynski then discusses his views about space exploration as it becomes an international collaboration.

CAS1
Extravehicular Activity; Prelaunch Summaries; Antennas; Installing; Orbital Rendezvous; Robot Arms; Spacecraft Docking

STS-100 Multi-Purpose Logistics Module Briefing
Feb. 28, 2001; In English; Videotape: 23 min. 49 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001047878; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Silvanna Rabbi, MPLM Program Manager, Italian Space Agency, gives an overview of the Multi-Purpose Logistics Module (MPLM) in a prelaunch press conference. She describes the objectives, construction, specifications, and purpose of the three Italian-built modules, Leonardo, Raffaello, and Donnafugata. Ms. Rabbi then answers questions from the press.

CAS1
Construction; Logistics; Space Station Modules; Specifications; Prelaunch Summaries

STS-100 Crew Interview: Chris Hadfield
Apr. 03, 2001; In English; Videotape: 45 min. 48 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001047879; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

STS-100 Mission Specialist Yuri Lonchakov is seen being interviewed. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission’s goals and significance, the rendezvous and docking of Endeavour with the International Space Station (ISS), the mission’s spacewalks, and installation and capabilities of the Space Station robotic arm, UHF antenna, and Raffaello Logistics Module. Lonchakov then discusses his views about space exploration as it becomes an international collaboration.

CAS1
Extravehicular Activity; Prelaunch Summaries; Antennas; Installing; Orbital Rendezvous; Robot Arms; Spacecraft Docking

STS-102 Expedition 2 Mission Overview
Feb. 28, 2001; In English; Videotape: 1 hr. 18 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001047882; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

John Shannon, STS-102 Lead Flight Director, Bernestine Dickey, STS-102 Launch Package Manager, and Rick LaBrode, International Space Station (ISS) Lead Flight Director, give an overview of the STS-102 mission during a prelaunch press conference. Mr. Shannon discusses how the mission came into being and its objectives, including information on the launch and a day-by-day account of mission activities. Ms. Dickey gives details on the payload of STS-102, describing the systems racks, cargo elements, and crew supplies delivered via the Leonardo Multi-Purpose Logistics Module. Mr. LaBrode describes the current configuration of the ISS and upcoming changes. He also discusses the activities of the Expedition 2 crew during the next four months. Computer simulations show the ISS’s current and future (after the STS-102 mission) configurations, the installations of Leonardo, and the move of the Pressurized Mating Adapter from one port to another on the Destiny Laboratory. The panel then answers questions from the press.

CAS1
International Space Station; Prelaunch Summaries; Space Station Modules; Spacecraft Docking

STS-102 Expedition 2 Increment and Science Briefing
Feb. 28, 2001; In English; Videotape: 38 min. 18 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001049892; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Merri Sanchez, Expedition 2 Increment Manager, John Urri, Increment Scientist, and Lybrease Woodard, Lead Payload Operations Director, give an overview of the upcoming activities and objectives of the Expedition 2’s (E2’s) mission in this prelaunch press conference. Ms. Sanchez describes the crew rotation of Expedition 1 to E2, the timeline E2 will follow during their stay on the International Space Station (ISS), and the various flights going to the ISS and what each will bring to the ISS. Mr. Urri gives details on the on-board experiments that will take place on the ISS in the fields of microgravity research, commercial, earth, life, and space sciences (such as radiation characterization, H-reflex, colloids formation and interaction, protein crystal growth, plant growth, fermentation in microgravity, etc.). He also gives details on the scientific facilities to be used (laboratory racks and equipment such as the human torso facsimile or ‘phantom torso’). Ms. Woodard gives an overview of Marshall Flight Center’s role in the mission. Computerized simulations show the installation of the Space Station Remote Manipulator System (SSRMS) onto the ISS and the installation
of the airlock using SSRMS. Live footage shows the interior of the ISS, including crew living quarters, the Progress Module, and the Destiny Laboratory. The three then answer questions from the press.

CASI

International Space Station; Microgravity; Spaceborne Experiments; Prelaunch Summaries; Aerospace Sciences; Earth Sciences; Life Sciences

200101035850 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–102 Expedition 2 Increment Crew News Conference
Feb. 28, 2001; In English; Videotape: 45 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001048991; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Expedition 2 crewmembers Commander Yuri Usachev and Flight Engineers James Voss and Susan Helms are introduced in this prelaunch press conference. They answer questions from the press about their expectations and activities for the upcoming mission on the International Space Station.

CASI

International Space Station; Spacecraft: Prelaunch Summaries; Crew Procedures (Inflight)

200101035853 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–102 Prelaunch Press Conference
Mar. 06, 2001; In English; Videotape: 37 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001048898; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Joel Wells, NASA Public Affairs, introduces Ron Dittermore, NASA Shuttle Program Manager, Tommy Holloway, NASA International Space Station Program Manager, Dave King, NASA Director of Shuttle Processing, and Capitan CH Stargardt, US Air Force Meteorologist, in this STS-102 prelaunch press conference. The men give an overview of the prelaunch processing for the Discovery Orbiter (such as the PRSD loading) and give a weather forecast for launch. They then answer questions from the press.

CASI

Discovery (Orbiter); Spacecraft Launching; Weather Forecasting; Prelaunch Summaries; Prelaunch Tests

200101035854 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–102 Countdown Status
Mar. 05, 2001; In English; Videotape: 21 min. 56 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001048897; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

George Diller, NASA Public Affairs, introduces Jeff Spaulding, NASA Test Director, Glenn Chin, Leonardo Payload Manager, and Ed Priselac, Shuttle Weather Officer, in this STS-102 prelaunch press conference. Mr. Spaulding gives an overview of the status of the Discovery Orbiter, including the prelaunch procedures (payload inspection and closure, avionics check, and the loading of the onboard cryogenic tanks), the countdown and built in time holds, launch window, Discovery launch, and the landing. Mr. Chin discusses the payload status, including specifications on the Multi-Purpose Logistics Module, and the hardware contamination inspection. Mr. Priselac describes the weather forecast for the upcoming launch. The men then answer questions from the press.

CASI

Discovery (Orbiter); Countdown: Launch Windows; Spacecraft Launching; Prelaunch Tests; Prelaunch Summaries; Payloads; Weather Forecasting

200101036656 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–102 Countdown Status Briefing
Mar. 06, 2001; In English; Videotape: 18 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001052179; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Joel Wells, NASA Public Affairs, introduces Pete Nickolenko, NASA Test Director, Glenn Chin, Leonardo Mission Manager, and Ed Priselac, Shuttle Weather Officer, in this STS-102 prelaunch press conference. Mr. Nickolenko gives an overview of the countdown and built-in hold times, the launch window, and prelaunch activities (such as activation and checkout of the onboard computer systems, closing the payload bay doors, servicing of the onboard cryogenic cell tanks, main engine tests, and power-up of the ground communications systems). Mr. Chin confirms that the payload is in the final flight configuration and is ready for launch. Mr. Priselac gives the weather forecast for the launch date. The men then answer questions from the press.

CASI

Checkout: Countdown: Spacecraft Launching; Weather Forecasting; Prelaunch Summaries; Prelaunch Tests

200101036749 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–102 Extravehicular Activities Briefing
Feb. 28, 2001; In English; Videotape: 25 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001052181; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Keith Johnson, STS-102 Lead Extravehicular Activities Officer, gives an overview of the mission’s spacewalks in this prelaunch press conference. He describes the activities, objectives, and timeline of the spacewalks during the STS-102 mission. Computerized simulations show the move of the Third Pressurized Mating Adapter (PMAS) and the retrieval of the rigid modules from the payload bay of Discovery. Mr. Johnson then answers questions from the press.

CASI

Extravehicular Activity; Prelaunch Summaries; Crew Procedures (Inflight)

200101036756 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–106 TCDT Photo Opportunity
Aug. 17, 2000; In English; Videotape: 19 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20001052190; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

STS-106 crewmembers Commander Terrence W. Wilcutt, Pilot Scott D. Altman, and Mission Specialists Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov are seen during the Terminal Countdown and Demonstration Test (TCDT) activity of meeting the press. Each crewmember introduces himself and then they answer questions from the press about the upcoming mission.

CASI

Spacewalks; Crew Procedures (Preflight)

200101036768 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–101 Mission Overview Briefing
Mar. 29, 2000; In English; Videotape: 53 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000076141; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Phil Engelsfadt, STS-101 Lead Flight Director, Paul Hill, STS-101 ISS Lead Flight Director, and Sharon Castle, STS-101 Package Manager, give an overview of the objectives and activities of the upcoming mission in this preflight press conference. Computerized animations show the configuration of the payload bay and the docking and flyaround of Atlantis and the International Space Station (ISS). Mr. Engelsfadt, Mr. Hill, and Ms. Castle then answer questions from the press.

CASI

International Space Station: Spacecraft Docking; Crew Procedures (Inflight); Prelaunch Summaries

154
Astronaut Training; Crew Procedures (Preflight); Extravehicular Activity; Egress; Astronaut Performance

20010038418 NASA Johnson Space Center, Houston, TX USA
STS-98 Mission Highlights Resource Tape, Part 2 of 3
Apr. 13, 2001; In English; Videotape: 56 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001054059; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
A continuation of ‘STS-98 Mission Highlights Resource Tape, Part 1 of 3’ (internal ID 2001054058), this video shows the activities of flight days four through seven of the STS-98 mission on Atlantis. ‘STS-98 Mission Highlights Resource Tape, Part 3 of 3’ (internal ID 2001054060) shows footage from flight days 8-11.

CASI

20010038514 NASA Johnson Space Center, Houston, TX USA
STS-98 Mission Highlights Resource Tape, Part 3 of 3
Apr. 13, 2001; In English; Videotape: 59 min. 36 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001054060; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
A continuation of ‘STS-98 Mission Highlights Resource Tape, Part 1 of 3’ (internal ID 2001054058) and ‘STS-98 Mission Highlights Resource Tape, Part 2 of 3’ (internal ID 2001054059), this video concludes the overview of the STS-98 mission. Footage shows the activities of flight days 8 through 11 and the landing of Atlantis.

CASI

International Space Station; Spacecraft Landing; Atlantis (Orbiter); Crew Procedures (Inflight)

20010038724 NASA Johnson Space Center, Houston, TX USA
Space Shuttle: Ground Support
Dec. 13, 1993; In English; Videotape: 11 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001056989; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video gives an overview of the function and importance of the Ground Support System to the Space Station missions. Details are given on the individual responsibilities and contributions of each of the NASA centers, from the design and construction of the Space Shuttle to its launch, on-orbit performance, and landing.

CASI

Ground Support Systems: Space Shuttles: Spacecraft Design

20010038725 NASA Johnson Space Center, Houston, TX USA
Space Shuttle Propulsion
Jan. 01, 1993; In English; Videotape: 11 min. 30 sec. playing time, in color, with sound; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video gives an overview of the Space Shuttle’s propulsion system, giving details on the individual components, their specifications, and functions. Successful launches are shown.

CASI

Space Shuttles: Specifications; Spacecraft Propulsion

20010038858 NASA Johnson Space Center, Houston, TX USA
STS-98 Mission Highlights Resource Tape, Part 1 of 3
Apr. 13, 2001; In English; Videotape: 24 min. 23 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001054058; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
An overview of the STS-98 mission is given through footage from each flight day, starting with the prelaunch preparations (crew breakfast, suitup, and boarding of Atlantis), countdown, and Atlantis’ launch and ending with the activities of flight day four. Footage from the fourth flight day is continued on the video ‘STS-98 Mission Highlights Resource Tape, Part 2 of 3’ (internal ID 2001054059), which shows mission activities through flight day seven. STS-98 Mission Highlights Resource Tape, Part 3 of 3 (internal ID 2001054060) shows the end of the mission, including footage from flight days 8-11 and the landing of Atlantis.

CASI

Countdown; Spacecraft Launching; Crew Procedures (Inflight); Crew Procedures (Preflight); Astronaut Performance

20010038996 NASA Johnson Space Center, Houston, TX USA
STS-100 Crew Activity Report: Flight Day 3 Highlights
Apr. 24, 2001; In English; Videotape: 24 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001059992; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this third day of the STS-100 mission, the crewmembers of Endeavour (Commander Kent Rominger, Pilot Jeffrey Ashby, and Mission Specialists Chris Hadfield, Scott Parazynski, John Phillips, Umberto Guidoni, and Yuri Valentinovich Lonchakov) are seen during preparations for the upcoming spacewalk, installation of the Canadian Robot Arm, and the docking of Endeavour with the International Space Station (ISS). The docking is shown, and Endeavour is seen against a backdrop of Earth as it passes over the Pacific Ocean while it approaches the southern tip of South America.

CASI

Spacecraft Docking; Endeavour (Orbiter); International Space Station; Crew Procedures (Inflight)

20010039007 NASA Johnson Space Center, Houston, TX USA
STS-100 Crew Activity Report: Flight Day 1 Highlights
Apr. 19, 2001; In English; Videotape: 20 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001059991; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this first day of the STS-100 mission, the crewmembers of Endeavour (Commander Kent Rominger, Pilot Jeffrey Ashby, and Mission Specialists Chris Hadfield, Scott Parazynski, John Phillips, Umberto Guidoni, and Yuri Valentinovich Lonchakov) are seen during various prelaunch activities, including the ceremonial breakfast, suit-up, departure from the Operations and Checkout (O&C) Building, and boarding Endeavour. The launch of the orbiter is shown.

CASI

Checkout: Endeavour (Orbiter); Crew Procedures (Preflight); Spacecraft Launching

20010039098 NASA Johnson Space Center, Houston, TX USA
STS-100 Crew Activity Report: Flight Day 8 Highlights
Apr. 25, 2001; In English; Videotape: 25 min. 24 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001059999; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this eighth day of the STS-100 Endeavour mission, Mission Specialists Chris Hadfield and Scott Parazynski are seen preparing for and performing their spacewalks as they check the connections between the Destiny Laboratory...
Module and the Canadian Robotic Arm, remove an early communications antenna from the Unity Module, and confirm power connections for the Canadian Robotic Arm. Commander Kent Rominger is seen during a workout on Endeavour’s ergometer.**

**CASI**

*Ergometers: Robot Arms; Crew Procedures (Inflight); Extravehicular Activity; Endeavour (Orbiter); International Space Station*

20010638999 NASA Johnson Space Center, Houston, TX USA

**STS–100 Crew Activity Report: Flight Day 5 Highlights**

Apr 24, 2001; In English; Videotape: 31 min. 03 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001059988; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On this fifth day of the STS-100 mission, the crew of Endeavour (Commander Kent Rominger, Pilot Jeffrey Ashby, and Mission Specialists Chris Hadfield, Scott Parazynski, John Phillips, Umberto Guidoni, and Yuri Valentovich Lonchakov) and the Expedition 2 crew (Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms) are seen greeting each other after opening the connecting hatches between Endeavour and the International Space Station (ISS). Parazynski uses the newly installed Canadian Robotic Arm to lift the Raffaello Module out of the payload bay of Endeavour and install it onto the Destiny Laboratory Module on the ISS. Ashby, Hadfield, and Parazynski answer questions about the mission during an on-orbit press conference. Ashby and Parazynski give a guided video tour of the interior of the ISS/Endeavour complex.

**CASI**

*Endeavour (Orbiter); International Space Station; Robot Arms; Crew Procedures (Inflight); Spacesuits*

20010639000 NASA Johnson Space Center, Houston, TX USA

**STS–100 Crew Activity Report: Flight Day 2 Highlights**

Apr 20, 2001; In English; Videotape: 19 min. 34 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001059521; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this second day of the STS-100 mission, the crewmembers of Endeavour (Commander Kent Rominger, Pilot Jeffrey Ashby, and Mission Specialists Chris Hadfield, Scott Parazynski, John Phillips, Umberto Guidoni, and Yuri Valentovich Lonchakov) are seen during various preparations for the upcoming docking procedure with the International Space Station (ISS). Footage shows Hadfield and Parazynski checking their spacesuits and the tools they will use on the first spacewalk. The Shuttle’s robotic arm is used to survey the payload bay of Endeavour and to check on the Canadian Robotic Arm. Expedition 2 crewmembers Susan Helms and Jim Voss are seen in the Destiny Laboratory Module. The Canadian Robotic Arm is shown against a backdrop of Earth after it unfurls from the payload bay.

Author

Robot Arms; Spacesuits; Crew Procedures (Inflight); Endeavour (Orbiter)

20010647481 NASA Johnson Space Center, Houston, TX USA

**STS–106 Mission Highlights Resource Tape, Part 1 of 2**

May 15, 2001; In English; Videotape: 1 hr. 26 min. 50 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001072041; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

An overview of the STS-106 mission is given through footage of the activities of the first flight days of the mission, starting with flight day one and ending with flight day eight. The crewmembers of Atlantis, Commander Terrence Wilcutt, Pilot Scott Altman, and Mission Specialists Daniel Burbank, Edward Lu, Richard Mastracchio, Yuri Malenchenko, and Boris Morukov, are seen during various prelaunch activities, such as during the ceremonial breakfast, suit up, and boarding Atlantis. The launch is seen, as are the rendezvous and docking of the Orbiter to the International Space Station (ISS) and the spacewalks performed on flight day three by Lu and Malenchenko. Activities for flight days 9-12 can be seen on ‘STS-106 Mission Highlights Resource Tape, Part 2 of 2’ (internal ID 2001072040).

**CASI**

*Extravehicular Activity; International Space Station; Orbital Rendezvous; Spacecraft Docking: Atlantis (Orbiter); Crew Procedures (Inflight); Crew Procedures (Preflight)*

20010647555 NASA Johnson Space Center, Houston, TX USA

**STS–100 Flight Day 12 Highlights**

May 04, 2001; In English; Videotape: 25 min. 32 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001064667; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this twelfth day of the STS-100 mission, the crewmembers of Atlantis, Commander Kent Rominger, Pilot Jeffrey Ashby, and Mission Specialists Chris Hadfield, Scott Parazynski, John Phillips, Umberto Guidoni, and Yuri Valentovich Lonchakov, are seen in an on-orbit press conference as they answer questions from the press. Also shown is the approach and dock of the Russian Soyuz spacecraft to the International Space Station (ISS). The Expedition 2 crew, Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms, and the Soyuz crew greet each other and welcome space tourist Dennis Tito to the ISS.

**CASI**

*Soyuz spacecraft; International Space Station; Crew Procedures (Inflight); Spacesuits*

20010647588 NASA Johnson Space Center, Houston, TX USA

**STS–104 Crew Interview: Mike Gernhardt**

May 13, 2001; In English; Videotape: 55 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001071162; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-104 Mission Specialist Mike Gernhardt is seen being interviewed. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission’s goals and significance, its payload (the Joint Airlock and the external gas tanks), and the usefulness of the newly installed Canadian Robotic Arm (installed by STS-100 crew). Gernhardt describes his role in the rendezvous, docking, undocking, and flyaround of the Atlantis Orbiter and the International Space Station (ISS) and discusses the mission’s planned spacewalks.

**CASI**

*Air Locks: External Tanks; Extravehicular Activity; Spacecraft Docking; Crew Procedures (Inflight); Prelaunch Summaries*

20010647589 NASA Johnson Space Center, Houston, TX USA

**STS–104 Crew Interview: Jim Reilly**

May 13, 2001; In English; Videotape: 53 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001071161; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-104 Mission Specialist Jim Reilly is seen being interviewed. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission’s goals and significance, its payload (the Joint Airlock and the external gas tanks), and the usefulness of the newly installed Canadian Robotic Arm (installed by STS-100 crew). Reilly describes his role in the rendezvous, docking, undocking, and flyaround of the Atlantis Orbiter and the International Space Station (ISS) and discusses the mission’s planned spacewalks.

**CASI**

*Air Locks: External Tanks; Extravehicular Activity; Spacecraft Docking; Crew Procedures (Inflight); Prelaunch Summaries*

20010647590 NASA Johnson Space Center, Houston, TX USA

**STS–104 Crew Interview: Charlie Holbaurh**

May 13, 2001; In English; Videotape: 44 min. 30 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001071160; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-104 Pilot Charlie Holbaurh is seen being interviewed. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission’s goals and significance, its payload (the Joint Airlock and the external gas tanks), and the usefulness of the newly installed Canadian Robotic Arm (installed by STS-100 crew). Holbaurh describes his role in the rendezvous, docking, undocking, and flyaround of the Atlantis Orbiter and
the International Space Station (ISS) and discusses the mission’s planned spacewalks.

CASI

Air Locks; Extravehicular Activity; Spacecraft Docking; Prelaunch Summaries

2001047594 NASA Johnson Space Center, Houston, TX USA

STS–104 Crew Interview: Janet Kavandi
May 13, 2001; In English; Videotape: 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001070357; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

STS–104 Mission Specialist Janet Kavandi is seen being interviewed. She answers questions about her inspiration to become an astronaut and her career path. She gives details on the mission’s goals and significance, its payload (the Joint Airlock and the external gas tanks), and the usefulness of the newly installed Canadian Robotic Arm (installed by STS–100 crew). Kavandi describes her role in the rendezvous, docking, undocking, and flyaround of the Atlantis Orbiter and the International Space Station (ISS) and discusses the mission’s planned spacewalks.

CASI

Air Locks; Extravehicular Activity; Spacecraft Docking; Prelaunch Summaries

20010447595 NASA Johnson Space Center, Houston, TX USA

STS–104 Crew Interview: Steve Lindsey
May 13, 2001; In English; Videotape: 40 min. 2 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001070356; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS–104 Commander Steve Lindsey is seen being interviewed. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission’s goals and significance, its payload (the Joint Airlock and the external gas tanks), and the usefulness of the newly installed Canadian Robotic Arm (installed by STS–100 crew). Lindsey describes his role in the rendezvous, docking, undocking, and flyaround of the Atlantis Orbiter and the International Space Station (ISS) and discusses the mission’s planned spacewalks.

CASI

Air Locks; External Tasks; Extravehicular Activity; Spacecraft Docking; Prelaunch Summaries

20010447633 NASA Johnson Space Center, Houston, TX USA

STS–100 Crew Activity Report: Flight Day 7 Highlights
Apr. 25, 2001; In English; Videotape: 22 min. 27 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001061752; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this seventh day of the STS–100 mission, the crewmembers of Endeavour, Commander Kent Rominger, Pilot Jeffrey Ashby, and Mission Specialists Chris Hadfield, Scott Parazynski, John Phillips, Umberto Guidoni, and Yuri Valentinovich Lounchakov, are seen as they unload equipment from the Rafiello Logistics Module. Guidoni and Rominger answer questions from the Italian and European Space Agencies in an on-orbit press conference. The computer glitch that delayed tests on the Canadian Robotic Arm and another boost to the International Space Station (ISS) is described.

CASI

International Space Station; Spacecraft Docking; Prelaunch Summaries

20010447634 NASA Johnson Space Center, Houston, TX USA

STS–100 Flight Day 10 Highlights
Apr. 30, 2001; In English; Videotape: 23 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001061751; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this tenth day of the STS–100 mission, the computer problems that delayed tests on the Canadian robotic arm are discussed between the Atlantis and Mission Ground Control. The Canadian robotic arm is seen after it lifts Spacelab from the pallet on Atlantis and moves to meet the Space Shuttle’s robotic arm as it ‘hands over’ Spacelab to the smaller robotic arm. The Canadian robotic arm with Spacelab are seen against a backdrop of Earth as the Space Shuttle and International Space Station pass to the northeast of Australia.

CASI

Extravehicular Activity; Robot Arms; Crew Procedures (Inflight); International Space Station

20010447635 NASA Johnson Space Center, Houston, TX USA

STS–100 Flight Day 9 Highlights
Apr. 30, 2001; In English; Videotape: 27 mins. 58 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001061750; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this ninth day of the STS–100 mission, Commander Kent Rominger and Mission Specialist Chris Hadfield answer questions about the mission in an on-orbit press conference. The Expedition 2 crew, Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms, answer questions about their mission and the Canadian Robotic Arm in another on-orbit press conference. The Rafiello Logistics Module is removed from the Unity Module on the International Space Station and transfers it to the payload bay of Atlantis.

CASI

International Space Station; Crew Procedures (Inflight); Astronaut Performance; Space Station Modules

20010447641 NASA Johnson Space Center, Houston, TX USA

STS–100 Flight Day 8 Highlights
Apr. 26, 2001; In English; Videotape: 13 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001059990; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this eighth day of the STS–100 mission, the crewmembers of Endeavour, Commander Kent Rominger, Pilot Jeffrey Ashby, and Mission Specialists Chris Hadfield, Scott Parazynski, John Phillips, Umberto Guidoni, and Yuri Valentinovich Lounchakov, are seen unloading equipment from the Rafiello Logistics Module. External views of the International Space Station (ISS) are shown against the backdrop of Earth as Mission Ground Control and the Atlantis crew discuss the efforts to fix the glitch in the ISS’ computer system.

CASI

International Space Station; Computer Systems Performance; Mission Ground Control; Spacewalks; Space Station Modules

20010447642 NASA Johnson Space Center, Houston, TX USA

STS–100 Crew Activity Report: Flight Day 4 Highlights
Apr. 24, 2001; In English; Videotape: 29 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001059520; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fourth day of the STS–100 mission, Mission Specialists Chris Hadfield and Scott Parazynski are seen performing their spacewalks, where they work on the electrical connections between the Destiny Laboratory and the Canadian Robotic Arm, remove the ultrahigh frequency antenna from the pallet and install it onto Destiny, and raise the Robotic Arm to prepare it for deployment. The fully deployed Robotic Arm is seen against a backdrop of Earth.

CASI

Extravehicular Activity; Robot Arms; Crew Procedures (Inflight); International Space Station

157
Space Shuttle: The Orbiter

Jun. 01, 2001; In English; Videotape: 18 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001059519; No Copyright; Avail: CASI; B02, Videotape–Beta; V02, Videotape–VHS

This video gives an overview of the components, systems, interior layout, and procedures associated with the Space Shuttle Orbiter. A rollout, launch, and landing of the Orbiter are shown.

CASI

Spacecraft Launching; Spacecraft Landing; Specifications; Space Shuttle Orbiters

STS–102 Mission Highlights Resource Tape, Part 2 of 2

May 15, 2001; In English; Videotape: 38 min. 57 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001072040; No Copyright; Avail: CASI; B03, Videotape–Beta; V03, Videotape–VHS

A continuation of ‘STS–106 Mission Highlights Resource Tape, Part 1 of 2’ (internal ID 2001096942), this video shows highlights from flight days 9–12, including the undocking of Atlantis from the International Space Station (ISS) and the landing of the Space Shuttle.

CASI

International Space Station; Atlantis (Orbiter); Spacecraft Docking; Spacecraft Landing; Crew Procedures (Inflight)

STS–102 Mission Highligths Resource Tape, Part 2 of 2, Tape 2 of 2

May 15, 2001; In English; Videotape: 1 hr. 32 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001096943; No Copyright; Avail: CASI; B04, Videotape–Beta; V04, Videotape–VHS

A continuation of ‘STS–102 Mission Highlight Resource Tape, Part 1 of 2’, Tape 1 of 2 (internal ID 2001096942), and ‘STS–102 Mission Highlight Resource Tape, Part 2 of 2, Tape 1 of 2’ (internal ID 2001096943), this video shows the activities of flight days 6–14 can be seen on ‘STS–102 Mission Highlight Resource Tape, Part 2 of 2, Tape 1 of 2’. Activities for flight day five can be seen on ‘STS–102 Mission Highlight Resource Tape, Part 1 of 2, Tape 2 of 2’ (internal ID 2001096941). Flight days 6–14 activities can be seen on ‘STS–102 Mission Highlight Resource Tape, Part 2 of 2, Tape 1 of 2’ (internal ID 2001096943) and ‘STS–102 Mission Highlight Resource Tape, Part 2 of 2, Tape 2 of 2’ (internal ID 2001096940).

CASI

International Space Station; Orbital Rendezvous; Spacecraft Docking; Spacecraft Launching; Crew Procedures (Preflight); Crew Procedures (Inflight); Spacecraft Docking

STS–102 Mission Highlight Resource Tape, Tape 3 of 4, Part A

Dec. 06, 2000; In English; Videotape: 20 min. 23 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001105694; No Copyright; Avail: CASI; B03, Videotape–Beta; V03, Videotape–VHS

A continuation of ‘STS–92 Mission Highlight Resource Tape, Part 1 of 2’, Tape 1 of 2 (internal ID 2001096942) and ‘STS–102 Mission Highlight Resource Tape, Part 1 of 2’, Tape 2 of 2 (internal ID 2001096943), this video shows the activities of flight days 6–12 of the STS–102 mission. Various on-orbit activities are seen, such as STS–102 Mission Specialists Andrew Thomas and Paul Richards suit up and performing their spacewalks, Thomas in the Leonardo Multipurpose Logistics Module preparing for the unloading activities, the change of command from the International Space Station’s (ISS’s) Expedition 1 crew (William Shepherd, Yuri Gidzenko, and Sergei Krikalev) to the Expedition 2 crew (Yuri Usachev, James Voss, and Susan Helms) and the undocking of the Discovery Orbiter from the ISS. Activities for flight days 13 and 14 can be found on ‘STS–102 Mission Highlight Resource Tape, Part 2 of 2, Tape 1 of 2’. Activities for flight days 6–14 can be seen on ‘STS–102 Mission Highlight Resource Tape, Part 2 of 2, Tape 1 of 2’ (internal ID 2001096943) and ‘STS–102 Mission Highlight Resource Tape, Part 2 of 2, Tape 2 of 2’ (internal ID 2001096940).

CASI

Extravehicular Activity; Unloading; Crew Procedures (Inflight); Spacecraft Docking

STS–92 Post-Flight Presentation

Dec. 06, 2000; In English; Videotape: 20 min. 23 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001101178; No Copyright; Avail: CASI; B03, Videotape–Beta; V03, Videotape–VHS

This video gives an overview of the STS–92 mission. The crew of the Discovery Orbiter, Commander Brian Duffy, Pilot Pam Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter Wisoff, Michael Lopez-Alegria and William McArthur, narrate as footage of the launch, on-orbit activities (including rendezvous and docking with the International Space Station (ISS), the mission’s four spacewalks, in-flight maintenance, undocking, and the crew playing in a zero-gravity environment), and the landing of Discovery are seen.

CASI

Discovery (Orbiter); Extravehicular Activity; International Space Station; Spacecraft Docking; Spacecraft Launching; Spacecraft Landing; Crew Procedures (Inflight)

STS–104 Crew Training Clips

Jun. 22, 2001; In English; Videotape: 58 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001101177; No Copyright; Avail: CASI; B04, Videotape–Beta; V04, Videotape–VHS

This video gives an overview of the first four flight days of the STS–102 mission through a compilation of footage from each day. The crew of STS–102 (Commander James Wetherbee, Pilot James Kelly, and Mission Specialists Andrew Thomas and Paul Richards) and the Expedition 2 crew (Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms) are seen during the communal breakfast, suitup, and as they board Discovery. The orbiter’s launch is seen from several different viewpoints, and various in-flight activities are shown, such as the opening of Discovery’s payload bay doors, Helms preparing for the ‘H-Reflex Experiment: Effects of Microgravity on the Spine’, the rendezvous and docking of Discovery with the International Space Station (ISS), and Helms and Voss preparing for and performing their spacewalks. The crew of STS–102 and both Expedition crews (E1 crew William Shepherd, Yuri Gidzenko, and Sergei Krikalev) are seen in the Destiny Laboratory Module. Activities for flight day five can be seen on ‘STS–102 Mission Highlight Resource Tape, Part 1 of 2, Tape 2 of 2’ (internal ID 2001096941). Flight days 6–14 activities can be seen on ‘STS–102 Mission Highlight Resource Tape, Part 2 of 2, Tape 1 of 2’ (internal ID 2001096943) and ‘STS–102 Mission Highlight Resource Tape, Part 2 of 2, Tape 2 of 2’ (internal ID 2001096940).

CASI

International Space Station; Orbital Rendezvous; Spacecraft Docking; Spacecraft Launching; Crew Procedures (Preflight); Crew Procedures (Inflight); Spacecraft Docking; Spacecraft Launching; Crew Procedures (Inflight)
B03, Videotape-Beta; V03, Videotape-VHS

The crewsmembers of STS-104, Commander Steven Lindsey, Pilot Charles Hobaugh, and Mission Specialists Michael Gernhardt, James Reilly, and Janet Kavandi, are seen during various stages of their training. Footage shows the following: (1) Water Survival Training at the Neutral Buoyancy Laboratory (NBL); (2) Rendezvous and Docking Training in the Shuttle Mission Simulator; (3) Training in the Space Station Airlock; (4) Training in the Virtual Reality Lab; (5) Post-insertion Operations in the Fixed Base Simulator; (6) Extravehicular Activity Training at the NBL; (7) Crew Stowage Training in the Space Station Mock-up Training Facility; and (8) Water Transfer Training in the Crew Compartment Trainer. 

CASI 
Astronaut Training; Extravehicular Activity; Shuttle Mission Simulator; Spacecrews; Training Devices; Virtual Reality 

STS–104 Flight Day 1 Highlights
Jul. 13, 2001; In English; Videotape: 17 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001108017; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-104 mission, the crewsmembers of Atlantis, Commander Steven Lindsey, Pilot Charles Hobaugh, and Mission Specialists Michael Gernhardt, James Reilly, and Janet Kavandi, are seen during the ceremonial breakfast before launch. The launch of Atlantis is shown, and exterior video scans of the orbiter show the payload bay after the bay doors are opened. 

CASI 
Atlantis (Orbiter); Crew Procedures (Preflight); Spacecraft Launching 

STS–104 Flight Day 2 Highlights
Jul. 13, 2001; In English; Videotape: 16 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001108018; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this second day of the STS-104 mission, the Space Shuttle Atlantis continues its approach to the International Space Station. External scans of the orbiter show the robotic arm checkout as it passes over the southern Pacific Ocean and Australia. 

CASI 
Robot Arms; Atlantis (Orbiter) 

STS–104 Flight Day 3 Highlights
Jul. 14, 2001; In English; Videotape: 18 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001108020; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this third day of the STS-104 mission, the Atlantis Orbiter approaches and docks with the International Space Station (ISS). The crew of STS-104, Commander Steven Lindsey, Pilot Charles Hobaugh, and Mission Specialists Michael Gernhardt, James Reilly, and Janet Kavandi, are seen as they open the hatches between Atlantis and the ISS. External video shows the Quest airlock in the payload bay of Atlantis. 

CASI 
Air Locks; Atlantis (Orbiter); International Space Station; Crew Procedures (Inflight) 

STS–104 Flight Day 4 Highlights
Jul. 15, 2001; In English; Videotape: 29 min. 52 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001108022; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fourth day of the STS-104 mission, Mission Specialists Michael Gernhardt and James Reilly are seen during their spacewalks as they attach equipment to the Quest airlock before the robotic arm of the International Space Station (ISS) lifts the airlock out of Atlantis' payload bay and moves it into position to be installed by Gernhardt and Reilly. The ceremonial cutting of the ribbon to Quest by STS-104 Commander Steven Lindsey and Expedition 2 Commander Yuri Usachev is shown. 

CASI 
Air Locks; Extravehicular Activity; International Space Station; Crew Procedures (Inflight)
Expedition 2 Commander Steven Lindsey, Pilot Charles Hobugh, and Mission Specialists Michael Gernhardt, James Reilly, and Janet Kavandi, and Expedition 2 Flight Engineer Susan Helms are seen during an on-orbit press conference, where they answer questions about the mission.

**CASI**

Air Locks; Extravehicular Activity; International Space Station; Leakage; Valves; Crew Procedures (Inflight)

Expedition 2 Flight Engineer Jim Voss is seen opening the hatch between the Unity Module and the Quest Airlock. An on-orbit interview with Expedition 2 Commander Yuriy Usachov and STS-104 Commander Steve Lindsey and Mission Specialist Charles Hobugh is shown as they answer questions about some problems with a previous spacewalk. As exterior shots of the International Space Station are seen, the air leak in the Unity Modules node pressure valve is described.

**CASI**

Air Locks; Extravehicular Activity; International Space Station; Leakage; Valves; Crew Procedures (Inflight)

**STS-104 Flight Day 8 Highlights**

Jul. 19, 2001; In English; Videotape: 16 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001109808; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Expedition 2 Flight Engineer Jim Voss and STS-104 Commander Steve Lindsey are seen in between the Unity Module and the Quest Airlock in the International Space Station as they replace the intermodular ventilation valve. Footage shows STS-104 Mission Specialist Janet Kavandi and Expedition 2 Flight Engineers Susan Helms and Jim Voss outfitting the Quest Airlock after Voss and Lindsey are finished with the repairs.

**CASI**

Air Locks; International Space Station; Valves; Crew Procedures (Inflight); Extravehicular Activity

Expedition 3 Commander Scott Horowitz is seen during a prelaunch interview. He answers questions about his inspiration to become an astronaut, his career path, training for the mission, and his role in the mission’s activities. He gives details on the spacewalks that will take place during the STS-105 mission (the mission carrying the Expedition 3 crew up to the ISS) and the unloading operations for the Multipurpose Logistics Module.

**CASI**

Extravehicular Activity; International Space Station; Spacecrews; Spaceborne Experiments; Space Station Modules

Expedition 3 Commander Frank Culbertson is seen being interviewed before leaving to become part of the third resident crew on the International Space Station (ISS). He answers questions about his inspiration to become an astronaut and his career path. He discusses his expectations for life on the ISS and the experiments he will be performing while on board. Culbertson gives details on the spacewalks that will take place during the STS-105 mission (the mission carrying the Expedition 3 crew up to the ISS) and the unloading operations for the Multipurpose Logistics Module.

**CASI**

Extravehicular Activity; International Space Station; Spacecrews; Spaceborne Experiments; Space Station Modules

Expedition 3 Pilot Vladimir Dezhurov is seen being interviewed before leaving to become part of the third resident crew on the International Space Station (ISS). He answers questions about his inspiration to become an astronaut and his career path. He discusses his expectations for life on the ISS and the experiments he will be performing while on board. Dezhurov gives details on the spacewalks that will take place during the STS-105 mission (the mission carrying the Expedition 3 crew up to the ISS) and the unloading operations for the Multipurpose Logistics Module.

**CASI**

International Space Station; Spacecrews; Extravehicular Activity; Spaceborne Experiments; Loading Operations

Expedition 3 Crew Interview: Frank Culbertson, Jr. Jul. 15, 2001; In English; Videotape: 55 min. 25 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001108189; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Expedition 3 Commander Frank Culbertson is seen being interviewed before leaving to become part of the third resident crew on the International Space Station (ISS). He answers questions about his inspiration to become an astronaut and his career path. He discusses his expectations for life on the ISS and the experiments he will be performing while on board. Culbertson gives details on the spacewalks that will take place during the STS-105 mission (the mission carrying the Expedition 3 crew up to the ISS) and the unloading operations for the Multipurpose Logistics Module.

**CASI**

Extravehicular Activity; International Space Station; Spacecrews; Spaceborne Experiments; Space Station Modules

Expedition 3 Crew Interview: Dan Barry Jul. 23, 2001; In English; Videotape: 34 min. 19 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001101040; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Expedition 3 Mission Specialist Dan Barry is seen during a prelaunch interview. He answers questions about his inspiration to become an astronaut, his career path, training for the mission, and his role in the mission’s activities. He
Astronaut Training; Crew Procedures (Inflight)

2001067429 NASA Johnson Space Center, Houston, TX USA
STS–104 Flight Day 9 Highlights
Jul. 20, 2001; In English; Videotape: 19 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001110044; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

On this ninth day of the STS-104 mission, Mike Gernhardt and Jim Reilly are
seen in the newly installed Quest Airlock performing a dry run for flight
day ten’s spacewalks’ preparations. The crews of STS-104 (Commander Steven
Lindsey, Pilot Charles Hobaug, and Mission Specialists Mike Gernhardt, Jim
Reilly, and Janet Kavandi) and Expedition 2 (Commander Yuriy Usachev and
Flight Engineers James Voss and Susan Helms) answer questions about the
STS-104 mission, the next day’s spacewalks, and Expedition 2’s stay on the
International Space Station during an on-orbit interview. An external shot of
the Atlantis Orbiter shows a water dump as it leaves the Shuttle and dissipates into
space. Commander Lindsey gives a guided video tour of the Quest Airlock,
displaying equipment and summarizing its purpose.

CASI
Air Locks; International Space Station: Spacecrews; Crew Procedures (Inflight)

2001067437 NASA Johnson Space Center, Houston, TX USA
STS–105 Crew Interview: Pat Forrester
Jul. 23, 2001; In English; Videotape: 24 min. 29 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001110188; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

STS-105 Mission Specialist Pat Forrester is seen during a prelaunch interview.
He answers questions about his inspiration to become an astronaut, his
career path, training for the mission, and his role in the mission’s activities. He
gives details on the mission’s goals, which include the transfer of supplies from
the Discovery Orbiter to the International Space Station (ISS) and the change-
over of the Expedition 2 and Expedition 3 crews (the resident crews of ISS).
Forrester discusses the importance of the ISS in the future of human spaceflight.

CASI
Astronaut Training; Education; Astronauts

2001067483 NASA Johnson Space Center, Houston, TX USA
STS–104 Flight Day 10 Highlights
Jul. 21, 2001; In English; Videotape: 28 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001110046; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

On this tenth day of the STS-104 mission, Mission Specialists Mike Gernhardt
and Jim Reilly are seen as they perform their spacewalks, where they install
Nitrogen Tank 3 on the Quest Airlock after the Canadarm lifts the tank out of the
payload bay of Atlantis.

CASI
Extravehicular Activity; Spacecrews; Crew Procedures (Inflight); International Space Station

2001067484 NASA Johnson Space Center, Houston, TX USA
STS–104 Flight Day 11 Highlights
Jul. 22, 2001; In English; Videotape: 25 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001110045; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

On this 11th day of the STS-104 mission, Expedition 2 crewmembers,
Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms,
are seen in the Destiny Laboratory Module as they prepare for the departure of
the STS-104 crew. Both the Expedition 2 crew and the STS-104 crew
(Commander Steven Lindsey, Pilot Charles Hobaug, and Mission Specialists
Mike Gernhardt, Jim Reilly, and Janet Kavandi) are seen as they say their fare-
wells and the STS-104 crew returns to the Space Shuttle. The undocking of Atlantis
is shown and the International Space Station is seen against Earth and
space as the orbiter flies around the station. The STS-104 crew answers questions
about the mission in an on-orbit interview.

CASI
International Space Station; Spacecrews; Crew Procedures (Inflight); Spacecraft Docking

2001067565 NASA Johnson Space Center, Houston, TX USA
STS–105 Crew Interview: Rick Sturckow
Jul. 23, 2001; In English; Videotape: 11 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001110189; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

STS-105 Pilot Rick Sturckow is seen during a prelaunch interview. He
answers questions about his inspiration to become an astronaut, his career path,
training for the mission, and his role in the mission’s activities. He
gives details on the mission’s goals, which include the transfer of supplies from the Discovery
Orbiter to the International Space Station (ISS) and the change-over of the
Expedition 2 and Expedition 3 crews (the resident crews of ISS). Sturckow
discusses the importance of the ISS in the future of human spaceflight.

CASI
Astronaut Training; Crew Procedures (Inflight); Astronauts

2001067566 NASA Johnson Space Center, Houston, TX USA
STS–104 Flight Day 12 Highlights
Jul. 23, 2001; In English; Videotape: 9 min. playing time, in color, with sound;
No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this 12th day of the STS-104 mission, the crew of Atlantis (Commander
Steven Lindsey, Pilot Charles Hobaug, and Mission Specialists Mike Gern-
hardt, Jim Reilly, and Janet Kavandi) continue their journey back to Earth after
their departure from the International Space Station the day before. External
shots of Atlantis are seen, as is a sunrise from orbit.

CASI
Spacecrews; Atlantis (Orbiter)

20010676272 NASA Johnson Space Center, Houston, TX USA
STS–100 Mission Highlights Resource Tape, Part 2 of 4
Jul. 31, 2001; In English; Videotape: 59 min. 14 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001117678; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

A continuation of ‘STS-100 Mission Resource Tape, Part 1 of 4’ (internal
ID 2001117677), this video shows highlights from flight days four through six,
including footage of the installation of the Canadarm (ISS’ robotic arm) on the
International Space Station (ISS), the spacewalks involved in this process, and
the robotic arm lifting the Rafaeli Multipurpose Logistics Module from the
payload bay of Endeavour. The activities of flight days 6 (continued) - 11 can be
found on ‘STS-100 Mission Resource Tape, Part 3 of 4’ (internal
ID 2001117680) and ‘STS-100 Mission Resource Tape, Part 4 of 4’ (internal
ID 2001117681).

CASI
Extravehicular Activity; Installing; International Space Station; Robot Arms; Crew Procedures (Inflight)

20010676273 NASA Johnson Space Center, Houston, TX USA
STS–105 Crew Training Clip
Jul. 31, 2001; In English; Videotape: 57 min. 57 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001117679; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

The STS-105 crewmembers, Commander Scott Horowitz, Pilot Frederick
Sturckow, and Mission Specialists Daniel Barry and Patrick Forrester, are seeing
during various stages of their training. Footage includes Post-Insertion Training,
Virtual Reality Laboratory Remote Manipulator System Training, Emergency
Egress Training in the CCT, Neutral Buoyancy Laboratory Training, Post Egress
Landing Training at FFT, Long Range Training in the GNS (Navigation Simulator),
and Post Insertion Operations Training at FFT.

CASI
Astronaut Training; Egress; Spacecrews
STS–100 Mission Highlights Resource Tape, Part 1 of 4
Aug. 02, 2001; In English; Videotape: 1 hr. 22 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001120373; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of ‘STS–92 Mission Highlights Resource Tape, Part 1 of 2’ (internal ID 2001120371), this video shows footage from flight days 7-14 of the STS-92 mission. Mission Specialists Jeff Wisoff and Mike Lopez-Alegria are seen as they perform their spacewalks to work on the Third Pressurized Module Adaptor, washing her hair and Commander Brian Duffy shaving. For footage from flight days 7-14, see ‘STS-92 Mission Highlights Resource Tape, Part 3 of 4’ and ‘STS-92 Mission Highlights Resource Tape, Part 4 of 4’ (internal ID 2001120371).

CASl Extravehicular Activity: Spacecraft Docking; Spacecraft Launching; Discovery (Orbiter); Crew Procedures (Preflight); Crew Procedures (Inflight); Extravehicular Activity: International Space Station; Trusses; Spacecraft Docking; Spacecraft Launching; Discovery (Orbiter); Crew Procedures (Preflight); Crew Procedures (Inflight); Extravehicular Activity: Spacewalks; International Space Station; Crew Procedures (Inflight)

STS–92 Mission Highlights Resource Tape, Part 2 of 4
Aug. 02, 2001; In English; Videotape: 1 hr. 22 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001120373; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of ‘STS-92 Mission Highlights Resource Tape, Part 1 of 2’ (internal ID 2001120371), this video shows footage from flight day six of the STS-92 mission. Mission Specialists Jeff Wisoff and Mike Lopez-Alegria are seen as they perform their spacewalks to work on the Third Pressurized Module Adaptor, washing her hair and Commander Brian Duffy shaving. For footage from flight days 7-14, see ‘STS-92 Mission Highlights Resource Tape, Part 3 of 4’ and ‘STS-92 Mission Highlights Resource Tape, Part 4 of 4’ (internal ID 2001120371).

CASl Extravehicular Activity: Spacewalks; International Space Station; Crew Procedures (Inflight)

STS–92 Mission Highlights Resource Tape, Part 3 of 4
Aug. 02, 2001; In English; Videotape: 1 hr. 22 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001120373; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of ‘STS-92 Mission Highlights Resource Tape, Part 1 of 2’ (internal ID 2001120371), this video shows footage from flight day six of the STS-92 mission. Mission Specialists Jeff Wisoff and Mike Lopez-Alegria are seen as they perform their spacewalks to work on the Third Pressurized Module Adaptor, washing her hair and Commander Brian Duffy shaving. For footage from flight days 7-14, see ‘STS-92 Mission Highlights Resource Tape, Part 3 of 4’ and ‘STS-92 Mission Highlights Resource Tape, Part 4 of 4’ (internal ID 2001120371).

CASl Discovery (Orbiter); Spacecraft Landing

STS–92 Mission Highlights Resource Tape, Part 4 of 4
Aug. 02, 2001; In English; Videotape: 1 hr. 22 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001120373; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of ‘STS-92 Mission Highlights Resource Tape, Part 1 of 2’ (internal ID 2001120371), this video shows footage from flight day six of the STS-92 mission. Mission Specialists Jeff Wisoff and Mike Lopez-Alegria are seen as they perform their spacewalks to work on the Third Pressurized Module Adaptor, washing her hair and Commander Brian Duffy shaving. For footage from flight days 7-14, see ‘STS-92 Mission Highlights Resource Tape, Part 3 of 4’ and ‘STS-92 Mission Highlights Resource Tape, Part 4 of 4’ (internal ID 2001120371).

CASl Discovery (Orbiter); Spacecraft Landing

STS–92 Mission Highlights Resource Tape, Part 3 of 4
Aug. 02, 2001; In English; Videotape: 1 hr. 22 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001120373; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of ‘STS-92 Mission Highlights Resource Tape, Part 1 of 2’ (internal ID 2001120371), this video shows footage from flight day six of the STS-92 mission. Mission Specialists Jeff Wisoff and Mike Lopez-Alegria are seen as they perform their spacewalks to work on the Third Pressurized Module Adaptor, washing her hair and Commander Brian Duffy shaving. For footage from flight days 7-14, see ‘STS-92 Mission Highlights Resource Tape, Part 3 of 4’ and ‘STS-92 Mission Highlights Resource Tape, Part 4 of 4’ (internal ID 2001120371).

CASl Discovery (Orbiter); Spacecraft Landing
Leonardo Multipurpose Logistics Module to the International Space Station

STS-105 Flight Day 5 Highlights
Aug. 02, 2001; In English; Videotape: 1 hr. 25 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001120376; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

A continuation of ‘STS-92 Mission Highlights Resource Tape, Part 1 of 4’ (internal ID 2001120375) and ‘STS-92 Mission Highlights Resource Tape, Part 2 of 4’ (internal ID 2001120373), this video shows footage from flight days 7-10 of the STS-92 mission. Scenes include the spacewalks performed by Mission Specialists Leroy Chiao and Bill McArthur to prepare the International Space Station (ISS) for the solar arrays that will be arriving with the next mission, the undocking of Discovery from the ISS, and the crewmembers (Commander Brian Duffy, Pilot Pamela Melroy, and Mission Specialist Koichi Wakata, Leroy Chiao, Peter Wisoff, Michael Lopez-Alegria, and William McArthur) are heard as they answer questions about the mission in an on-orbit interview. Several crewmembers are also seen as they shave and then have a meal. For footage from flight days 11-14 of the mission, see “STS-92 Mission Highlights Resource Tape, Part 4 of 4” (internal ID 2001120371).

CASI

Extravehicular Activity; International Space Station; Crew Procedures (Inflight); Spacecraft Docking

STS-105 Flight Day 3 Highlights
Aug. 12, 2001; In English; Videotape: 35 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001120467; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On this third day of the STS-105 mission, footage shows Discovery docking with the International Space Station (ISS). The Expedition 2 crewmembers, Yuri Usachev, James Voss, and Susan Helms, are seen as they work in the Destiny Laboratory Module on the ISS. The STS-105 crew (Commander Scott Horowitz, Pilot Frederick Sturckow, and Mission Specialist Daniel Barry and Patrick Forrester), Expedition 2 crew, and Expedition 3 crew (Frank Culbertson, Jr., Mikhail Turin, and Vladimir Dezhurov) are seen as the connecting hatches are opened between the ISS and Discovery and the crews meet.

CASI

International Space Station; Spacecraft Docking; Discovery (Orbiter); Crew Procedures (Inflight)

STS-105 Flight Day 4 Highlights
Aug. 14, 2001; In English; Videotape: 38 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001120547; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On this fourth day of the STS-105 mission, footage shows the Shuttle’s robotic arm as it moves into position to grapple the Leonardo Multipurpose Module (LMMP) out of Discovery’s payload bay and into position to be installed to the Unity Module on the International Space Station (ISS). The STS-105 crew (Commander Scott Horowitz, Pilot Frederick Sturckow, and Mission Specialists Daniel Barry and Patrick Forrester), Expedition 2 crew (Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms), and the Expedition 3 crew (Frank Culbertson, Jr., Mikhail Turin, and Vladimir Dezhurov) are seen as they unload LMMP and transfer racks to and from the Destiny Laboratory Module and the Space Shuttle.

CASI

Destiny Laboratory Module; International Space Station; Loading Operations; Crew Procedures (Inflight)

STS-105 Flight Day 5 Highlights
Aug. 15, 2001; In English; Videotape: 29 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001120550; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fifth day of the STS-105 mission, the transfer of supplies from the Leonardo Multipurpose Logistics Module to the International Space Station (ISS) and the handover of control of the ISS from the Expedition 2 crew (Yuriy Usachev, James Voss, and Susan Helms) to the Expedition 3 crew (Frank Culbertson, Jr., Mikhail Turin, and Vladimir Dezhurov) continue. Commanders Usachev and Culbertson answer questions about the ISS in an on-orbit interview, and the Expedition 3 crewmembers give a video tour of their new sleeping quarters on the ISS. The north Pacific Ocean and the USA Pacific northwest are seen from space.

CASI

International Space Station; Loading Operations; Crew Procedures (Inflight)

STS-105 Flight Day 2 Highlights
Aug. 12, 2001; In English; Videotape: 19 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001120466; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this second day of the STS-105 mission, Discovery continues to approach the International Space Station (ISS) and the crewmembers of the orbiter (Commander Scott Horowitz, Pilot Frederick Sturckow, and Mission Specialists Daniel Barry and Patrick Forrester) are seen as they participate in various on-orbit activities, including the set-up and performance of the experiment ‘Effects of Microgravity on Spinal Cord Excitability’ and maneuver the Shuttle’s robotic arm to its docking configuration. The Rocky Mountains are seen as Discovery passes over the USA.

CASI

Spaceborne Experiments; Crew Procedures (Inflight); Discovery (Orbiter)

STS-105 Flight Day 1 Highlights
Aug. 11, 2001; In English; Videotape: 23 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001120468; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-105 mission, the crew of the Discovery Orbiter (Commander Scott Horowitz, Pilot Frederick Sturckow, and Mission Specialists Daniel Barry and Patrick Forrester) and the Expedition 3 crew (Frank Culbertson, Jr., Mikhail Turin, and Vladimir Dezhurov) are seen working in the Destiny Laboratory Module. The three crews gather (STS-105 crew Commander Scott Horowitz, Pilot Fred Sturckow, and Mission Specialists Dan Barry and Pat Forrester, Expedition 2 crew Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms, and Expedition 3 crew Frank Culbertson, Jr., Mikhail Turin, and Vladimir Dezhurov) for the change of command ceremony, where the Expedition 3 crew officially takes control of the International Space Station from the Expedition 2 crew, and the three crews answer questions about the mission in an on-orbit interview. Footage shows Hawaii from space.

CASI

Countdown; Discovery (Orbiter); Crew Procedures (Preflight); Spacecraft Launching

STS-105 Flight Day 8 Highlights
Aug. 18, 2001; In English; Videotape: 22 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001120339; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eighth day of the STS-105 mission, Expedition 2 crewmember Susan Helms and Expedition 3 crewmember Vladimir Dezhurov are seen working in the Destiny Laboratory Module. The three crews gather (STS-105 crew Commander Scott Horowitz, Pilot Fred Sturckow, and Mission Specialists Dan Barry and Pat Forrester, Expedition 2 crew Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms, and Expedition 3 crew Frank Culbertson, Jr., Mikhail Turin, and Vladimir Dezhurov) for the change of command ceremony, where the Expedition 3 crew officially takes control of the International Space Station from the Expedition 2 crew, and the three crews answer questions about the mission in an on-orbit interview. Footage shows Hawaii from space.

CASI

International Space Station; Spacecrafts; Crew Procedures (Inflight)

STS-105 Flight Day 9 Highlights
Aug. 19, 2001; In English; Videotape: 25 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001120838; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this ninth day of the STS-105 mission, Mission Specialists Dan Barry and...
and Pat Forrester are seen during their spacewalks as they work on the exterior of the Destiny Laboratory Module, installing handrails and connecting cables.

2001ST--105 Flight Day 7 Highlights
Aug. 17, 2001; In English; Videotape: 31 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001126405; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On this seventh day of the STS--105 mission, Mission Specialists Dan Barry and Pat Forrester are seen as they perform their spacewalks to install the Early Ammonia Servicer to the International Space Station (ISS). A brief ceremony is shown as Expedition 3 crewmembers Mikhail Turin and Vladimir Dezhurov commemorate the 1000th flight day anniversary of the ISS.

CASI
Extravehicular Activity; International Space Station: Crew Procedures (Inflight)

2001ST--105 Flight Day 6 Highlights
Aug. 16, 2001; In English; Videotape: 14 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001126406; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

In this sixth day of the STS--105 mission, Expedition 2 crewmember Susan Helms answers questions about her long-duration flight on the International Space Station (ISS) in this on-orbit interview. Footage shows portions of Canada and the northern USA from space as the orbiter flies over, including Idaho, Montana, and North Dakota.

CASI
International Space Station: Crew Procedures (Inflight)

2001ST--105 Flight Day 11 Highlights
Aug. 21, 2001; In English; Videotape: 29 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001130665; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This 11th day of the STS--105 mission, the three crews, Expedition 2 (Commander Yury Usachev and Flight Engineers James Voss and Susan Helms), Expedition 3 (Frank Culbertson, Jr., Mikhail Turin, and Vladimir Dezhurov), and STS--105 (Commander Scott Horowitz, Pilot Fred Sturckow, and Mission Specialists Dan Barry and Pat Forrester), gather to say a few words about the changeover of the control of the International Space Station (ISS). Footage shows the undocking of Discovery from the ISS. STS--105 and E2 crews answer questions about the stay on the ISS in an on-orbit interview.

CASI
International Space Station: Spacewalks: Spacecraft Docking: Crew Procedures (Inflight)

2001ST--105 Flight Day 10 Highlights
Aug. 19, 2001; In English; Videotape: 30 min. 11 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001130666; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this tenth day of the STS--105 mission, footage shows the Leonardo Multipurpose Logistics Module packed and ready to return to Earth before it is grappled using the robotic arm and returned to the payload bay of Discovery. As the orbiter and the International Space Station fly over Earth, Florida is seen, as are Washington and Oregon (where the forest fires blaze), Lake Winnipeg, and the border between Ontario and Quebec.

CASI
International Space Station: Space Station Modules: Crew Procedures (Inflight)

2001ST--105 Flight Day 12 Highlights
Aug. 22, 2001; In English; Videotape: 20 min. 38 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001133694; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

In this 12th day of the STS--105 mission, Discovery continues to fly towards Earth after the previous day's undocking from the International Space Station (ISS). Several on-orbit interviews are conducted, including questions to the STS--105 crew (Commander Scott Horowitz, Pilot Fred Sturckow, and Mission Specialists Dan Barry and Pat Forrester) about spaceflight, questions to the Expedition 2 crew (Commander Yury Usachev and Flight Engineers James Voss and Susan Helms) about their stay on the ISS, and questions to the Expedition 3 crew (Frank Culbertson, Jr., Mikhail Turin, and Vladimir Dezhurov) about some of the experiments on board the ISS. Typhoon 14 is seen from above as Discovery passes over the storm.

CASI
International Space Station: Space Flight: Spacecrews; Crew Procedures (Inflight)

2001ST--105 Countdown Status Briefing
Aug. 06, 2001; In English; Videotape: 20 min. 39 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001133691; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Joel Wells, NASA Public Affairs, introduces Steve Altemus, Deputy Manager of the ISS Program, Dave King, NASA Director of Shuttle Processing, and Judy Konecky, Staff Meteorologist, in this STS--105 prelaunch press conference. An overview is given of the launch countdown, payload status (Leonardo Multipurpose Logistics Module), and weather forecast. The men then answer questions from the press.

CASI
Countdown; Payloads; Weather Forecasting; Prelaunch Summaries

2001ST--104 Pre-Launch Press Conference
Aug. 07, 2001; In English; Videotape: 28 min. 53 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001133690; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

George Diller, NASA Public Affairs, introduces Bill Gerstenmaier, Deputy Manager of the ISS Program, Dave King, NASA Director of Shuttle Processing, and Judy Konecky, Staff Meteorologist, in this STS--105 press conference. An overview is given of the success of the Expedition 2 crew, the expectations of the Expedition 3 crew, the launch countdown status, and the weather forecast for the Shuttle launch. They then answer questions from the press.

CASI
Countdown; Weather Forecasting; Prelaunch Summaries: Astronaut Performance

2001ST--104 Pre-Launch Press Conference
Jul. 10, 2001; In English; Videotape: 35 min. 55 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001133689; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

George Diller, NASA Public Affairs, introduces Jim Halsell, Shuttle Program Launch Integration Manager, Dave King, NASA Director of Shuttle Processing, Michael Havens, Deputy Associate Administrator for ISS, and John Weema, Launch Weather Officer, in this STS--104 press conference. An overview is given of the launch and mission activities, International Space Station activities during the mission, and the weather forecast for the launch. The men then answer questions from the press.

CASI
Weather Forecasting; Prelaunch Summaries
in the mission. The crew is seen during suit-up, boarding the Shuttle, during launch, and performing many on-orbit activities, including the rendezvous with the International Space Station (ISS) (live and a computer animation), the three spacewalks (installing Quest Airlock and three external gas tanks), and the opening and outfitting of Quest. As the mission ends the crew bids farewell to the Expedition 2 crew (Commander Yuri Usachev and Flight Engineers James Voss and Susan Helms) and the Atlantis Orbiter undocks from ISS, performs the fly-around of the space station, and lands.

CASI

Extravehicular Activity; International Space Station; Spacecraft Launching; Spacecrews: Crew Procedures (Preflight); Crew Procedures (Inflight)

2001115089 NASA Johnson Space Center, Houston, TX USA

STS-108 Crew Interviews: Yuri I. Onufrienko
Nov. 04, 2001; In English; Videotape: 26 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP-NASA- VT-2001119092; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Expedition 4 Commander Yuri Onufrienko is seen during a prelaunch interview. He gives details on the mission’s goals and significance, his role in the mission, what his responsibilities will be, what the crew exchange will be like (transferring the Expedition 4 crew in place of the Expedition 3 crew on the International Space Station (ISS)), the day-to-day life on an extended stay mission, the experiments he will be conducting on board, and what the $0$ truss will mean to ISS. Onufrienko ends with his thoughts on the short-term and long-term future of the International Space Station.

CASI

International Space Station; Spacecrews: Prelaunch Summaries

2001115224 NASA Johnson Space Center, Houston, TX USA

Expedition 4 Crew Interviews: Dan Bursch
Nov. 04, 2001; In English; Videotape: 53 min. 47 sec. playing time, in color, with sound
Report No.(s): NONP-NASA- VT–2001119045; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Expedition 4 Flight Engineer Dan Bursch is seen during a prelaunch interview. He gives details on the mission’s goals and significance, his role in the mission, what his responsibilities will be, what the crew exchange will be like (transferring the Expedition 4 crew in place of the Expedition 3 crew on the International Space Station (ISS)), the day-to-day life on an extended stay mission, the experiments he will be conducting on board, and what the $0$ truss will mean to ISS. Bursch ends with his thoughts on the short-term and long-term future of the International Space Station.

CASI

International Space Station; Spacecrews: Prelaunch Summaries

2001115230 NASA Johnson Space Center, Houston, TX USA

Expedition 4 Crew Interviews: Carl Walz
Nov. 04, 2001; In English; Videotape: 41 min. 57 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–2001119052; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Expedition 4 Flight Engineer Carl Walz is seen during a prelaunch interview. He gives details on the mission’s goals and significance, his role in the mission, what his responsibilities will be, what the crew exchange will be like (transferring the Expedition 4 crew in place of the Expedition 3 crew on the International Space Station (ISS)), the day-to-day life on an extended stay mission, the experiments he will be conducting on board, and what the $0$ truss will mean to ISS. Walz ends with his thoughts on the short-term and long-term future of the International Space Station.

CASI

International Space Station; Spacecrews: Prelaunch Summaries

2001116595 NASA Johnson Space Center, Houston, TX USA

STS–108 Crew Training Clip
Nov. 15, 2001; In English; Videotape: 55 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001194277; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video shows the crew of STS-108, Commander Dominic Gorie, Pilot Mark Kelly, and Mission Specialists Linda Godwin and Daniel Tani, during various parts of their training, including T-38 operations at Ellington, bail-out training (with the Expedition 4 crew: Commander Yuri Onufrienko and Flight Engineers Carl Walz and Daniel Bursch) in CCT2, extravehicular activity (EVA) preparations, Space Station Mockup and Test/Training Facility (SSMFT) transfer and hands-on familiarization (also with E4), Remote Manipulator System training, EVA training in the Neutral Buoyancy Laboratory, and in a payload training class.

CASI

Astronaut Training: Extravehicular Activity; Spacecrews

2001116608 NASA Johnson Space Center, Houston, TX USA

STS–108 Crew Interviews: Don Gorie
Nov. 11, 2001; In English; Videotape: 30 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20011194280; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

STS-108 Commander Don Gorie is seen during a prelaunch interview. He answers questions about the mission’s goals and significance, explaining the meaning of ‘utilization flight 1’ (UF-1) as opposed to an ‘assembly flight’. He gives details on the payload (Starshine Satellite, Avian Development Facility, and Raffaello Multipurpose Logistics Module (MPLM)), his role in the rendezvous, docking, and undocking of the Endeavour Orbiter to the International Space Station (ISS), how he will participate in the unloading and reloading of the MPL, and the way in which the old and new resident crews of ISS will exchanged. Gorie ends with his thoughts on the short-term and long-term future of the International Space Station.

CASI

Endeavour (Orbiter); International Space Station: Spacecraft Docking; Prelaunch Summaries

2001116601 NASA Johnson Space Center, Houston, TX USA

STS–108 Crew Interviews: Linda Godwin
Nov. 11, 2001; In English; Videotape: 30 min. 3 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20011194276; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

STS-108 Mission Specialist Linda Godwin is seen during a prelaunch interview. She answers questions about the mission’s goals and significance, explaining the meaning of ‘utilization flight 1’ (UF-1) as opposed to an ‘assembly flight’. She gives details on the payload (Starshine Satellite, Avian Development Facility, and Raffaello Multipurpose Logistics Module (MPLM)), her role in the rendezvous, docking, and undocking of the Endeavour Orbiter to the International Space Station (ISS), how she will participate in the unloading and reloading of the MPL, and the way in which the old and new resident crews of ISS will exchanged. Godwin ends with her thoughts on the short-term and long-term future of the International Space Station.

CASI

Endeavour (Orbiter); International Space Station: Spacecraft Docking; Prelaunch Summaries

2001116602 NASA Johnson Space Center, Houston, TX USA

STS–108 Crew Interviews: Mark Kelly
Nov. 11, 2001; In English; Videotape: 26 min. 29 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20011194275; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

STS-108 Pilot Mark Kelly is seen during a prelaunch interview. He answers questions about the mission’s goals and significance, explaining the meaning of ‘utilization flight 1’ (UF-1) as opposed to an ‘assembly flight’. He gives details on the payload (Starshine Satellite, Avian Development Facility, and Raffaello Multipurpose Logistics Module (MPLM)), his role in the rendezvous, docking, and undocking of the Endeavour Orbiter to the International Space Station (ISS), how he will participate in the unloading and reloading of the MPL, and the way in which the old and new resident crews of ISS will exchanged. Kelly ends with
his thoughts on the short-term and long-term future of the International Space Station.

CASI Endeavour (Orbiter); International Space Station; Spacecraft Docking; Prelaunch Summaries

20010116063 NASA Johnson Space Center, Houston, TX USA
STS-108 Crew Interviews: Dan Tani
Nov. 11, 2001; In English; Videotape: 35 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001194274; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-108 Mission Specialist Dan Tani is seen during a prelaunch interview. He answers questions about the mission’s goals and significance, explaining the meaning of ‘utilization flight’ 1’ (UFI-1) as opposed to an ‘assemble flight’. He gives details on the payload (Starshine Satellite, Avian Development Facility, and Rafaello Multipurpose Logistics Module (MPLM)), his role in the rendezvous, docking, and undocking of the Endeavour Orbiter to the International Space Station (ISS), how he will participate in the unloading and reloading of the MPLM, and the way in which the old and new resident crews of ISS will exchanged. Tani ends with his thoughts on the short-term and long-term future of the International Space Station.

CASI Endeavour (Orbiter); International Space Station; Spacecraft Docking; Prelaunch Summaries

20010117169 NASA Johnson Space Center, Houston, TX USA
STS-105 Post-Flight
Oct. 28, 2001; In English; Videotape: 16 min. 48 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001188069; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The crewmembers of STS-105, Commander Scott Horowitz, Pilot Fred Sturckow, and Mission Specialists Dan Barry and Pat Forrester, narrate this video as footage from the mission is seen, starting with the boarding and launch of Discovery. Various on-orbit activities are shown, including on-orbit activities (H Reflex Experiment), the rendezvous and docking of Discovery with the International Space Station (ISS), the transfer of materials from the Multipurpose Logistics Module, extravehicular activities, and the exchange of resident ISS crews. The video ends with Discovery undocking from the ISS and the landing of the orbiter.

CASI Extravehicular Activity; International Space Station; Spacecraft Docking; Spacecrews; Crew Procedures (Inflight); Discovery (Orbiter)

200101122948 NASA Johnson Space Center, Houston, TX USA
STS-108 Flight Day 7 Highlights: Flight Day 1
Dec. 06, 2001; In English; Videotape: 23 min. 37 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001206814; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-108 mission, the crewmembers of Endeavour, Commander Dominic Gorie, Pilot Mark Kelly, and Mission Specialists Linda Godwin and Daniel Tani, are seen during various prelaunch activities, including the ceremonial breakfast, suitup, departing the Operations and Checkout (O&C) Building, and boarding the orbiter. The launch of Endeavour is shown. The payload bay doors open once in orbit and Pilot Kelly is seen as the solid rocket boosters ignite.

CASI Spacecraft Launching; Spacecrews; Crew Procedures (Inflight); Endeavour (Orbiter)

2002001348 NASA Johnson Space Center, Houston, TX USA
STS-108 Flight Day 2 Highlights
Dec. 07, 2001; In English; Videotape: 9 min. 19 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001206813; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this second day of the STS-108, Endeavour continues to approach the International Space Station. A camera on the end of the Remote Manipulator System robotic arm scans the side of Endeavour and shows the Rafaello Multipurpose Logistics Module.

CASI Endeavour (Orbiter); Remote Manipulator System; Crew Procedures (Inflight)

20020002232 NASA Johnson Space Center, Houston, TX USA
STS-108 Flight Day 7 Highlights
Dec. 12, 2001; In English; Videotape: 35 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--20011216283; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On this seventh day of the STS-108 mission, NASA Ground Control, STS-108 crew (Commander Dominic Gorie, Pilot Mark Kelly, and Mission Specialists Linda Godwin and Daniel Tani), Expedition 3 crew (Commander Frank Culbertson, Jr. and Flight Engineers Mikhail Turnin and Vladimir Dezhurov), and Expedition 4 crew (Commander Yuri Onufrienko and Flight Engineers Carl Walz and Daniel Bursch) are seen during a ceremony of remembrance in honor of the three-month anniversary of the September 11th tragedy. The three crews also answer questions from the press on their missions. They are seen as they transfer supplies and equipment from the Rafaello Multipurpose Logistics Module.

CASI Spacecrews; International Space Station; Crew Procedures (Inflight); Loading Operations

20020002352 NASA Johnson Space Center, Houston, TX USA
STS-104 Mission Highlights Resource Tape, Part 2 of 4
Dec. 12, 2001; In English; Videotape: 59 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--20011214902; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of ‘STS-104 Mission Highlights Resource Tape, Part 1 of 4’ (internal ID 2001214904), this video shows footage from flight days four through seven of the STS-104 mission. Mission Specialists Mike Gernhardt and Jim Reilly are seen during their spacewalks, Pilot Charles Holuga and Mission Specialists Janet Kavandi, Mike Gernhardt, and Jim Reilly, and Expedition 2 Flight Engineer Susan Heimn work inside the newly installed Quest Airlock. Expedition 2 Flight Engineer Jim Voss is seen as he works to outfit the vestibule between the Unity Module and Quest and opening the hatch between the two components of the International Space Station. Flight days seven (continued) through twelve can be found on the videos ‘STS-104 Mission Highlights Resource Tape, Part 3 of 4’ (internal ID 2001214906) and ‘STS-104 Mission Highlights Resource Tape, Part 4 of 4’ (internal ID 2001214905).

CASI Astronauts; Extravehicular Activity; International Space Station; Spacecrews; Crew Procedures (Inflight)

20020002331 NASA Johnson Space Center, Houston, TX USA
STS-108 Flight Day 6 Highlights
Dec. 11, 2001; In English; Videotape: 39 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--20011217633; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On this sixth day of the STS-108 mission, Mission Specialists Linda Godwin and Daniel Tani perform their spacewalks, where they place insulating blankets on the two Beta Gimbal Assemblies.

CASI Extravehicular Activity; International Space Station; Crew Procedures (Inflight)

20020002378 NASA Johnson Space Center, Houston, TX USA
STS-108 Flight Day 8 Highlights
Dec. 13, 2001; In English; Videotape: 22 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001216282; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eighth day of the STS-108 mission, the STS-108 crew (Commander
On this fourth day of the STS-108 mission, the robotic arm is seen as it moves towards the Raffaello Multipurpose Logistics Module to prepare for the grappling and transfer of the module from Endeavour to the International Space Station (ISS). Expedition 4 Flight Engineer Carl Walz and STS-108 Mission Specialist Linda Godwin are shown during preparations to open the hatch between ISS and Raffaello. Expedition 3 Commander Frank Culbertson, Expedition 4 Commander Yuri Onufrienko and STS-108 Pilot Mark Kelly are seen during an on-orbit press conference, where they answer questions about the supply transfer between Raffaello and ISS and share their thoughts about the September 11th tragedy.

CASI

Endeavour (Orbiter); International Space Station; Spacecraft Docking; Space Station; Procedures (Inflight); Loading Operations

20020002388 NASA Johnson Space Center, Houston, TX USA

STS-108 Flight Day 4 Highlights

Dec. 10, 2001; In English; Videotape: 33 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP—NASA—VT—2001214921; No Copyright; Aval: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On this fourth day of the STS-108 mission, the Endeavour Orbiter is seen docking with the International Space Station. The crew of STS-108 (Commander Dominic Gorie, Pilot Mark Kelly, and Mission Specialists Linda Godwin and Daniel Tani) and Expedition 4 (Commander Yuri Onufrienko and Flight Engineers Carl Walz and Daniel Bursch) move towards the Raffaello Multipurpose Logistics Module to prepare for the grappling and transfer of the module from Endeavour to the International Space Station (ISS). Expedition 4 Flight Engineer Carl Walz and STS-108 Mission Specialist Linda Godwin are shown during preparations to open the hatch between ISS and Raffaello. Expedition 3 Commander Frank Culbertson, Expedition 4 Commander Yuri Onufrienko and STS-108 Pilot Mark Kelly are seen during an on-orbit press conference, where they answer questions about the supply transfer between Raffaello and ISS and share their thoughts about the September 11th tragedy.

CASI

Endeavour (Orbiter); International Space Station; Crew Procedures (Inflight)

20020002387 NASA Johnson Space Center, Houston, TX USA

STS-108 Flight Day 3 Highlights

Dec. 9, 2001; In English; Videotape: 28 min. 59 sec. playing time, in color, with sound
Report No.(s): NONP—NASA—VT—2001214917; No Copyright; Aval: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this third day of the STS-108 mission, the Endeavour Orbiter is seen docking with the International Space Station. The crew of STS-108 (Commander Dominic Gorie, Pilot Mark Kelly, and Mission Specialists Linda Godwin and Daniel Tani) and Expedition 4 (Commander Yuri Onufrienko and Flight Engineers Carl Walz and Daniel Bursch) greet the Expedition 3 crew (Commander Frank Culbertson, Jr. and Flight Engineers Mikhail Turin and Vladimir Dezhurov) in the Destiny Laboratory Module.

CASI

Endeavour (Orbiter); International Space Station; Spacecraft Docking; Space Station; Procedures (Inflight)

20020002389 NASA Johnson Space Center, Houston, TX USA

STS-108 Flight Day 5 Highlights

Dec. 10, 2001; In English; Videotape: 18 min. playing time, in color, with sound
Report No.(s): NONP—NASA—VT—2001214915; No Copyright; Aval: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fifth day of the STS-108 mission, the STS-108 crew (Commander Dominic Gorie, Pilot Mark Kelly, and Mission Specialists Linda Godwin and Daniel Tani), Expedition 3 crew (Commander Frank Culbertson, Jr. and Flight Engineers Mikhail Turin and Vladimir Dezhurov) and Expedition 4 crew (Commander Yuri Onufrienko and Flight Engineers Carl Walz and Daniel Bursch) join in an on-orbit conference to honor those who lost loved ones in the September 11th tragedy. They are also seen moving equipment from the Raffaello Multipurpose Logistics Module to the International Space Station.

CASI

International Space Station; Spacecrafts; Crew Procedures (Inflight)

20020002390 NASA Johnson Space Center, Houston, TX USA

STS-104 Mission Highlights Resource Tape, Part 1 of 4

Dec. 11, 2001; In English; Videotape: 59 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP—NASA—VT—2001214904; No Copyright; Aval: CASI; B03, Videotape-Beta; V03, Videotape-VHS

An overview of the STS-104 mission is given through footage of each flight day. Scenes from flight days one through three show activities such as astronaut prelaunch procedures (breakfast, suit-up, and boarding Atlantis), launch, and on-orbit activities such as the opening of the payload bay doors, rendezvous and docking of the Orbiter to the International Space Station (ISS), and the opening of the hatches separating the Orbiter from ISS. The STS-104 crew (Commander Steven Lindsey, Pilot Charles Hobaugh, and Mission Specialists Mike Gernhardt, Jim Reilly, and Janet Kavandi) greets the Expedition 2 crew (Commander Yuri Usachev and Flight Engineers James Voss and Susan Helms). Footage from flight days four through twelve can be found on the following videos: ‘STS-104 Mission Highlights Resource Tape, Part 2 of 4’ (internal ID 2001214902), ‘STS-104 Mission Highlights Resource Tape, Part 3 of 4’ (internal ID 2001214906), and ‘STS-104 Mission Highlights Resource Tape, Part 4 of 4’ (internal ID 2001214905).

CASI

International Space Station; Spacecraft Docking; Space Station; Procedures (Inflight); Crew Procedures (Preflight)

20020002391 NASA Johnson Space Center, Houston, TX USA

STS-104 Mission Highlights Resource Tape, Part 4 of 4

Dec. 12, 2001; In English; Videotape: 47 min. playing time, in color, with sound
Report No.(s): NONP—NASA—VT—2001214906; No Copyright; Aval: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of ‘STS-104 Mission Highlights Resource Tape, Part 1 of 4’ (internal ID 2001214904) and ‘STS-104 Mission Highlights Resource Tape, Part 2 of 4’ (internal ID 2001214902), this video shows footage from flight days seven (continued from part three) through twelve. The Atlantis Orbiter undocks from the International Space Station and performs the fly-around before landing back on Earth. Various unspecified views of Earth are seen from space.

CASI

Atlantis (Orbiter); International Space Station; Spacecraft Docking; Space Station; Procedures (Inflight);

20020002392 NASA Johnson Space Center, Houston, TX USA

STS-104 Mission Highlights Resource Tape

Dec. 12, 2001; In English; Videotape: 56 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP—NASA—VT—2001214906; No Copyright; Aval: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of ‘STS-104 Mission Highlights Resource Tape, Part 1 of 4’ (internal ID 2001214904) and ‘STS-104 Mission Highlights Resource Tape, Part 2 of 4’ (internal ID 2001214902), this video shows footage from flight days seven (continued from part two) through ten. Mission Specialists Mike Gernhardt and Jim Reilly are seen during their spacewalks, and Expedition 2 Flight Engineer Jim Voss and STS-104 Commander Steven Lindsey replace a leaking intermodular valve in the vestibule between the Unity Module and Quest Airlock. Voss is seen checking for further leaks the next day. Flight day ten is continued on ‘STS-104 Mission Highlights Resource Tape, Part 4 of 4’ (internal ID 2001214905), which also shows flight days eleven and twelve.

CASI

Extravehicular Activity; Valves; Crew Procedures (Inflight); International Space Station

20020005664 NASA Johnson Space Center, Houston, TX USA

STS-108 Flight Day 11 Highlights

Dec. 15, 2001; In English; Videotape: 35 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP—NASA—VT—2001220094; No Copyright; Aval: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On this eleventh day of the STS-108 mission, the Expedition 3 crew (Commander Frank Culbertson, Jr. and Flight Engineers Mikhail Turin and Vladimir Dezhurov), Expedition 4 crew (Commander Yuri Onufrienko and Flight Engineers Carl Walz and Daniel Bursch), and STS-108 crew (Commander Dominic Gorie, Pilot Mark Kelly, and Mission Specialists Linda Godwin and Daniel Tani) are seen as the E3 crew bids farewell to the International Space Station (ISS) that has been their home for the previous several months. Endeavour undocks from ISS and performs the customary flyaround. The STS-108
crew and Commander Culbertson answer questions from the press in an on-orbit interview.

CASI

International Space Station: Crew Procedures (Inflight); Endeavour (Orbiter); Spacecraft Docking

20020022943 NASA Johnson Space Center, Houston, TX USA

STS–109 Crew Interviews – Altman
Feb. 04, 2002; In English; Videotape: 34 min. 3 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2002033710; No Copyright; Avail: CASI; B03, Videotape-VHS

STS-109 crew Commander Scott D. Altman is seen during a prelaunch interview. He answers questions about his inspiration to become an astronaut, his career path, and his most memorable experiences. He gives details on the mission’s goals and objectives, which focus on the refurbishing of the Hubble Space Telescope, and its role in the mission. He provides a brief background on the Hubble Space Telescope, and explains the plans for the rendezvous of the Columbia Orbiter with the Hubble Space Telescope. He provides details and timelines for each of the planned Extravehicular Activities (EVAs), which include replacing the solar arrays, changing the Power Control Unit, installing the Advanced Camera for Surveys (ACS), and installing a new Cryocooler for the Near Infrared Camera Multi-Object Spectrometer (NICMOS). He also describes the

Near Infrared Camera Multi-Object Spectrometer; (3) repairing the reaction wheel assembly; (4) installing additional solar arrays; (5) augmenting the power control unit; (6) working on the HST’s gyros. The reaction wheel assembly task, a late addition to the mission, may necessitate the abandonment of one or more of the other tasks, such as the gyro work.

CASI

Prelaunch Summaries: Extravehicular Activity; Hubble Space Telescope; Spacecraft Maintenance; Crew Procedures (Inflight); Spacecrews

20020022944 NASA Johnson Space Center, Houston, TX USA

STS–109 Crew Interviews – Carey
Feb. 04, 2002; In English; Videotape: 35 min. 7 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2002033709; No Copyright; Avail: CASI; B03, Videotape-VHS

STS-109 pilot Duane G. Carey is seen during a prelaunch interview. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission’s goals and significance, as well as an extended description of his role in the Orbiter’s return landing. As its primary objective, this mission has the maintenance of the Hubble Space Telescope (HST). Following the Columbia Orbiter’s rendezvous with the telescope, extravehicular activities (EVA) will focus on repairs to and augmentation of the HST.

CASI

Prelaunch Summaries: Spacecrews; Hubble Space Telescope; Spacecraft Maintenance; Spacecraft Docking

20020022805 NASA Johnson Space Center, Houston, TX USA

STS–109 Crew Interviews: James H. Newman
Feb. 04, 2002; In English; Videotape: 45 min. 21 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2002033712; No Copyright; Avail: CASI; B03, Videotape-VHS

STS-109 Mission Specialist James H. Newman is seen during a prelaunch interview. He answers questions about his inspiration to become an astronaut, his career path, and his most memorable experiences. He gives details on the mission’s goals and objectives, which focus on the refurbishing of the Hubble Space Telescope, and its role in the mission. He provides a brief background on the Hubble Space Telescope, and explains the plans for the rendezvous of the Columbia Orbiter with the Hubble Space Telescope. He provides details and timelines for each of the planned Extravehicular Activities (EVAs), which include replacing the solar arrays, changing the Power Control Unit, installing the Advanced Camera for Surveys (ACS), and installing a new Cryocooler for the Near Infrared Camera and Multi-Object Spectrometer (NICMOS). He gives further explanation of each of these pieces of equipment. He also describes the break-out plan in place for these spacewalks. The interview ends with Newman explaining the details of a late addition to the mission’s tasks, which is to replace a reaction wheel on the Hubble Space Telescope.

CASI

Columbia (Orbiter); Hubble Space Telescope; Prelaunch Summaries: Spacecrews; Orbital Rendezvous; Extravehicular Activity
break-out plan in place for these spacewalks. The interview ends with Massimino explaining the details of a late addition to the mission’s tasks, which is to replace a reaction wheel on the Hubble Space Telescope.

CASI

**Columbia (Orbiter); Hubble Space Telescope; Prelaunch Summaries; Spacecraft Launching; Orbital Rendezvous; Extravehicular Activity**

**2002026807 NASA Johnson Space Center, Houston, TX USA**

**STS-109 Crew Interviews – Linnehan**
Feb. 05, 2002; In English; Videotape: 44 min. 52 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002033715; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-109 Mission Specialist 3 (MS3) Richard M. Linnehan is seen during a prelaunch interview. He answers questions about his lifelong desire to become an astronaut and his career path, which included becoming a zoo veterinarian. He gives details on the Columbia Orbiter mission, which has as its main purpose the maintenance and augmentation of the Hubble Space Telescope (HST). As MS3, his primary role in the mission pertains to EVAs (Extravehicular Activities) 1, 3, and 5. During EVA 1, Linnehan and another crewmember will replace one of two flexible solar arrays on the HST with a smaller, more efficient rigid solar array. The second solar array will be replaced on EVA 2 by other crewmembers. EVA 3 will involve the replacement of the Power Control Unit (PCU), and will require the first complete powering down of HST since its deployment. The possibility of a serious problem occurring is greatest during this portion of the mission because the original PCU was not built to be replaced. In EVA 5, Linnehan and another crewmember will install a replacement cooling system on NICMOS (Near Infrared Camera Multi-Object Spectrometer), which has not been operational. Linnehan discusses his role during the mission as well as that of his crewmates, and provides an abbreviated timeline, including possible contingencies.

CASI

**Prelaunch Summaries: Crew Procedures (Inflight); Extravehicular Activity; Hubble Space Telescope; Astronauts; Columbia (Orbiter); Spacecraft Maintenance**

**2002026912 NASA Johnson Space Center, Houston, TX USA**

**STS-109 Crew Interviews – Currie**
Feb. 05, 2002; In English; Videotape: 42 min. 11 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002033714; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-109 Mission Specialist 2 Nancy Jane Currie is seen during a prelaunch interview. She answers questions about her inspiration to become an astronaut and her career path. She gives details on the Columbia Orbiter mission which has as its main tasks the maintenance and augmentation of the Hubble Space Telescope (HST). While she will do many things during the mission, the most important will be her role as the primary operator of the robotic arm, which is responsible for grabbing the HST, bringing it to the Orbiter bay, and providing support for the astronauts during their EVAs (Extravehicular Activities). Additionally, the robotic arm will be responsible for transferring new and replacement equipment from the Orbiter to the HST. This equipment includes: two solar arrays, a Power Control Unit (PCU), the Advanced Camera for Surveys, and a replacement cooling system for NICMOS (Near Infrared Camera Multi-Object Spectrometer).

CASI

**Prelaunch Summaries: Crew Procedures (Inflight); Loading Operations; Spacecraft Docking; Extravehicular Activity; Columbia (Orbiter); Hubble Space Telescope; Spacecraft Maintenance; Robot Arms; Orbital Rendezvous**

**2002026954 NASA Johnson Space Center, Houston, TX USA**

**STS-109 Crew Training**
Feb. 15, 2002; In English; Videotape: 51 min. 38 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002034928; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Footage shows the crew of STS-109 (Commander Scott Altman, Pilot Dianne Carey, Payload Commander John Grunsfeld, and Mission Specialists Nancy Currie, James Newman, Richard Linnehan, and Michael Massimino) during various parts of their training. Scenes show the crew’s photo session, Post Landing Egress practice, training in Dome Simulator, Extravehicular Activity Training in the Neutral Buoyancy Laboratory (NBL), and using the Virtual Reality Laboratory Robotic Arm. The crew is also seen tasting food as they choose their menu for on-orbit meals.

CASI

**Extravehicular Activity; Spacecrafts; Training Simulators; Astronaut Training**

**20020927794 NASA Johnson Space Center, Houston, TX USA**

**STS–109 Crew Interview: Grunsfeld**
Feb. 05, 2002; In English; Videotape: 1 hr. 2 min. 1 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002032711; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

STS-109 Payload Commander John Grunsfeld is seen during a prelaunch interview answering questions about his inspiration to become an astronaut and his career path. He gives details on the mission’s goal (which is to service the Hubble Space Telescope (HST)), his role during the mission, the five scheduled spacewalks, the Columbia Orbiter’s recent upgrades, and what he sees as the challenges of the mission. Grunsfeld describes how his experience on the STS-103 mission, a previous HST servicing mission, has helped prepare him for the STS-109 mission. The interview ends with Grunsfeld explaining why the servicing of the Reaction Wheel Assembly, a task added late in his training, is so important.

CASI

**Astronauts: Extravehicular Activity; Hubble Space Telescope; Payloads; Crew Procedures (Inflight)**

**20020927135 NASA Johnson Space Center, Houston, TX USA**

**STS–188 Post Flight Presentation**
Feb. 06, 2002; In English; Videotape: 18 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002030466; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The crewmembers of STS-108, Commander Dominic Gorie, Pilot Mark Kelly, and Mission Specialists Linda Godwin and Daniel Tani, narrate this video as footage from the mission is shown. The crew is seen flying into Kennedy Space Center, suiting up, boarding the Endeavour Orbiter, and during launch. Various mission highlights are seen, including the rendezvous with the International Space Station (ISS) and docking of Endeavour, the unloading of the Multi-purpose Logistics Module (MPLM), and the spacewalk to install thermal blankets over the Beta Gimbal Assemblies (BGAs) at the bases of the Space Station’s solar panels. A glimpse is given into the difficulties of working in a microgravity environment as the crewmembers attempt to eat food before it floats away from them and drink water from a bag. The exchange of the Expedition 4 (Yuri I. Onufrienko, Carl E. Walz, and Daniel W. Bursch) for the Expedition 3 crew (Frank L. Culbertson, Mikhail Turin, and Vladimir N. Dezhurov) are also seen. The Endeavour undocks from the ISS, which is seen over the Caribbean Sea. Endeavour passes over Cuba, and footage of the Swiss Alps is shown. The video ends with the landing of the spacecraft.

CASI

**Extravehicular Activity: International Space Station; Orbital Rendezvous; Spacecraft Launching; Spacecraft Docking; Crew Procedures (Inflight); Endeavour (Orbiter); Spacecraft Landing**

**20020268932 NASA Johnson Space Center, Houston, TX USA**

**STS–109 Flight Day 1 Highlights**
Mar. 01, 2002; In English; Videotape: 20 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002043979; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

While in orbit around Earth, the crew of STS-109 aboard the Columbia Orbiter will service the Hubble Space Telescope (HST) in five extravehicular activities (EVA). In this video, prelaunch activities are shown including the positioning of the astronauts in their seats prior to liftoff. Liftoff is also shown, as is the escape flight. A comment is also made concerning the announcement shortly after liftoff that there was restricted flow in one of two fixed loops in the Orbiter’s radiator.

CASI

**Astronauts: Columbia (Orbiter); Spacecraft Launching; Hubble Space Telescope**
Mar. 03, 2002; In English; Video: 30 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2002043977; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This footage from the third day of the STS-109 mission to service the Hubble Space Telescope (HST) begins with the grappling of the HST by the robotic arm of the Columbia Orbiter, operated by Mission Specialist Nancy Currie. During the grapple, numerous angles deliver close-up images of the telescope which appears to be in good shape despite many years in orbit around the Earth. Following the positioning of the HST on its berthing platform in the Shuttle bay, the robotic arm is used to perform an external survey of the telescope. Some cursory details are given about different equipment which will be installed on the HST including a replacement cooling system for the Near Infrared Camera Multi-Object Spectrometer (NICMOS) and the Advanced Camera for Surveys. Following the survey, there is footage of the retraction of both of the telescope’s two flexible solar arrays, which was successful. These arrays will be replaced by rigid solar arrays with decreased surface area and increased performance.

CASI
Hubble Space Telescope: Robot Arms; Solar Arrays; Spacecraft Docking

Mar. 04, 2002; In English; Video: 36 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2002043976; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-109 Payload Commander John Grunsfeld and Mission Specialist Richard Linnehan are seen suitting up in preparation for their spacewalk with the assistance of Mission Specialists Michael Massimino and James Newman. Linnehan and Grunsfeld move the old solar arrays from the Hubble Space Telescope (HST) into the cargo bay of the Columbia Orbiter for storage. Grunsfeld is seen maneuvering around the HST to remove the connections to the diode box controller. Linnehan is seen controlling the new rigid solar array as he moves it into position onto the HST and Grunsfeld locks it into place. Footage is shown of Linnehan unfolding the solar array and Grunsfeld attaching the cables to the diode box controller to supply power to the solar array. Scenes of the HST with its new starboard rigid solar array are shown. The video concludes with footage of the activities of Nancy Currie, James Newman, and Michael Massimino during the spacewalk.

CASI
Extravehicular Activity: Hubble Space Telescope; Solar Arrays; Space Procedures (Inflight)

Mar. 05, 2002; In English; Video: 30 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2002044999; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On the fifth day of the STS-109 mission, the crewmembers and Commander Scott Altman of the Columbia Orbiter are shown in their servicing mission to the Hubble Space Telescope (HST). Selected footage is presented of the extravehicular activities (EVA) of Mission Specialists Jim Newman and Mike Massimino, who installed a new port solar array on the HST. Information is presented on the size and power capacity of the array. The reaction wheel assembly, one of four gyroscopic devices used to maneuver the HST, is also shown being replaced by the astronauts. A new insulation blanket panel was also installed at the end of the spacewalk because the astronauts had extra time.

CASI
Extravehicular Activity: Hubble Space Telescope; Reaction Wheels; Solar Arrays; Thermal Insulation; Space Maintenance; Spacecraft Maintenance

Mar. 07, 2002; In English; Video: 32 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2002045007; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The Hubble Space Telescope (HST) is seen on its berthing platform on the rear of the cargo bay of the Columbia Orbiter. Additional footage shows the port solar array of the HST as well as the area where the new thermal blanket was installed. Mission Specialists James Newman and Michael J. Massimino are performing their spacewalk. The footage includes Newman unbolting and sliding out the Faint Object Camera, moving it into storage, then lifting the Advanced Camera for Surveys (ACS) out of the cargo bay, and Massimino installing the ACS. The second stage of their spacewalk shows Newman retrieving the Electronic Support Module out of the cargo bay, and assisting Massimino as he installs the module and its connectors in front of the ACS. As they return to Columbia, additional members of the crew are seen preparing spacecrafts for the following day’s spacewalk and cleaning the seals on the airlock. The video concludes with Pilot Duane G. Carey interviewing Massimino about his spacewalk using internet questions from school children.

CASI
Extravehicular Activity: Columbia (Orbiter); Hubble Space Telescope; Crew Procedures (Inflight)

Mar. 09, 2002; In English; Video: 30 min. 12 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2002047889; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Footage shows the Hubble Space Telescope (HST) against a backdrop of Earth. The grappling of the HST with the robotic arm is seen, and payload bay cameras show different angles of the HST in its deployment orientation. The deployment of the HST from the Columbia Orbiter is seen, followed by footage of the HST flying freely over the Earth’s horizon. All seven crew members are gathered together during an in-flight interview as they answer questions about the mission, the experiences of being in space, and their lives as astronauts. Additional footage of the crew working during the deployment of the HST is shown. Duane Carey is seen interviewing Nancy Currie with Internet questions from young students. The video concludes with the view from Columbia of the Pacific Ocean, the coast of Northwestern Chile, and a sunrise.

CASI
Hubble Space Telescope; Columbia (Orbiter); Crew Procedures (Inflight)
During this space walk, the HST was powered down to a completely dormant state for the first time since its launch in 1990. Following the successful installation of the new PCU, the HST’s power was restored by engineers at the Goddard Space Flight Center (GSFC). There had been some concern about the telescope’s possible failure to restart, but everything went smoothly.

CASI

Control Equipment: Extravehicular Activity; Hubble Space Telescope; Spacecraft Maintenance

2002030208 NASA Johnson Space Center, Houston, TX USA
STS–109 Flight Day 10 Highlights
Mar. 10, 2002; In English; Videotape: 29 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002047888; No Copyright; Available: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Footage shows the view of Earth from the Columbia Orbiter. A video conference of the crew members of STS-109 (Commander Scott Altman, Pilot Dunne Carey, Payload Commander John Grunsfeld, and Mission Specialists Nancy Currie, James Newman, Richard Linnehan, and Michael Massimino) and of the International Space Station is seen as they discuss and share their experiences in space. Carey and Currie are seen as they answer questions sent from school children. Additional footage of the view of Earth is shown as the crew members answer more questions about the mission during an on-orbit interview. The view of the Hubble Space Telescope in the distance is seen. The video concludes with a view of the Galapagos Islands.

CASI

Earth Observations (From Space); Spacecrews

20020303739 NASA Johnson Space Center, Houston, TX USA
Mar. 05, 2002; In English; Videotape: 56 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002046549; No Copyright; Available: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

A continuation of ‘STS-105 Mission Highlights Resource Tape: Flight Days 1–3’ (internal ID 2002046550), this video shows footage from flight days four through six of the STS-105 mission. Commander Scott Horowitz helps Mission Specialist Pat Forrester maneuver the Space Shuttle’s robotic arm as it grapples the Multipurpose Logistics Module (MPLM) from Discovery’s payload bay to the International Space Station (ISS). The three crews, STS-105 (Commander Horowitz, Pilot Fred Sturckow, and Mission Specialists Dan Barry and Forrester), Expedition 2 (Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms), and Expedition 5 (Commander Frank Culbertson, Jr. and Flight Engineers Mikhail Turin and Vladimir Dezhurov) are seen during unloading operations as they transfer equipment from the MPLM to the ISS. Forrester and Barry check their equipment and suits for the next day’s spacewalk loading operations as they transfer equipment from the MPLM to the ISS. As Discovery approaches the International Space Station (ISS), the Expedition 2 (E2) crew, Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms, are seen working in the Destiny Laboratory Module aboard ISS. Discovery docks to the space station and the three crews (STS-105, E2, and E3) greet each other after the hatch between the orbiter and ISS is open. As Discovery passes over the USA, Utah, Wyoming, South Dakota, and Minnesota are seen through patchy clouds. For footage from flight days 10–13, see ‘STS-105 Mission Highlights Resource Tape: Flight Days 10-13’ (internal ID 2002046551).

CASI

International Space Station; Spacecrews; Loading Operations; Crew Procedures (Inflight); Space Station Modules

20020303740 NASA Johnson Space Center, Houston, TX USA
STS–105 Mission Highlights Resource Tape: Flight Days 7–9, Part 3 of 4
Mar. 05, 2002; In English; Videotape: 1 hr. 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002046552; No Copyright; Available: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

A continuation of ‘STS-105 Mission Highlights Resource Tape: Flight Days 1–3’ (internal ID 2002046550) and ‘STS-105 Mission Highlights Resource Tape: Flight Days 4–6’ (internal ID 2002046549), this video shows footage from flight days seven through nine of the STS-105 mission. Mission Specialists Dan Barry and Forrester are seen preparing for and performing their spacewalks, where they install an Early Ammonia Servicer on the International Space Station (ISS). The Expedition 2 crew (Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms) hands control of the ISS over to the Expedition 3 crew (Commander Frank Culbertson, Jr. and Flight Engineers Mikhail Turin and Vladimir Dezhurov) in a short ceremony. Barry and Forrester return to space the next day for another spacewalk to install handrails and heater cables. Hawaii is seen from space as ISS passes over, and the smoke from forest fires in Oregon and Idaho is shown. For footage from flight days 10–13, see ‘STS-105 Mission Highlights Resource Tape: Flight Days 10–13’ (internal ID 2002049551).

CASI

Extravehicular Activity; International Space Station; Orbital Servicing; Crew Procedures (Inflight)

20020303741 NASA Johnson Space Center, Houston, TX USA
Part 4 of 4
Mar. 05, 2002; In English; Videotape: 1 hr. 12 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002046551; No Copyright; Available: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

A continuation of ‘STS-105 Mission Highlights Resource Tape: Flight Days 1–3’ (internal ID 2002046550), ‘STS-105 Mission Highlights Resource Tape: Flight Days 4–6’ (internal ID 2002046549), and ‘STS-105 Mission Highlights Resource Tape: Flight Days 7–9’ (internal ID 2002046552), this video shows footage from flight days 10 through 13 of the STS-105 mission. The Multipurpose Logistics Module (MPLM) is moved from the International Space Station (ISS) to the payload bay of Discovery. The STS-105 crew (Commander Scott Horowitz, Pilot Fred Sturckow, and Mission Specialists Dan Barry and Pat Forrester) and Expedition 2 crew (Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms) bid farewell to the Expedition 3 crew (Commander Frank Culbertson, Jr. and Flight Engineers Mikhail Turin and Vladimir Dezhurov), who are to remain on ISS. ISS is seen against the Earth as Discovery performs its fly-around after the orbiter undocks. There is no flight day footage from flight day 12. Discovery is seen landing.

CASI

International Space Station; Spacecrews; Spacecraft Docking; Crew Procedures (Inflight); Discovery (Orbiter)

20020303742 NASA Johnson Space Center, Houston, TX USA
Mar. 04, 2002; In English; Videotape: 1 hr. 15 min. 7 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002046550; No Copyright; Available: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

An overview of the STS-105 mission is given through footage of each flight day. Scenes from flight days one through three show activities such as astronaut prelaunch procedures (breakfast, suit-up, and boarding Discovery), the launch from multiple vantage points, and various on-orbit activities. Expedition 3 (E3) Commander Frank Culbertson, Jr. and Flight Engineer Mikhail Turin perform the H-Reflex Experiment, an experiment to test the effects of microgravity on the human spinal cord. As Discovery approaches the International Space Station (ISS), the Expedition 2 (E2) crew, Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms, are seen working in the Destiny Laboratory Module aboard ISS. Discovery docks to the space station and the three crews (STS-105, E2, and E3) greet each other after the hatch between the orbiter and ISS are opened. As Discovery passes over the USA, Utah, Wyoming, South Dakota, and Minnesota are seen through patchy clouds. Footage from flight days 4–13 can be found on ‘STS-105 Mission Highlights Resource Tape: Flight Days 4–6’ (internal ID 2002046549), ‘STS-105 Mission Highlights Resource Tape: Flight Days 7–9’ (internal ID 2002046552), and ‘STS-105 Mission Highlights Resource Tape: Flight Days 10–13’ (internal ID 2002046551).

Derived from text

International Space Station; Spacecraft Launching; Spacecrews; Crew Procedures (Preflight); Crew Procedures (Inflight)

20020306743 NASA Johnson Space Center, Houston, TX USA
STS–109 Flight Day 8 Highlights
Mar. 08, 2002; In English; Videotape: 41 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002047890; No Copyright; Available: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Footage of the eighth day of STS-109 is shown during which Mission Specialists John Grunsfeld and Rick Linnehan service the Hubble Space Telescope (HST). A brief overview of the Columbia Orbiter mission is presented.
On the fifth extravehicular activity (EVA) of the mission, Grunsfeld and Linnehan installed a new cryogenic cooling system and radiator on HST for NICMOS (Near Infrared Camera and Multi-Object Spectrometer) which had not been previously operational due to the failure of an earlier cooling system. Linnehan and Grunsfeld are both shown on the end of the Orbiter’s robotic arm, the Remote Manipulator System, which was controlled by Commander Scott Altman. Following the completion of their spacewalk, the two Mission Specialists make statements which include thanking the numerous support personnel. Linnehan answers questions on the differences between training simulation at facilities such as the Neutral Buoyancy Lab (NBL) and his actual experiences in space.

**CASI**

**Cooling Systems: Cryogenic Cooling; Extravehicular Activity: Hubble Space Telescope: Space Maintenance; Heat Radiators; Spacecraft Maintenance**

---

**STS–110 Crew Interviews: Lee Morin**

Mar. 12, 2002; In English; Videotape: 42 min. 10 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2002049337; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS–110 Mission Specialist Lee Morin is seen during this preflight interview, where he gives a quick overview of the mission before answering questions about his inspiration to become an astronaut and his career path. Morin outlines his role in the mission in general, and specifically during the docking and extravehicular activities (EVAs). He describes the payload (S0 Truss and Mobile Transporter) and the dry run installation of the S0 truss that will take place the day before the EVA for the actual installation. Morin discusses the planned EVAs in detail and outlines what supplies will be left for the resident crew of the International Space Station (ISS). He ends with his thoughts on the most valuable aspect of the ISS.

**CASI**

**Astronauts: Trusses; Crew Procedures (Inflight); Prelaunch Summaries**

---

**STS–110 Crew Interviews: Ellen Ochoa**

Mar. 12, 2002; In English; Videotape: 27 min. 33 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2002049333; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

STS–110 Mission Specialist Ellen Ochoa is seen during this preflight interview, where she gives a quick overview of the mission before answering questions about her inspiration to become an astronaut and her career path. Ochoa outlines her role in the mission in general, and specifically her use of the robotic arm during the extravehicular activities (EVAs). She describes the payload (S0 Truss and Mobile Transporter) and the dry run installation of the S0 truss that will take place the day before the EVA for the actual installation. Ochoa discusses the planned EVAs in detail and outlines what supplies will be left for the resident crew of the International Space Station (ISS). She ends with thoughts on the most valuable aspect of the ISS.

**CASI**

**Astronauts: Robot Arms; Prelaunch Summaries**

---

**STS–110 Crew Interview: Rex Walheim**

Mar. 12, 2002; In English; Videotape: 31 min. 44 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2002049335; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS–110 Mission Specialist Rex Walheim is seen during this preflight interview, where he gives a quick overview of the mission before answering questions about his inspiration to become an astronaut and his career path. Walheim outlines his role in the mission in general, and specifically during the docking and extravehicular activities (EVAs). He describes the payload (S0 Truss and Mobile Transporter) and the dry run installation of the S0 truss that will take place the day before the EVA for the actual installation. Walheim discusses the planned EVAs in detail and outlines what supplies will be left for the resident crew of the International Space Station (ISS). He ends with his thoughts on the most valuable aspect of the ISS.

**CASI**

**Astronauts: Crew Procedures (Inflight); Prelaunch Summaries**

---

**STS–110 Crew Interview: Mike Bloomfield**

Mar. 12, 2002; In English; Videotape: 32 min. 55 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2002049336; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS–110 Commander Mike Bloomfield is seen during this preflight interview, where he gives a quick overview of the mission before answering questions about his inspiration to become an astronaut and his career path. Bloomfield outlines his role in the mission in general, and specifically during the docking and extravehicular activities (EVAs). He describes the payload (S0 Truss and Mobile Transporter) and the dry run installation of the S0 truss that will take place the day before the EVA for the actual installation. Bloomfield discusses the planned EVAs in detail and outlines what supplies will be left for the resident crew of the International Space Station (ISS). He ends with his thoughts on the most valuable aspect of the ISS.

**CASI**

**Astronauts: Trusses; Crew Procedures (Inflight); Prelaunch Summaries**

---

**STS–110 Crew Interview: Jerry Ross**

Mar. 12, 2002; In English; Videotape: 43 min. 24 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2002049338; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS–110 Mission Specialist Jerry Ross is seen during this preflight interview, where he gives a quick overview of the mission before answering questions about his inspiration to become an astronaut and his career path. Ross outlines his role in the mission in general, and specifically during the docking and extravehicular activities (EVAs). He describes the payload (S0 Truss and Mobile Transporter) and the dry run installation of the S0 truss that will take place the day before the EVA for the actual installation. Ross discusses the planned EVAs in detail and outlines what supplies will be left for the resident crew of the International Space Station (ISS). He ends with his thoughts on the most valuable aspect of the ISS.

**CASI**

**Astronauts: Trusses; Crew Procedures (Inflight); Prelaunch Summaries**

---

**STS–110 Crew Interview: Stephen Frick**

Mar. 11, 2002; In English; Videotape: 25 min. 9 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2002049340; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

STS–110 Pilot Stephen Frick is seen during this preflight interview, where he gives a quick overview of the mission before answering questions about his inspiration to become an astronaut and his career path. Frick outlines his role in the mission in general, and specifically during the docking and extravehicular activities (EVAs). He describes the payload (S0 Truss and Mobile Transporter) and the dry run installation of the S0 truss that will take place the day before the EVA for the actual installation. Frick discusses the planned EVAs in detail and outlines what supplies will be left for the resident crew of the International Space Station (ISS). He ends with his thoughts on the most valuable aspect of the ISS.

**CASI**

**Astronauts: Crew Procedures (Inflight); Prelaunch Summaries**

---

**STS–110 Crew Interviews: Steve Smith**

Mar. 12, 2002; In English; Videotape: 42 min. 6 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2002049341; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS–110 Mission Specialist Steve Smith is seen during this preflight inter-
view, where he gives a quick overview of the mission before answering questions about his inspiration to become an astronaut and his career path. Smith outlines his role in the mission in general, and specifically during the docking and extravehicular activities (EVAs). He describes the payload (S0 Truss and Mobile Transporter) and the dry run installation of the S0 truss that will take place the day before the EVA for the actual installation. Smith discusses the planned EVAs in detail and outlines what supplies will be left for the resident crew of the International Space Station (ISS). He ends with his thoughts on the most valuable aspect of the ISS.

Astronauts: Trusses: Crew Procedures (Inflght); Prelaunch Summaries

STS–109 Flight Day 11 Highlights
Mar. 11, 2002; In English; Videotape: 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002049131; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On the 11th day of the STS-109 mission, Commander Scott Altman, Pilot Duane Carey, Payload Commander John Grunsfeld, and Mission Specialists Nancy Currie, James Newman, Richard Linnehan, and Michael Massimino are seen answering questions from students in an on-orbit interview. Various shots of the Earth are shown as Columbia orbits over the north of the Australian coast, the west coast of Mexico, Madagascar and the southern Indian Ocean, and the Atlantic coast of Africa.

CASII
Spacecrews; Crew Procedures (Inflght); International Space Station

STS–108 Mission Highlights Resource Tape
Mar. 06, 2002; In English; Videotape: 59 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002049331; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This is Part 1 of a three part video series which provides highlights of the STS-108 mission during which the Expedition Three crew (Commander Frank Culbertson) of the International Space Station (ISS) was relieved by the Expedition Four crew (Commander Yuri Onufrienko). For the other parts of the series, refer to ‘STS-108 Mission Highlights Resource Tape, Part 2 of 3’ (Internal ID 2002049330) and ‘STS-108 Mission Highlights Resource Tape, Part 3 of 3’ (Internal ID 2002049329). During this video, the STS-108 crew of the Space Shuttle Endeavour (Commander Dom Gorie), as well as the Expedition Four crew, are seen preparing for liftoff at Kennedy Space Center (KSC). Preparations include preflight suiting up, and the strapping in of the crew by support staff. The launch is shown from the Launch Control Center. Following the orbital entry of Endeavour, there is an inspection of the shuttle’s payload bay. There is some flight deck activity as the crew prepares for the rendezvous and docking of Endeavour with the ISS. Following the docking, the Expedition Three crew welcomes the others aboard the station, and both crews are briefed. There is an unobstructed view of the South Atlantic Ocean and the coast line of Argentina which includes Peninsula Valdes and Golfo Nuevo. The Raffaello Multipurpose Logistics Module (MPLM) is unberthed from the shuttle payload bay and attached to the ISS.

CASII
Endeavour (Orbiter); International Space Station; Orbital Rendezvous; Spacecraft Docking; Spacecraft Landing; Crew Procedures (Inflght)

STS–108 Mission Highlights Resource Tape, Part 2 of 3
Mar. 06, 2002; In English; Videotape: 57 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002049330; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video is a continuation of ‘STS-108 Mission Highlights Resource Tape: Part 1 of 3’ (Internal ID 2002049331). Flight day four footage continues with a video tour of the International Space Station (ISS). During flight day five, an exterior view of the Multipurpose Logistics Module (MPLM) is seen, followed by the crew unloading the supplies and equipment from the MPLM. Commander Dominic Gorie and Mission Specialist Linda Godwin are seen making preparations for the Extravehicular Activity (EVA) scheduled for the following day. Footage of an exterior view of the ISS is also shown. Flight day six footage includes Godwin and Mission Specialist Daniel Tani suiting up for their EVA and the installation of thermal blankets around the solar array wings of the ISS. Expedition 3 Commander Frank Culbertson is seen working in the ISS laboratory during flight day seven. Views are shown of Saudi Arabia and the Red Sea, the western coast of Australia, Cuba and Florida, and Switzerland and Northern Italy. During flight day eight, the crew is seen stowing objects in the MPLM for return to Earth. The video concludes with footage of the treadmill used by the astronauts for physical exercise. Flight days nine through twelve are included in ‘STS-108 Mission Highlights Resource Tape: Part 3 of 3’ (Internal ID 2002049329).

CASII
International Space Station; Spacecrews; Extravehicular Activity; Earth Observations (From Space); Crew Procedures (Inflght)

STS–108 Mission Highlights Resource Tape, Part 3 of 3
Mar. 07, 2002; In English; Videotape: 58 min. 33 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002049329; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of ‘STS-108 Mission Highlights Resource Tape, Part 1 of 3’ (Internal ID 2002049331) and ‘STS-108 Mission Highlights Resource Tape, Part 2 of 3’ (Internal ID 2002049330), this video shows footage from flight days 9–12. The control of the International Space Station (ISS) is handed from the Expedition 3 crew (Commander Frank Culbertson, Jr. and Flight Engineers Mikhail Turin and Vladimir Dezhurov) to the Expedition 4 crew (Commander Yuri Onufrienko and Flight Engineers Carl Walz and Daniel Bursch) in an on-orbit ceremony. Both Expedition crews and the STS-108 crew (Commander Dominic Gorie, Pilot Mark Kelly, and Mission Specialists Linda Godwin and Daniel Tani) are seen reloading the Raffaello Multipurpose Logistics Module (MPLM). External shots show the MPLM demating from the ISS and returning to the payload bay of Endeavour. The three crews bid farewell to each other before closing the hatches between ISS and Endeavour. The orbiter unlocks from ISS and performs its Bayronds. ISS is seen against a backdrop of stars as Endeavour flies away. On the return flight to Earth, the Starchild 2 satellite is deployed. The video ends with the orbiter’s landing as seen from several viewpoints.

CASII
Endeavour (Orbiter); International Space Station; Spacecraft Docking; Spacecraft Landing; Crew Procedures (Inflght)

18 SPACECRAFT DESIGN, TESTING AND PERFORMANCE

Includes satellites; space platforms; space stations; spacecraft systems and components such as thermal and environmental controls; spacecraft control and stability characteristics. For life support systems, see also 05 Aircraft Design, Testing and Performance, 39 Structural Mechanics, and 16 Space Transportation and Safety.

19940009155 NASA Langley Research Center, Hampton, VA, USA
Scout: The unsung hero of space
Mar. 1, 1991; In English; 30 min. playing time, in color and black and white, with sound
Report No.(s): NONP–NASA–VT–93–185304; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
A history of the Scout program, managed by LaRC for 30 years, is presented. 
Author (revised)
Scout Launch Vehicle: Scout Project

19940009161 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–32 post-flight press conference
Feb. 1, 1990; In English; 19 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–185309; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Video footage of the post-flight press conference of STS-32 is presented. The footage is narrated by the crew, and it covers the following topics: launch, deployment of Syncom IV-5, retrieval of the Long Duration Exposure Facility, in-orbit activities, and the landing.

Author (revised)
Conferences: Space Transportation System; Space Transportation System Flights

19940010754 NASA Marshall Space Flight Center, Huntsville, AL, USA
Long Duration Exposure Facility is coming home
Nov 1, 1989; In English; 2 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190454; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video tape describes how the Long Duration Exposure Facility will provide knowledge of the effects of space on various materials over a long period of time.
CASI
Long Duration Exposure Facility: Spaceborne Experiments

19940010794 NASA Goddard Space Flight Center, Greenbelt, MD, USA
Orbiting solar operations
Jul 1, 1988; In English; 10 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190381; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
A short video presentation about the capabilities, accomplishments, and limitations of the Orbiting Solar Operations is presented.
CASI
Solar Activity: Solar Observatories

This video tape documents the planned design and development of the Space Station.
CASI
NASA Space Programs: Space Station Freedom

199400106805 NASA Marshall Space Flight Center, Huntsville, AL, USA
Inertial Upper Stage
Feb 1, 1989; In English; 5 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190452; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video tape details the importance of the Inertial Upper Stage in projecting various satellites from the Shuttle’s cargo bay.
CASI
Inertial Upper Stage: Orbit Insertion; Payload Delivery (STS)

199400106823 NASA, Washington, DC, USA
Comet Halley returns
Dec 1, 1985; In English; 3 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190406; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This videotape shows the five exploratory spacecraft, representing several countries, that will study Comet Halley: Giotto, Vega 1 and 2, Planet A, and Sakigake.
CASI
Giotto Mission; Halley’s Comet; Vega Project

199400109963 NASA, Washington, DC, USA
First US Mars landing
Jun 1, 1976; In English; 4 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190346; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video shows the launches of Viking 1 and 2 and discusses objectives of the first mission to Mars.
CASI
Mars Landing; Space Exploration; Viking Mars Program

199400106985 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Dare to dream
Jun 1, 1989; In English; 5 min. 52 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190390; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video describes the Space Station Freedom and discusses the purpose of this international project.
CASI
Mission Planning; Space Station Freedom

199400110623 NASA Langley Research Center, Hampton, VA, USA
Long Duration Exposure Facility retrieval animation
Nov 1, 1989; In English; 4 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190223; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video is a computer animation of a Long Duration Exposure Facility (LDEF) retrieval.
CASI
Long Duration Exposure Facility; Spacecraft Recovery

199400110624 NASA Langley Research Center, Hampton, VA, USA
Long Duration Exposure Facility
Jun 1, 1989; In English; 4 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190224; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
A summary of the Long Duration Exposure Facility from launch through plans for the retrieval is presented.
CASI
Long Duration Exposure Facility; Mission Planning; Space Shuttle Payloads; Spacecraft Launching; Spacecraft Recovery
Space Station resource reel

Report No.(s): NONP-NASA-VT-93-190471; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video presents a series of talks and sequences with model photography of 1990 Space Station design.

CASI

Space Stations; Spacecraft Design

LDEF update

Oct 1, 1986; In English; 3 min. 23 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-198200; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video explores the research being done on the Long Duration Exposure Facility (LDEF), a satellite carrying 57 experiments designed to study the effects of the space environment, which had been in orbit for almost 6 years, and was retrieved and brought back to Earth by the Space Shuttle Astronauts. The video shows scenes of the retrieval of LDEF, as well as scenes of ongoing research into the data returned with the satellite from experiments on external coating, contamination of optical materials by thermal control paint, the effects of cosmic rays on different materials, and the effect of the space environment on 12 million tomato seeds that have since been planted.

CASI

Earth Orbitals Environments; Environmental Tests; Long Duration Exposure Facility; Space Shuttle Payloads; Spacecraft Recovery

Designing Space Station

Oct 1, 1986; In English; 3 min. 23 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-198220; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

An overview of preparations for the construction of Space Station Freedom (SSF) is presented. The video includes footage of astronauts testing materials for erectable structures in space both in the Shuttle bay while in orbit and in a neutral buoyancy tank at McDonald Douglas' Underwater Test Facility. Also shown are footage of robot systems that will assist the astronauts in building SSF, a computer simulation of an Orbiting Manuevering Vehicle, solar dynamic mirrors that will power SSF, and mockups of the living quarters of the SSF.

CASI

Orbital Assembly; Space Station Freedom; Spacecraft Design

TDRS press release

Oct 1, 1988; In English; 7 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-198220; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This material is released to both local and national broadcast media showing the Tracking and Data Relay Satellite (TDRS). The tape has split audio to facilitate ease of customizing for individual broadcast formats.

CASI

Functional Design Specifications; TDRS Satellites

Cosmic Background Radiation Explorer (COBE)

Oct 1, 1989; In English; 12 min. 56 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-12929; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video explains the mission of the Cosmic Background Radiation Explorer (COBE) prior to its November 1989 launch. It also includes animated footage on the Big Bang theory.

CASI

Background Radiation; Big Bang Cosmology; Cosmic Background Explorer Satellite; Spaceborne Astronomy

United States/Russia space cooperation documentary

Dec 1, 1993; In English; 24 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-12937; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video documents the initiative to develop a multinational, permanent space research laboratory. Historical background on the U.S. and Soviet manned space flight program as well as joint efforts such as the Apollo-Soyuz link up is shown. The current initiative will begin with collaborative missions involving NASA’s space shuttle and Russia’s Mir space station, and culminate in a permanently manned space station involving the U.S., Russia, Japan, Canada, and ESA. Shown are computer simulations of the proposed space station. Commentary is provided by the NASA administrator, former astronauts, cosmonauts, and Russian and American space experts.

CASI

International Cooperation; Manned Space Flight; NASA Space Programs;
Space Stations; U.S.S.R. Space Program

Space Station quarterly, May 1992

May 1, 1992; In English; 10 min. 12 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-23141; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This quarterly report discusses the First International Microgravity Laboratory, the building of space station truss structures at the Johnson Space Center, the building of the living and laboratory modules at the Marshall Space Flight Center, and the Lewis Research Center’s work on power for the space station. The video includes a segment on the Japanese Experiment Module.

CASI

Space Laboratories; Space Station Power Supplies; Space Station Structures;
Space Stations; Spacecraft Modules

Aero-Space Plane: Flexible access to space

Aug 1, 1991; In English; 3 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-23146; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The most recently designed X-30 (National Aerospace Plane) is described. The video features also the development of the X-plane series, beginning with the X-1.

CASI

Aerospace Planes; National Aerospace Plane Program; X-31 Aircraft

United States/Russia space cooperation documentary

Jan 1, 1992; In English; 30 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-95-34002; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video highlights the record breaking mission of STS-49, the maiden voyage of the Space Shuttle Endeavor. It includes the dramatic capture, repair, and reboost of the INTELSAT VI Satellite, as well as the ASEM experiment. The effectiveness of certain EVA techniques for the future construction of a space station is demonstrated.

JSC

Construction; Endeavour (Orbiter); Extravehicular Activity; Intelsat Satellites;
Space Shuttles; Space Stations

NASA's space shuttle and Russia’s Mir space station, and culminate in a permanently manned space station involving the U.S., Russia, Japan, Canada, and ESA. Shown are computer simulations of the proposed space station. Commentary is provided by the NASA administrator, former astronauts, cosmonauts, and Russian and American space experts.

CASI

International Cooperation; Manned Space Flight; NASA Space Programs;
Space Stations; U.S.S.R. Space Program

Space Station quarterly, May 1992

May 1, 1992; In English; 10 min. 12 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-23141; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This quarterly report discusses the First International Microgravity Laboratory, the building of space station truss structures at the Johnson Space Center, the building of the living and laboratory modules at the Marshall Space Flight Center, and the Lewis Research Center’s work on power for the space station. The video includes a segment on the Japanese Experiment Module.

CASI

Space Laboratories; Space Station Power Supplies; Space Station Structures;
Space Stations; Spacecraft Modules

Aero-Space Plane: Flexible access to space

Aug 1, 1991; In English; 3 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-23146; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The most recently designed X-30 (National Aerospace Plane) is described. The video features also the development of the X-plane series, beginning with the X-1.

CASI

Aerospace Planes; National Aerospace Plane Program; X-31 Aircraft

United States/Russia space cooperation documentary

Jan 1, 1992; In English; 30 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-95-34002; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video highlights the record breaking mission of STS-49, the maiden voyage of the Space Shuttle Endeavor. It includes the dramatic capture, repair, and reboost of the INTELSAT VI Satellite, as well as the ASEM experiment. The effectiveness of certain EVA techniques for the future construction of a space station is demonstrated.

JSC

Construction; Endeavour (Orbiter); Extravehicular Activity; Intelsat Satellites;
Space Shuttles; Space Stations

NASA's space shuttle and Russia’s Mir space station, and culminate in a permanently manned space station involving the U.S., Russia, Japan, Canada, and ESA. Shown are computer simulations of the proposed space station. Commentary is provided by the NASA administrator, former astronauts, cosmonauts, and Russian and American space experts.

CASI

International Cooperation; Manned Space Flight; NASA Space Programs;
Space Stations; U.S.S.R. Space Program
A short explanation of NASA's accomplishments and goals are discussed in this video. Space Station Freedom, lunar bases, manned Mars mission, and robotic spacecrafts to explore other worlds are briefly described.

CASI
Aerospace Engineering; NASA Space Programs; Research Projects; Technological Forecasting; Technology Assessment

19950824433 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Mir 18 post flight presentation
Jul 18, 1995; In English; 29 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-95-59072; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The post flight presentation for the Mir 18 Mission is featured on this video, with both the American astronauts and Russian Cosmonauts present for the press conference. They included: Gibson; Precourt; Baker; Harbough; Dunbar; Strekalov; Dezhurov; and Thagard. Film footage and photographic slides of the various activities performed aboard the Mir Space Station and the spaceborne experiments accomplished during the flight mission are presented. Each of the operations are explained by the cosmonauts, with brief views of the Atlantis-Mir Earth orbital rendezvous over the Red Sea included.

CASI
Astronauts; Cosmonauts; Earth Orbital Rendezvous; Earth Orbits; International Cooperation; MIR Space Station; Russian Space Program; Space Missions; Space Shuttles

19998032576 NASA Johnson Space Center, Houston, TX USA
Delta II Mars Pathfinder
Dec. 04, 1998; In English; Videotape: 1 hour 15 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-1999036756; No Copyright; Avail: CASI; V04, Videotape-VHS

Final preparations for lift off of the DELTA II Mars Pathfinder Rocket are shown. Activities include loading the liquid oxygen, completing the construction of the Rover, and placing the Rover into the Lander. After the countdown, important visual events include the launch of the Delta Rocket, burnout and separation of the third Solid Rocket Boosters, and the main engine cutoff. The cutoff of the main engine marks the beginning of the second stage engine. After the completion of the second stage, the third stage engine ignites and then cuts off. Once the third stage engine cuts off spacecraft separation occurs.

CASI
Mars (Planet); Mars Pathfinder; Mars Missions; Unmanned Spacecraft

19990832577 NASA Johnson Space Center, Houston, TX USA
Mars Climate Orbiter
Dec. 11, 1998; In English; Videotape: 1 hour 2 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-1999036757; No Copyright; Avail: CASI; V04, Videotape-Beta; V04, Videotape-VHS

The purpose of this mission is to study the climate history and the water distribution of Mars. Beautiful panoramic views of the shuttle on the launch pad, engine ignition, Rocket launch, and the separation and burnout of the Solid Rocket Boosters are shown. The footage also includes an animation of the mission. Detailed views of the path that the Orbiter traversed were shown. Once the Orbiter lands on the surface of Mars, it will dig a six to eight inch hole and collect samples from the planets’ surface. The animation also included the prospective return of the Orbiter to Earth over the desert of Utah. The remote sensor on the Orbiter helps in finding the exact location of the Orbiter so that scientists may collect the sample and analyze it.

CASI
Mars (Planet); Mars Surface; Mars Environment; Spacecraft Entry; Return to Earth Space Flight; Mars Sample Return Missions; Mars Surface Samples; Mars Climate Orbiter

19990832578 NASA Johnson Space Center, Houston, TX USA
Delta II Deep Space 1 Launch
Oct. 24, 1998; In English; Videotape: 1 hour 33 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-1999036758; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The post flight presentation for the Mir 18 Mission is featured on this video, with both the American astronauts and Russian Cosmonauts present for the press conference. They included: Gibson; Precourt; Baker; Harbough; Dunbar; Strekalov; Dezhurov; and Thagard. Film footage and photographic slides of the various activities performed aboard the Mir Space Station and the spaceborne experiments accomplished during the flight mission are presented. Each of the operations are explained by the cosmonauts, with brief views of the Atlantis-Mir Earth orbital rendezvous over the Red Sea included.

CASI
Astronauts; Cosmonauts; Earth Orbital Rendezvous; Earth Orbits; International Cooperation; MIR Space Station; Russian Space Program; Space Missions; Space Shuttles

19998032576 NASA Johnson Space Center, Houston, TX USA
Delta II Mars Pathfinder
Dec. 04, 1998; In English; Videotape: 1 hour 15 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-1999036756; No Copyright; Avail: CASI; V04, Videotape-VHS

Final preparations for lift off of the DELTA II Mars Pathfinder Rocket are shown. Activities include loading the liquid oxygen, completing the construction of the Rover, and placing the Rover into the Lander. After the countdown, important visual events include the launch of the Delta Rocket, burnout and separation of the third Solid Rocket Boosters, and the main engine cutoff. The cutoff of the main engine marks the beginning of the second stage engine. After the completion of the second stage, the third stage engine ignites and then cuts off. Once the third stage engine cuts off spacecraft separation occurs.

CASI
Mars (Planet); Mars Pathfinder; Mars Missions; Unmanned Spacecraft

19990832577 NASA Johnson Space Center, Houston, TX USA
Mars Climate Orbiter
Dec. 11, 1998; In English; Videotape: 1 hour 2 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-1999036757; No Copyright; Avail: CASI; V04, Videotape-Beta; V04, Videotape-VHS

The purpose of this mission is to study the climate history and the water distribution of Mars. Beautiful panoramic views of the shuttle on the launch pad, engine ignition, Rocket launch, and the separation and burnout of the Solid Rocket Boosters are shown. The footage also includes an animation of the mission. Detailed views of the path that the Orbiter traversed were shown. Once the Orbiter lands on the surface of Mars, it will dig a six to eight inch hole and collect samples from the planets’ surface. The animation also included the prospective return of the Orbiter to Earth over the desert of Utah. The remote sensor on the Orbiter helps in finding the exact location of the Orbiter so that scientists may collect the sample and analyze it.

CASI
Mars (Planet); Mars Surface; Mars Environment; Spacecraft Entry; Return to Earth Space Flight; Mars Sample Return Missions; Mars Surface Samples; Mars Climate Orbiter

19990832578 NASA Johnson Space Center, Houston, TX USA
Delta II Deep Space 1 Launch
Oct. 24, 1998; In English; Videotape: 1 hour 33 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-1999036758; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
The final preparations of the DELTA II Deep Space 1 Launch Mission are presented. The footage includes the loading of liquid oxygen, views of the shuttle on the launch pad, countdown, ignition of the engines, launch, burnout and separation of the three Solid Rocket Boosters, separation of the probe from the spacecraft occurring over the Indian Ocean.

CASI
Deep Space 1 Mission; Flyby Missions; NASA Space Programs; Interplanetary Spacecraft

19990112748 NASA Kennedy Space Center, Cocoa Beach, FL, USA
Galileo Press Conference from JPL
Jul. 27, 1995; In English; Videotape: 44 min. 20 sec. playing time, in color with sound
Report No.(s): NONP–NASA–VT–1999206977; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
This press conference concerns the Orbiter Deflection maneuver that had taken place earlier that day. The participants in the press conference, spoke of the success of the maneuver, which was performed perfectly. The Galileo project was a cooperative effort with the German Space Agency. Two members of the German Space Agency were introduced. There was a review of the trip to Jupiter, and the probe release. The deflection maneuver was important to getting the Probe on the correct path for the descent into the atmosphere of Jupiter. A brief video showed simulations of the probe release and the descent of the probe into the atmosphere. There was discussion about the failure of the high gain antenna to deploy, and the requirement to use the low gain antenna instead. A full scale model of the probe was shown.

CASI
Galileo Project; Galileo Spacecraft; Jupiter Atmosphere; Jupiter (Planet); Interplanetary Trajectories

20000812873 NASA Kennedy Space Center, Cocoa Beach, FL, USA
May 18, 1995; In English; Videotape: 28 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999206992; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Live footage includes a continuation of the discussions on Geostationary Satellites, the Automatic Surface Observation System (ASOS), and the Doppler Radar Network lead by Frederick Oshby, Director of the National Severe Storms Forecast Center. Live Coverage also shows the question and answer session between the panelists and the audience. This abstract describes the content of tape 2 of 2, 1 having a Report Number of NONP–NASA–VT–2000000038.

CASI
Atlas Centaur Launch Vehicle: Conferences

20000813559 NASA Kennedy Space Center, Cocoa Beach, FL, USA
TRW Video News: Chandra X-ray Observatory
July 99; In English; Videotape: 7 min. 47 sec. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–2000010635; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This NASA Kennedy Space Center sponsored video release presents live footage of the Chandra X-ray Observatory prior to STS-93 as well as several short animations recreating some of its activities in space. These animations include a Space Shuttle flyby with Chandra, two perspectives of Chandra’s deployment from the Shuttle, the Chandra deployment orbit sequence, the Initial Upper Stage (IUS) first stage burn, and finally a “beauty shot”, which represents another animated view of Chandra in space.

CASI
X Ray Astrophysics Facility; Computer Animation

20000714071 NASA Kennedy Space Center, Cocoa Beach, FL, USA
Apollo 11 Launch
Jul. 28, 1999; In English; Videotape: 59 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000068131; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
This NASA Kennedy Space Center video release presents the countdown and liftoff of Apollo 11, the first manned journey to the Moon which began at Pad A, Launch Complex 39, Kennedy Space Center, Florida at 9:32 a.m. EDT on July 16, 1969. The crew of Apollo 11 included Commander Neil A. Armstrong, Command Module pilot Michael Collins, and Lunar Module pilot Edwin E. Aldrin, Jr. Several different camera viewpoints of the spacecraft as well as overhead shots of the Kennedy launch control center are presented prior to liftoff. Other footage includes shots of President Lyndon B. Johnson and his wife among the African audience viewing liftoff. During the countdown several audio updates from Kennedy launch control are presented as to the status of pre-launch testing and system readiness. Captivating footage from liftoff to the spacecraft nearing the outer Earth atmosphere is shown as the video ends with Neil Armstrong’s confirmation of engine start separation and launch escape tower separation from the spacecraft.

CASI
Apollo 11 Flight: Liftoff (Launching): Countdown

20000833143 NASA Johnson Space Center, Houston, TX USA
International Space Station: Expedition 2000
Jan. 01, 2000; In English; Videotape: 55 min. 17 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000003437; No Copyright; Avail: CASI; V03, Videotape-VHS
Live footage of the International Space Station (ISS) presents an inside look at the ground and assembly of the ISS. Footage includes both animation and live footage of a Space Shuttle liftoff. Phil West, Engineer; Dr. Catherine Clark, Chief Scientist ISS; and Joe Edwards, Astronaut, narrate the video. The first topic of discussion is People and Communications. Good communication is a key component in our ISS endeavor. Dr. Catherine Clark uses two soap cans attached by a string to demonstrate communication. Bill Nye the Science Guy talks briefly about science aboard the ISS. Charlie Spencer, Manager of Space Station Simulators, talks about communication aboard the ISS. The second topic of discussion is Engineering. Bonnie Dunbar, Astronaut at Johnson Space Flight Center, gives a tour of the Japanese Experiment Module (JEM). She takes us inside Node 2 and the U.S. Lab Destiny. She also shows where protein crystal growth experiments are performed. Audio terminal units are used for communication in the JEM. A demonstration of solar arrays and how they are tested is shown. Alan Bell, Project Manager MRMD (Mobile Remote Manipulator Development Facility), describes the robot arm that is used on the ISS and how it maneuvers the Space Station. The third topic of discussion is Science and Technology. Dr. Catherine Clark, using a balloon attached to a weight, drops the apparatus to the ground to demonstrate Microgravity. The bursting of the balloon is observed. Sherri Dunnette, Imaging Technologist, describes the various cameras that are used in space. The types of still cameras used are: 1) 35 mm, 2) medium format cameras, 3) large format cameras, 4) video cameras, and 5) the DV camera. Kumar Krishan, Chief Technologist ISS, explains infrared cameras, infrared vision cameras and how they perform. The Short Arm Centrifuge is shown by Dr. Millard Reske, Senior Life Scientist, to subject astronauts to forces greater than 1-g. Reske is interested in the physiological effects of the eyes and the muscular system after their exposure to forces greater than 1-g.

CASI
International Space Station; Expeditions; Assembling; Astronauts

20000857850 NASA Kennedy Space Center, Cocoa Beach, FL, USA
Delta X TE Moved from Hangar M to Complex 17 at Cape Canaveral Air Station
Jul. 17, 1995; In English; Videotape: 3 min. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2000007588; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This Kennedy Space Center video presents a live footage of Delta X TE moving to CX 17.

CASI
Delta Launch Vehicle: X Ray Timing Explorer; Ground Support Equipment; Space Transportation

20000857581 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta X TE Moved to Vertical at Cape Canaveral Air Station Hangar AO
Jul. 11, 1995; In English; Videotape: 3 min. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2000078589; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This Kennedy Space Center video presents a live footage of Delta XTE move to vertical at CCAS AO.

**CASI**

*Delta Launch Vehicle: X Ray Timing Explorer; Spaceborne Astronomy; Ground Support Equipment*

**2000005788** NASA Kennedy Space Center, Cocoa Beach, FL USA

**Delta 181 News Release**
Feb. 04, 1988; In English; Videotape: 5 min. 30 sec. playing time, in color, no sound
Report No.(s): NONP-NASA–VT–2000078600; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The Delta-181 mission was a military tracking exercise with released sub-satellites. It was also engaged in research and exploration of the upper atmosphere and the Earth Limb. This videotape consists of an animated film, which reviews the rocket stages, the launch and orbital insertion. It also shows the planned release of the sub-satellites in two groups. The plans for Earth limb observations are also shown.

**CASI**

*Military Spacecraft; Earth Observations (From Space); Satellite Constellations; Microsatellites*

**2000005783** NASA Kennedy Space Center, Cocoa Beach, FL USA

**Delta II Geotail Pre-Launch Press Conference**
Jul. 23, 1992; In English; Videotape: 62 min. 29 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000078601; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHIS

This video presents a live coverage of a pre-launch press conference on the Delta II/Geotail Mission. George Diller, NASA Public Affairs, presents the panel. The panel consists of James Womack, NASA Launch Manager, Kennedy Space Center; Mario Acuna, Project Scientist, Goddard Space Flight Center; ATsuo Nishida, Project Manager, ISAS; John Beckham, Delta Launch Manager, GSFC; and Joel Tumbiolo, Launch Weather Officer, CCIFS (Cape Canaveral Air Force Station). ATsuo Nishida presents the objectives of the Geotail Mission which are: 1) to determine the characteristics of the Geomagnetic Tail; 2) to understand the internal instability that leads to sudden energy releases; 3) to clarify the source of plasma in the tail; and 4) to study the structure of important interfaces such as the Magnetopause. Mario Acuna gives illustrations of the Magnetosphere. James Womack discusses the countdown and status of the mission. Tono Usuguro discusses spacecraft readiness for the July 24, 1992 launch, and Joel Tumbiolo gives the weather forecast for the launch. The press conference concludes with a question and answer period. See NONP-NASA–VT–2000078605 for additional questions and footage.

**CASI**

*Geomagnetic Tail; Prelaunch Summaries: Spacecraft Launching: Delta Launch Vehicle*

**2000005782** NASA Kennedy Space Center, Cocoa Beach, FL USA

**Delta XTE Spacecraft Removed from Transfer Cannister**
Dec. 30, 1995. This videotape shows the spacecraft being removed from the burst of X-rays that light up the sky and then disappear forever. It was launched on Dec. 30, 1995. This videotape shows the spacecraft being removed from the transfer cannister. After the spacecraft is set down, the foil covering is removed.

**CASI**

*X Ray Timing Explorer; Spaceborne Astronomy; Spacecraft Structures*
rocket booster stage powered by four Thiokol Castor IVA solid rocket boosters (SRB) and a core vehicle stage (booster and sustainer) powered by Rocketdyne MA-5A liquid propellant engines (RP-1 fuel and liquid oxygen). The multiple firing Centaur is powered by two Pratt and Whitney (RL10A-4) liquid hydrogen and liquid oxygen engines with extendible nozzles. This video shows the erection of the Atlas booster and transportation (to 36-B launching pad) and erection of the Centaur.

CASI

Atlas Centaur Launch Vehicle: Launch Vehicles; SOHO Mission: Space Shuttle Boosters: Ground Handling; Preflight Operations

20000058130 NASA Kennedy Space Center, Cocoa Beach, FL USA

SOHO Payload Mate to Atlas/Centaur at the SAEF 2
Aug. 18, 1995; In English; Videotape: 5 min. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2000078651; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
The footage shows the Solar and Heliospheric Observatory’s (SOHO) payload mating with the Atlas Centaur launch vehicle in the Spacecraft Assembly and Encapsulation Facility (SAEF-2).
CASI

Atlas Centaur Launch Vehicle: SOHO Mission; Preflight Operations; Payloads

20000058132 NASA Kennedy Space Center, Cocoa Beach, FL USA

Delta XTE Spacecraft Solar Panel Deployment, Hangar AO at Cape Canaveral Air Station
Jun. 06, 1995; In English; Videotape: 5 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000078586; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
The footage shows technicians in the clean room checking and adjusting the deployment mechanism of the solar panel for XTE spacecraft. Other scenes show several technicians making adjustments to software for deployment of the solar panels.
CASI

Deployment: Solar Cells; Panels; Solar Collectors

20000058143 NASA Kennedy Space Center, Cocoa Beach, FL USA

XTE Payload at Hangar AO
Aug. 14, 1995; In English; Videotape: 3 min. 30 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2000078618; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
The X-ray Timing Explorer (XTE), launched on Dec. 30, 1995, is a satellite that observes the fast-moving, high-energy worlds of black holes, neutron stars, X-ray pulsars and bursts of X-rays that light up the sky and then disappear forever. This videotape shows the XBTE satellite being worked on by personnel in clean room clothing. The XTE is mounted on a base, which moves the satellite from the vertical to the horizontal position, to allow for access to various parts.
Author

CASI

Clean Rooms: X Ray Timing Explorer

20000058144 NASA Kennedy Space Center, Cocoa Beach, FL USA

Atlas Centaur 77 GOES–J Wet Dress Rehearsal at Cape Canaveral Air Station
May 03, 1995; In English; Videotape: 6 min. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2000078614; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
A Wet Dress Rehearsal (WDR) was successfully run on Atlas/Centaur 77 launch vehicle. The WDR verifies the launch readiness of the vehicle, the launch support equipment at the pad and in the blockhouse, the countdown procedure, and the launch countdown operations of the Eastern Range. During this countdown test liquid hydrogen, liquid oxygen and RP-1 propelants are aboard the vehicle, verifying the structural integrity of the Atlas first stage and Centaur upper stage tanks.
CASI

Atlas Centaur Launch Vehicle; Payloads; Delta Launch Vehicle; Launch Vehicle Configurations

20000058147 NASA Kennedy Space Center, Cocoa Beach, FL USA

Delta II/Geostail Pre–Launch Press Conference
Jul. 23, 1992; In English; Videotape: 10 min. 59 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000078605; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video presents a continuation of the question and answer period on the Delta II/Geostail Mission. For the first part of the press conference, see NONP–NASA–VT–2000078601.
CASI

Geomagnetic Tail; Spacecraft Launching; Prelaunch Summaries; Delta Launch Vehicle

20000058148 NASA Kennedy Space Center, Cocoa Beach, FL USA

Delta Wind Mating to Upper Stage at PHSF
Oct. 14, 1994; In English; Videotape: 14 min. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–2000078595; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Footage shows the mating of the Delta Wind to the Upper Stage rocket engine at the Payload Hazardous Servicing Facility (PHSF).
CASI

Spacecraft Components; Bonding; Upper Stage Rocket Engines

20000058149 NASA Kennedy Space Center, Cocoa Beach, FL USA

XTE Delta 2nd Stage Erection at Complex 17A, Cape Canaveral Air Station
Jul. 28, 1995; In English; Videotape: 4 min. 30 sec. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–2000078592; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Footage shows the erection of the Delta 2nd Stage vehicle at launch pad 17A. Scenes include the lifting of the component onto the launch pad.
CASI

Construction: Aircraft Maintenance; Flight Operations; Preflight Operations

20000058150 NASA Kennedy Space Center, Cocoa Beach, FL USA

Delta XTE Lifted To Work Stand
Jun. 28, 1995; In English; Videotape: 5 min. 13 sec. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–2000078590; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Live footage of the XTE (X-Ray Timing Explorer) being lifted to the work stand is presented.
CASI

X Ray Timing Explorer: Supports; Cranes

20000059213 NASA Kennedy Space Center, Cocoa Beach, FL USA

WIND Mated to Delta
Oct. 19, 1994; In English; Videotape: 6 min. 4 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2000078622; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This NASA Kennedy Space Center video release presents footage of the mating of NASA’s WIND payload to the Delta launch vehicle at Cape Canaveral Air Station’s complex 17B. The video includes shots of the work crews as well as wide angle views of the spacecraft in its launching position. WIND was launched on November 1, 1994 and is the first of two NASA spacecraft in the Global Geospace Science initiative and part of the International Solar Terrestrial Physics (ISTP) Project.
CASI

Payloads: Delta Launch Vehicle; Launch Vehicle Configurations

20000059214 NASA Kennedy Space Center, Cocoa Beach, FL USA

Delta II/Geostail Launch with Pre–Launch Activities
Jul. 24, 1992; In English; Videotape: 90 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000078607; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS
Footage contains scenes from both the launch pad and Mission Directors
Center from T minus 4 minutes and counting until launch. The launch has a short window of 5 minutes. The Geotail satellite is a joint effort between NASA and the International Solar Terrestrial Physics Program. It was developed by the Japanese Inst. of Space and Astronautical Science.

CASI
Geomagnetic Tail: Launching; Delta Launch Vehicle

2000059215 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta II/Geotail Pre-Launch Press Conference
Jul. 23, 1992; In English; Videotape: 10 min. 18 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000078603; No Copyright; Avail: CASI;
B01, Videotape-Beta: V01, Videotape-VHS

This footage contains scenes from the Geotail press conference. It covers a brief question and answer period. Questions about costs associated with the space mission were discussed.

CASI
Conferences; Geomagnetic Tail; Costs

2000059216 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta II/Geotail Launch with Pre-Launch Activities
Jul. 24, 1992; In English; Videotape: 90 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000078602; No Copyright; Avail: CASI;
B04, Videotape-Beta: V04, Videotape-VHS

The footage contains scenes from both the launch pad and the Mission Directors Center. Pre-launch activities include fueling of both the 1st and 2nd stages of the engines and 2nd stage helium/nitrogen pressurization. The launch has a short window of 5 minutes.

CASI
Geomagnetic Tail: Launching; Refueling; Delta Launch Vehicle

2000059217 NASA Kennedy Space Center, Cocoa Beach, FL USA
Geotail Video News Release
Jul. 20, 1992; In English; Videotape: 3 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000078599; No Copyright; Avail: CASI;
B01, Videotape-Beta: V01, Videotape-VHS

The Geotail mission, part of the International Solar Terrestrial Physics (ISTP) program, measures global energy flow and transformation in the magnetotail to increase understanding of fundamental magnetospheric processes. The satellite was launched on July 24, 1992 onboard a Delta II rocket. This video shows with animation the solar wind, and its effect on the Earth. The narrator explains that the Geotail spacecraft was designed and built by the Institute of Space and Astronautical Science (ISAS), the Japanese Space Agency. The mission objectives are reviewed by one of the scientists in a live view. The video also shows an animation of the orbit, while the narrator explains the orbit and the reason for the small launch window.

CASI
Geomagnetic Tail: Solar Wind; Solar Terrestrial Interactions; Satellite Orbits

2000059218 NASA Kennedy Space Center, Cocoa Beach, FL USA
ATLAS--SOHO: Satellite Arrival and Uncrating, Uncrating of the Propulsion Unit and Electric Module
Aug. 01, 1995; In English; Videotape: 3 min. 46 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000078597; No Copyright; Avail: CASI;
B01, Videotape-Beta: V01, Videotape-VHS

The SOHO satellite, part of the International Solar-Terrestrial Physics Program (ISTP), is a solar observatory designed to study the structure, chemical composition, and dynamics of the solar interior. It will also observe the structure (density, temperature and velocity fields), dynamics and composition of the outer solar atmosphere, and the solar wind and its relation to the solar atmosphere. The spacecraft was launched on December 2, 1995. This video shows the unloading of the satellite from the transport plane at the Kennedy Space Station and the lowering to an awaiting flatbed truck. The video also shows the uncrating of the satellite, the propulsion unit and the electric module in a clean room.

CASI
Clean Rooms; SOHO Mission; Solar Observatories; Scientific Satellites; Unloading

2000059219 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta XTE Lift and Mate at Complex 17A
Aug. 16, 1995; In English; Videotape: 7 min. 30 sec. playing time, in color, no sound
Report No.(s): NONP--NASA--VT--2000078594; No Copyright; Avail: CASI;
B01, Videotape-Beta: V01, Videotape-VHS

This NASA Kennedy Space Center (KSC) video release presents footage of the full and mate of NASA's X-ray Timing Explorer (XTE) to a McDonnell Douglas Delta II rocket at Launch Complex 17A, Cape Canaveral Air Station. The video includes shots of the workcrews as well as wide angle views of the spacecraft in its launching position. The XTE was launched into a circular orbit with an altitude of 600 km and an inclination of 23 degrees on Dec. 30, 1995.

CASI
X-Ray Timing Explorer; Ground Support Equipment; Delta Launch Vehicle

2000059220 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta Near Launch Activities, Launch Complex 17B, Cape Canaveral Air Station
Feb. 17, 1996; In English; Videotape: 6 min. 54 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000078593; No Copyright; Avail: CASI;
B01, Videotape-Beta: V01, Videotape-VHS

This NASA Kennedy Space Center (KSC) video release presents footage of pre-launch activities as well as the actual spacecraft launching of NASA's Near Earth Asteroid Rendezvous (NEAR) spacecraft aboard a McDonnell Douglas Delta II rocket. The spacecraft was launched from Launch Complex 17B, Cape Canaveral Air Station, 17 February 1996.

CASI
Press Brief; Near Earth Asteroid Rendezvous Mission; Delta Launch Vehicle: Spacecraft Launching

2000060865 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta XTE Spacecraft Arrives at CCAS Skid Strip
May 31, 1995; In English; Videotape: 6 min. 49 sec. playing time, in color, without sound
Report No.(s): NONP--NASA--VT--2000078616; No Copyright; Avail: CASI;
B01, Videotape-Beta: V01, Videotape-VHS

Footage shows the U.S. Air Force Aircraft "Air Mobility Command" approaching, and landing at the Cape Canaveral Air Station Skid Strip (CCAS). The truck carrying the Delta XTE Spacecraft is also shown as it leaves the Air Mobility Command.

CASI
Delta Launch Vehicle: Arrivals

2000062361 NASA Kennedy Space Center, Cocoa Beach, FL USA
SOHO Mission Science Briefing
Oct. 31, 1995; In English; Videotape: 1 hr. 6 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000081535; No Copyright; Avail: CASI;
B04, Videotape-Beta: V04, Videotape-VHS

Footage shows the SOHO Mission Pre-Launch Science Briefing. The moderator of the conference is Fred Brown, NASA/GSFC Public Affairs, introduces the panel members. Included are Professor Roger Bonnet, Director ESA Science Program, Dr. Wesley Huntress, Jr., NASA Associate Administrator for Space Science and Dr. Vicente Domingo, ESA SOHO Project Scientist. Also present are several members from the SOHO Team: Dr. Richard Harrison, Art Poland, and Phillip Scherrer. The discussions include understanding the phenomena of the sun, eruption of gas clouds into the atmosphere, the polishing of the mirrors for the SOHO satellite, artificial intelligence in the telescopes, and
the launch and operating costs. The panel members are also seeing answer questions from various NASA Centers and Paris. CASI.

SOFI Mission; ESA Satellites: Conferences

*Footage shows a panel discussion on the GEOS-I Satellite. The moderator George Diller, NASA Public Affairs, introduces the panel members. Panel members include Dr. Joe Friday, Director of the National Weather Service and Dr. Bob Sheets, from the National Hurricane Center. Discussions include infrared and microwave imagery, the GEOS-I satellite, and the gathering of weather and hurricane data. CASI.

GEOS Satellites (ESA): Conferences

*Footage shows the removal of the SOH0 satellite from its packaging at the Spacecraft Assembly and Encapsulation Facility (SAEF) 2.

*Footage shows SOHO Mission: Scientific Satellites

*Footage shows the launch of the 6th member of the satellite system on an Atlas Centaur rocket. Within a minute of launch a problem developed. The initial sign of the problem was the loss of telemetry data. The footage shows three isolated views of the launch, and then a freeze frame of a lightning strike shortly after the launch. The tape then shows a press conference, with Mr. Wolmaster, Mr. Gibbs, and Air Force Colonel Alsbrooke. Mr. Gibbs summarizes the steps that would be taken to review the launch failure. The questions from the press mostly concern the weather conditions, and the possibility that the weather might have caused the mission failure. CASI.

*Footage shows the launch of the TOPEX/POSEIDON satellite. The panel discussion on the GEOS-I Satellite. The moderator George Diller, NASA Public Affairs, introduces the panel members. Panel members include Dr. Joe Friday, Director of the National Weather Service and Dr. Bob Sheets, from the National Hurricane Center. Discussions include infrared and microwave imagery, the GEOS-I satellite, and the gathering of weather and hurricane data. CASI.

TOPEX/POSEIDON Launch from Guiana Space Center Aboard an Ariane 42P

*Footage shows the launch control center (LCC) as they prepare for launch. During preparation Charles Bigot, Chairman and C.E.O. of Ariane space, and Jean-Daniel Levi, Director of CNES spoke briefly about the joint effort between National Aeronautics and Space Administration (NASA) and the European Space Agency (ESA). The NASA administrator, Don Golding also made a brief speech via telephone before the launching. Live footage also shows the launch of the TOPEX/POSEIDON satellite. CASI.

*Footage shows the launch of the TOPEX/POSEIDON satellite. The panel discussion on the GEOS-I Satellite. The moderator George Diller, NASA Public Affairs, introduces the panel members. Panel members include Dr. Joe Friday, Director of the National Weather Service and Dr. Bob Sheets, from the National Hurricane Center. Discussions include infrared and microwave imagery, the GEOS-I satellite, and the gathering of weather and hurricane data. CASI.

*Footage shows the removal of the SOH0 satellite from its packaging at the Spacecraft Assembly and Encapsulation Facility (SAEF) 2.

TOPEX/POSEIDON Press Conference (2 of 2)

*Footage shows the continuation of the TOPEX Press Conference. The panelists are seen answering questions from the participating audience as well as from NASA Centers. They respond to questions about Kelvin waves, pulses of warm water, sea surface temperature, and the direction in which the project is heading. Also presented are TOPEX/POSEIDON playbacks of the topography and currents of

communications between naval aircraft, ships, submarines, and ground stations and between the Strategic Air Command and the national command authority network. This footage shows the attempted launch of the 6th member of the satellite system on an Atlas Centaur rocket. Within a minute of launch a problem developed. The initial sign of the problem was the loss of telemetry data. The footage shows three isolated views of the launch, and then a freeze frame of a lightning strike shortly after the launch. The tape then shows a press conference, with Mr. Wolmaster, Mr. Gibbs, and Air Force Colonel Alsbrooke. Mr. Gibbs summarizes the steps that would be taken to review the launch failure. The questions from the press mostly concern the weather conditions, and the possibility that the weather might have caused the mission failure. CASI.

*Footage shows the launch of the TOPEX/POSEIDON satellite. The panel discussion on the GEOS-I Satellite. The moderator George Diller, NASA Public Affairs, introduces the panel members. Panel members include Dr. Joe Friday, Director of the National Weather Service and Dr. Bob Sheets, from the National Hurricane Center. Discussions include infrared and microwave imagery, the GEOS-I satellite, and the gathering of weather and hurricane data. CASI.

*Footage shows the launch of the TOPEX/POSEIDON satellite. The panel discussion on the GEOS-I Satellite. The moderator George Diller, NASA Public Affairs, introduces the panel members. Panel members include Dr. Joe Friday, Director of the National Weather Service and Dr. Bob Sheets, from the National Hurricane Center. Discussions include infrared and microwave imagery, the GEOS-I satellite, and the gathering of weather and hurricane data. CASI.

*Footage shows the launch of the TOPEX/POSEIDON satellite. The panel discussion on the GEOS-I Satellite. The moderator George Diller, NASA Public Affairs, introduces the panel members. Panel members include Dr. Joe Friday, Director of the National Weather Service and Dr. Bob Sheets, from the National Hurricane Center. Discussions include infrared and microwave imagery, the GEOS-I satellite, and the gathering of weather and hurricane data. CASI.
The experiments focus on the fields of medicine, fluids, technology, agriculture, and the effects of microgravity. An outline of which countries provided which modules is given, and details about the modules are provided.

CASI
International Space Station; Space Station Modules; Construction; Spaceborne Experiments

20040929211 NASA Johnson Space Center, Houston, TX USA
ISS Animation Resource Reel
June 2006; In English; Videotape: 22 min. 47 sec. playing time, in color, no sound
Report No.(s): NONP—NASA—VT—2004014436; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
A collection of computerized animations show various International Space Station (ISS) components and stages of assembly. Various clips show the following: (1) Space Shuttle dock and fly-around views; (2) Russian Proton rocket launch; (3) Service Module Zvezda flight; (4) Russian Progress vehicle, STS-92 Discovery, and the Soyuz spacecraft dock with ISS (separately); (5) Z-1 truss and Pressurized Mating Adapter 3 installation; (6) STS-97 installation of solar arrays; (7) STS-98 Destiny Laboratory Module installation; (8) ESA, Russian, and Columbus Attached Pressurized Modules; (9) fly-around of Russian research modules, US modules, and Kibo module; (10) view of truss structure; (11) Space Station fly-around; (12) solar arrays tracking the sun; (13) ISS Remote Manipulator System (robotic arm) attach and detach; (14) interior and exterior views of Columbus Attached Pressurized Modules; (15) CETA Cart on ISS truss; (16) zoom out from ISS to broad Earth shot; and (17) ISS assembly sequence.
CASI
International Space Station; Installing; Space Station Modules; Service Modules; Assemblies

20010929213 NASA Johnson Space Center, Houston, TX USA
ISS General Resource Reel
January 2001; In English; Videotape: 49 min. 2 sec. playing time, in color, with sound
Report No.(s): NONP—NASA—VT—2001014438; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
An overview of the construction and evolution of the International Space Station (ISS) is seen through a collection of video clips. Live footage shows the following: (1) the launch of Zarya on the Russian Proton rocket; (2) spacecrafts from various assembly missions, including STS-88, STS-96, STS-101, STS-92, STS-105, and STS-97; (3) Zvezda docking to ISS as seen from the camera in the docking port; (4) the launch of the Expedition 1 crew (William Shepherd, Yuri Gidzenko, and Sergei Krikalev) on Soyuz and the spacecraft’s docking with ISS; and (5) the US Destiny Laboratory Module, Leonardo and Rafello Modules, Mobile Base System, Kibo Experiment Module, US Airlock, US Habitation Module, and ISS Remote Manipulator System (robotic arm) during processing. Computerized animations show the ISS as the Space Shuttle docks; the Progress Module as it docks to ISS; interior and exterior views of the Columbus Orbital Facility; and an ISS assembly sequence.
CASI
Extravehicular Activity; International Space Station; Construction; Spacecraft Docking; Space Station Modules; Orbital Assembly

20010929215 NASA Johnson Space Center, Houston, TX USA
Go for Assembly: Building the International Space Station
Sep. 18, 1997; In English; Videotape: 11 min. 1 sec. playing time, in color, with sound
Report No.(s): NONP—NASA—VT—2001014440; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
An overview of the improvements made on the spacewalking suits and equipment used to assemble the International Space Station (ISS) while in orbit is presented. Details are given on the adjustable heaters and helmet lights. The tools used are shown, and the safety equipment, such as space life jackets and stiff tethers, are described. Astronaut training in the Neutral Buoyancy Laboratory (NBL) and shuttle simulators also are seen.
CASI
International Space Station; Astronaut Training; Safety Devices; Tethers and...
Assembl.v; Space Station Modules
[52x273]Assembling for launch at the Baikonur Cosmodrome in Kazakhstan, Russia. The interior and exterior of Zvezda are seen during construction. Computerized simulations show the solar arrays deploying on Zvezda in space, the maneuvers of the module as it approaches and connects with the International Space Station (ISS), the installation of the Z1 truss on the ISS and its solar arrays deploying, and the installations of the Destiny Laboratory, Remote Manipulator System, and Kibo Experiment Module. Live footage then shows the successful launch of the Proton Rocket.

CASI
International Space Station; Computerized Simulation; Spacecraft Launching; Spacecraft Docking

20010035885 NASA Kennedy Space Center, Cocoa Beach, FL USA
ISS Expedition 1 Pre-Launch Press Conference
Oct. 19, 2000; In English; Videotape: 42 min. 13 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20010488899; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Expedition 1 crewmembers William Shepherd, Yuri Gidzenko, and Sergei Krikalev are introduced in this prelaunch press conference. Each crewmember gives a brief statement about his expectations for the upcoming mission and they answer questions from the press.

CASI
Prelaunch Summaries; Crew Procedures (Inflight): International Space Station; Spacecrafs

20010036657 NASA Kennedy Space Center, Cocoa Beach, FL USA
ISS Service Module Pre–Launch
Jul. 07, 2000; In English; Videotape: 61 min. 27 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001052178; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Various shots show Discovery at the launch pad during the final 30-minute countdown. The prelaunch conditions are described and information is given on the upcoming launch and the orbiter’s docking with the International Space Station (ISS). A brief collage of rollout and launch footage of STS-92 Endeavour commemorates the 100th Space Shuttle mission and the 100th anniversary of the Philadelphia Orchestra (also seen). The music of ‘2001: A Space Odyssey’ is played by the orchestra.

CASI
Countdown: Spacecraft Launching; Spacecraft Docking; Discovery (Orbiter)

20010038856 NASA Johnson Space Center, Houston, TX USA
Zarya Resource Reel
Dec. 08, 1998; In English; Videotape: 40 min. 45 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP–NASA–VT–2001041443; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

An overview of the Zarya Module (part of the International Space Station) is given through various clips of its construction, launch, and installation. Computerized animations show the deployment of Zarya’s solar panels, Zarya’s motor firing to a higher orbit, and the installation of Zarya to the Unity Module using the STS-88 Endeavour’s robotic arm. Live footage shows the following: (1) Zarya and the Proton Rocket under construction at the Khrunichev State Research and Production Center in Moscow, Russia; (2) Zarya launch preparations (test deployment of solar arrays) at the Baikonur Cosmodrome in Kazakhstan, Russia; (3) prelaunch activities (inspection, Proton Rocket rollout to launch pad); (4) the launch of Zarya on the Proton Rocket at the Baikonur Cosmodrome; and (5) Endeavour’s capture of Zarya and its berthing to Unity.

CASI
Construction: Spacecraft Launching; Zarya Control Module; Solar Arrays

20010115334 NASA Johnson Space Center, Houston, TX USA
Skylab: Space Station I
Jan. 24, 1996; In English; Videotape: 28 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001181401; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video shows a number of astronauts describing the importance of man’s continued space exploration. Footage shows the interior of Skylab as the
crew performs experiments (solar effects, Earth observation), monitors their health, and going about their day-to-day lives.

CASI
Astronauts: Health; Space Exploration; Skylab Program

20010116514 NASA Johnson Space Center, Houston, TX USA
Apollo Presentation
Jan. 01, 2001; In English; Videotape: 7 min. 2 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001174288; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video is a compilation of scenes from the Apollo 11 mission, from the speech President Kennedy gave declaring America's intention to go to the Moon through the Lunar Module liftoff from the Moon's surface, including footage from the Apollo 11 spacecraft launch, astronaut activities on the lunar surface, the placing of the American flag on the surface of the Moon, and an astronaut on the Lunar Rover.
CASI
Astronauts: Lunar Surface; Moon: Apollo 11 Flight

20010116515 NASA Johnson Space Center, Houston, TX USA
Legacy of Skylab
May 11, 1989; In English; Videotape: 9 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001174286; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video is a compilation of footage from the Skylab missions. The three
three-man crews are seen as they perform experiments (solar effects, Earth
observations, exercise, and play in zero gravity.
CASI
Skylab Program: Spacecrews

20010117034 NASA Johnson Space Center, Houston, TX USA
Spacecraft Skylab: Wings of Discovery
Jan. 01, 2001; In English; Videotape: 10 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001181308; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video shows footage from the missions on the Skylab space station. The
resident astronauts are seen as they perform spacewalks and various scient-
ic experiments, including solar studies, Earth observations, metal alloy
creation, and the effects of microgravity on the human body. The importance
of these experiments is described.
CASI
Skylab Program: Solar Activity Effects; Spaceborne Experiments: Gravitational Effects: Earth Observations (From Space)

SPACECRAFT INSTRUMENTATION AND ASTRONICS

Includes the design, manufacture, or use of devices for the purpose of measuring,
detecting, controlling, computing, recording, or processing data related to the
operation of space vehicles or platforms. For related information, see also 06
Aircraft Instrumentation and Avionics; 89 Astronomy, Instrumentation and
Photography; For spaceborne telescopes and other astronomical instruments
see 89 Astronomy. Instrumentation and Photography; For spaceborne telescopes and other astronomical instruments
see 89 Astronomy.

19940114433 NASA Marshall Space Flight Center, Huntsville, AL, USA
ASTRO-1 to explore invisible universe
Nov 1, 1989; In English; 3 min. 55 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--94--198207; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video explains the ASTRO 1 observatory and its ten day mission
aboard SpaceLab on NASA's Space Shuttle, which Marshall Space Flight Center
(MSFC) and Goddard Space Flight Center (GSFC) astronomers will use to study
distant stars, supernovae, and black holes. The observatory contains ultraviolet and
x ray telescopes that will capture images earth-bound observatories can't,
due to interference from the earth's atmosphere. The video contains footage of
the instrument being loaded on the shuttle, animations of anticipated images to
be captured, and scenes of the SpaceLab Control Center at MSFC.
CASI
Astro Missions (ST); Ground Stations; Loading Operations; Spaceborne Astronomy; Spaceborne Telescopes

19950040116 NASA Lewis Research Center, Cleveland, OH, USA
SAMS (space acceleration measurement system)
Feb 1, 1994; In English; 7 min. 30 sec. playing time, with sound
Report No.(s): NONP--NASA--VT--93--23163; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
The SAMS unit flew on STS-62 to monitor onboard accelerations that
could disrupt shuttle experiments. This highly sensitive instrument can measure,
condition, and record low-gravity accelerations at as many as three experiment
sites simultaneously.
CASI
Acceleration (Physics); Accelerometers; Microgravity; Onboard Equipment; Space Shuttles; Spacecraft Instruments

20010118497 NASA Kennedy Space Center, Cocoa Beach, FL USA
National Anthem
Oct 08, 1991; In English; Videotape: 2 min. 29 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001023118; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
A montage of video clips over the years, footage shows the spacecrews,
launch, and landing for different orbiters and missions. Clips include the Endea-
vour and Atlantis Orbiters and are shown to the music of the American National
Anthem.
CASI
Spacecraft Launching; Spacecraft Landing; Spacecrews

20 SPACECRAFT PROPULSION AND POWER

Includes main propulsion systems and components, e.g., rocket engines; and
spacecraft auxiliary power sources. For related information, see also 07 Aircraft
Propulsion and Power; 28 Propellants and Fuels; 16 Launch Vehicles and Launch Operations; and 44 Energy Production and Conversion.

19940099144 NASA John C. Stennis Space Center, Bay Saint Louis, MS, USA
SSME testing at Stennis Space Center
Mar 1, 1989; In English; 9 min. 54 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--93--185327; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Different views of Space Shuttle Main Engine test firings on all three test
stands including closeup of engine, day, and night firings are presented.
Author (revised)
Space Shuttle Main Engine: Test Firing

19940099152 NASA Lewis Research Center, Cleveland, OH, USA
Low thrust space propulsion
Jul 1, 1987; In English; 6 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--93--185502; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
An overview of low rocket engine propulsion concepts for space missions
is presented. Chemical and electrical rocket engines are shown. Animation illustrates propulsion applications.
Author (revised)
Chemical Propulsion; Electric Propulsion; Engine Design; Low Thrust Propulsion; Rocket Engines; Spacecraft Propulsion

19940010756 NASA Marshall Space Flight Center, Huntsville, AL, USA
Advanced Solid Rocket Motor
Mar 1, 1989; In English; 2 min. 1 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--93--190456; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video tape describes the redesign and construction of the Advanced Solid Rocket Motor.

**Advanced Solid Rocket Motor (ASRM); Solid Propellant Rocket Engines**

19940010878 NASA Lewis Research Center, Cleveland, OH, USA

**Low thrust propulsion no. CV-110**

May 1, 1990; In English; 10 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--94--23169; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video presents an overview of low thrust rocket engine propulsion concepts for space missions. Chemical and electrical rocket engines are shown. Animation illustrates various propulsion applications.

**LeRC**

**Low Thrust Propulsion; Rocket Engines; Spacecraft Propulsion**

19940011030 NASA Lewis Research Center, Cleveland, OH, USA

**Futurepath 1**

Apr 1, 1988; In English; 27 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--93--190228; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video looks at the photovoltaic and solar dynamic power systems being developed for Freedom and the Advanced Turboprop Program.

**CASI**

**Photovoltaic Conversion: Solar Dynamic Power Systems; Space Station Power Supplies; Turboprop Aircraft**

19940027312 NASA Lewis Research Center, Cleveland, OH, USA

**Solar connection**

Jan 1, 1992; In English; 14 min. 18 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--94--9961; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video explains the Work package 4, an electrical power system being developed by NASA Lewis Research Center, for use on the Space Station Freedom. It shows footage and explains steps in building and testing of actual flight hardware for Space Station Freedom. Details are given of the threat that plasma poses on cells.

**CASI**

**Space Station Freedom: Space Station Power Supplies**

19940029051 NASA John C. Stennis Space Center, Bay Saint Louis, MS, USA

**ASRM testing at Stennis Space Center (proposed)**

Jan 1, 1993; In English; 6 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--94--12923; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This summary of the Advanced Solid Rocket Motor (ASRM) program at Stennis Space Center has a specific focus on the environmental impact.

**CASI**

**Advanced Solid Rocket Motor (STS); Environment Effects; Environment Protection; Rocket Test Facilities; Test Firing**

19950004114 NASA Lewis Research Center, Cleveland, OH, USA

**One fantastic ride**

Jan 1, 1991; In English; 14 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--94--12956; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video gives an overview of work being done by the Space Propulsion Technology Division at LeRC. This division conducts research on chemical, nuclear-thermal, and solar propulsion systems and propellants. Two ongoing projects highlighted are a low-thrust rocket for moving around in Earth orbit and large unmanned cargo rockets, both for use with the Space Station.

**CASI**

**Aerospace Engineering; Chemical Propulsion; Nuclear Propulsion; Propellants; Propulsion System Configurations; Propulsion System Performance; Solar Propulsion; Spacecraft Propulsion**

199500058151 NASA Kennedy Space Center, Cocoa Beach, FL, USA

**XTE Solid Motor Installation at Pad 17-A, Cape Canaveral Air Station**

Jul. 25, 1995; In English; Videotape: 16 min. 48 sec. playing time, in color, without sound
Report No.(s): NONP--NASA--VT--2000078587; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This NASA Kennedy Space Center video presents live footage of the installation of the XTE (X-Ray Timing Explorer) Solid Rocket Motor at Launch Pad 17-A. The installation takes place at Cape Canaveral Air Station, Florida.

**CASI**

**Installing: X Ray Timing Explorer; Launching Pads: Solid Propellant Rocket Engines**

200000118239 NASA Kennedy Space Center, Cocoa Beach, FL, USA

**OV-105 Endeavour Main Engine Press Showing at VAB**

Oct. 31, 1990; In English; Videotape: 4 min. 58 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--200015211; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows press members inspecting Endeavour’s main engine before installation as a Vehicle Assembly Building (VAB) official answers questions.

**CASI**

**Endeavour (Orbiter); Prelaunch Summaries; Engines**

20000019014 NASA Kennedy Space Center, Cocoa Beach, FL, USA

**SOHO Solid Rocket Booster Installation**

Nov. 4, 1995; In English; Videotape: 8 min. 42 sec. playing time, in color, no sound
Report No.(s): NONP--NASA--VT--200109211; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the arrival (via truck) and installation of the solid rocket boosters onto the SOHO spacecraft.

**CASI**

**Installing: Booster Rocket Engines**

---

**COMPOSITE MATERIALS**

Includes physical, chemical, and mechanical properties of laminates and other composite materials.

19940010872 NASA, Washington, DC, USA

**Better airplane wings**

Nov 1, 1989; In English; 3 min. 23 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--93--190243; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The videotape discusses the new composites that will be used to create lighter yet stronger aircraft wings.

**CASI**

**Aircraft Design; Composite Materials; Composite Structures; NASA Programs; Wings**
19940029244 NASA Lewis Research Center, Cleveland, OH, USA
National aerospace

Mid-deck experiments, STS-26
19940027377 NASA Lewis Research Center, Cleveland, OH, USA
Solid surface

199500120784 National Inst. of Standards and Technology, Gaithersburg, MD, USA
Chemical engineering: Measurements for a competitive age

19940027378 NASA Lewis Research Center, Cleveland, OH, USA
Mid-deck experiments, STS-26

25 INORGANIC, ORGANIC AND PHYSICAL CHEMISTRY
Includes the analysis, synthesis, and use of organic and inorganic compounds; combustion theory; electrochemistry and photochemistry. For related information see also Fluid Dynamics and Thermodynamics. For astrophysics see category 90 Astrophysics.

26 METALS AND METALLIC MATERIALS
Includes physical, chemical, and mechanical properties of metals and metallic materials; and metallurgy.

27 NONMETALLIC MATERIALS
Includes physical, chemical, and mechanical properties of plastics, elastomers, lubricants, polymers, textiles, adhesives, and ceramic materials. For composite materials see 24 Composite Materials.

19940016840 NASA, Washington, DC, USA
Restoring Miss Liberty

19940016897 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-26 SSIP briefing

19940016892 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-26 protein growth (PCG) experiment

19940027378 NASA Lewis Research Center, Cleveland, OH, USA
Defying gravity

19950004106 NASA Lewis Research Center, Cleveland, OH, USA
In-situ monitoring of crystal growth using MEPHISTO

187
The report presents the results of a flight experiment, Tank Pressure Control Experiment/Thermal Phenomena (TPCE/TP) performed in the microgravity environment of the space shuttle. TPCE/TP, flown on the Space Transportation System (STS)-52, was a second flight of the Tank Pressure Control Experiment (TPCE). The experiment used Freon 113 at near saturation conditions. The test tank was filled with liquid to about 83 percent by volume. The experiment consisted of 21 tests. Each test generally started with a heating phase to increase the tank pressure and to develop temperature stratification in the fluid, followed by a fluid mixing phase for the tank pressure reduction and fluid temperature equilibration. The heating phase provided pool boiling data from large (relative to bubble sizes) heating surfaces (0.1046 m by 0.0742 m) at low heat fluxes (0.23 to 1.16 kW/m²). The system pressure and the bulk liquid subcooling varied from 39 to 78 kPa and 1 to 3 deg C, respectively. The boiling process during the entire heating period, as well as a jet-induced mixing process for the first 2 min. of the mixing period, was also recorded on video. Analyses of data from the two flight experiments (TPCE and TPCE/TP) and their comparison with the results obtained in drop tower experiments suggest that as Bond number approaches zero the flow pattern produced by an axial jet and the mixing time can be predicted by the Weber number. This is video tape 4 of 4.

CASl; B04, Videotape-Beta; V04, Videotape-VHS

The report presents the results of the flight experiment Tank Pressure Control Experiment/Thermal Phenomena (TPCE/TP) performed in the microgravity environment of the space shuttle. TPCE/TP, flown on the Space Transportation System (STS)-52, was a second flight of the Tank Pressure Control Experiment (TPCE). The experiment used Freon 113 at near saturation conditions. The test tank was filled with liquid to about 83 percent by volume. The experiment consisted of 21 tests. Each test generally started with a heating phase to increase the tank pressure and to develop temperature stratification in the fluid, followed by a fluid mixing phase for the tank pressure reduction and fluid temperature equilibration. The heating phase provided pool boiling data from large (relative to bubble sizes) heating surfaces (0.1046 m by 0.0742 m) at low heat fluxes (0.23 to 1.16 kW/m²). The system pressure and the bulk liquid subcooling varied from 39 to 78 kPa and 1 to 3 deg C, respectively. The boiling process during the entire heating period, as well as a jet-induced mixing process for the first 2 min. of the mixing period, was also recorded on video. Analyses of data from the two flight experiments (TPCE and TPCE/TP) and their comparison with the results obtained in drop tower experiments suggest that as Bond number approaches zero the flow pattern produced by an axial jet and the mixing time can be predicted by the Weber number. This is video tape 4 of 4.

CASl; B04, Videotape-Beta; V04, Videotape-VHS

The report presents the results of a flight experiment, Tank Pressure Control Experiment/Thermal Phenomena (TPCE/TP) performed in the microgravity environment of the space shuttle. TPCE/TP, flown on the Space Transportation System (STS)-52, was a second flight of the Tank Pressure Control Experiment (TPCE). The experiment used Freon 113 at near saturation conditions. The test tank was filled with liquid to about 83 percent by volume. The experiment consisted of 21 tests. Each test generally started with a heating phase to increase the tank pressure and to develop temperature stratification in the fluid, followed by a fluid mixing phase for the tank pressure reduction and fluid temperature equilibration. The heating phase provided pool boiling data from large (relative to bubble sizes) heating surfaces (0.1046 m by 0.0742 m) at low heat fluxes (0.23 to 1.16 kW/m²). The system pressure and the bulk liquid subcooling varied from 39 to 78 kPa and 1 to 3 deg C, respectively. The boiling process during the entire heating period, as well as a jet-induced mixing process for the first 2 min. of the mixing period, was also recorded on video. Analyses of data from the two flight experiments (TPCE and TPCE/TP) and their comparison with the results obtained in drop tower experiments suggest that as Bond number approaches zero the flow pattern produced by an axial jet and the mixing time can be predicted by the Weber number. This is video tape 4 of 4.

CASl; B04, Videotape-Beta; V04, Videotape-VHS

The report presents the results of a flight experiment, Tank Pressure Control Experiment/Thermal Phenomena (TPCE/TP) performed in the microgravity environment of the space shuttle. TPCE/TP, flown on the Space Transportation System (STS)-52, was a second flight of the Tank Pressure Control Experiment (TPCE). The experiment used Freon 113 at near saturation conditions. The test tank was filled with liquid to about 83 percent by volume. The experiment consisted of 21 tests. Each test generally started with a heating phase to increase the tank pressure and to develop temperature stratification in the fluid, followed by a fluid mixing phase for the tank pressure reduction and fluid temperature equilibration. The heating phase provided pool boiling data from large (relative to bubble sizes) heating surfaces (0.1046 m by 0.0742 m) at low heat fluxes (0.23 to 1.16 kW/m²). The system pressure and the bulk liquid subcooling varied from 39 to 78 kPa and 1 to 3 deg C, respectively. The boiling process during the entire heating period, as well as a jet-induced mixing process for the first 2 min. of the mixing period, was also recorded on video. Analyses of data from the two flight experiments (TPCE and TPCE/TP) and their comparison with the results obtained in drop tower experiments suggest that as Bond number approaches zero the flow pattern produced by an axial jet and the mixing time can be predicted by the Weber number. This is video tape 4 of 4.

CASl; B04, Videotape-Beta; V04, Videotape-VHS

The report presents the results of a flight experiment, Tank Pressure Control Experiment/Thermal Phenomena (TPCE/TP) performed in the microgravity environment of the space shuttle. TPCE/TP, flown on the Space Transportation System (STS)-52, was a second flight of the Tank Pressure Control Experiment (TPCE). The experiment used Freon 113 at near saturation conditions. The test tank was filled with liquid to about 83 percent by volume. The experiment consisted of 21 tests. Each test generally started with a heating phase to increase the tank pressure and to develop temperature stratification in the fluid, followed by a fluid mixing phase for the tank pressure reduction and fluid temperature equilibration. The heating phase provided pool boiling data from large (relative to bubble sizes) heating surfaces (0.1046 m by 0.0742 m) at low heat fluxes (0.23 to 1.16 kW/m²). The system pressure and the bulk liquid subcooling varied from 39 to 78 kPa and 1 to 3 deg C, respectively. The boiling process during the entire heating period, as well as a jet-induced mixing process for the first 2 min. of the mixing period, was also recorded on video. Analyses of data from the two flight experiments (TPCE and TPCE/TP) and their comparison with the results obtained in drop tower experiments suggest that as Bond number approaches zero the flow pattern produced by an axial jet and the mixing time can be predicted by the Weber number. This is video tape 4 of 4.
microgravity environment of the space shuttle. TPCE/TP, flown on the Space Transportation System STS-52, was a second flight of the Tank Pressure Control Experiment (TPCE). The experiment used Freon 113 at near saturation conditions. The test tank was filled with liquid to about 83 percent by volume. The experiment consisted of 21 tests. Each test generally started with a heating phase to increase the tank pressure and to develop temperature stratification in the fluid, followed by a fluid mixing phase for the tank pressure reduction and fluid temperature equilibration. The heating phase provided pool boiling data from large (relative to bubble sizes) heating surfaces (0.1046 m by 0.0742 m) at low heat fluxes (0.23 to 1.16 kW/m\(^2\)). The system pressure and the bulk liquid subcooling varied from 39 to 78 kPa and 1 to 3 deg C, respectively. The boiling process during the entire heating period, as well as a jet-induced mixing process for the first 2 min. of the mixing period, was also recorded on video. Analyses of data from the two flight experiments (TPCE and TPCE/TP) and their comparison with the results obtained in drop tower experiments suggest that as Bond number approaches zero the flow pattern produced by an axial jet and the mixing time can be predicted by the Weber number. This is video tape 3 of 4.

**31 ENGINEERING (GENERAL)**

Includes general research topics to engineering and applied physics, and particular areas of vacuum technology, industrial engineering, cryogenics, and fire prevention. For specific topics in engineering see categories 32 through 39.

199401101846 NASA, Washington, DC, USA

**Building a lunar base**

Jan 1, 1986; In English; 4 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP NASA–VT–93–190472; No Copyright; Avail: CASI
B01, Videotape-Beta; V01, Videotape-VHS

This video looks at the testing of lunar materials as a possible building material for lunar bases.

CASI

**Construction Materials; Lunar Bases; Lunar Rocks; Lunar Soil; Materials Tests**

19950920783 National Inst. of Standards and Technology, Gaithersburg, MD, USA

**NIST Automated Manufacturing Research Facility (AMRF): March 1987**

Herbert, Judith E., editor, National Inst. of Standards and Technology, USA; Kane, Richard, editor, National Inst. of Standards and Technology, USA; Mar 1, 1987; In English; 19 min. playing time, in color, with sound
Report No.(s): NONP NASA–VT–95–49097; No Copyright; Avail: CASI
B02, Videotape-Beta; V02, Videotape-VHS

The completion and advances to the NIST Automated Manufacturing Research Facility (AMRF) is described in this video. The six work stations: (1) horizontal machining; (2) vertical machining; (3) turning machinery; (4) cleaning and deburring; (5) materials handling; and (6) inspection are shown and used for each workstation are cited. Visiting researchers and scientists within NIST describe the advantages of each of the workstations, what the facility is used for, future applications of the technological advancements from the AMRF, including examples of how AMRF technology is being transferred to the U.S. Navy industry and discuss future technological goals for the facility.

CASI

**Automatic Control; Government/Industry Relations; Industrial Plants; Research and Development: Research Facilities; Technology Assessment; Technology Utilization; Workstations**

2000058145 Bionetics Corp., Cocoa Beach, FL USA

**Cooler Deployment, GOES J on ATLAS**

Mar 14, 1995; In English; Videotape: 5 min. 13 sec. playing time, in color, no sound
Report No.(s): NONP NASA–VT–2000078613; No Copyright; Avail: CASI
B01, Videotape-Beta; V01, Videotape-VHS

This NASA Kennedy Space Center video release presents footage of workcrew overseeing the cooler deployment on the GOES-J weather satellite that will be launched on the Atlas Centaur rocket from Complex 36 at the Cape Canaveral Air Station.

CASI

**Coolers; GOES Satellites; Spacecraft Components**

1999016819 NASA Goddard Space Flight Center, Greenbelt, MD, USA

**COBE video news**

Oct 1, 1989; In English; 3 min. 46 sec. playing time, in color, with sound
Report No.(s): NONP NASA–VT–93–190396; No Copyright; Avail: CASI
B01, Videotape-Beta; V01, Videotape-VHS

This video tape was produced for hand-out to both local and national broadcast media as a prelude to the launch of the Cosmic Background Explorer. The tape consists of short clips with multi-channel sound to facilitate news media editing.

CASI

**Cosmic Background Explorer Satellite; News Media; Spacecraft Launching**

19950922753 NASA, Washington, DC, USA

**High resolution microwave survey**

Scheibe, J., editor, NASA, USA; Sep 18, 1992; In English; 12 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP NASA–VT–93–46901; No Copyright; Avail: CASI
B01, Videotape-Beta; V01, Videotape-VHS

Research information on radar tracking systems, computer animation of star formation, footage of solar systems, and desert radar equipment and research facilities are contained in this video. Frank Drake, President of SETI (Search for Extraterrestrial Intelligence) Institute is interviewed along with Jill Tarter, NASA's High Resolution Microwave Survey Project Scientist.

CASI

**Computer Animation; High Resolution; Microwaves; Radar Tracking; Radio Astronomy; Radio Communication**

33 ELECTRONICS AND ELECTRICAL ENGINEERING

Includes development, performance, and maintainability of electrical/electronic devices and components; related test equipment, and microelectronics and integrated circuitry. For related information see also 60 Computer Operations and Hardware; and 76 Solid-State Physics. For communications equipment and devices see 32 Communications and Radar.

19940929077 NASA Lewis Research Center, Cleveland, OH, USA

**Space electronics video: Research for today and tomorrow**

Jan 1, 1991; In English; 7 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP NASA–VT–94–12957; No Copyright; Avail: CASI
B01, Videotape-Beta; V01, Videotape-VHS

This video gives an overview of work being done by the different branches of the Space Electronics Division at LeRC. The video highlights electron beam, solid state, high speed circuit design and, high frequency communication research.

CASI

**Electron Beams; Electronic Equipment; NASA Programs; Solid State Devices**
FLUID MECHANICS AND THERMODYNAMICS

includes fluid dynamics and kinematics and all forms of heat transfer; boundary layer flow; hydrodynamics; hydraulics; fluidics; mass transfer and ablation cooling. For related information see also 02 Aerodynamics.

1994010773 NASA Ames Research Center, Moffett Field, CA, USA

The 1989 computational fluid dynamics highlights

Jan 1, 1989; In English; 24 min. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--93-190433; No Copyright; Avail: CASI; B01, Videotape-Beta; V02, Videotape-VHS

This document presents highlights of 1989's CFD graphics, which show shuttle flight problems, F-18 flows, artificial heart, and rotorator with more complex blades.

CASI

Computational Fluid Dynamics: Numerical Flow Visualization; Scientific Visualization

1994010779 NASA, Washington, DC, USA

Riblets: New speed technology

Mar 1, 1987; In English; 3 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--93-190439; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This document discusses a new drag reduction technology called riblets, which may have helped win yachting's America's Cup.

CASI

Boundary Layer Control: Drag Reduction; Hydrodynamics; Riblets

1994010958 NASA Ames Research Center, Moffett Field, CA, USA

The 1988 computational fluid dynamics highlights

Jan 1, 1988; In English; 15 min. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--93-190443; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video highlights the 1988 CFD graphics which show zero gravity phenomena, boundary layers, aerelasticity, rotor blades, stators, jet ground effects, the F-18, flow about the shuttle, hypersonic flow, and flow in an artificial heart.

CASI

Computational Fluid Dynamics: Computer Graphics; Computerized Simulation; Fluid Flow; Numerical Flow Visualization; Scientific Visualization

1994010958 NASA Lewis Research Center, Cleveland, OH, USA

Thermocapillary convection in evaporating sessile drops

Jan 1, 1986; In English; 28 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--94-9958; No Copyright; Avail: CASI; B01, Videotape-Beta; V02, Videotape-VHS

The purpose of this video is to understand the effects of surface tension on fluid convection. The fluid system chosen is the liquid sessile droplet to show the importance in single crystal growth, the spray drying and cooling of metal, and the advance droplet radiators of the space stations radiators. A cross sectional representation of a hemispherical liquid droplet under ideal conditions is used to show internal fluid motion. A direct simulation of buoyancy-dominated convection and surface tension-dominated convection is graphically displayed. The clear differences between two mechanisms of fluid transport, thermocapillary convection, and buoyancy dominant convection is illustrated.

CASI

Capillary Flow; Convection; Convective Heat Transfer; Cooling Systems; Crystal Growth; Drops (Liquids); Drying; Evaporation; Single Crystals; Spacecraft Radiators; Sprayers

19950104104 NASA Lewis Research Center, Cleveland, OH, USA

ZENO: A critical fluid light scattering experiment

Feb 1, 1994; In English; 7 min. 25 sec. playing time, with sound
Report No.(s): NONP-NASA--VT--94-23162; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The ZENO experiment flown on the STS-62, it is designed to verify intriguing, but previously untested, theories in fluid physics. These theories attempt to describe dramatic changes in the properties of fluids near the critical temperature at which the vapor and liquid forms co-exist.

19950104148 NASA Langley Research Center, Hampton, VA, USA

Two-dimensional scramjet inlet unstart model: Wind-tunnel blockage and actuation systems test

Holland, Scott D., NASA Langley Research Center, USA; Nov 1, 1994; In English; Videotape supplement: 10 min. 52 sec. playing time, in color, in VHS and Beta formats

This supplement to NASA TM 109152 shows the Schlieren video (10 min. 52 sec., color, Beta and VHS) of the external flow field and a portion of the internal flow field of a two-dimensional scramjet inlet model in the NASA Langley 26-Inch Mach 6 Tunnel. The intent of the overall test program is to study (both experimentally and computationally) the dynamics of the inlet unstart; this (phase I) effort examines potential wind-tunnel blockage issues related to model sizing and the adequacy of the actuation systems in accomplishing the start and unstart. The model is equipped with both a moveable cowl and aft plug. Windows in the inlet sidewalls allow limited optical access to the internal shock structure. In the video, flow is from right to left, and the inlet is oriented inverted with respect to flight, i.e., with the cowl on top. The plug motion is obvious because the plug is visible in the aft window. The cowl motion, however, is not as obvious because the cowl is hidden from view by the inlet sidewall. The end of the cowl actuator arm, however, becomes visible above the inlet sidewalls between the windows when the cowl is up (see figure 1b of the primary document). The model is injected into the tunnel and observed through several actuation sequences with two plug configurations over a range of unit freestream Reynolds number at a nominal freestream Mach number of 6. The framing rate and shutter speed of the camera were too slow to fully capture the dynamics of the unstart but did prove sufficient to identify inlet start and unstart. This series of tests indicated that the model was appropriately sized for this facility and identified operability limits required first to allow the inlet to start and second to force the unstart.

Author

Engine Inlets; Flow Distribution; Flow Visualization; Free Flow; Hypersonic Inlets; Hypersonic; Wind Tunnel; Inlet Flow; Schlieren Photography; Supersonic Combustion Ramjet Engines; Wind Tunnel Tests

35 INSTRUMENTATION AND PHOTOGRAPHY

includes remote sensors; measuring instruments and gauges; detectors; cameras and photographic supplies; and holography. For aerial photography see also Earth Resources and Remote Sensing. For related information see also 06 Avionics and Aircraft Instrumentation; and 19 Spacecraft Instrumentation.

19940106774 NASA, Washington, DC, USA

Space Station Freedom

Jul 1, 1990; In English; 3 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--94-9934; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video presents great model photograph along with astronaut activity as practiced in mockup.

CASI

Astronaut Training; Space Station Freedom; Spacecraft Models

19940106831 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS--30 crew photo in building 4

Apr 1, 1989; In English; 7 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--93-190371; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video shows the Space Shuttle crew learning how to use the photography equipment they will have on board the Space Shuttle.

**Astronaut Training; Photographic Equipment; Space Shuttle Orbiters; Spaceborne Photography**

1994010843 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-32 IMAX camera training
Nov 1, 1989; In English; 10 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-190365; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The crew is shown learning how to load the IMAX camera and use it. This training takes place on the middeck of the CFT.

**Astronaut Training: Photographic Equipment; Space Shuttle Orbiters; Spaceborne Photography**

1994010891 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-29 IMAX camera audio class FET
Mar 1, 1990; In English; 15 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-190340; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

The astronauts are shown how to work the audio portion of the IMAX camera system.

**Astronaut Training: Photographic Equipment; Space Shuttle Orbiters; Spaceborne Photography**

1994010907 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-29 crew IMAX camera training
Jan 1, 1990; In English; 16 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-190264; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

The crew is shown learning to use the IMAX camera system.

**Astronaut Training: Photographic Equipment; Space Shuttle Orbiters; Spaceborne Photography**

1994010932 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-27 crew photo training and habituation procedures
Nov 1, 1988; In English; 15 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-190351; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The crew is shown studying photography equipment they will carry into orbit, and how to take the best shots possible.

**Astronaut Training: Photographic Equipment; Space Shuttle Orbiters; Spaceborne Photography**

1994010990 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-35 payload specialists Durrance and Parise: 76mm photo training and cabin familiarization
Apr 1, 1990; In English; 14 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-190295; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video shows astronauts Durrance and Parise being trained with photography equipment.

**Astronaut Training: Photographic Equipment; Space Shuttle Orbiters; Spaceborne Photography**

19970835833 NASA Lewis Research Center, Cleveland, OH, USA
Improved Optical Techniques for Studying Sonic and Supersonic Injection into Mach 3 Flow
Buggle, Alvin E., NASA Lewis Research Center, USA; Seasholtz, Richard G., NASA Lewis Research Center, USA; Sep. 1997; 22p; In English; 42nd International Society for Optical Engineering Conference, 27 Jul.-1 Aug. 1997, San Diego, CA, USA; Sponsored by International Society for Optical Engineering, USA; Original contains color illustrations
Contract(s)/Grant(s): RTOP 953-74-40
Report No.(s): NONP-NASA-VT-1997067113; No Copyright; Avail: CASI;
A03, Hardcopy; A01, Microfiche; V01, Videotape-VHS

Filterd Rayleigh Scattering and shadowgraph flow visualization were used to characterize the penetration of helium or moist air injected transversely at several pressures into a Mach 3 flow in the NASA Lewis 3.81 inch by 10 inch continuous flow supersonic wind tunnel. This work is in support of the LOX (liquid oxygen) Augmented Nuclear Thermal Rocket program. The present study used an injection-seeded, frequency doubled Nd:YAG pulsed laser to illuminate a traverse section of the injector plume. Rayleigh scattered light was passed through an iodine absorption cell to suppress stray laser light and was imaged onto a cooled CCD camera. The scattering was based on condensation of water vapor in the injector flow. Results are presented for various configurations of sonic and supersonic injector designs mounted primarily in the floor of the tunnel. Injectors studied include a single 0.25 inch diameter hole, five 0.112 inch diameter holes on 0.177 inch spacing, and a 7 degree half angle wedge. High speed shadowgraph flow visualization images were obtained with several video camera systems. Roof and floor static pressure data are presented several ways for the three configurations of injection designs with and without helium and/or air injection into Mach 3 flow. A 12 min. video supplement is also included.

**Passive millimeter wave (PMMW) sensors have the ability to see through fog, clouds, dust and sandstorms and thus have the potential to support all-weather operations, both military and commercial. Many of the applications, such as military transport or commercial aircraft landing, are technologically stressing in that they require imaging of a scene with a large field of view in real time and with high spatial resolution. The development of a low cost PMMW focal plane array camera is essential to obtain real-time video images to fulfill the above needs. The overall objective of this multi-year project (Phase1) was to**
develop and demonstrate the capabilities of a W-band PMMW camera with a microwave/millimeter wave monolithic integrated circuit (MMIC) focal plane array (FPA) that can be manufactured at low cost for both military and commercial applications. This overall objective was met in July 1997 when the first video images from the camera were generated of an outdoor scene. In addition, our consortium partner McDonnell Douglas was to develop a real-time passive millimeter wave flight simulator to permit pilot evaluation of a PMMW-equipped aircraft in a landing scenario. A working version of this simulator was completed. This work was carried out under the DARPA-funded PMMW Camera Technology Reinvestment Project (TRP), also known as the PMMW Camera DARPA Joint Dual-Use Project. In this final report for the Phase 1 activities, a year by year description of what the specific objectives were, the approaches taken, and the progress made is presented, followed by a description of the validation and imaging test results obtained in 1997.

37 MECHANICAL ENGINEERING

Includes mechanical devices and equipment; machine elements and processes. For cases where the application of a device or the host vehicle is emphasized see also the specific category where the application or vehicle is treated. For robotics see 63 Cybernetics, Artificial Intelligence, and Robotics; and 54 Man/System Technology and Life Support.

19940109131 NASA Goddard Space Flight Center, Greenbelt, MD, USA Goddard Space Flight Center robotics demo

Nov 1, 1988; In English; 15 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--93-185317; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Documentary footage of a fascinating look at Goddard Space Flight Center’s Robotic Capability during a demonstration by Goddard robotics engineers is presented.

Author

Documentation: NASA Programs; Robot Control; Robotics: Tests

199401010790 AEROSPACE PLANNING Bureau, NASA Lewis Research Center, Cleveland, OH, USA Robotics for Space Station tape 1

Sep 1, 1990; In English; 16 min. 18 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--93-190376; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video shows robotics for the Space Station.

CASI Robotics: Space Stations

19890819412 NASA Goddard Space Flight Center, Greenbelt, MD, USA Robotics in space

Nov 1, 1988; In English; 7 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--93-190382; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Produced for the AIAA symposium, this fast paced video shows robotics and tele robotics in the exploration of space.

CASI Robotics: Space Exploration

199401010794 NASA Goddard Space Flight Center, Greenbelt, MD, USA Robotics for Space Station, tape 1

Aug 1, 1989; In English; 30 min. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--93-190386; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Shot on location at the Goddard Robotics Laboratory, this video uses state of the art Wavefront animation to take the viewer on a tour of the robotics that may someday be a part of Space Station Freedom.

CASI Robotics: Space Station Freedom

199401010881 NASA, Washington, DC, USA Future of robotics

Apr 1, 1989; In English; 2 min. 3 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--93-190390; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This videotape describes robotic research such as the EVA retriever and virtual reality.

CASI Extravehicular Activity; Robotics; Virtual Reality

199401010874 NASA, Washington, DC, USA Unistick vehicle controller

Oct 1, 1986; In English; 4 min. 6 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--93-190416; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

A single stick control system, like the lunar rover, is presented as a control to enable disadvantaged individuals to drive with only one hand.

CASI Control Sticks; Manual Control; Technology Utilization

199401010983 NASA Lyndon B. Johnson Space Center, Houston, TX, USA EVA retriever demonstration

Apr 1, 1988; In English; 10 min. 30 sec. playing time, in color, with sound
 Report No.(s): NONP-NASA--VT--93-190307; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The EVA retriever is demonstrated in the Manipulator Development Facility (MDF). The retriever moves on the air bearing table ‘searching’ for its target, in this case tools ‘dropped’ by astronauts on orbit.

CASI Extravehicular Activity; Retrieval; Target Acquisition

199401010886 NASA Lyndon B. Johnson Space Center, Houston, TX, USA STS-41 VCS training with mission specialist Bruce Melnick and Bill Shepard

Sep 1, 1990; In English; 12 min. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--93-190310; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Astronaut Bill Shepard is shown using the Voice Command System (VCS) in the Manipulative Development Facility (MDF) under the eye of project engineers and crew trainers. The video shows VCS in action moving cameras around the MDF payload bay mockup.

CASI Remote Handling; Voice Control

199401027298 NASA Lewis Research Center, Cleveland, OH, USA High temperature NASP engine seal development

Jan 1, 1992; In English; 6 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--94-9950; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video details research being conducted at the Lewis Research Center on high temperature engine seal design for the National Aerospace Plane. To maximize the speed, the jets on the NASP extract oxygen from the air rather than carry large liquid fuel tanks; this creates temperatures within the jet of over 5000 F. To prevent these potentially explosive gases from escaping, researchers are developing new technologies for use in the engine seals. Two examples explained are the ceramic wafer seal and the braided ceramic rope seal. Computer simulations and laboratory footage are used to illustrate the workings of these seals. Benefits for other aerospace and industrial applications, as well as for the space shuttle, are explored.

CASI Aerospace Planes; Ceramics; Engine Parts; High Temperature; National Aerospace Plane Program; Refractory Materials; Seals (Stoppers)

199401029080 NASA Lewis Research Center, Cleveland, OH, USA The Stirling engine

Jan 1, 1992; In English; 7 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--94-12360; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video describes the Stirling engine, an external combustion engine which creates heat energy to power the motor, and can use many types of fuel. It can be used for both stationary and propulsion purposes and has advantages of better fuel economy and cleaner exhaust than internal combustion engines. The engine is shown being road tested at Langley Air Force Base.

**CASI**

*Engine Tests: Stirling Engines*

**199409029611** NASA Goddard Space Flight Center, Greenbelt, MD, USA

**Robotics Demo Peer Group review**

Jan 1, 1994; In English; 13 min. playing time, in color, with sound

Report No.(s): NON-P--NASA--VT--94--13714; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This animated color video shows the Shuttle robot arm performing construction on the SpaceLab.

**CASI**

*Remote Manipulator System: Robot Arms: Telerobotics*

**199409031006** Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA

**Teleoperation and supervised autonomy for ORU exchange**

Aug 1, 1990; In English; 12 min. 30 sec. playing time, in color, with sound

Report No.(s): NON-P--NASA--VT--94--15920; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video presents scenes demonstrating current telerobotics technology, specifically teleoperation with the aid of a computer.

**CASI**

*Teleoperators: Telerobotics*

**200009032743** NASA Kennedy Space Center, Cocoa Beach, FL, USA

**STS-36 : Turbo Pump Deinstalled and Being Inspected**

Feb. 07, 1990; In English; Videotape: 2 min. 42 sec. playing time, in color, no sound except background noise

Report No.(s): NON-P--NASA--VT--2000043338; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

STS-36 was the sixth shuttle mission dedicated to the Department of Defense. The mission was launched onboard the shuttle Atlantis, on Feb 28, 1990. This videotape opens with shots of the shuttle on the launch pad and shows the removal of a turbo pump, and visual and internal inspection of the pump.

**CASI**

*Inspection; Turbo Pumps: Space Shuttle Orbiter*

**200009034859** NASA Johnson Space Center, Houston, TX USA

**STS-36: Hydrogen Turbo Pump Removal Preps**

Feb. 02, 1990; In English; Videotape: 4 min. 50 sec. playing time, in color, with sound

Report No.(s): NON-P--NASA--VT--2000043339; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This live footagge shows workers preparing for the removal of the hydrogen pump turbo.

**CASI**

*Hydrogen: Turbo Pumps: Fuel Pumps: Removal*

**38 QUALITY ASSURANCE AND RELIABILITY**

Includes approaches to, and methods for reliability analysis and control, inspection, maintainability, and standardization.

**199409010847** NASA Marshall Space Flight Center, Huntsville, AL, USA

**IG nuts and bolts**

Jul 1, 1988; In English; 13 min. playing time, in color, with sound

Report No.(s): NON-P--NASA--VT--93--190450; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This videotape supports and explains the importance of Quality and Assurance Testing.

**CASI**

*NASA Programs: Quality Control*

**199409029215** NASA Marshall Space Flight Center, Huntsville, AL, USA

**Activities of the NASA centers**

Nov 1, 1989; In English; 15 min. playing time, in color, with sound

Report No.(s): NON-P--NASA--VT--94--12964; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video highlights the NASA centers and their activities. Additionally, the commitment of the NASA centers to quality assurance is presented.

**CASI**

*NASA Programs: Quality Control: Research Facilities*

**39 STRUCTURAL MECHANICS**

Includes structural element design, analysis and testing: dynamic responses of structures; weight analysis; fatigue and other structural properties; and mechanical and thermal stresses in structure. For applications see 05 Aircraft Design, Testing and Performance and 18 Spacecraft Design, Testing and Performance.

**199409027313** NASA Lewis Research Center, Cleveland, OH, USA

**Futurepath 3**

Oct 1, 1989; In English; 28 min. 55 sec. playing time, in color, with sound

Report No.(s): NON-P--NASA--VT--94--9962; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

The story of research and technology at NASA Lewis Research Center’s Structures Division is presented. The job and designs of the Structures Division needed for flight propulsion is described including structural mechanics, structural dynamics, fatigue, and fracture. The video briefly explains why properties of metals used in structural mechanics need to be tested. Examples of tests and simulations used in structural dynamics (bodies in motion) are briefly described. Destructive and non-destructive fatigue/fracture analysis is also described. The arc sprayed monolape (a composite material) is explained, as are the programs in which monolape plays a role. Finally, the National Aero-Space Plane (NASP or X-30) is introduced, including the material development and metal matrix as well as how NASP will reduce costs for NASA.

**CASI**


**43 EARTH RESOURCES AND REMOTE SENSING**

Includes remote sensing of earth features, phenomena and resources by aircraft, balloon, rocket, and spacecraft; analysis or remote sensing data and imagery; development of remote sensing products; photogrammetry; and aerial photographs. For instrumentation see 88 Instrum netion and Photography.

**199409016772** NASA, Washington, DC, USA

**Views from space**

Feb 1, 1990; In English; 3 min. 25 sec. playing time, in color, with sound

Report No.(s): NON-P--NASA--VT--93--190432; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This document shows how views from the shuttle provide valuable information as to the condition of earth.

**CASI**

*Earth Observations (From Space): Environmental Monitoring: Remote Sensing: Space Shuttle Orbiter*

**199409016824** NASA, Washington, DC, USA

**Combating malaria**

Nov 1, 1989; In English; 3 min. 25 sec. playing time, in color, with sound

Report No.(s): NON-P--NASA--VT--93--190407; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This videotape shows the use of remote sensing to better target mosquito larvae for more effective control.

CASI
Insects: Parasitic Diseases; Remote Sensing

1994/01/0837 NASA, Washington, DC, USA
Finding fish from above
Jan 1, 1991; In English; 2 min. 54 sec. playing time, in color, with sound
Report No(s): NONP-NASA-VT–93–190400; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This videotape shows how the use of satellites can help locate fish. The demonstration is intended for the fishing industry.

CASI
Fisheries; Fishing; Industries; Satellite Observation; Technology Utilization

1994/01/0861 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-26 Shuttle Earth views, April 1990, part 1 and part 2
Jan 1, 1996; In English; 1 hr. 30 min. playing time, in color, no sound
Report No(s): NONP-NASA-VT–93–190362; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
This video features Earth views compiled from a variety of footage shot during shuttle missions. Included are parts of North America, Africa, Europe, the Orient, and the Middle East.

CASI
Earth Observations (From Space); Space Shuttle Missions

1994/01/0936 NASA, Washington, DC, USA
Testing the waters from space
Dec 1, 1986; In English; 2 min. 48 sec. playing time, in color, with sound
Report No(s): NONP-NASA-VT–93–190421; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
It is explained how an infrared radiometer can accurately measure ocean surface temperature.

CASI
Earth Observations (From Space); Infrared Radiometers; Ocean Surface; Surface Temperature; Thermal Mapping

1994/01/0955 NASA, Washington, DC, USA
Improved mapping system
Jan 1, 1991; In English; 3 min. 19 sec. playing time, in color, with sound
Report No(s): NONP-NASA-VT–93–190441; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video explains the system of mapping terrain made more accurate with NASA technology.

CASI
Aerospace Technology Transfer; Geodetic Accuracy; Mapping; NASA Programs; Technology Utilization; Terrain; Topography

1994/02/0929 NASA John C. Stennis Space Center, Bay Saint Louis, MS, USA
A collection of The Movies
Mar 28, 1991; In English; 21 min. 52 sec. playing time, in color, with sound
Report No(s): NONP-NASA-VT–94–12934; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video contains computer-generated animation made from still data sets processed by computer to give the illusion of flying around the objects. 'Earth the Movie' uses cloud data from satellites and geographical data from maps. 'LA the Movie' was taken from LANDSAT data of the Los Angeles area. This was the first experimental demonstration of the technology. 'Mars the Movie' was taken from Viking orbiter data. 'Miranda' the Movie was made from a mosaic of 9 frames taken by Voyager of the Uranium moon, Miranda. The last movie is 'Monterey Bay'.

CASI
Earth Observations (From Space); Remote Sensing; Satellite Imagery

1994/02/0929242 NASA John C. Stennis Space Center, Bay Saint Louis, MS, USA
EOCAP: Commercial Earth observations program
Jan 1, 1994; In English; 8 min. playing time, in color, with sound
Report No(s): NONP-NASA-VT–94–12926; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The Earth Observations Commercial Applications Program (EOCAP) is described. This video explains how EOCAP has aided in the development of new and commercial products.

CASI
Earth Observations (From Space); Earth Observing System (EOS); Earth Resources; Resources Management

1996/02/05967 NASA Johnson Space Center, Houston, TX USA
Shuttle Earth Views, 1994, Part 4
Apr 26, 1995; In English; Videotape: 59 min. 30 sec. playing time, in color, no sound
Report No(s): NONP-NASA-VT–96–1996031301; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
In this fourth part of a four part video compilation of Space Shuttle's Earth views various geographical areas are shown, including both land and water masses. The views covered the Middle East (Saudi Arabia, Oman, Jordan, Egypt, Iran, Iraq, Kuwait, Bahrain, Qatar, and the United Arab Emirates), northeastern Africa (Yemen, Oman, Ethiopia, Somalia, and Djibouti), Russia, Siberia, India, SRI Lanka, Tibet, Bhutan, western China, and Mongolia. Various lakes, seas, rivers, and islands are shown, along with several pieces of film footage of sunsets, moon sets, clouds, and tropical storms. Each film clip has a heading that names the shuttle and the geographical location of the footage.

CASI
Space Shuttles; Earth Observations (From Space); Color Photography; Geographic Distribution

1996/02/05968 NASA Johnson Space Center, Houston, TX USA
Shuttle Earth Views, 1994, Part 2
Apr 26, 1995; In English; Videotape: 58 min. 55 sec. playing time, in color, no sound
Report No(s): NONP-NASA-VT–96–1996031299; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
In this second part of a four part video compilation of Space Shutte's Earth views various geographical areas are shown, including both land and water masses. The views cover the southwestern, south central, and eastern United States, and the Caribbean area, Mexico, Gulf of Mexico, and South America (Ecuador, Peru, Brazil, Bolivia, Argentina, Chile, and Paraguay). Each film clip has a heading that names the shuttle and the geographical location of the footage.

CASI
Space Shuttles; Earth Observations (From Space); Geographic Distribution; Color Photography

1996/02/05969 NASA Johnson Space Center, Houston, TX USA
Shuttle Earth Views, 1994, Part 1
Apr 26, 1995; In English; Videotape: 59 min. 17 sec. playing time, in color, no sound
Report No(s): NONP-NASA-VT–96–1996031298; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
In this first part of a four part video compilation of Space Shuttle's Earth views, Canada, the western coastal states of the USA (from Oregon to southern California), and the southwestern and lower south central USA (from Texas to the Gulf of Mexico) geographical areas are presented from space observations. Each film clip has a heading that names the shuttle and the geographical location of the footage.

CASI
Space Shuttles; Earth Observations (From Space); Geographic Distribution; Color Photography
In this third part of a four part video compilation of Space Shuttles’ Earth views various geographical areas are shown, including both land and water masses; The views cover South America, Asia (North Vietnam, Laos, Cambodia, China, Malaysia, Thailand, Java, various islands, Burma, Philippines, Taiwan, Guam), New Guinea, Australia, Morocco, Southern Europe (Spain, Portugal, Algeria, Italy, Sicily, Greece, Former Republic of Yugoslavia, Tunisia), and parts of the Middle East (Libya, Saudi Arabia, Egypt, Israel, Jordan, Sinai, Cyprus, Lebanon, Iraq), the Pacific Ocean, the Atlantic Ocean, the Indian Ocean, and the Mediterranean. Dead, Coral, Tyrrhenian, Adriatic, Ionian, Red, South China, Mindanao, Arafura, Sulu, Java, and China Seas. Each film clip has a heading that names the shuttle and the geographical location of the footage.

Shuttle Earth Views, 1994, Part 3

Apr 26, 1995; In English; Videotape: 59 min. 10 sec. playing time, in color, no sound
Report No.(s): NONP-NASA–VT–96–1996031300; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

In this third part of a four part video compilation of Space Shuttles’ Earth views various geographical areas are shown, including both land and water masses; The views cover South America, Asia (North Vietnam, Laos, Cambodia, China, Malaysia, Thailand, Java, various islands, Burma, Philippines, Taiwan, Guam), New Guinea, Australia, Morocco, Southern Europe (Spain, Portugal, Algeria, Italy, Sicily, Greece, Former Republic of Yugoslavia, Tunisia), and parts of the Middle East (Libya, Saudi Arabia, Egypt, Israel, Jordan, Sinai, Cyprus, Lebanon, Iraq), the Pacific Ocean, the Atlantic Ocean, the Indian Ocean, and the Mediterranean. Dead, Coral, Tyrrhenian, Adriatic, Ionian, Red, South China, Mindanao, Arafura, Sulu, Java, and China Seas. Each film clip has a heading that names the shuttle and the geographical location of the footage.

CASI
Space Shuttles: Earth Observations (From Space): Geographic Distribution; Color Photography; Europe; Middle East; Asia; South America; Australia; Indonesia: Mediterranean Sea; Atlantic Ocean; Pacific Ocean; Indian Ocean

1997002396 NASA Goddard Space Flight Center, Greenbelt, MD USA

Glacier Bay, Alaska, from the Ground, Air, and Space

Hall, Dorothy K., NASA Goddard Space Flight Center, USA; Feb. 23, 1997; In English; Videotape: 13 min. 13 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997032489; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This tape uses a combination of video, three-dimensional computer imaging, and still photographs to provide a descriptive overview of the life-cycle and environmental effects of glaciers. An historical prospective of researchers and the contribution that they have made to the understanding of glaciers and Glacier Bay is presented. The data collected from these scientists have been documented and used by means of scientific visualization in the hope of learning how glacial activity relates to climate changes.

CASI
Glaciers: Environment Effects; Scientific Visualization; Climate Change; Glacial Drift; Satellite Imagery; Imaging Techniques

1997004121 North Dakota Univ., Dept. of Space Studies, Grand Forks, ND USA

What is the Value of Space Exploration? – A Prairie Perspective

1995; 48p; In English; What is the Value of Space Exploration? - A Prairie Perspective, 1-2 Nov, 1995, Grand Forks, ND, USA; Sponsored by NASA Washington, USA
Contract/Grant: NAGw-4524
Report No.(s): NONP–NASA–VT–1997002334; No Copyright; Avail: CASI; A01, Hardcopy; A01, Microfiche; V02, Videotape-VHS

The symposium addresses different topics within Space Exploration. The symposium was led, using satellite downlinks, to several communities in North Dakota, the first such symposium of its type ever held. The specific topics presented by different community members within the state of North Dakota were: the economic, cultural, scientific and technical, political, educational and social value of Space Exploration. Included is a 22 minute VHS video cassette highlighting the symposium.

CASI
Conferences: North Dakota; Space Exploration; Education

1995004112 NASA Lewis Research Center, Cleveland, OH, USA

SAMPIE (Solar Array Module Plasma Interactions Experiment)

Feb 1, 1994; In English; 7 min. 20 sec. playing time, with sound
Report No.(s): NONP–NASA–VT–94–23160; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

SAMPIE is an in-space technology experiment that flew on STS-62. Its intent is to investigate the potentially damaging effects of space plasma (gases) on different types, sizes, and shapes of solar cells, solar modules, and spacecraft materials.

LeRC
Earth Orbital Environments: Plasma Interactions; Solar Arrays; Solar Cells
This videotape explains how NASA participated in controlling the devastating forest fires that consumed parts of Yellowstone National Park.

**CASI**

**Computer Graphics; Forest Fires; Total Ozone Mapping Spectrometer; Yellowstone National Park (ID-MT-WY)**

1994-01-0856 NASA Goddard Space Flight Center, Greenbelt, MD, USA


Feb 1, 1989; In English; 41 min. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--93--190253; No Copyright; Avail: CASI;
B01, Videotape-Beta; V03, Videotape-VHS

This video contains very graphic images of the seasonal accumulation and depletion of the world's ozone layer, as depicted by the Total Ozone Mapping Satellite (TOMS).

**CASI**

**Annual Variations: Ozone; Ozone Depletion; Ozonosphere; Total Ozone Mapping Spectrometer**

1994-01-0877 NASA, Washington, DC, USA

**What's killing the trees?**

Oct 1, 1987; In English; 3 min. 7 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--93--190419; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The possible causes for forest decline are discussed, including acid rain on Camel's Hump Mountain, Vermont.

**CASI**

**Acid Rain; Forest Management; Forests**

1994-01-0891 NASA, Washington, DC, USA

**Global Greenhouse Expedition**

Oct 1, 1990; In English; 3 min. 18 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--93--190411; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video covers an airborne study of greenhouse gases in the atmosphere.

**CASI**

**Atmospheric Composition; Global Warming; Greenhouse Effect**

1994-01-0892 NASA, Washington, DC, USA

**Arctic ozone**

Apr 1, 1989; In English; 4 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--93--190412; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Recent research on ozone done in the Arctic region is detailed and an update on information is gained from the previous Antarctic research.

**CASI**

**Arctic Regions; Ozone Depletion**

1994-01-0935 NASA, Washington, DC, USA

**Louisiana delta study**

Feb 1, 1990; In English; 3 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--93--190420; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The project studies the causes of land erosion and sediment transport in order to protect the Delta’s resources.

**CASI**

**Erosion; Land Management; Sediment Transport**

1994-01-0952 NASA, Washington, DC, USA

**Forest fire study**

Mar 1, 1987; In English; 3 min. 49 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--93--190413; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The impact of natural fires on our environment is examined, especially regarding greenhouse gases.

**CASI**

**Environment Effects; Forest Fires; Greenhouse Effect**

1994-01-14487 NASA, Washington, DC, USA

**Ozone hole**

Feb 1, 1998; In English; 3 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--94--198215; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The first segment of this video gives an overview of the Ozone Hole Airborne Arctic Stratospheric Expedition, an international effort using balloon payloads, ground-based instruments, and airborne instruments to study ozone depletion and the hole in the ozone over Antarctica which occurs every spring. False color imagery taken from NASA’s Nimbus 7 satellite which documents daily changes in ozone is also shown. The second segment of this video shows actual take-off and flight footage of the two aircraft used in the experiment: the DC-8 Flying Laboratory and the high flying ER-2.

**CASI**

**Airborne Equipment; Arctic Regions; Expeditions; Ozone Depletion; Research Aircraft; Satellite Imagery; Stratosphere**

1994-01-14994 NASA Goddard Space Flight Center, Greenbelt, MD, USA

**October 1979–1989 Southern Hemisphere total ozone as seen by TOMS**

Nov 1, 1989; In English; 7 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--94--198222; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This is raw video from space taken by the Total Ozone Mapping Satellite (TOMS).

**CASI**

**Ozone: Total Ozone Mapping Spectrometer**

1994-01-29645 NASA Ames Research Center, Moffett Field, CA, USA

**Ozone hole airborne Arctic stratospheric expedition (pre-flight)**

Feb 1, 1989; In English; 7 min. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--94--12928; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Ozone research done in the Antarctic region is detailed.

**CASI**

**Antarctic Regions; Ozone Depletion; Ozonometry; Stratosphere**

1994-01-36997 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA

**Insight to global change: EOS/SAR mission**

Jun 1, 1990; In English; 8 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--94--15911; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video presentation describes the methods and instrumentation used to help in determining future climate changes on Earth and explains the benefits of experimentation with synthetic aperture radar (SAR). It also gives a better understanding of the burning of fossil fuels, deterioration of the biosphere and deforestation of the rain forest which causes the green house effect.

**CASI**

**Climate Change; Earth Observing System (EOS); Remote Sensing; Synthetic Aperture Radar**

1995-01-04367 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

**The desert tortoise: A delicate balance**

Aug 1, 1992; In English; Prepared in cooperation with Dept. of the AF, Edwards AFB, CA; 14 min. 12 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--94--23639; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This award winning program looks at the efforts to preserve the desert tortoise in and around the Edwards Air Force Base, CA area. It also explains what
people should do if they come in contact with a tortoise. This video was produced in cooperation with Edwards Air Force Base.

**Endangered Species: Environment Protection; Mojave Desert (CA): Turtles**

1995#A110383 NASA Goddard Space Flight Center, Greenbelt, MD, USA

**Evolution of the Southern Hemisphere ozone hole as seen by TOMS from August 1979 to December 1991**

Aug 3, 1994; In English; 5 min. 45 sec. running time, in color, no sound
Report No.(s): NONP-NASA-VT-95-37003; No Copyright; Avail: CASI;B01, Videotape-Beta; V01, Videotape-VHS

The computerized color images of the Total Ozone Mapping Spectrometer (TOMS) showed the ozone distribution and levels in the Earth's southern hemisphere from August 1979 to December 1991 in this video. The annual variations were presented in a monthly format and the ozone levels were measured in Dobson units.

**Annual Variations; Atmospheric Circulation; Computer Graphics; Earth Atmosphere; Ozone Depletion; Southern Hemisphere; Total Ozone Mapping Spectrometer**

1994#A014174 NASA Marshall Space Flight Center, Huntsville, AL, USA

**CRRES to blaze new trails in orbit**

Jul 1, 1990; In English; 2 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-185329; No Copyright; Avail: CASI;B01, Videotape-Beta; V01, Videotape-VHS

The purpose of the Combined Release Radiation Effects Satellite in re-mapping and planning protection for future spacecraft is described.

**CRRES (Satellite): Radiation Protection; Spacecraft Shielding**

1994#A014099 NASA Goddard Space Flight Center, Greenbelt, MD, USA

**Southern and Northern Hemispheres total ozone as seen by TOMS**

Mar 1, 1990; In English; 24 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-190398; No Copyright; Avail: CASI;B01, Videotape-Beta; V01, Videotape-VHS

This videotape contains raw footage of this planet's upper atmosphere for use in the preparation of environmental and Earth monitoring presentation.

**Northern Hemisphere; Ozone; Southern Hemisphere; Total Ozone Mapping Spectrometer; Upper Atmosphere**

1995#A014148 NASA, Washington, DC, USA

**Global climate study**

Jul 1, 1989; In English; 3 min. 18 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-190410; No Copyright; Avail: CASI;B01, Videotape-Beta; V01, Videotape-VHS

The Global Surface Radiation Budget Experiment, which determines if current climate models are accurate, is explained.

**CASI Climate; Earth Radiation Budget Experiment; Radiation**

1995#A014572 NASA, Washington, DC, USA

**Dante's volcanoes**

Sep 1, 1994; In English; 14 min. 40 sec. playing time
Report No.(s): NONP-NASA-VT-95-25775; No Copyright; Avail: CASI;B01, Videotape-Beta; V01, Videotape-VHS

This video contains two segments: one a 0:01:50 spot and the other a 0:08:21 feature. Dante 2, an eight-legged walking machine, is shown during field trials as it explores the inner depths of an active volcano at Mount Spurr, Alaska. A NASA sponsored team at Carnegie Mellon University built Dante to withstand Earth's harshest conditions, to deliver a science payload to the interior of a volcano, and to report on its journey to the floor of a volcano. Remotely controlled from 80 miles away, the robot explored the inner depths of the volcano and information from onboard video cameras and sensors was relayed via satellite to scientists in Anchorage. There, using a computer generated image, controllers tracked the robot's movement. Ultimately the robot team hopes to apply the technology to future planetary missions.

**CASI Remote Control; Robotics; Robots; Volcanoes; Walking Machines**

1995#A016566 NASA, Washington, DC, USA

**Forecasting earthquakes**

Jan 1, 1994; In English; 11 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-95-35012; No Copyright; Avail: CASI;B01, Videotape-Beta; V01, Videotape-VHS

In this video there are scenes of damage from the Northridge Earthquake and interviews with Dr. Andrea Donelan, Geophysics at JPL, and Dr. Jim Delan, earthquake geologist from Cal. Tech. The interviews discuss earthquake forecasting by tracking changes in the earth's crust using antenna receiving signals from a series of satellites called the Global Positioning System (GPS).

**JPL Earth Crust; Earthquakes; Forecasting; Geological Surveys; Global Positioning System**

1995#A017243 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**The atmosphere below**

Jan 1, 1992; In English; Its Liftoff to Learning Series; 16 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-95-43941; No Copyright; Avail: CASI;B02, Videotape-Beta; V02, Videotape-VHS

In this educational “Liftoff to Learning” video series, astronauts from the STS-45 Space Shuttle Mission (Kathy Sullivan, Byron Lichtenberg, Brian Duffy, Mike Foale, David Leesmaa, Charlie Bolden, and Dirk Friman) explain and discuss the Earth's atmosphere, its needs, the changes occurring within it, the importance of ozone, and some of the reasons behind the ozone depletion in the Earth's atmosphere. The questions of: (1) what is ozone; (2) what has happened to the ozone layer in the atmosphere; and (3) what exactly does ozone do in the atmosphere, are answered. Different chemicals and their reactions with ozone are discussed. Computer animation and graphics show how these chemical reactions affect the atmosphere and how the ozone hole looks and develops at the south pole during its winter season appearance.

**CASI Annual Variations; Carbon Dioxide; Chemical Reactions; Chlorofluorocarbons; Climate Change; Earth Atmosphere; Global Warning; Nitrogen Compounds; Ozone; Ozone Depletion; Ozoneosphere**

1995#A020174 Maryland Public Television, Owings Mills, MD, USA

**Live from Antarctica: Then and now**

Jan 1, 1994; In English; Sponsored by NASA; NSF; PBS K-12 Learning Services; DOE; Amoco; and Duracell Its Passport to Knowledge Special Series; 54 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-95-42903; No Copyright; Avail: CASI;B03, Videotape-Beta; V03, Videotape-VHS

This real-time educational video series, featuring Camille Jennings from atmospheric flushes above thunderstorms from the SPRITE upper atmosphere optical emissions campaign.

**CASI Atmospheric Radiation; Thunderstorms; Upper Atmosphere**
Maryland Public Television, includes information from Antarctic scientists and interactive discussion between the scientists and school children from both Maryland and Hawaii. This is part of a ‘Passport to Knowledge’ series. In this part of the four-part Antarctic series, the history of Antarctica from its founding to the present, its mammals, plants, and other life forms are shown and discussed. The importance of Antarctica as a research facility is explained, along with different experiments and research that the facilities there perform.

19950120175 Maryland Public Television, Owings Mills, MD, USA
Live from Antarctica: The coldest, windiest place on Earth
Jan 1, 1994; In English; Sponsored by NASA; NSF; PBS K-12 Learning Services; DOE; Amoco; and Duracell Its Passport to Knowledge Special Series; 1 hr. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–42904; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
In this first part of a four-part ‘Passport to Knowledge Special’, hosted by Camille Jennings from Maryland Public Television, children from Maryland and Texas schools had the opportunity to directly interact with and ask questions of scientists and researchers in Antarctica live. The physical characteristics of Antarctica are featured, along with their effects on the human and microbiological organisms living in the region. The reasons behind the clothing worn in the Antarctic and the importance of the meteorological station are featured. Interviews with Professor Ian Dolziel (U of Texas) and Lt. Commander John Joseph, NSFA (the head of the Navy Meteorology Center) occur with the school children, along with actual video footage of the surrounding geological features and geography. The ‘Weatherops’ is located at McMurdo Station, Antarctica.

19950120176 Maryland Public Television, Owings Mills, MD, USA
Live from Antarctica, volume 4
Jan 1, 1994; In English; Sponsored by NASA; NSF; PBS K-12 Learning Services; DOE; Amoco; and Duracell Its Passport to Knowledge Special Series; 57 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–42905; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
In this fourth video of a four-part ‘Passport to Knowledge Special’, hosted by Camille Moody Jennings from Maryland Public Television, children from Maryland and Alaska public schools had the opportunity to directly interact with and ask questions of scientists and researchers from the Antarctic, and learn about the different geological and meteorological research going on in the Antarctic and McMurdo Base at McMurdo Sound. The scientists questioned included: Donal Manahan (biologist from Un. of So. California), who described some of the geological features from Hut Point, the historic hut built by Capt. Scott in 1902; SrRadar Anandakrishnan (Penn State Uni.), whose research includes ice plate movement of the central ice sheet and earthquakes and how they affect the sheet; and Lt. j.g. Kate McNitt, who spends her winters investigating the trace gases, aerosols, CFC’s and ozone levels over the Antarctic area that are affecting the seasonal ozone hole that appears in that region. Historical film footage of Capt. Scott’s exploration of the Antarctic is included.

CASI
Antarctic Regions; Biology; Botany; Histories; Meteorology; Research Facilities

47
METEOROLOGY AND Climatology

Includes weather observation forecasting and modification
19920925062 NASA Langley Research Center, Hampton, VA, USA
Inertial oscillation of a vertical rotating draft with application to a supercell storm: Video supplement to NASA Technical Paper 3230
Cotten, Robert C., NASA Langley Research Center, USA; Stock, Larry V., Hampton Univ., USA; Sep 15, 1992; In English; 8 min., color, sound, VHS
Contract(s)/Grant(s): RTP5 06–41–01
Report No.(s): NONP–NASA–VT–92–125097; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
In this video (8 min., color, sound, VHS), animation depicts the inertial oscillation of a new mathematical model (‘vertical rotating draft’) for spinning up a single supercell storm. The oscillation consists of a long quiescent phase when the draft is large in diameter and rotates anticlockwise and a short intense phase when the draft is small and cyclonic. During the intense phase, the rotating draft resembles a supercell. The physical basis for the oscillation is depicted by tracking air parcels in the draft as they move along inertial circles (projected on a horizontal plane), where the horizontal pressure gradient is zero and the Coriolis force balances the centrifugal force. A side view of the oscillation shows that contraction and expansion are linked, respectively, to buoyantly driven compressible downdraft and updraft. An aerial view tracks the draft as it moves above the surface of the Earth and turns to the right during the intense phase. Radar echoes from a supercell storm are superimposed for comparison. The data appear to support only the intense phase. A critical experiment would measure the predominantly downward flow that theoretically occurs before the right turn in a supercell track and causes contraction and spin-up.

CASI
Atmospheric Circulation: Atmospheric Models; Computerized Simulation; Meteorological Models; Oscillations; Rotation; Thunderstorms; Vertical Air Currents

1994010753 NASA Marshall Space Flight Center, Huntsville, AL, USA
Mesoscale lightning
Apr 1, 1989; In English; 2 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190453; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video tape addresses ongoing lightning research and how data is valuable to upcoming projects.

CASI
Lightning: Mesoscale Phenomena

1994010853 NASA, Washington, DC, USA
Wind shear and heavy rain
Jul 1, 1989; In English; 2 min. 56 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190250; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This document looks at research on countering the effects of wind shear and heavy rain situations on flight stability.

CASI
Aerodynamic Stability: Aircraft Stability; Rainstorm; Wind Shear

1994010957 NASA Ames Research Center, Moffett Field, CA, USA
Venus lightning
Jul 1, 1990; In English; 3 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190442; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This document presents scenes of earth lightning with dramatic sound, views of Venus clouds rotating, and diagrams of Venusian weather.

CASI
Cloud Cover; Lightning; Thunderstorms; Venus (Planet); Venus Clouds; Weather
1994/02/09/44 NASA John C. Stennis Space Center, Bay St. Louis, MS, USA
Hurricane Andrew mission
Sep 21, 1992; In English; 5 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--94--12925; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video explains how NASA used their information on space development
technology to assist in hurricane relief efforts.
CASI
Aerospace Engineering; Disasters; Hurricanes; Technology Utilization

48

OCEANOGRAPHY

Includes the physical, chemical and biological aspects of oceans and seas; ocean
dynamics, and marine resources. For related information see also 43 Earth
Resources and Remote Sensing.

1994/01/08/08 NASA Goddard Space Flight Center, Greenbelt, MD, USA
Coastal zone color scanner: Nimbus 7
May 1, 1989; In English; 15 min. 10 sec. playing time, in color, no sound
Report No.(s): NONP-NASA--VT--93--190388; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This videotape is a soundless presentation showing the global ocean color
for scientific purposes. The tape makes excellent B-roll for use in editing.
CASI
Coastal Zone Color Scanner: Nimbus 7 Satellite; Oceans; Water Color

1994/01/08/76 NASA, Washington, DC, USA
Ocean wave study
May 1, 1991; In English; 3 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--93--190418; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
An international study of waves in the Atlantic Ocean is explained. The
study is to determine the effect of the waves on the transfer of energy between
sea and air.
CASI
Air Water Interactions; Energy Transfer; Water Waves

51

LIFE SCIENCES (GENERAL)

Includes general research topics related to plant and animal biology (non-human);
ecology; microbiology; and also the origin, development, structure, and maintenance, of
animals and plants in space and related environmental conditions. For specific topics in
life sciences see categories 52 through 55.

1994/01/07/62 NASA, Washington, DC, USA
Plant research
Apr 1, 1985; In English; 3 min. 14 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--93--190462; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video presentation addresses Sennett research on the use of plants for
the purification of water and air for living in space and on Earth.
CASI
Air Purification; Plants (Botany); Water Treatment

1994/01/09/05 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-29 crew with student experiment
Feb 1, 1989; In English; 15 min. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--93--190342; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
John Vellinger, student experimenter, and Mark Deuser, Kentucky Fried
Chicken Sponsor, are shown explaining the Chicken Embryo experiment to the crew.
CASI
Chickens; Embryos; Experiment Design; Spaceborne Experiments; Students

1994/02/09/58 NASA, Washington, DC, USA
Assisting wine growers
Jan 1, 1993; In English; 6 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--94--12940; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video documents efforts at NASA Ames Research Center to assist
wine growers in the Napa valley in their fight against a root parasite which is
destroying millions of dollars worth of grape crops. NASA researchers are using
airborne scanners and remote sensing equipment to detect the parasite before it becomes
entrenched; so that growers can treat the harvest to resist infestation.
CASI
Crop Vigor; Infestation; Parasites; Remote Sensing; Vineyards

1994/02/29/64 NASA John F. Kennedy Space Center, Cocoa Beach, FL, USA
KSC wildlife show
Jan 1, 1994; In English; 30 min. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--94--12936; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
This video highlights footage of the many forms of animal and plant life
that inhabit the environs surrounding KSC. Shown are birds, alligators, butter-
flies, and plants as they react to shuttle launches and other activities emanating
from KSC.
CASI
KSCF Kennedy Launch Complex; Environment Effects; Habitats; Spacecraft
Launching; Wildlife

1995/06/02/871 Interface Video Systems, Inc., Washington, DC, USA
Life sciences program
Jan 1, 1995; In English; 17 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--95--46006; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
This Life Science Program video examines the variety of projects that study
both the physiological and psychological impacts on astronauts due to extended
space missions. The hazards of space radiation and microgravity effects on the
human body are described, along with these effects on plant growth, and the
performance of medical procedures in space. One research technique, which is
honored to provide help for future space travel, is the study of aquarums and their
life habits underwater.
CASI
Aerospace Medicine; Gravitational Effects; Gravitational Physiology; Life
Sciences; Long Duration Space Flight; NASA Space Programs; Psychological
Factors; Radiation Effects; Space Missions

2001/08/28/790 Indiana Univ.-Purdue Univ., Dept. of Geology, Indianapolis, IN
USA
Dino Fest
Rosenberg, Gary D., Editor, Indiana Univ.-Purdue Univ., USA; Wolberg, Donald L., Editor, Indiana Univ.-Purdue Univ., USA; Spencer, Randall S., Editor, Pal-
etiological Society, USA; 1994; 512p; In English, 24-26 Mar. 1994, Indianapo-
olis, IN, USA; Sponsored by Paleontological Society, USA; Videotape: 2 hours
playing time, in color, with sound
Contract(s)/Grant(s): NAG3-11657
Report No.(s): NONP-NASA--VT--997087409; No Copyright; Avail: CASI;
A22, Hardcopy; A04, Microfiche; V04, Videotape-VHS
This document and videotape represent the proceedings of the first
Dinofest conference, which was unprecedented in bringing together exhibits of
dinosaurs and other fossils and attracting many of the world's leading paleontolo-
gists and science educators, students and the public. This first Dinofest consisted
of scores of exhibits that included live and fossil plants, invertebrates and verte-
brates. Lasting three weeks, the event concluded with a three-day symposium,
providing dinosaur experts from around the country a forum to discuss their
research and ideas with the public and other scientists. The document presents
the talks of many of the scientists. The videotape is from an interactive television
broadcast relayed by a NASA satellite that enabled children at remote locations
to ask questions of a panel of dinosaur experts, literally reaching an audience
around the world.
CASI
Conferences; Fossils; Paleobiology; Paleontology; Reptiles
AEROSPACE MEDICINE

Includes the biological and physiological effects of atmospheric and space flight (weightlessness, space radiation, acceleration, and altitude stress) on the human being, and the prevention of adverse effects on those environments. For psychological and behavioral effects of aerospace environments see 53 Behavioral Sciences. For the effects of space on animals and plants see 51 Life Sciences.

199409010777 NASA, Washington, DC, USA

Cool suit
Feb 1, 1988; In English; 3 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP-NASA- VT–93–190437; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video explains how a boy born with no sweat glands now lives a relatively normal life.

CASI

Chronic Conditions: Cooling Systems; Diseases; Disorders; Medical Equipment; Skin; Sweat; Temperature Control

199409010780 NASA, Washington, DC, USA

New insulin pump
Feb 1, 1988; In English; 3 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA- VT–93–190440; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video details the Programmable Implant Medicine Monitoring System.

CASI

Endocrinology; Insulin; Medical Equipment; Medical Science; Pumps

199409010836 NASA, Washington, DC, USA

Space adaptation
May 1, 1991; In English; 3 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP-NASA- VT–93–190399; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video discusses space adaptation syndrome and a training simulator that may help astronauts adjust to microgravity before space flight.

CASI

Astronaut Training; Space Adaptation Syndrome; Training Simulators

199409010839 NASA, Washington, DC, USA

Laser artery repair
Apr 1, 1985; In English; 3 min. 51 sec. playing time, in color, with sound
Report No.(s): NONP-NASA- VT–93–190402; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This videotape demonstrates the capabilities of the excimer laser and the angioscope for treating heart disease.

CASI

Arteries; Excimer Lasers; Heart Diseases; Surgery

199409010895 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

Living well in space: Monitoring environment
Jul 1, 1989; In English; 9 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP-NASA- VT–93–190334; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video describes the Environmental Health Systems (EHS). Progress in experiments concerning water quality, toxicology, microbiology, and radiation are addressed.

CASI

Environmental Monitoring; Health; Space Habitats; Spacecraft Environments

199409010897 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

Living well in space: Ensuring crew capability
Jul 1, 1989; In English; 7 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP-NASA- VT–93–190355; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video describes the Exercise Countermeasure Facility (ECF). This video provides a comprehensive exercise program to allow astronauts to remain physically fit during extended stays in space. Featured are the Exercise Development Laboratory, the Exercise Physiology Laboratory, the Anthropomorphic and Biomechanical Laboratory, and the Artificial Intelligence Laboratory.

CASI

Aerospace Medicine; Astronauts; Biodynamics; Countermeasures; Exercise Physiology; Ecobiology; Gravitational Physiology; Physical Exercise; Physical Fitness; Physiological Effects

199409010899 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS–32 crew training for lower body negative pressure unit and AFE
Nov 1, 1989; In English; 13 min. playing time, in color, with sound
Report No.(s): NONP-NASA- VT–93–190272; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Astronauts Dunbar, Ivins, and Low are shown preparing for the checkouts of the Lower Body Negative Pressure (LBNP) and American Flight Echocardiograph (AFE) tests. Dunbar gets into the LBNP suit, while technicians look on.

CASI

Astronaut Training; Astronauts; Echocardiography; Lower Body Negative Pressure; Physiological Tests; Spacecrafts; Weightlessness Simulation

199409010894 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

Answering the space medicine challenge
Aug 1, 1988; In English; 15 min. playing time, in color, with sound
Report No.(s): NONP-NASA- VT–93–190308; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video describes the Health Maintenance Facility (HMF). The HMF provides inflight medical care including prevention, diagnosis, and care during transport if the patient must be evacuated. A comparison to medical services found in a large hospital is used to describe the HMF's subsystems.

CASI

Aerospace Medicine; Aerospace Safety; Clinical Medicine; Health; Medical Equipment; Medical Services; Space Stations

19950904138 NASA, Washington, DC, USA

SpaceLab Life Sciences–1
Aug 1, 1991; In English; 3 min. 53 sec. playing time, in color, with sound
Report No.(s): NONP-NASA- VT–93–23142; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

STS-40, carrying SpaceLab Life Sciences–1, was the first dedicated to study the human body in microgravity. Experiments regarding adaptation to space and...
readaptation to the world of gravity are discussed in this video. SpaceLab is another precursor to long-term science aboard the space station.

Aerospace Technology Transfer; Computer Aided Design; Medical Science; Ultrasonic Tests

Telemedicine Spacebridge

This video is an overview on NASA's Telemedicine Spacebridge Project, which lets US doctors consult with Russian clinicians thousands of miles away by demonstration of the feasibility of live, two-way, full-bandwidth video as a medical tool.

Clinical Medicine; International Cooperation; Medical Electronics; Medical Equipment; Medical Services; Teleconferencing; Video Communication; Video Equipment

Robotic Assisted Microsurgery – RAMS FY’97

JPL and Microdexterity Systems collaborated to develop new surgical capabilities. They developed a Robot Assisted Microsurgery (RAM) tool for surgeons to use for operating on the eye, ear, brain, and blood vessels with unprecedented dexterity. A surgeon can hold the surgical instrument with motions of 6 degrees of freedom with an accuracy of 25 microns in a 70 cu cm workspace. In 1996 a demonstration was performed to remove a microscopic particle from a simulated eyeball. In 1997, tests were performed at UCLA to compare telerobtics with mechanical operations. In 5 out of 7 tests, the RAM tool performed with a significant improvement of preciseness over mechanical operation. New design features include: (1) amplified forced feedback; (2) simultaneous slave robot instrumentation; (3) index control switch on master handle; and (4) tool control switches. Upgrades include: (1) increase in computational power; and (2) installation of hard disk memory storage device for independent operation and independent operation of forceps. In 1997 a final demonstration was performed using 2 telerobtics simultaneously in a microsurgery suture procedure to close a slit in a thin sheet of latex rubber which extended the capabilities of microsurgery procedures. After completing trials and demonstrations for the FDA the potential benefits for thousands of operations will be exposed.

CASI

Robotic Assisted Microsurgery: Surgical Instruments; Robotics: Degrees of Freedom: Surgery; Robots

BEHAVIORAL SCIENCES

Includes psychological factors; individual and group behavior; crew training and evaluation; and psychiatric research.

Teacher in space

Dec 1, 1985; In English; 4 min. 50 sec. playing time, in color, with sound

This video presentation covers the Teacher in Space program from the selection and training processes to the selection and training of Christa McAuliffe and Barbara Morgan.

Astronauts: Education; Instructors: NASA Programs

Astronauts number 1

Sep 1, 1988; In English; 26 min. 51 sec. playing time, in color, with sound

The story of the selection and training of the seven Mercury astronauts is presented. A re-release of US Project Mercury.

Astronaut Training: Mercury Project: Personnel Selection

Crew Training Clip

Nov. 15, 2001; In English; Videotape: 40 min. playing time, in color, with sound

This video shows clips of the Expedition 4 crewmembers, Commander Yuri Usanenkov and Flight Engineers Carl Walz and Daniel Bursch, during various parts of their training, including T-38 operations at Ellington, training in the virtual reality laboratory, Hydrobab training in Russia, International Space Station (ISS) food selection, and ISS Hab equipping and procedures in the Space Station Mockup and Test/Training Facility (SSTF).

Spacecrews: Astronaut Training: International Space Station

MAN/SYSTEM TECHNOLOGY AND LIFE SUPPORT

Includes human factors engineering; bionics, man-machine, life support, space suits and protective clothing. For related information see also 18 Space Transportation and 62 Aerospace Medicine.

STS–30 Magellan IUS/EVA training in WETF

Apr 1, 1989; In English; 11 min. playing time, in color, with sound

Astronauts Thaggard and Lee suit up and enter the WETF to practice working the Magellan mockup in a zero-g environment.

Extravehicular Activity; Inertial Upper Stage: Magellan Project (NASA); Microgravity: Space Shuttle Mission 61-A: Space Shuttle Payloads: Weightlessness Simulation

New prosthetic devices

May 1, 1991; In English; 3 min. 36 sec. playing time, in color, with sound

Using robotic techniques, NASA researchers have developed end-effec-
tors designed to meet individual needs of hand and below the elbow amputees that are more efficient than the traditional hook.

**Author**

**End Effectors: Prosthetic Devices: Robotics**

1994090142 NASA, Washington, DC, USA

**Recycling in space**

May 1, 1991; In English; 3 min. 11 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--93--185325; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

NASA's effort to provide a completely enclosed life support system that
offers food and recycled air, water, and waste for long-duration space travel or settlements is explained.

**Author**

Closed Ecological Systems; Environmental Engineering; Long Duration Space Flight: Recycling

19940101317 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**STS-35 EVA payload training in WETF**

Apr 1, 1990; In English; 11 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--93--190289; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Footage showing astronauts Lounge and Hoffman donning EVA suits while astronaut Durmance watches is presented. The footage also shows Lounge and Hoffman working on an ASTRO-1 mockup in the WETF.

**Author**

Closed Ecological Systems; Environmental Engineering; Long Duration Space Flight: Recycling

19940101721 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**STS-35 crew training: EMU walk through and EVA prep and post**

Apr 1, 1990; In English; 12 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--93--190285; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video tape shows astronauts Hoffman, Gardner, and Lounge donning the Extravehicular Mobility Unit (EMU) and performing checks on the system.

**Author**

Closed Ecological Systems; Environmental Engineering; Long Duration Space Flight: Recycling

19940101722 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**STS-35 Crew training: bailout in CCT, firefingting, TAGS class and bailout in WETF**

Apr 1, 1990; In English; 30 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--93--190286; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Several aspects of crew training are shown including bailout exercises from the CCT and in the Weightless Environment Training Facility.

**Author**

Closed Ecological Systems; Environmental Engineering; Long Duration Space Flight: Recycling

19940101751 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**Brown, Mark**

Jul 1, 1989; In English; 8 min. 20 sec. playing time, in color, no sound
Report No.(s): NONP-NASA-VT--93--190302; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Mark Brown is shown during ASCAN training programs including parachute and classroom instruction.

**Author**

Closed Ecological Systems; Environmental Engineering; Long Duration Space Flight: Recycling

19940101812 NASA, Washington, DC, USA

**Supporting life in space**

Apr 1, 1989; In English; 3 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--93--190391; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This videotape examines NASA research regarding the growing of plants for food during long-duration space travel. The primary focus is on the Controlled Ecological Life Support System (CELLS).

**Author**

Closed Ecological Systems; Environmental Engineering; Long Duration Space Flight: Recycling

19940101813 NASA, Washington, DC, USA

**Ancient skills: Modern use**

Nov 1, 1988; In English; 2 min. 42 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--93--190392; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This videotape shows Navajo Indians involved in making the spacesuits of the future.

**Author**

Closed Ecological Systems; Environmental Engineering; Long Duration Space Flight: Recycling

19940101826 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**STS-35 EVA prep in CCT: Grabe, Lee, and Thagard**

Apr 1, 1989; In English; 5 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--93--190370; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Astronauts Grabe, Thagard, and Lee practice donning extravehicular activity (EVA) suits while in the CCT.

**Author**

Closed Ecological Systems; Environmental Engineering; Long Duration Space Flight: Recycling

19940101832 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**STS-29 pre-launch and post-landing egress**

Mar 1, 1989; In English; 10 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--93--190372; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

This video shows crew emergency egress training. It includes practice after being hoisted to the ceiling and descending a rope.

**Author**

Closed Ecological Systems; Environmental Engineering; Long Duration Space Flight: Recycling

19940101857 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**STS-37 CETA evaluation with Ross**

Jul 1, 1990; In English; 5 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--93--190292; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video shows Astronaut Ross donning an EVA suit and performing various tasks on the Crew and Equipment Translation Aid (CETA) equipment.

**Author**

Closed Ecological Systems; Environmental Engineering; Long Duration Space Flight: Recycling

19940101886 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**STS-34 final bench review**

Oct 1, 1989; In English; 14 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--93--190261; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The Space Shuttle crew is shown looking through equipment they will carry into orbit, including clothing, personal effects, and camera.

**Author**

Closed Ecological Systems; Environmental Engineering; Long Duration Space Flight: Recycling

19940101887 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**STS-34 crew bailout exercise in CCT**

Aug 1, 1989; In English; 10 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--93--190262; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video shows crews practicing bailout procedures in the CCT.

CASI
Astronaut Training: Bailout; Space Shuttle Missions

1994010888 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-34 Chang-Diaz and E. Baker during Galileo contingency training in WETF
Sep 1, 1989; In English; 16 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190263; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
Chang-Diaz and Baker are shown donning suits for submersion in the Weightless Environment Training Facility (WETF). Once in the water, they work on the Galileo mockup.
CASI
Astronaut Training: Crew Procedures (Inflight); Weightlessness Simulation

1994010889 NASA, Washington, DC, USA
Firefighters breathing system
Apr 1, 1989; In English; 2 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190409; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
The improvement of protective gear for fire fighters is presented, including the breathing system.
CASI
Breathing Apparatus; Protective Clothing

1994010898 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
International food research project
Oct 1, 1989; In English; 5 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190337; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Dr. Selma Ahmed, an associate professor of Human Nutrition, explains the purpose of the international Food Research Project to food tasters.
CASI
Food; International Cooperation; Nutrition

1994010902 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-29 EVA prep in FFT
Jan 1, 1990; In English; 11 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190341; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Astronauts Blaha, Springer, and Bagian are shown donning suits in the FFT. Blaha runs through checklists while the other two suit up in the airlock.
CASI
Astronauts; Extravehicular Activity; Space Shuttle Missions; Space Transportation System Flights

1994010904 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-32 LDEF training in WETF with Low and Dunbar
Nov 1, 1989; In English; 14 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190270; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Astronauts Low and Dunbar are shown entering the Weightless Environment Training Facility to perform tasks they might be called on to do if extravehicular activity were required during their mission to retrieve the Long Duration Exposure Facility.
CASI
Astronaut Training; Astronauts; Extravehicular Activity; Long Duration Exposure Facility; Payload Retrieval (STS); Spacecrews; Weightlessness Simulation

1994010909 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-29 crew food tasting in building 45
Jan 1, 1989; In English; 3 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190345; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
The crew is shown tasting food that will be served on the Space Shuttle.
CASI
Consumables (Spacecrew Supplies); Food; Spacecrews; Taste

1994010910 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-32 bailout training in WETF
Dec 1, 1989; In English; 13 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190273; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
The crew is shown practicing water survival techniques in the Weightless Environment Training Facility in case of a bailout during the launch or landing.
CASI
Astronaut Training: Bailout; Water Landing

1994010912 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-29 crew bailout in WETF
Feb 1, 1989; In English; 7 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190346; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
The crew is shown donning life vests and being dropped into the WETF. Once in the water, the crew is trained on water survival techniques.
CASI
Astronaut Training: Bailout; Marine Environments; Protective Clothing; Spacecrews; Survival; Tests; Water

1994010914 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-28 Adamson and Brown EMU walk through
Jul 1, 1989; In English; 10 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190347; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Astronauts Adamson and Brown are shown working on EMU suit, donning EVA gear, and entering vacuum chamber.
CASI
Astronaut Training: Astronauts; Extravehicular Activity; Extravehicular Mobility Units; Spacecrews

1994010915 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–33 emergency egress training
Nov 1, 1989; In English; 15 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190322; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
The STS-33 crew is shown donning flight survival gear, then entering the CCT for bailout exercises. After completion of the exercises in the CCT, the bailout procedures are practiced in the FFT.
CASI
Astronaut Training: Bailout; Egress

1994010917 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
1990 ASCAN land survival training
Feb 1, 1991; In English; 32 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190324; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
This video tape shows astronaut candidates training at Fairchild AFB with signal flares, setting up tents, making fires, fishing, and signaling a helicopter with mirrors and radios.
CASI
Astronaut Training: Survival

1994010918 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
1990 ASCAN ground egress/parasail
Feb 1, 1991; In English; 32 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190325; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
This video tape shows astronaut candidates practicing ground egress and parachute landing procedures.

CASI

Astronaut Training: Egress: Parachute Descent

19940010919 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

Crew escape certification test

Aug 1, 1988; In English; 2 min. 50 sec. playing time, in color, with sound

Report No.(s): NONP-NASA—VT—93—190327; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video tape shows the Shuttle hatch jettison test at Rockwell facilities. The video also shows a Shuttle escape pole deployment test from a NASA aircraft, and an emergency egress test performed by a volunteer Navy parachutist using the pole and a parachute escape system.

CASI

Egress: Escape Systems: Hatches: Jettisoning: Space Shuttle Orbiters

19940010928 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS—27 EMU and RMS contingency training

Dec 1, 1988; In English; 23 min. playing time, in color, with sound

Report No.(s): NONP-NASA—VT—93—190348; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

This video shows astronauts donning their EMU suits and Astronauts Shepard and Ross training in the WETF on the RMS, which will not come down.

CASI

Astronaut Training: Astronauts: Extravehicular Mobility Units: Spacecrews

19940010929 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-33 Carter and Thornton during WETF activities

Nov 1, 1989; In English; 8 min. 54 sec. playing time, in color, with sound

Report No.(s): NONP-NASA—VT—93—190268; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Astronauts Carter and Thornton are shown suiting up for work in the WETF (Weightless Environment Training Facility). (The payload mockup shown is not related to the STS-33 mission. It is a mockup of the Upper Atmosphere Research Satellite (UARS), which is scheduled to fly in the early 1990’s.)

CASI

Astronaut Training: Astronauts: Space Flight Training: Spacecrews: Weightslessness Simulation

19940010931 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-27 crew post—insertion deorbit—prep in CCT

Nov 1, 1988; In English; 14 min. playing time, in color, with sound

Report No.(s): NONP-NASA—VT—93—190350; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The crew is shown donning harness backpacks and suits for post-insertion activities in the CCT. Once on the CCT middeck, astronauts take off suits and practice stowing seats.

CASI

Astronauts: Space Shuttle Missions: Space Transportation System Flights: Spacecrews

19940010933 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS—27 crew fire training and glove molding

Nov 1, 1988; In English; 14 min. 30 sec. playing time, in color, with sound

Report No.(s): NONP-NASA—VT—93—190352; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The crew is shown during fire training exercises and space suit glove molding.

CASI


19940010962 NASA, Washington, DC, USA

Food for space

Jan 1, 1985; In English; 3 min. 20 sec. playing time, in color, with sound

Report No.(s): NONP-NASA—VT—93—190466; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video explores the food preparation and selection over the years of space flight.

CASI

Consumables (Spacecrew Supplies): Food: Preparation

19940010968 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS—31 Hubble space telescope contingency training in WETF with McCandless and Sullivan

Feb 1, 1989; In English; 13 min. playing time, in color, with sound

Report No.(s): NONP-NASA—VT—93—190277; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Astronauts McCandless and Sullivan are shown suiting up for training with a telescope mockup in the Weightless Environment Training Facility (WETF). CASI

Astronaut Training: Space Suits: Weightslessness Simulation

19940010980 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS—38 crew training: Habitation equipment procedures, bailout in CCT, 70mm photo class, EVA prep and post, and firefighting

Jul 1, 1990; In English; 20 min. playing time, in color, with sound

Report No.(s): NONP-NASA—VT—93—190291; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Several aspects of crew training are shown, including habitation equipment procedures and bailout procedures (both in CCT), 70mm photo class, EVA prep and post, and firefighting.

Author (revised)


19940010981 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

Adamson, Jim

Jul 1, 1989; In English; 11 min. 34 sec. playing time, in color, with sound

Report No.(s): NONP-NASA—VT—93—190304; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Jim Adamson is shown during ASCAN training programs including T-38 training, parachute and life raft training, and classroom instruction.

CASI

Parachutes: T-38 Aircraft

19940010987 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS—37 astronauts Ross and Apt during CETA hardware checkout

Mar 1, 1990; In English; 7 min. 15 sec. playing time, in color, with sound

Report No.(s): NONP-NASA—VT—93—190293; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Astronauts Ross and Apt are shown checking out Crew and Equipment Translation Aid (CETA) equipment.

CASI


19940010989 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS—36 crew EVA prep and post—training, bailout exercises, final bench review

Feb 1, 1990; In English; 14 min. 30 sec. playing time, in color, with sound

Report No.(s): NONP-NASA—VT—93—190295; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The crew is shown in the CCT airlock checking out EVA equipment and practicing bailout exercises. They are also shown looking over equipment they will carry into space including medical equipment, clothing, and cameras.

CASI


19940010997 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS—26 crew clothing, glove molding, and personal hygiene

Jul 1, 1988; In English; 19 min. 41 sec. playing time, in color, with sound

Report No.(s): NONP-NASA—VT—93—190317; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
This videotape shows the crew during various phases of flight clothing fit checks, space suit glove molding, and selection of personal hygens articles for use onboard the Shuttle.
CASI
Space Suits; Space Transportation System Flights; Spacecraft

1994011834 NASA, Washington, DC, USA
Space suit design
Jan 1, 1987; In English; 3 min. 48 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-190468; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video shows how space suits evolved to those being designed for the Space Station Freedom.
CASI
Design Analysis; Space Suits

1994011841 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Mark 111 suit test evaluation in WETF with Jerry Ross
Oct 1, 1989; In English; 7 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-198941; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Astronaut Jerry Ross tests the new Mark 111 suit. The Mark 111 could be used as the main spacesuit on the Space Station Freedom.
CASI
Design Analysis; Space Suits

19950116854 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Living in space
Brown, Ray, editor, NASA Lyndon B. Johnson Space Center, USA; Jan 1, 1993; In English; Its Liftoff to Learning Series; 9 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-95-43939; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
In this educational video from the 'Liftoff to Learning' series, astronauts from the STS-55 Mission (Ken Cockrell, Mike Foale, Ellen Ochoa, Steve Oswald, and Ken Cameron) explain and show through demonstrations how microgravity affects the way astronauts live onboard the Space Shuttle, and how these same daily habits or processes differ on Earth. A tour of the Space Shuttle is given, including the sleeping compartments, the kitchen area, the storage compartments, and the Waste Collection System (or WCS, as they call it). Daily habits (brushing teeth, shampooing hair and bathing, eating,...) are explained and actively illustrated, along with reasons of how these applications differ from their employment on Earth.
CASI
Aircraft Compartments: Crew Workstations; Earth Gravitation; Education; Gravitational Effects; Microgravity; Space Shuttle Missions; Spaceborne Experiments; Spacecraft Modules

19950122759 Lockheed Engineering and Sciences Co., Washington, DC, USA
Lockheed Stabilizer System for space exercise equipment
Feb 25, 1992; In English; Sponsored by NASA, Washington; 5 min. playing time, in color, without sound
Report No.(s): NONP-NASA-VT-95-46004; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Through the use of computer animation, the Lockheed Stabilizer System for spaceborne exercise equipment is shown. A bicycle mounted onto a shuttle floor demonstrates the range of vibrations that occur without the Lockheed Stabilizer. There is animation of the stabilizer system’s tests and normal protein crystal growth in microgravity environments. Actual short clips of astronauts exercising in space are also presented.
CASI
Computer Animation; Control Stability; Control Systems Design; Microgravity; Physical Exercise; Stabilized Platforms; Vibration Effects

20010929212 NASA Johnson Space Center, Houston, TX USA
1995 ASCAN Training: Land Survival
Jan. 01, 1995; In English; Videotape: 61 min. 28 sec. playing time, in color, with sound; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
Footage shows astronaut candidates during land survival training, where they are seen performing such activities as constructing shelters, making nets, and finding food.
CASI
Astronaut Training; Survival

20010929214 NASA Johnson Space Center, Houston, TX USA
ASCAN Training: Egress and Parasail Training
Jan. 01, 1995; In English; Videotape: 49 min. 52 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2001041439; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Footage shows astronaut candidates during emergency egress and parasail training, performing such activities as practicing seat ejection procedures, power line landing, and parachute landing and release.
CASI
Astronaut Training; Egress; Parasail Descent

20010929253 NASA Lewis Research Center, Cleveland, OH USA
Moonwalking Series, Episode 2: Adapting to a Space Environment
[2001]; In English; Videotape: 29 min. 13 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2001095020; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This episode (second in a four-part series) shows the procedures Apollo operators used in order to make sure the astronauts would be able to survive in outer space, namely testing man's limitations and preferences (atmospheric pressure, temperature range, breathing gas, acceleration protection) and adapting the Columbia Module to account for these limitations. This show explains the function of the different stages of the moon rocket, i.e., how the stages separate and what becomes of them. We pick up the moonwalk story by looking back at some of the old classic space films that were a Hollywood perspective on future space travel.
Author (revised)
Aerospace Environments; Astronauts; Moon; Astronaut Training; Extravehicular Activity

55 EXOBIOLoGY
Includes astrobiology, planetary biology, and extraterrestrial life. For the biological effects of aerospace environments on humans see 52 Aerospace medicine; on animals and plants see 51 Life Sciences. For psychological and behavioral effects of aerospace environments see 53 Behavioral Science.

19940827883 NASA Ames Research Center, Moffett Field, CA, USA
The quest for contact
Feb 1, 1992; In English; 32 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-99778; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
This video details the history and current efforts of NASA's Search for Extraterrestrial Intelligence program. The video explains the use of radio telescopes to monitor electromagnetic frequencies reaching the Earth, and the analysis of this data for patterns or signals that have no natural origin. The video presents an overview of Frank Drake's 1960 'Ozma' experiment, the current META experiment, and planned efforts incorporating an international Deep Space Network of radio telescopes that will be trained on over 800 stars.
CASI
Deep Space Network; Extraterrestrial Intelligence; Project Seti; Radio Telescopes
COMPUTER OPERATIONS AND HARDWARE

Includes hardware for computer graphics, firmware and data processing. For components see 33 Electronics and Electrical Engineering. For computer vision see 65 Cybernetics, Artificial Intelligence and Robotics.

1994/0049136 NASA Ames Research Center, Moffett Field, CA, USA
Cray Y-MP
Nov 1, 1988; In English; 12 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-18532; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video shows the installation of the Cray Y-MP, a computer four times faster than any other computer at Ames. Computer room scenes, aeronautical and space applications, and other non-aerospace applications are also included.

1994/0019755 NASA Marshall Space Flight Center, Huntsville, AL, USA
NASA Spacelink computer
May 1, 1989; In English; 2 min. 13 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-190455; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video tape introduces Spacelink, a computer resource that educators and students can access. The purpose of Spacelink is to stimulate interest in math and science.

COMPUTER PROGRAMMING AND SOFTWARE

Includes software engineering, computer programs, routines, algorithms, and specific applications, e.g., CAD/CAM. For computer software applied to specific applications, see also the associated category.

1994/006163 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Six degree of freedom
Nov 1, 1990; In English; 7 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-185310; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This animated clip shows operations of the Six Degree of Freedom (DOF) computer during a simulated mission. The clip is intercut with live video of a shuttle crew 'docking' with Space Station Freedom.

1994/0058211 NASA Langley Research Center, Hampton, VA, USA
EM-ANIMATE: A computer program for displaying and animating electromagnetic near-field and surface-current solutions. Video supplement to NASA Technical Memorandum 4539
Aug 1, 1991; In English; 6 min., color, sound, VHS
Contract(s)/Grant(s): RTOP 505-59-76-03
Report No.(s): NONP-NASA-VT-94-12970; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
In this video, several examples of electromagnetic field and surface-current animation sequences are shown to demonstrate the visualization capabilities of the EM-ANIMATE computer program. These examples show the animation of total and scattered electric near fields from test bodies of a flat plate, a corner reflector, and a sphere. These test cases show the electric-field behavior caused by different scattering mechanisms through the animation of electromagnetic data from the EM-ANIMATE routine.

1995/004143 NASA, Washington, DC, USA
Virtual reality
Dec 1, 1991; In English; 3 min. 32 sec. playing time, with sound
B01, Videotape-Beta; V01, Videotape-VHS
This video presentation discusses how virtual reality enables scientists to "explore" other worlds without leaving the laboratory. The applicability of virtual reality for scientific visualization is also discussed.

Telepresence media resource tape
Jan 31, 1992; In English; Sponsored by NASA, Washington; 9 min. playing time, in color, with sound
B01, Videotape-Beta; V01, Videotape-VHS
Dr. Michael McGreevey (NASA's Ames Research Center) explains what virtual reality is and how NASA uses this concept. Computer animation of different planets using virtual reality is shown. One Ames research tool, the Virtual Wind Tunnel allows air flow to be studied inside the tunnel from any...
conceivable location. Dr. Carol Stoker (NASA's Ames Research Center) comments on Telepresence, one form of virtual reality.

CASI
Computer Simulation: Man Machine Systems; Motion Simulation; Teleoperators; Virtual Reality: Wind Tunnels

19960001040 California Inst. of Tech., Irvine, CA, USA
The story of pi
Apostol, Tom M., editor, California Inst. of Tech., USA; Jan 1, 1989; In English; Sponsored by NASA, Washington and NSF Its Project Mathematics Series; 26 min. 13 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-95-680010; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The early history and the uses of the mathematical notation - pi - are presented through both film footage and computer animation in this 'Project Mathematics' series video. Pi comes from the first letter in the Greek word for perimeter. Archimedes and early Greek mathematician, formulated the equations for the computation of a circle's area using pi and was the first person to seriously approximate pi numerically, although only to a few decimal places. By 1985, pi had been approximated to over one billion decimal places and was found to have no repeating pattern. One use of pi is the application of its approximation calculation as an analytical tool for determining the accuracy of supercomputers and software designs.

CASI
Applications of Mathematics; Computation; Computer Animation; History

19960010325 NASA Johnson Space Center, Houston, TX, USA
Images of Earth and Space: The Role of Visualization in NASA Science
Mar. 06, 1996; In English; Videotape: 17 min. 14 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-96-1996060600; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Fly through the ocean at breakneck speed. Tour the moon. Even swim safely in the boiling sun. You can do these things and more in a 17 minute virtual journey through Earth and space. The trek is by way of colorful scientific visualizations developed by the NASA/Goddard Space Flight Center’s Scientific Visualization Studio and the NASA HPCC Earth and Space Science Project investigators. Various styles of electronic music and lay-level narration provide the accompaniment.

CASI
Scientific Visualization: Computational Fluid Dynamics; Computer Simulation: Education

63
CYBERNETICS, ARTIFICIAL INTELLIGENCE AND ROBOTICS
Includes feedback and control theory, information theory, machine learning, and expert systems. For related information see also 54 Man/System Technology and Life Support.

19940110142 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Programmable Remapper project
Jul 1, 1990; In English; 23 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-1990305; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video shows how the Remapper Project helps with many problems including vision problems. It shows the Remapper in action as it tracks several objects around the moon. The video is narrated by Dr. Richard Juday, Robotic Vision, Manager at the Johnson Space Center.

CASI
Computer Vision; Image Resolution; Robot Sensors; Tracking (Position)

64
NUMERICAL ANALYSIS
Includes iteration, differential and difference equations, and numerical approximation.

19960001046 California Inst. of Tech., Irvine, CA, USA
Sines and cosines. Part 1 of 3
Apostol, Tom M., editor, California Inst. of Tech., USA; Jan 1, 1994; In English; Sponsored by NASA, Washington and NSF Its Project Mathematics Series; 30 min. 7 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-95-67470; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

In this 'Project Mathematics' series video, the addition formulas of sines and cosines are explained and their real life applications are demonstrated. Both film footage and computer animation is used. Several mathematical concepts are discussed and include: Poincargy's theorem concerned with quadrilaterals; the difference between a central angle and an inscribed angle; sines and chord lengths; special angles; subtraction formulas; and a application to simple harmonic motion. A brief history of the city Alexandria, its mathematicians, and their contribution to the field of mathematics is shown.

Author
Angles (Geometry); Cosine Series; Simple Harmonic Motion; Sine Series; Theorems; Trigonometry

19960001065 California Inst. of Tech., Irvine, CA, USA
Sines and cosines. Part 2 of 3
Apostol, Tom M., editor, California Inst. of Tech., USA; Jan 1, 1993; In English; Sponsored by NASA, Washington and NSF Its Project Mathematics Series; 29 min. 52 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-95-67471; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The Law of Sines and the Law of Cosines are introduced and demonstrated in this 'Project Mathematics' series video using both film footage and computer animation. This video deals primarily with the mathematical field of Trigonometry and explains how these laws were developed and their applications. One significant use is geographical and geological surveying. This includes both the triangulation method and the spirit leveling method. With these methods, it is shown how the height of the tallest mountain in the world, Mt. Everest, was determined.

Author
Cosine Series; Geography; Geological Surveys; Laws; Planetary Mapping; Sine Series; Trigonometry

19960001066 California Inst. of Tech., Irvine, CA, USA
Sines and cosines. Part 3 of 3
Apostol, Tom M., editor, California Inst. of Tech., USA; Jan 1, 1992; In English; Sponsored by NASA, Washington and NSF Its Project Mathematics Series; 28 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-95-67472; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Applying the concept of similar triangles, the mathematical principles of circular motion and sine and cosine waves are presented utilizing both film footage and computer animation in this 'Project Mathematics' series video. Concepts presented include: the symmetry of sine waves; the cosine (complementary sine) and cosine waves; the use of sines and cosines on coordinate systems; the relationship they have to each other; the definitions and uses of periodic waves, square waves, sawtooth waves; the Gibbs phenomena; the use of sines and cosines as ratios; and the terminology related to sines and cosines (frequency, overtone, octave, intensity, and amplitude).

Author
Coordinates; Cosine Series; Sawtooth Waveforms; Similarity Theorem; Sine Series; Sine Waves; Square Waves; Symmetry; Terminology

19960001067 California Inst. of Tech., Irvine, CA, USA
Similarity
Apostol, Tom M., editor, California Inst. of Tech., USA; Jan 1, 1990; In English; Sponsored by NASA, Washington and NSF Its Project Mathematics Series; 26 min. 55 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-95-67473; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This 'Project Mathematics' series, sponsored by the California Institute for Technology (CalTech), the mathematical concept of similarity is presented. The history of and real life applications are discussed using actual film footage and computer animation. Terms used and various concepts of size, shape, ratio, area,
and volume are demonstrated. The similarity of polygons, solids, congruent triangles, internal ratios, perimeters, and line segments using the previous mentioned concepts are shown.

Author

*Polygons: Shapes; Similarity Theorem: Solids; Triangles*

1996/0101686 California Inst. of Tech., Irvine, CA, USA

**Polynomials**
Apostol, Tom M., editor, California Inst. of Tech., USA; Jan 1, 1995; In English; Sponsored by NASA, Washington and NSF Its Project Mathematics Series; 27 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP--N.A.S.A.VT--95--67474; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

In this 'Project Mathematics' series, sponsored by California Institute for Technology (CalTech), the mathematical concept of polynomials in rectangular coordinate (x, y) systems are explored, using film footage of real life applications and computer animation sequences, the history of the application of, and the different linear coordinate systems for quadratic, cubic, intersecting, and higher degree of polynomials are discussed.

Author

*Cartesian Coordinates: Computer Animation: Linear Systems: Polynomials*

1996/0101689 California Inst. of Tech., Irvine, CA, USA

**Discovering the Theorem of Pythagoras**
Lattanzio, Robert, editor, California Inst. of Tech., USA; Jan 1, 1988; In English; Sponsored by NASA, Washington, Association for Computing Machinery's Special Interest Group on Computer Graphics, and the Educational Foundation of America Its Project Mathematics Series; 26 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP--N.A.S.A.VT--95--67475; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

In this 'Project Mathematics' series, sponsored by the California Institute of Technology, Pythagoras' theorem (a^2 + b^2 = c^2) is discussed and the history behind this theorem is explained. Through live film footage and computer animation, applications in real life are presented and the significance of and uses for this theorem are put into practice.

Author

*Applications of Mathematics: Computer Animation: Theorems*

1996/0101700 California Inst. of Tech., Irvine, CA, USA

**The tunnels of Samos**
Apostol, Tom M., editor, California Inst. of Tech., USA; Jan 1, 1995; In English; Sponsored by NASA, Washington and NSF Its Project Mathematics Series; 29 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP--N.A.S.A.VT--95--67476; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This 'Project Mathematics' series video from CalTech presents the tunnel of Samos, a famous underground aquaduct tunnel located near the capital of Pythagorion (named after the famed Greek mathematician, Pythagoras, who lived there), on one of the Greek islands. This tunnel was constructed around 600 BC by King Samos and was built under a nearby mountain. Through film footage and computer animation, the mathematical principles and concepts of why and how this aquaduct tunnel was built are explained.

Author


66

**SYSTEMS ANALYSIS AND OPERATIONS RESEARCH**

Includes mathematical modeling of systems; network analysis; mathematical programming; decision theory; and game theory.

1996/0027708 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA

**FIDO - Video File**
Apr. 27, 1995; In English; Videotape; 10 min. playing time, in color, with sound
Report No.(s): NONP--N.A.S.A.VT--2000033900; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Field Integrated Design and Operations (FIDO) rover is a prototype of the Mars Sample Return rovers that will carry the integrated Athena Science Payload to Mars in 2003 and 2005. The purpose of FIDO is to simulate, using Mars analog settings, the complex surface operations that will be necessary to find, characterize, obtain, cache, and return samples to the ascent vehicles on the landers. This videotape shows tests of the FIDO in the Mojave Desert. These tests include drilling through rock and movement of the rover. Also included in this tape are interviews with Dr Raymond Arvidson, the test director for FIDO, and Dr. Eric Baumgartner, Robotics Engineer at the Jet Propulsion Laboratory.

CASI

*Mars Sample Return Missions: Prototypes: Roving Vehicles: Robotics: Research Vehicles: Mars (Planet): Mars Exploration: Mars Surface*

70

**PHYSICS (GENERAL)**

Includes general research topics related to mechanics, kinematics, magnetism, and electrodynamic. For specific areas of physics see categories 71 through 77. For related instrumentation see 35 Instrumentation and Photography; for geophysics, astrophysics or solar physics see 46 Geophysics, 90 Astrophysics, or 92 Solar Physics.

1996/0101768 NASA Marshall Space Flight Center, Huntsville, AL, USA

**Automated directional solidification furnace**
Aug 1, 1989; In English; 1 min. 42 sec. playing time, in color, with sound
Report No.(s): NONP--N.A.S.A.VT--93--190460; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video presentation addresses space research supporting the development of longer lasting, lighter weight, and more powerful magnets.

CASI

*Directional Solidification (Crystals): Furnaces: Magnets*

1996/0101853 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**Newton in space**
Herbert, Dexter, editor, NASA Lyndon B. Johnson Space Center; USA; Mar 4, 1992; In English; Its Liftoff to Learning Series; 12 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP--N.A.S.A.VT--95--43938; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

In this 'Liftoff to Learning' series video, astronauts (Charles Vach, Gregory Harbaugh, Donald McNemile, Michael Coats, L. Blaine Hammond, Guion Bluford, Richard Hieb) from the STS-39 Mission used physical experiments and computer animation to explain how weightlessness and gravity affect everything and everyone onboard the Space Shuttle. The physics behind the differences between weight and mass, and the concepts of 'free fall', are demonstrated along with explanations and experiments of Sir Isaac Newton's three laws of motion.

CASI


71

**ACOUSTICS**

Includes sound generation, transmission, and attenuation. For noise pollution see 46 Environment Pollution. For aircraft noise see also 02 Aerodynamics and 07 Aircraft Propulsion Propulsion and Power.

1996/0102973 NASA Lewis Research Center, Cleveland, OH, USA

**Flying on the ground**
Jan 1, 1991; In English; 11 min. 52 sec. playing time, in color, with sound
Report No.(s): NONP--N.A.S.A.VT--94--12953; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video details research being conducted at LeRC on aircraft acoustics and the impact of aircraft noise on communities and passengers. The video
describes LeRC researchers utilization of a laser Doppler velocimeter to study aircraft and the development of the Advanced Ducted Propeller.

CASI
Aeroacoustics; Aircraft Noise; Noise Pollution; Shrouded Propellers

74
OPTICS
Includes light phenomena and the theory of optical devices. For lasers see 
Lasers and Lasers.

19940029214 NASA Marshall Space Flight Center, Huntsville, AL, USA
Rotating unbalanced mass proof--of-concept
Jan 1, 1993; In English; 7 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--94--12942; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The video describes the Rotating Unbalanced Mass. The Rotating Unbalanced Mass is a device for scanning ground-based, balloon-borne, and space-based gimbaled payloads, as well as free-flying spacecraft. This device offers advantages over other methods of scanning--especially large payload scanning at high frequencies--such as reduced system power and mass, improved system stability and reliability, and better scan accuracy.

CASI
Control Moment Gyroscopes; Payloads; Pointing Control Systems; Rotating Bodies; Scanners; Torque Motors

80
SOCIAL AND INFORMATION SCIENCES (GENERAL)
Includes general research topics related to sociology; educational programs and curricula.

19940001416 NASA John C. Stennis Space Center, Bay Saint Louis, MS, USA
Taeannautics: Sharing the dream
Apr 1, 1989; In English; 13 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--93--185328; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
A week-long teacher workshop is described. Highlights include underwater simulation training, model rocket building and launching, map reading, and survival training.

Author (revised)
Environment Simulation; Instructors

19940010757 NASA Marshall Space Flight Center, Huntsville, AL, USA
SHARP
Jan 1, 1989; In English; 7 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--93--190457; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video tape describes the benefits of NASA’s Summer High School Apprenticeship Program to participating students.

CASI
Education; NASA Programs

19940010759 NASA Marshall Space Flight Center, Huntsville, AL, USA
Space classroom
Nov 1, 1990; In English; 2 min. 21 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--93--190459; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video presentation provides information on the first classroom taught from space to encourage student interest in astronomy and space exploration.

CASI
Education; NASA Programs

19940010775 NASA, Washington, DC, USA
Enhancing sight
Feb 1, 1990; In English; 3 min. 54 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--93--190435; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video describes a new reading program for people with limited sight.

CASI
Blindness; Optometry; Reading; Vision; Visual Perception; Visual Tasks

19940010687 NASA, Washington, DC, USA
Student researchers
Jul 1, 1990; In English; 3 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--93--190238; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The videotape shows students and their NASA-related research at LeRC.

CASI
Research and Development; Students

19940010689 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Short walk to everywhere
Jul 1, 1998; In English; 17 min. 43 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--93--190338; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video details the activities of the Space, Earth, Ocean Center (SEOC), an environmental residential camp held in the summer for elementary school children. Students are shown participating in hands on activities designed to encourage environmental awareness and interests in the environmental sciences.

CASI
Aerospace Sciences; Children; Earth Sciences; Education; Facilities; Oceanography

19940010645 NASA Lewis Research Center, Cleveland, OH, USA
CORE/TC
Feb 1, 1998; In English; 7 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--93--190231; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video looks at the Central Operations for Educators in Ohio, and the LeRC Teacher Resource Center.

CASI
Education; Facilities; NASA Programs

19940010647 NASA Lewis Research Center, Cleveland, OH, USA
Spacework 16
Jan 1, 1988; In English; 28 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--93--190233; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video consists of the Simulated Space Shuttle Program for schools and also has clips on wind tunnel research and on JPL’s ‘Miranda the Movie’.

CASI
Education; Flight Simulation; Miranda; Space Shuttles; Wind Tunnel Tests; Wind Tunnels

19940011631 NASA Lewis Research Center, Cleveland, OH, USA
Challenger Center
Nov 1, 1989; In English; 8 min. 18 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--93--190229; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video explains the objectives of the Challenger Center for Space Education and how it got started.

CASI
Aerospace Sciences; Education; Facilities

19940011632 NASA Lewis Research Center, Cleveland, OH, USA
Challenger Center: Orientation
Jul 1, 1989; In English; 7 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--93--190230; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This is a video orientation to the Challenger Center for Space Science Education in Prince Georges County, Maryland.

CASI
Aerospace Sciences; Education; Facilities; NASA Programs; Orientation
1994014589 NASA Marshall Space Flight Center, Huntsville, AL, USA

**National Boy Scout Jamboree**
Aug 1, 1989; In English; 1 min. 57 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–94–198214; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video looks at a NASA sponsored exhibit at the National Boy Scout Jamboree in Fredricksburg, VA. Boy Scouts are shown interacting with NASA researchers and astronauts and touring mockups of Space Station Freedom and Apollo 11. NASA's program to encourage the researchers of tomorrow is detailed. CASI

**Astronauts; NASA Programs; Students**

1994002340 NASA Lewis Research Center, Cleveland, OH, USA

**Marsville: The cosmic village**
May 1, 1993; In English; 7 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–9952; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video describes an educational student activity sponsored by the Challenger Center for Space Science Education and the Educational Information and Resource Center, which was held at the Lewis Research Center. Marsville was held in May 1992, involving students from schools in three counties around Cleveland. In commemoration of the International Space Year, students worked together to plan a simulated colony on Mars, which culminated in the erection of a balloon tent ‘city’ at the Lewis Research Center.

CASI

**Education: Mars (Planet); NASA Programs; Space Colonies**

19940027301 NASA Lewis Research Center, Cleveland, OH, USA

**Space acceleration measurement system**
May 1, 1993; In English; 23 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–9954; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This training video, presented by the Lewis Research Center’s Space Experiments Division, gives a background and detailed instructions for preparing the space acceleration measurement system (SAMS) for use. The SAMS measures, conditions, and records forces of low gravity accelerations, and is used to determine how effective these forces on various experiments performed in microgravity. Inertial sensors are used to measure positive and negative acceleration over a specified frequency range. The video documents the SAMS’ uses in different configurations during shuttle missions.

CASI

**Acceleration (Physics); Accelerometers; Microgravity; Spaceborne Experiments; Spacecraft Instruments**

19940027309 NASA Lewis Research Center, Cleveland, OH, USA

**Welcome to the Ohio Aerospace Institute**
Nov 1, 1992; In English; 10 min. 22 sec. playing time, in color with sound
Report No.(s): NONP–NASA–VT–94–9956; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The mission and various programs administered by the Ohio Aerospace Institute, a consortium made up of 9 Ohio Universities, LeRC, and members of the Aerospace Industry are described. The video highlights the following: programs to bring aerospace research to K-12 classrooms; programs to allow graduate students access to laboratory equipment at LeRC; the creation of a state-wide television network to link researchers in industry and academia; and focus groups to encourage collaboration between companies in aerospace research.

CASI

**Aerospace Engineering; Aerospace Industry; Communication Networks; NASA Programs; Television Systems; University Program**

19940027311 NASA Lewis Research Center, Cleveland, OH, USA

**NASA report to education, volume 9**
Mar 1, 1991; In English; 26 min. 44 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–9960; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This is an edition of 'NASA Report to Education' covering NASA's Educational Workshop, Lewis Research Center's T-34 and the Space Exploration Initiative. The first segment shows NASA Education Workshop program (NEWEST - NASA Educational Workshops for Elementary School Teachers). Highlights of the 14 days of intense training, lectures, fieldtrips and simple projects that the educators went through to teach the program are included. Participants are shown working on various projects such as the electromagnetic spectrum, living Space Station Freedom, experience in T-34, tour of tower at the Federal Aviation Administrative Facilities, conducting an egg survival system and an interactive video conference with astronaut Stori Musgrave. Participants share impressions of the workshop. The second segment tells how the Lewis Research Center’s T-34 aircraft is used to promote aerospace education in several Cleveland schools and excite students.

CASI

**Education: Space Exploration; Spacecraft Survivability; Survival**

19940027381 NASA Lewis Research Center, Cleveland, OH, USA

**The sky is your classroom**
Jan 1, 1982; In English; 28 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–9959; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

An overview of NASA's 11th annual Aerospace Education Workshop Program is presented. A portion of activities that are performed during the workshop sessions, which are used to familiarize teachers with up-to-date information are shown. An overview of aerospace concepts and terms is provided. Activities shown include: how model rockets are used to teach about the principles of rocketry; how eggs are packaged to represent an astronaut landing on another planet; a trip to the Cleveland Museum of Natural History was used to introduce a telescope and planetarium; and a visit to LeRC. How lectures and discussion material are presented on such topics as the history of aircraft and the space shuttle is demonstrated.

CASI

**Aerospace Sciences; Education: NASA Programs**

19940020869 NASA Lewis Research Center, Cleveland, OH, USA

**Indianapolis CIP review**
Dec 1, 1988; In English; 14 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23173; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video presents the community involvement program at the Indianapolis Children’s Museum and Indianapolis Art League.

CASI

**Museums; NASA Programs**

19950044110 NASA Lewis Research Center, Cleveland, OH, USA

**NEWEST 1990 no. 4007**
Aug 1, 1990; In English; 15 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23173; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Twenty-two teachers go through the NASA Educational Workshops for Elementary School Teachers Program at the Lewis Research Center. LeRC

**Aerospace Sciences; Education: Instructors**

19950044111 NASA Lewis Research Center, Cleveland, OH, USA

**Anton Grdina Primary Achievement Program**
Nov 1, 1993; In English; 26 min. 20 sec. playing time, with sound
Report No.(s): NONP–NASA–VT–94–23159; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The Anton project presents a partnership between NASA Lewis, CMHA, and the Cleveland Public Schools. The intent of this project is to empower parents to work with their children in science and math activities.

LeRC

**Education: Mathematics; Science**

19950044152 NASA Lewis Research Center, Cleveland, OH, USA

**SHARP no. 4010, version 1 and no. 4011, version 2**
Dec 1, 1990; In English; 10 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23157; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Concurrent Engineering: Data Processing; Data Transfer (Computer); Government/Industry Relations; Process Control (Industry); Quality Control

19950822749 NASA, Washington, DC, USA
NASA: The state of the agency
Oct 7, 1992; In English; 19 min. 37 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–45998; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
NASA’s challenges, accomplishments, and goals are described in this video. Historical footage of man’s first lunar walk are shown and there are brief descriptions covering several of NASA’s major projects, such as: Skylab; Viking Voyager; Coby; and the 1990 Hubble Space Telescope.
CASI
Awards: NASA Programs; Research Projects; Technology Assessment

19950822750 NASA, Washington, DC, USA
An announcement by Dan Goldin
Oct 15, 1992; In English; 15 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–45999; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Daniel S. Goldin (NASA Administrator) announces the reconstruction of several NASA programs and management structural changes. The upcoming developments for Space Station Freedom, the Office of Space Science Applications (OSSA), and the field of Aeronautics are discussed.
CASI
Aerospace Industry; Management Planning; NASA Programs; Personnel Management; Technological Forecasting; Trends

2000066583 NASA Kennedy Space Center, Cocoa Beach, FL, USA
A/C 67 Investigation Board Final Report
May 11, 1987; In English; Videotape: 27 min., 41 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000078606; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On March 26, 1987, after the launch of an Atlas/Centaur rocket with a payload of a Navy Communications Satellite, a problem developed and the rocket was lost. John Basse chaired the Accident Investigation Board that was convened to investigate the incident. This videotape is a press conference with Mr. Basse, who reviews the findings of the investigation concerning the loss of the Atlas/Centaur 67 launch vehicle. The loss is primarily attributed to a hard-over engine yaw command that was caused by an erroneous signal from the digital computer unit. The generation of the erroneous signal is blamed on unfavorable weather conditions which created a lightning hazard. Mr. Busse, also, reviews the investigation’s recommendations for avoiding similar occurrences. The press then asks questions about the findings and recommendations.
CASI
Accident Investigation; Atlas Centaur Launch Vehicle; Lightning; Weather; Spacecraft Launching; Flight Hazards; Meteorological Parameters

92 DOCUMENTATION AND INFORMATION SCIENCE

Includes information management; information storage and retrieval technology; technical writing; graphic arts; and microfiche. For computer documentation see 61 Computer Programming and Software.

199408010758 NASA Marshall Space Flight Center, Huntsville, AL, USA
University Joint Venture: JOVE
Mar 1, 1989; In English; 2 min. 12 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190458; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video presentation explains how NASA shares its several trillion bits...
of raw science and engineering data with universities who help NASA analyze and distribute that data.

**NASA Programs: University Program**

1994#010778 NASA, Washington, DC, USA

**Monitoring history**

Jan 1, 1987; In English; 3 min. 25 sec. playing time, in color, with sound
Report No. (s): NONP-NASA-VT-93-190438; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Deep space technology is applied to help monitor the aging process of the treasured documents in the National Archives.

CASI

**Aerospace Technology Transfer; Aging (Materials); Documents; Records; Records Management; Technology Utilization**

1994#010827 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**Text and graphics systems**

Mar 1, 1989; In English; 1 min. 55 sec. playing time, in color, with sound
Report No. (s): NONP-NASA-VT-93-190468; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This video shows Text and Graphics Systems (TAGS) in action and describes how the system will be used on Space Shuttle missions.

CASI

**Computer Graphics; Space Shuttle Missions**

1994#011047 NASA, Washington, DC, USA

**Medical imaging**

Jun 1, 1986; In English; 3 min. 40 sec. playing time, in color, with sound
Report No. (s): NONP-NASA-VT-93-190473; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video shows how satellite data processing techniques (multispectral scanning) can improve disease detection and treatment.

CASI

**Diagnosis; Diseases; Imaging Techniques; Medical Equipment; Multispectral Band Scanners; Scanning; Technology Transfer**

1994#011050 NASA John C. Stennis Space Center, Bay Saint Louis, MS, USA

**Coast encounters: A space age adventure in science literacy**

Apr 1, 1989; In English; 6 min. 20 sec. playing time, in color, with sound
Report No. (s): NONP-NASA-VT-93-190475; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video recaps the NASA Community Involvement Program for education held on the Mississippi Gulf Coast, April 1989.

CASI

**Aerospace Sciences; Education; NASA Programs**

1995#004161 NASA Lewis Research Center, Cleveland, OH, USA

**STI: Managing a universe of information**

Jan 1, 1992; In English; 7 min. playing time
Report No. (s): NONP-NASA-VT-94-23626; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video highlights the NASA STI Program, its mission and key elements how the program manages the ever growing universe of scientific and technical information. The mission of the program is to provide world-wide access to aerospace-related scientific and technical information. A key element of the program is a massive online database of more than three million citations to technical reports and journal literature, acquired, processed and disseminated by the NASA STI Program.

CASI

**Data Bases; Information Management**

1995#004278 NASA, Washington, DC, USA

**NIST: Information management in the AMRF**

Callaghan, George, editor; National Inst. of Standards and Technology, USA; Nov 1, 1991; In English; 12 min. 30 sec. playing time, in color, with sound
Report No. (s): NONP-NASA-VT-95-409120; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The information management strategies developed for the NIST Automated Manufacturing Research Facility (AMRF) - a prototype small batch manufacturing facility used for integration and measurement related standards research are outlined in this video. The five major manufacturing functions - design, process planning, off-line programming, shop floor control, and materials processing are explained and their applications demonstrated.

Author (revised)

Automatic Control; Computer-Aided Design; Concurrent Engineering; Control Equipment; Control Systems Design; Government/Industry Relations; Information Management; Mechanical Engineering; Process Control (Industry); Prototypes; Research Facilities

1998#005687 Commerce Energy NASA NLM Defense Information Cataloguing Committee, Washington, DC USA

**The future of bibliographic standards in a networked information environment**

Apr 16, 1997; In English; CENDI Workshop, 16 Apr. 1997, Bethesda, MD, USA; Videotape: 5 hrs. 51 min. playing time, in color, with sound
Report No. (s): NONP-NASA-VT-1998004466; No Copyright; Avail: CASI; V06, Videotape-VHS; B06, Videotape-Beta; V06, Videotape-VHS

The main mission of the CENDI Cataloguing Working Group is to provide guidelines for cataloging practices that support the sharing of database records among the CENDI agencies, and that incorporate principles based on cost effectiveness and efficiency. Recent efforts include the extension of COSATI Guidelines for the Cataloging of Technical Reports to include non-print materials, and the mapping of each agency's export file structure to USMARC. Of primary importance is the impact of electronic documents and the distributed nature of the networked information environment. Topics discussed during the workshop include the following: Trade-offs in Cataloging and Indexing Internet Information; The Impact on Current and Future Standards; A Look at WWW Metadata Initiatives; Standards for Electronic Journals; The Present and Future Search Engines; The Roles for Text Analysis Software; Advanced Search Engine Meets Metathesaurus; Locator Schemes for Internet Resources; Identifying and Cataloging Web Document Types; In Search of a New Bibliographic Record. The videos in this set include viewgraphs of charts and related materials of the workshop.

CASI

**Catalogs (Publications); Bibliographies; Cost Effectiveness; Data Management; Data Bases; Indexes (Documentation); Internets; Texts**

1995#004164 NASA, Washington, DC, USA

**TECHNOLOGY UTILIZATION AND SURFACE TRANSPORTATION**

Includes aerospace technology transfer; urban technology; surface and mass transportation. For related information see 03 Air Transportation and Safety, 16 Space Transportation and Safety, and 44 Energy Production and Conversion. For specific technology transfer applications see also the category where the subject is treated.
Aerospace Engineering: Aerospace detector cameras, a 3 inch diameter chip to analyze the amino acid and chemical era, infrared era, CCD era, QWIP (Quantum Well Infrared Lander spacecraft, at high resolution maps taken by the Mars Global Surveyor. Images of Mat’s taken by the Mariner 4 spacecraft, color images from the Viking visible and infrared pictures of the Orion nebula. Also included are the first images of Mars taken by the Mariner 4 spacecraft, color images from the Viking Lander spacecraft, and high resolution maps taken by the Mars Global Surveyor. Radar images of Los Angeles (Pasadena), San Francisco and San Juan are also shown. Some of the technological developments include the active pixel sensor camera, infrared cameras, CCD cameras, QWIP (Quantum Well Infrared Photodetector) cameras, a 3 inch diameter chip to analyze the amino acid and chemical compounds of the Martian soil, and sensors with the ability to crawl. The lecture also includes the planning of future missions.

CASI
Aerospace Technology Transfer: NASA Programs; Technology Utilization

This video shows how space derived technology is being used to benefit people on Earth.

CASI
Aerospace Technology Transfer: NASA Programs; Technology Utilization

This video presents two examples of NASA Technology Transfer. The first is a Downhole Video Logger, which uses remote sensing technology to help in mining. The second example is the use of satellite image processing technology to enhance ultrasound images taken during pregnancy.

CASI
Aerospace Technology Transfer: Imaging Techniques; Remote Sensing; Satellite Imagery; Technology Utilization; Ultrasensos

This video looks at a spinoff application of the technology from advanced microsensors – those that monitor and determine conditions of spacecraft like the Space Shuttle. The application featured is concerned with the monitoring of the health of premature babies.

CASI
Aerospace Technology Transfer: Biotechnology; Sensors

As speaker of this lecture series Michael Sandor, Director of Technology and Application at the Jet Propulsion Laboratory (JPL), addresses three questions that scientists and engineers at JPL and NASA face daily. These questions are: How did the universe evolve, how did life start, and are we alone? The video focuses on the technological developments, improvements, and applications in society. Slides include several still pictures (infrared, x-ray, radio, and visible) of the universe, pictures of Venus through the use of radar instruments, and the visible and infrared pictures of the Orion nebula. Also included are the first images of Mars taken by the Mariner 4 spacecraft, color images from the Viking Lander spacecraft, and high resolution maps taken by the Mars Global Surveyor. Radar images of Los Angeles (Pasadena), San Francisco and San Juan are also shown. Some of the technological developments include the active pixel sensor camera, infrared cameras, CCD cameras, QWIP (Quantum Well Infrared Photodetector) cameras, a 3 inch diameter chip to analyze the amino acid and chemical compounds of the Martian soil, and sensors with the ability to crawl. The lecture also includes the planning of future missions.

CASI
Aerospace Technology Transfer: NASA Programs; Research and Development
1994018949 NASA Goddard Space Flight Center, Greenbelt, MD, USA
NASAs Hubble Space Telescope: The challenge and complexity of operations
Jan. 1, 1989; In English; 16 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-190375; No Copyright; Available: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
This video presentation touches on the truly vast complexity of the first of
NASAs great observatories, the Hubble Space Telescope.
CASI
Hubble Space Telescope: NASA Programs

1994014599 NASA, Washington, DC, USA
Hubble Space Telescope
Feb. 1, 1990; In English; 2 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-198206; No Copyright; Available: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
An overview of the mission of the Hubble Space Telescope, a joint project
between NASA and the European Space Agency which will be used to study
deep space, as well as our solar system is presented. The video contains anima-
tions depicting the Hubble Space Telescope in orbit, as well as footage of scien-
tists at the Space Telescope Science Institute making real time observations.
The images Hubble acquires will be downloaded into a database that contains images
of over 19,000,000 celestial objects called the Star Catalog.
CASI
Hubble Space Telescope: Space Observations (From Earth)

1995004133 NASA Goddard Space Flight Center, Greenbelt, MD, USA
BXRRT clip: The Broad Band X-ray Telescope
May 1, 1990; In English; 18 min. playing time
Report No.(s): NONP-NASA-VT-94-23137; No Copyright; Available: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
This video recording explains the science mission of the Broad Band X-ray
Telescope on board the Space Shuttle Columbia, December 1990. This tape was
produced before launch.
GSFC
Broadband; Space Shuttle Missions; X Ray Telescopes

1995022751 Tokyo Univ., Inst. for Space and Astronautical Science., Japan
Yohkoh Soft X-ray Telescope
Apr 21, 1992; In English; Sponsored by NASA, Washington; 6 min. playing
time, in color, with sound
Report No.(s): NONP-NASA-VT-95-46000; No Copyright; Available: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video describes the Soft X-ray Telescope (SXT), Yohkoh. This is a
cooperative program between NASA and the Institute for Space and Astronauti-
cal Science of Japan. Images of the Sun's rotation were obtained with the SXT.
CASI
International Cooperation; Japanese Space Program; NASA Space Programs;
Universities; X Ray Astronomy; X Ray Telescopes

19950023896 NASA, Washington, DC, USA
Space astronomy update
Jun 6, 1995; In English; 58 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-95-56622; No Copyright; Available: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
A discussion of the images obtained by NASA's Hubble Space Telescope
(HST) is featured on this video. The discussion panel consists of Dr. Jeff Hester
(Arizona State Univ.), Dr. Jon Morse (Space Telescope Science Inst.), Dr. Chris
Burrows (European Space Agency), Dr. Bruce Margon (Univ. of Washington),
and host Don Savage (Goddard Space Flight Center). A variety of graphics and
explanations are provided for the images of star formations and other astronomi-
cal features that were viewed by the HST.
Author
Astronomical Photography; Celestial Bodies; Hubble Space Telescope; Space-
borne Astronomy; Star Formation; Ultraviolet Astronomy; Ultraviolet Spectra

19950024678 Interface, Inc., Fort Collins, CO, USA
NASA space astronomy update 6
Oct 1, 1992; In English; 6 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-95-46007; No Copyright; Available: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Professor Steve Bowyer (University of California at Berkeley) explains the
Extreme Ultraviolet Explorer and its telescope in this video. Both instrument and
satellite are kept in perfect working condition. The satellite picks up extra
galactic objects outside our galaxy.
CASI
Extreme Ultraviolet Explorer Satellite; NASA Space Programs; Spaceborne
Astronomy; Ultraviolet Astronomy; Ultraviolet Telescopes

19970936208 NASA Johnson Space Center, Houston, TX USA
Best of Hubble Space Telescope
Feb. 18, 1997; In English; Videotape: 90 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-199707165; No Copyright; Available: CASI;
B04, Videotape-Beta; V04, Videotape-VHS
This video presents a chronological account of the Hubble Space Tele-
scope. Using animation, movies, and stills it documents the design, development,
launch, and repair mission to correct its optics. The second part of this video
concentrates on the successes of Hubble. Included are the study of Galaxy Clus-
ters, Black Holes, Jupiter animation, and Nebulae.
CASI
Hubble Space Telescope; Galactic Clusters; Nebulae; Jupiter (Planet); Star
Clusters; Spaceborne Astronomy

19970936313 NASA Johnson Space Center, Houston, TX USA
Hubble Images from 1996
Jun. 28, 1997; In English; Videotape: 14 min. 33 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-199708236; No Copyright; Available: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Primarily composed of animation, movies, and stills, this video is divided
into 12 segments or slugs as the video refers to them. They are: Global Map of
Pluto, Images of Pluto,urface Map of Pluto, Helix Nebula- NGC 7293, Gaseous
Knots, Animation of the Formation of the Helix Nebula, Crab Nebula, Jupiter
Aurora Movie, Birth of a Quasar, Merging Galaxies, and Spiral Galaxies.
CASI
Hubble Space Telescope; Crab Nebula; Spiral Galaxies; Quasars; Space Explora-
tion

24000000441 NASA Kennedy Space Center, Cocoa Beach, FL, USA
Ulysses News Conference
Oct. 26, 1995; In English; Videotape: 48 min. 10 sec playing time, in color, with sound
Report No.(s): NONP-NASA-VT-199509699; No Copyright; Available: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
The focus of this lecture is to discuss the purpose of the Ulysses mission.
The mission objective is to study magnetic fields, cosmic rays and the solar winds
from both the equator and the (North and South) poles of the Sun. The moderator
of this lecture is Dr. Steve Maram, NASA/Goddard Space Flight Center, and panel
members include Dr. Richard Marsden, ESA (European Space Agency) Project
Scientist, Dr. Edward J. Smith, JPL/NASA Project Scientist, Dr. Antoinette
Galvin, University of Maryland College Park, Dr. Randy Jokipii, University of
Arizona, and Dr. John Phillips, Los Alamos National Laboratory. Each panel
member contributes to the informative nature of this live video coverage. Topics
discussed are the direction of the magnetic fields, solar winds, and cosmic rays.
Visual aids of this lecture consist of various slides and computerized simulations.
CASI
Ulysses Mission; Solar Probes; Cosmic Rays; Magnetic Fields; Solar Wind

200000004587 NASA Kennedy Space Center, Cocoa Beach, FL, USA
HST Briefing: HST Science Overview
Jun. 13, 1994; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-199920699; No Copyright; Available: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Hubble Space Telescope upgrades are discussed during this overview.
Among those discussed are the Space Telescope Imaging Spectrograph, the New Infrared Camera, upgrading of instruments with 90's technology, new CCD detectors, corrective optics, reconfiguration of mirrors, reduction in overall exposure time. A question and answer period with Johnson Spaceflight Center, Goddard Spaceflight Center and the press focuses primarily on these upgrades to the Hubble Space Telescope.

CASI
Hubble Space Telescope: Infrared Instruments; Imaging Techniques; Charge Coupled Devices; Cameras

200000094012 NASA Kennedy Space Center, Cocoa Beach, FL USA Hubble Space Telescope Spacecraft Overview Briefing Jan. 13, 1994; In English; Videotape: 46 min., 18 sec., playing time, in color, with sound Report No.(s): NONP-NASA-VT-1999206991; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This Kennedy Space Center video release presents the third part of a press conference held at Goddard Space Flight Center on Jan. 13, 1994. The session is moderated by Randee Exler (News Chief, GSFC) and includes presentations by Ken Lodbetter (HST Program Manager, NASA Headquarters), Frank Cepolina (HST Project Manager for Flight Systems and Servicing, GSFC) and Joe Rothenberg (Director, HST Flight Projects, GSFC) that discuss pre-flight testing and training, on-orbit servicing, highlights, and the status of the Hubble Space Telescope (HST). A question and answer period follows the presentations, after which three short highlight videos are presented that include actual footage of on-orbit servicing, galactic images taken by the HST, and pre-flight preparation and construction.

CASI Hubble Space Telescope: Space Maintenance

20000013497 NASA Kennedy Space Center, Cocoa Beach, FL USA Hubble Space Telescope Briefing: HST Science Overview Jan. 13, 1994; In English; Videotape: 1 hr. 2 min. 41 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT-1999206991; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This NASA Kennedy Space Center video release presents a broad overview of the science that is now possible as a result of the servicing of the Hubble Space Telescope (HST). Dr. Ed Weiler (HST Program Scientist, NASA Headquarters), Dr. Dave Leckrone (HST, Senior Project Scientist, Goddard Space Flight Center (GSFC)), Dr. John Trauger (Wide Field Planetary Camera 2 (WFPC2) Principal Investigator, Jet Propulsion Lab. (JPL)), Dr. Chris Burrows (WFPC2 Co-Investigator, Space Telescope Science Inst. (STScI))/European Space Agency (ESA)), Jim Crocker (Corrective Optics Space Telescope Axial Replacement) COSTAR Team Leader, STScI), Dr. Holland Ford (COSTAR Project Scientist, Johns Hopkins Univ., STScI), and Dr. Duccio Maccio (European Space Agency (ESA)) give brief presentations, which feature images of stars and galaxies taken from the ground, from WFPC1 (prior to the servicing mission), and from WFPC2 (after the servicing mission). The main theme of the discussions center around the spherical aberration that was found in the images prior to servicing and the corrected images seen without the aberration following servicing. A question and answer period rounds out the press conference, with questions posed from scientific journalists at GSFC and other NASA centers.

CASI Hubble Space Telescope: Aberration; Spaceborne Telescopes: Spaceborne Astronomy: Satellite-Borne Photography

20000013498 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA Searching for Planets Around other Stars Jan. 28, 1998; In English; Videotape: 1 hr. 19 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT-1999206897; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

In this colloquium presentation, Professor of Astronomy, Geoffrey Marcy discusses the discovery of planets orbiting other stars. Using the Doppler shift caused by stellar wobble that is caused by nearby planetary mass, astronomers have been able to infer the existence of Jupiter-sized planets around other stars. Using a special spectrometer at Lick Observatory, the wobble of several stars have been traced over the years required to generate an accurate pattern required to infer the stellar wobble. Professor Marcy, discusses the findings of planets around 47 Ursa Majoris, 16 Cygni B, 51 Pegasus, and 56 Rho 1 Cnc. In the case of 56 Rho 1 Cnc the planet appears to be close to the star, within 1.5 astronomical units. The observations from the smaller Lick Observatory will be augmented by new observations from the larger telescope at the Keck observatory. This move will allow observations of smaller planets, as opposed to the massive planets thus far discovered. The astronomers also hope to observe smaller stars with the Keck data. Future spaceborne observations will allow the discovery of even smaller planets. A spaceborne interferometer is in the planning stages, and an even larger observatory, called the Terrestrial Planet Finder, is hoped for. Professor Marcy shows artists' renderings of two of the planets thus far discovered. He also briefly discusses planetary formation and shows slides of both observations from the Orion Nebula and models of stellar system formation.

CASI
Planetary Evolution; Planetary Mass; Stellar Evolution: Celestial Bodies; Extrasolar Planets; Gas Giant Planets; Planetary Systems; Hypothetical Planets: Stellar Orbits

20010021668 Space Telescope Science Inst., Baltimore, MD USA Hubble Spies Huge Cluster of Stars Formed by Ancient Encounter Mar. 01, 2001; In English; Videotape: 6 min. 20 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT-2001036725; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This release marks the beginning of a new outlet for the Space Telescope Science Institute, the 'Hubble Minute'. Hubble Minute is an edited vignette suitable for use in newscasts, magazine shows, and as an interstitial program. The Minute explains how scientists are determining when M82 and M81 collided, and how dating the crash may result in a better understanding of how our own galaxy formed.

Author
Crashes: Galaxies; Star Clusters; Time Measurement

20010036664 Space Telescope Science Inst., Baltimore, MD USA Farthest Supernova Bolsters Proof for a Mysterious Form of Energy Pervading the Universe [2001]; In English; Videotape: 16 min. 42 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT-2001047824; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Computerized animations show the following: (1) the acceleration and deceleration of the universe; (2) an image subtraction of the 1995 and 1997 images of the Hubble Deep Field to reveal a supernova in the 1997 image; (3) a pie-chart of the mass composition of the universe; (4) the universe's expansion after the Big Bang; (5) a supernova detonating; and (6) the lightbulb test (to determine distance by comparing light intensity). Zoom shots show the Hubble Deep Field (from ground-based observations to the Hubble Space Telescope (HST) image) and the Hubble Deep Field with a supernova (from an artist's conception animation to a ground-based view). Dr. Ron Gilliland explains that he looked for a supernova in the Hubble Deep Field and how supernova are useful as standard candles. Dr. Adam Riess describes how astronomers used supernova to discover that the universe is expanding and why it might be expanding.

CASI
Luminous Intensity; Supernova; Expansion; Cosmology

20010659304 NASA Goddard Space Flight Center, Greenbelt, MD USA Microlensing: Globular Cluster M22 Video File [2001]; In English; Videotape: 6 min. 55 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT-2001092796; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

A computerized animation begins outside a globular cluster similar to M22, with the center of the Milky Way in the distance. The camera flies through the center of the cluster and rests with a dark object in the distance. This object, a galaxy formed. The globular cluster is compared to the cluster of stars around the center of the Milky Way in the distance. The galaxy formed. The globular cluster is compared to the cluster of stars around the center of the Milky Way, with a dark object in the distance. This object, a galaxy formed. The globular cluster is compared to the cluster of stars around the center of the Milky Way, with a dark object in the distance.

CASI
Gas; Luminous Intensity; Supernova; Expansion; Cosmology
and explains Hubble's role in the observations of M22. The last image was taken with Hubble's Wide Field and Planetary Camera 2 and pierces the heart of a globular cluster with its needle-sharp vision and uncovers tantalizing clues to what could potentially be a strange and unexpected population of wandering, planet-sized objects.

Author

Globular Clusters; Gravitational Lenses; Milky Way Galaxy

2001067427 Space Telescope Science Inst., Baltimore, MD USA

Hubble's Panoramic Portrait of a Vast Star-Forming Region
Jul. 26, 2001; In English; Videotape: 4 min. 13 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001111030; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

A computerized animation zooms into the 30 Doradus region. Dr. Nolan Walborn explains how the Hubble images of 30 Doradus and its central cluster are changing our understanding of similar star forming regions and what is happening in the gas pillars.

Derived from text

Magellanic Clouds: Nebulae

90

ASTROPHYSICS

Includes cosmology, celestial mechanics; space plasmas; and interstellar and interplanetary gases and dust.

1994081023 NASA Ames Research Center, Moffett Field, CA, USA

Pioneer–Venus press clip
May 1, 1988; In English; 11 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--19940503; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video shows, with high quality animation, the formation of the Solar System: comets, Jupiter, Europa, Saturn, Titan, Mars, the Sun, and early Earth. The focus is on life elsewhere in the Solar System. The recording was prepared for a news conference.

CASI

Extraterrestrial Life: Pioneer Venus Spacecraft; Planetary Evolution; Solar System Evolution

1994026056 NASA, Washington, DC, USA

Comet impact 1994 animation reel
Apr 1, 1994; In English; 6 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1994026056; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video contains computer generated simulations of the impact of comet Shoemaker-Levy 9 with Jupiter that will take place in July 1994. The simulations display the event from a number of vantage points including earth view, views from orbit, and views from the surface of Jupiter's moons.

CASI

Cometary Collisions; Hypervelocity Impact; Jupiter (Planet); Scientific Visualization; Shoemaker-Levy 9 Comet

1994026056 NASA, Washington, DC, USA

Aeronautics and Space Reports number 267: Comet impacts Jupiter
Jun 1, 1994; In English; 15 min. 48 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--19940619; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

This video contains three different segments of computer generated simulations of the impact of comet Shoemaker-Levy 9 with Jupiter that will take place in July 1994. It includes interviews with Shoemaker and Levy, discussing pictures taken at Mt. Kalamur Observatory, the comets approach to Jupiter, fragment size, and the affects of the comets impact on Jupiter and its atmosphere. The impact will be viewed by the Galileo Spacecraft.

CASI

Cometary Collisions; Computerized Simulation; Jupiter (Planet); Shoemaker-Levy 9 Comet

19990116383 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA

Asteroids and Comets Outreach Compilation
Sep. 17, 1999; In English; Videotape: 55 min. 38 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1999120511; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Contents include various different animations in the area of Asteroids and Comets. Titles of the short animated clips are: STARDUST Mission; Asteroid Callastia Impact Simulation; Callastia, Toutatis and the Earth; Simulation Asteroid Encounter with Earth; Nanorover Technology Task; Near Earth Asteroid Tracking; Champaillon Anchor Tests; Early Views of Comets; Exploration of Small Bodies; Ulysses Resource Materials from ESA; Ulysses Cometary Plasma Tail Animation; and various discussions on the Hale-Bopp Comet. Animation of the following are seen: the Stardust aerogel collector grid collecting cometary dust particles, comet and interstellar dust analyzer, Wiper-shield and dust flux monitor, a navigation camera, and the return of the sample to Earth; a comparison of the rotation of the Earth to the Callastia and Toutatis Asteroids; an animated land on Toutatis and the view of the motion of the sky from its surface; an Asteroid collision with the Earth; the USAF Station in Hawaii; close-up views of asteroids; automatic drilling of the Moon; exploding Cosmic Particles; and the dropping off of the plasma tail of a comet as it travels near the sun.

CASI

Asteroids; Hale-Bopp Comet; Oort Cloud; Comet Tails; Wild 2 Comet; Cometary Atmospheres

19990117114 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA

Colliding Galaxies: Hubble Space Telescope
Oct. 21, 1997; In English; Videotape: 6 min., 13 sec. playing time, in color, no sound
Report No.(s): NONP--NASA--VT--199906858; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

NASA's Hubble Space Telescope looks deep within the violent center where the two Antennae Galaxies were merging. The Hubble's high resolution and sensitivity reveals the birth of young star clusters formed in the collision. New Hubble images of young star clusters help investigators put the evolutionary sequence into the right order. The Hubble Space Telescope images are: (1) zoom into the antennae galaxies; (2) galaxy merger evolution sequence; (3) the formation of the antennae pair; and (4) artist's conception of the collision of Milky-Way Galaxy with the Andromeda.

CASI

Hubble Space Telescope: Collisions; Star Clusters; Stellar Evolution; Images; Galaxies

20000906443 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA

Asteroid Composite Tape
Jul. 07, 1998; In English; Videotape: 19 min. 50 sec., in color, with sound
Report No.(s): NONP--NASA--VT--199906860; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

This is a composite tape showing 10 short segments primarily about asteroids. The segments have short introductory slides, which include brief descriptions about the shots. The segments are: (1) Radar movie of asteroid 1620 Geographos; (2) Animation of the trajectories of Toutatis and Earth (3) Animation of a landing on Toutatis; (4) Simulated encounter of an asteroid with Earth, includes a simulated impact trajectory; (5) An animated overview of the Manover vehicle; (6) The Near Earth Asteroid Tracking project, includes a photograph of USAF Station in Hawaii, and animation of Earth approaching 4179 Toutatis and the asteroid Giapara; (7) live video of the anchor tests of the Champaillon anchoring apparatus; (8) second live video of the Champaillon anchor tests showing anchoring spikes, and collision rings; (9) An animated segment with narrative about the Stardust mission with sound, which describes the mission to fly close to a comet, and capture cometary material for return to Earth; (10) live video of the drop test of a Stardust replica from a hot air balloon; this includes sound but is not narrated.

CASI

Asteroids; Stardust Mission; Trajectories; Asteroid Collisions; Asteroid Missions
A panel discussion held on May 18, 1994, about the impact of the P/Shoemaker-Levy 9 (SL9) comet with Jupiter and its observable effects on Jupiter’s atmosphere, rings, satellites, and magnetosphere, is presented. Before the panel discussion animations show the first nuclear impact, collision with Jupiter’s might side (5 of the 22 known fragments of P/Shoemaker-Levy 9; N, P2, P1, Q2, and Q1), and simulated views of the Shoemaker-Levy 9 comet impact with Jupiter (from Earth and Galileo spacecraft) were presented. The panelists are: Dr. Eugene Shoemaker (from Lowell Observatory and US Geological Survey), the moderator and Shoemaker-Levy co-discoverer; Dr. Hal Weaver (from Space Telescope Science Institute); Dr. Lucy McFadden (from University of California-San Diego and the University of Maryland); Dr Melissa McGrath (from Space Telescope Science Institute); and Dr. Heidi Hammel (from Massachusetts Institute of Technology).

Topics discussed include: interactions of cometary material with Jupiter’s atmosphere, dynamical parameters of Jupiter’s troposphere and stratosphere, and Hubble Space Telescope (HST) Observations of the SL9 Impacts on Jupiter’s Atmosphere. The panel answered some of the audience’s questions at the end of the discussion. This video, Part 2 (of 2), is a continuation of Part 1. It presents the second part of the question and answer session and a replay of the animations.

Shoemaker-Levy 9 Comet: Cometary Collisions; Jupiter (Planet): Astronomical Observatories: Hypervelocity Impact
Galactic Clusters; Star Formations; Extragalactic Planets; Gas Giant Planets

The following are presented: computer animation of trajectories for both Voyager 1 and 2; view of Jupiter during one orbit of Ganymede; computer animation of Voyager 2’s encounter with Jupiter and its satellites; time lapse of the planet’s rotation and its satellites; spectroscopic sequence of selected frames; cloud motion; Jupiter’s Great Red Spot (4/25 - 5/24, 1979) through a violet filter; and the Great Red Spot through a blue filter by Voyager 1. The dynamics of Jupiter’s clouds are shown - the whole planet is shown first, then two closer looks are repeated several times. Also included are pans of stills of Jupiter’s satellites and a computer simulation tour of Saturn system from POV just behind Voyager, made of 116 images of Saturn through a green filter and of 516 images taken by Voyager 1 (9/12 - 9/14, 1980). Frames are enhanced to show the motion of features in Saturn’s rings. Pans of stills of Saturn’s satellites are shown. There is computer animation of the planet’s system, rings, and Sigma Sagittarii. Images on January, 1986 are through an orange filter.

Astronomers ponder lack of planets in globular cluster [2000]: In English; Videotape: 7 min. 55 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT--200102655; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This videotape has seven segments, discussing and showing the evidence for the proposition that the galactic clusters do not have many planets. Specifically the segments show: (1) Dr. Ron Gililland discussing the process of looking for “Hot Jupiters” (i.e., planets about the size of Jupiter, which are hotter than Jupiter) in the globular clusters, (2) a zoom into 47 Tucanae globular cluster, (3) an animation of a planet passing between the host star and the earth with a brightness graph, (4) the same animation as before without the graph, (5) Ron Gililland of the Space Telescope Science Institute (STScI) discussing possible interpretations of his findings in the 47 Tucanae globular cluster, (6) Ron Gililland examining the images of 47 Tucanae, and (7) images of 47 Tucanae watching for variations in brightness.

Derived from text

Galactic Clusters; Galaxies; Collisions

20010036751 Space Telescope Science Inst., Baltimore, MD USA Quasar Host Galaxies/Neptune Rotation/Galaxy Building Blocks/Hubble Deep Field/Saturn Storm [2001]: In English; Videotape: 13 min. 57 sec. playing time, in color, no sound Report No.(s): NONP-NASA-VT--200102656; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Computerized animations simulate a quasar erupting in the core of a normal spiral galaxy, the collision of two interacting galaxies, and the evolution of the universe. Hubble Space Telescope (HST) images show six quasars’ host galaxies (including spirals, ellipticals, and colliding galaxies) and six clumps of galaxies approximately 11 billion light years away. A false color time lapse movie of Neptune displays the planet’s 16-hour rotation, and the evolution of a storm on Saturn is seen though a view of the planet’s rotation. A zoom sequence starts with a ground-based image of the constellation Ursa major and ends with the Hubble Deep Field through progressively narrower and deeper views.

CASI

Computerized Simulation; Galactic Evolution; Galaxies; Interacting Galaxies; Neptune (Planet); Quasars; Saturn (Planet)

20010036752 Space Telescope Science Inst., Baltimore, MD USA Spinning Stardust into Planets [2001]: In English; Videotape: 6 min. 19 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT--200102654; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

A computerized animation simulates the formation of a stellar disk and planets. Ten images from the Hubble Space Telescope (HST) show young stellar disks (taken with the Near-Infrared Camera Multi-Object Spectrometer (NICMOS)) and stellar disks around young stars (taken with the Wide-Field Planetary Camera 2 (WFPC2)). Dr. Deborah Padgett describes what astronomers see in the images of young stellar disks and Dr. Karl Stapelfeldt explains HST’s role in helping astronomers to examine young stars in order to understand how solar systems like our own may form.

CASI

Planetary Evolution; Planets: Stellar Models; Computerized Simulation; Proto-planetary Disks

20010036753 Space Telescope Science Inst., Baltimore, MD USA The Trifid Nebula: Stellar Sibling Rivalry [2001]: In English; Videotape: 3 min. 55 sec. playing time, in color, no sound Report No.(s): NONP-NASA-VT--200102652; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

A zoom into the Trifid Nebula starts with ground-based observations and ends with a Hubble Space Telescope (HST) image. Another HST image shows star formation in the nebula and the video concludes with a ground-based image of the Trifid Nebula.

CASI

Nebulae; Star Formation

200100367455 Space Telescope Science Inst., Baltimore, MD USA Galaxy Group Stephan’s Quintet Video File HubbleMinute: Battle Royale in Stephan’s Quintet Jul 19, 2001; In English; Videotape: 12 min. 40 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT--2001107899; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The Hubble Space Telescope’s closeup view of Stephan’s Quintet, a group of five galaxies, reveals a string of brighter star clusters that separate like a diamond necklace. Astronomers studying the compact galaxy group Stephan’s Quintet have seen creative destruction in the many collisions taking place among its galaxies. This HubbleMinute discusses what astronomers are learning and hope to learn from exploring the quintet.

Derived from text

Galactic Clusters; Galaxies; Collisions

91 LUNAR AND PLANETARY SCIENCE AND EXPLORATION

Includes planetology; seismology; meteorites; comets; and manned and unmanned planetary and lunar flights. For spacecraft design or space stations see 16 Spacecraft Design, Testing and Performance.

1994010140 NASA, Washington, DC, USA Exploring Mars Mar 1, 1987; In English; 5 min. 40 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT--93-185324; No Copyright; Avail: CASI; B01, Videotape-Beta; V02, Videotape-VHS

This presentation shows what researchers are designing (solar balloon and rover) to better explore Mars geography before sending a manned mission.

Author (revised)

Mars Probes: Planetary Geology; Roving Vehicles; Spacecraft Design

1994009153 NASA Lewis Research Center, Cleveland, OH, USA NASA Images II Apr 1, 1988; In English; 27 min. 6 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT--93-185303; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

A look at unmanned spacecraft to explore planets is presented. The topics covered include Pioneer 10 and 11, Pioneer-Venus, Voyager, IUE, and HEAO.

Author (revised)

HEAO; IUE; Pioneer Project: Space Exploration; Unmanned Spacecraft; Voyager Project

19940010766 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA Voyager encounter highlights Jun 28, 1989; In English; 30 min. 18 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT--93-190217; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The following are presented: computer animation of trajectories for both Voyagers 1 and 2; view of Jupiter during one orbit of Ganymede; computer animation of Voyager 2’s encounter with Jupiter and its satellites; time lapse of the planet’s rotation and its satellites; spectroscopic sequence of selected frames; cloud motion; Jupiter’s Great Red Spot (4/25 - 5/24, 1979) through a violet filter; and the Great Red Spot through a blue filter by Voyager 1. The dynamics of Jupiter’s clouds are shown - the whole planet is shown first, then two closer looks are repeated several times. Also included are pans of stills of Jupiter’s satellites and a computer simulation tour of Saturn system from POV just behind Voyager, made of 116 images of Saturn through a green filter and of 516 images taken by Voyager 1 (9/12 - 9/14, 1980). Frames are enhanced to show the motion of features in Saturn’s rings. Pans of stills of Saturn’s satellites are shown. There is computer animation of the planet’s system, rings, and Sigma Sagittarii. Images on January, 1986 are through an orange filter. Uranus’s satellites are shown as is computer animation of an August 1989 encounter.

CASI

Jupiter (Planet); Jupiter Red Spot; Jupiter Satellites; Saturn Rings; Voyager 1 Spacecraft; Voyager 2 Spacecraft

219
Neptune encounter highlights
Nov 28, 1989; In English; 35 min. 18 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--93--190126; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Voyager encounter data are presented in computer animation (CA) and real
(R) animation. The highlights include a view of 2 full revolutions of Neptune. It
shows spacecraft trajectory 'diving' over Neptune and intercepting Triton’s
orbit, depicting radiation and occultation zones. Also shown are a renegade orbit
of Triton and Voyager’s encounter with Neptune’s Magnetopause. A model of
the spacecraft’s complex maneuvers during close encounters of Neptune and
Triton is presented. A view from Earth of Neptune’s occultation experiment is is
shown as well as a recreation of Voyager’s final pass. There is detail of Voyager’s
Image Compensation technique which produces Voyager images. Eighteen
images were produced on June 22 - 23, 1989, from 57 million miles away. A 68
day sequence which provides a stroboscopic view - colorization approximates
what is seen by the human eye. Real time images recorded live from Voyager on
8/24/89 are presented. Photoclinometry produced the topography of Triton. Three
images are used to create a sequence of Neptune’s rings. The globe of Neptuine
and 2 views of the south pole are shown as well as Neptune rotating. The
rotation of a scooter is frozen in images showing differential motion. There is a
view of rotation of the Great Dark Spot about its own axis. Photoclinometry
provides a 3-dimensional perspective using a color mosaic of Triton images. The
globe is used to indicate the orinetation of Neptune’s crescent. The east and west
plumes on Triton are shown.
CASI
Neptune (Planet); Planetary Rotation; Spacecraft Trajectories; Triton; Voyager
2 Spacecraft

Lunar base concepts
Apr 1, 1985; In English; 3 min. 2 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--93--190405; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This videotape discusses NASA’s plans for a lunar base. Additionally, the
videotape features interviews with George Keyworth, James Beggs, and
Harrison Schmitt.
CASI
Lunar Bases; NASA Space Programs

The 1979 highlights
Dec 1, 1979; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--93--190240; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
The videotape includes footage of the following: Voyagers to Jupiter, Pioneer
to Saturn, High Energy Astronomy Observatory, space telescope, space
shuttle, astronauts Young and Crippen, 10th anniversary of Apollo 11, Skylab
reentry, LANDSAT, satellite freeze warming, Fire Fighting Module, SAGE, wind
generators, Solar Energy Project, electric car research, XV-15, HiMAT, and crash
worthiness tests.
CASI
Energy Technology; HEAO; Highly Maneuverable Aircraft; Hubble Space Tele-
cscope; LANDSAT Satellites; Space Shuttles; XV-15 Aircraft

Voyager encounters Uranus
Jun 1, 1986; In English; 3 min. 2 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--93--190417; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Early results from Voyager’s pass of Uranus and its moon, Miranda, are
shown.
CASI
Miranda; Uranus (Planet); Voyager 2 Spacecraft

Galileo probe spacecraft mission to Jupiter
Oct 1, 1989; In English; 9 min. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--93--190444; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Galileo probe spacecraft mission to Jupiter
Oct 1, 1989; In English; 9 min. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--93--190444; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video contains Galileo probe animation, mission diagrams, and testing and manufacturing footage.
CASI
Checkout; Computer Animation; GalileoProbe; GalileoProject; Manufacturing; PrelaunchSummaries; SpaceVehicleCheckoutProgram

19940814484 NASA, Washington, DC, USA
Voyager’s last encounter
Nov 1, 1989; In English; 3 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-198209; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video describes Voyager 2’s encounter with Neptune. Computer animation and actual data convey Voyager’s discoveries such as turbulent storms and dark spots in Neptune’s atmosphere, six new moons, Neptune’s three rings, and the presence of frozen methane on Triton, as researchers at NASA’s Jet Propulsion Laboratory describe Voyager’s achievements.
CASI
Neptune (Planet); Neptune Atmosphere; Neptune Satellites; Planetary Rings; Voyager 2 Spacecraft

19940814485 NASA, Washington, DC, USA
Magellan, Galileo, and Ulysses
Jan 1, 1991; In English; 4 min. 4 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-198209; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
A combination of sophisticated computer animation and shuttle footage describe the missions of Ulysses, Galileo, and Magellan satellites to the solar system. Ulysses, launched in October 1990 by the European Space Agency, will study the sun. Galileo, launched in October 1989, will probe the Jovian system by releasing a probe that will descend into Jupiter’s atmosphere and by using 12 instruments which will study Jupiter’s 16 moons, its atmosphere, and its radiation and magnetic fields. Magellan, released from Space Shuttle Atlantis in May 1990, uses a synthetic aperture radar to probe through Venus’ dense atmosphere to map its planetary surface. A computer animation simulates flying over the surface of Venus.
CASI
Galileo Project; Galileo Spacecraft; Magellan Project (NASA); Magellan Spacecraft (NASA); Planetary Geology; Space Exploration; Ulysses Mission

19940814486 NASA, Washington, DC, USA
Future energy source
Oct 1, 1990; In English; 3 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-198210; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video describes the efforts of the Center for the Commercial Development of Space in Wisconsin to develop a strategy for mining Helium-3, an efficient, environmentally safe alternative to fossil fuels that exists on the moon. Animated sequences depict the equipment that could mine the lunar surface, boil away Helium-3 to be transported back to earth, and return the soil to the moon without destroying the lunar surface.
CASI
Helium Isotopes; Lunar Excavation Equipment; Lunar Mining; Lunar Resources; Space Commercialization

19940814493 NASA Lewis Research Center, Cleveland, OH, USA
Spacework 17: O’Leary’s Mars
May 1, 1988; In English; 28 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-198221; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Brian O’Leary gives his ideas on reaching and exploring Mars.
CASI
Mars (Planet); Space Exploration

19940827299 NASA Lewis Research Center, Cleveland, OH, USA
Mars: Five views on what is known
Feb 1, 1993; In English; 29 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-9951; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video gives a historical survey of philosophy and scientific study of the nature of the surface of Mars and discussion of whether life existed or exists on Mars. Several Lewis researchers recount early telescope observations of Mars including the identification of ‘channels’ or possible ancient waterways on the surface. An overview of the accomplishments of the Mariner spacecraft in mapping the surface of Mars as well as a detailed description of the Viking missions to Mars are presented. The results of the Viking Biology Experiment, conducted by the Viking Landers, are highlighted. There is also a discussion of the possible presence of monuments and a huge ‘face’ on the Martian surface. The video includes several computer simulations of flight over the Martian surface.
CASI
Extraterrestrial Life; General Overviews; Histories: Mars (Planet); Mars Probes; Mars Surface; Planetary Mapping

19940929981 Jet Propulsion Lab., California Inst.of Tech., Pasadena, CA, USA
And then there was Voyager
Sep 25, 1990; In English; 30 min. 19 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-9945; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
NASA’s legendary grand tour of the outer solar system from the mission conception in the early 1970’s is described. The search for the heliopause is discussed. This presentation is told in the words of the key members of the Voyager team.
CASI
Grand Tours: Milky Way Galaxy; Voyager Project

19940929586 NASA Ames Research Center, Moffett Field, CA, USA
Exobiology and solar system exploration
Aug 1, 1988; In English; 4 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-13713; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The exploration of the solar system through video animation is shown. Actual footage of the Earth’s water and land surface is included.
ARC
Exobiology; Space Exploration

19940936998 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA
Galileo: The Jovian laboratory
Oct 1, 1989; In English; 6 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-15912; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video presentation gives a pre-launch description of the Galileo Mission.
CASI
Galileo Project; Space Exploration

19940936999 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA
Voyager: National Air and Space Museum
Oct 1, 1989; In English; 4 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-15913; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
A recap of the travels of the Voyager spacecraft to the outer planets is presented. (This video was originally made for a talk at the National Air and Space Museum.
CASI
Space Exploration; Voyager Project

19940931000 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA
Voyager last picture show
Sep 1, 1990; In English; 5 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-15914; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video presentation blends animation, actual photos, and data of the Voyager-Neptune encounter.
CASI
Neptune (Planet); Space Exploration; Voyager Project

221
Comet Impact tape 1
Nov 1, 1990; In English; 2 min. 18 sec. playing time, in color, with sound
Report No(s): NONP-NASA-ct-94-15915; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video presents preliminary results as seen through the violet filter of the Galileo Solid State Imaging System.
CASI

Cometary Collisions; Jupiter (Planet); Shoemaker-Levy 9 Comet

Comet Impact tape 2
Jul 1, 1994; In English; 1 hr. 14 min. playing time, with sound
Report No(s): NONP-NASA-ct-94-23154; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS
Continued press coverage of the comet Shoemaker-Levy 9 impact on the surface of Jupiter is presented. This tape covers 19 Jul. 1994.
CASI

Cometary Collisions; Jupiter (Planet); Shoemaker-Levy 9 Comet

Comet Impact tape 3
Jul 1, 1994; In English; 1 hr. 22 min. playing time, with sound
Report No(s): NONP-NASA-ct-94-23152; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS
Continued press coverage of the comet Shoemaker-Levy 9 impact on the surface of Jupiter is presented. This tape covers 17 Jul. 1994.
CASI

Cometary Collisions; Jupiter (Planet); Shoemaker-Levy 9 Comet

Comet Impact tape 4
Jul 1, 1994; In English; 1 hr. playing time, with sound
Report No(s): NONP-NASA-ct-94-23153; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
Continued press coverage of the comet Shoemaker-Levy 9 impact on the surface of Jupiter is presented. This tape covers 18 Jul. 1994.
CASI

Cometary Collisions; Jupiter (Planet); Shoemaker-Levy 9 Comet

Comet Impact tape 5
Jul 1, 1994; In English; 1 hr. 12 min. playing time, with sound
Report No(s): NONP-NASA-ct-94-23159; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS
Continued press coverage of the comet Shoemaker-Levy 9 impact on the surface of Jupiter is presented. This tape covers 20 Jul. 1994.
CASI

Cometary Collisions; Jupiter (Planet); Shoemaker-Levy 9 Comet

Comet Impact tape 6
Jul 1, 1994; In English; 1 hr. 32 min. playing time, with sound
Report No(s): NONP-NASA-ct-94-23156; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS
Continued press coverage of the comet Shoemaker-Levy 9 impact on the surface of Jupiter is presented. This tape covers 21 Jul. 1994.
CASI

Cometary Collisions; Jupiter (Planet); Shoemaker-Levy 9 Comet

Comet Impact tape 7
Jul 1, 1994; In English; 1 hr. 30 min. playing time, with sound
Report No(s): NONP-NASA-ct-94-23157; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS
Continued press coverage of the comet Shoemaker-Levy 9 impact on the surface of Jupiter is presented. This tape covers 22 Jul. 1994.
CASI

Cometary Collisions; Jupiter (Planet); Shoemaker-Levy 9 Comet

Comet Impact tape 8
Jul 1, 1994; In English; 1 hr. 30 min. playing time, with sound
Report No(s): NONP-NASA-ct-94-23158; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS
Continued press coverage of the comet Shoemaker-Levy 9 impact on the surface of Jupiter is presented. This tape covers 23 Jul. 1994.
CASI

Cometary Collisions; Jupiter (Planet); Shoemaker-Levy 9 Comet

Comet Impact tape 9
Jul 1, 1994; In English; 1 hr. 21 min. playing time, with sound
Report No(s): NONP-NASA-ct-94-23159; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS
Continued press coverage of the comet Shoemaker-Levy 9 impact on the surface of Jupiter is presented. This tape covers 24 Jul. 1994.
CASI

Cometary Collisions; Jupiter (Planet); Shoemaker-Levy 9 Comet

Comet Impact tape 10
Jul 1, 1994; In English; 1 hr. 32 min. playing time, with sound
Report No(s): NONP-NASA-ct-94-23160; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS
Continued press coverage of the comet Shoemaker-Levy 9 impact on the surface of Jupiter is presented. This tape covers 25 Jul. 1994.
CASI

Cometary Collisions; Jupiter (Planet); Shoemaker-Levy 9 Comet

Comet Impact tape 11
Jul 1, 1994; In English; 1 hr. 30 min. playing time, with sound
Report No(s): NONP-NASA-ct-94-23161; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS
Continued press coverage of the comet Shoemaker-Levy 9 impact on the surface of Jupiter is presented. This tape covers 26 Jul. 1994.
CASI

Cometary Collisions; Jupiter (Planet); Shoemaker-Levy 9 Comet

Comet Impact tape 12
Jul 1, 1994; In English; 1 hr. 32 min. playing time, with sound
Report No(s): NONP-NASA-ct-94-23162; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS
Continued press coverage of the comet Shoemaker-Levy 9 impact on the surface of Jupiter is presented. This tape covers 27 Jul. 1994.
CASI

Cometary Collisions; Jupiter (Planet); Shoemaker-Levy 9 Comet

Comet Impact tape 13
Jul 1, 1994; In English; 1 hr. 30 min. playing time, with sound
Report No(s): NONP-NASA-ct-94-23163; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS
Continued press coverage of the comet Shoemaker-Levy 9 impact on the surface of Jupiter is presented. This tape covers 28 Jul. 1994.
CASI

Cometary Collisions; Jupiter (Planet); Shoemaker-Levy 9 Comet

Comet Impact tape 14
Jul 1, 1994; In English; 1 hr. 32 min. playing time, with sound
Report No(s): NONP-NASA-ct-94-23164; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS
Continued press coverage of the comet Shoemaker-Levy 9 impact on the surface of Jupiter is presented. This tape covers 29 Jul. 1994.
CASI

Cometary Collisions; Jupiter (Planet); Shoemaker-Levy 9 Comet
19950014571 NASA, Washington, DC, USA

Mars Pathfinder B-roll

Jan 1, 1997; In English; 9 min. 6 sec. playing time
Report No.(s): NONP-NASA--VT--95-29774; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video uses computer graphic models of the heat shield, lander, and parachute to present an artist’s concept of the Mars Pathfinder descent. Viking image mosaics are used to create a rotating globe of Mars. A separate segment presents a simulated flight over the Mars Pathfinder landing site.

CASI
Mars Landing; Parachute Descent; Spacecraft Landing; Spacecraft Maneuvers

19950010421 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

Apollo 16: Nothing so hidden

Jan 1, 1972; In English; 28 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--95-35955; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

This film shows the landing and the three lunar traverses in the highland region of the moon, near the crater Descartes. It includes an astronaut’s eye view from the rover, lunar grand prix, discovery of the house-sized rock, lunar lift-off and eva 173,000 miles above the earth. Microphones and cameras in mission control record the emergency problem solving during the prelanding crisis and the reactions of scientists on earth as the astronauts explore the moon.

JSC
Apollo 16 Flight; Lunar Craters; Lunar Exploration; Lunar Landing; Lunar Launch; Lunar Photography; Lunar Rocks; Lunar Trajectories; Moon

19950010422 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

Apollo 17: On the shoulders of giants

Jan 1, 1975; In English; 28 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--95-33956; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

A documentary view of the Apollo 17 journey to Taurus-Littrow, the final lunar landing mission in the Apollo program is discussed. The film depicts the highlights of the mission and relates the Apollo program to Skylab, the Apollo-Soyuz linkup and the Space Shuttle.

Author
Apollo Soyuz Test Project; Apollo 17 Flight; Lunar Landing; Space Shuttles

19950010423 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

New look at the old Moon

Jan 1, 1982; In English; 28 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--95-35957; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

The decade of 1969–1979 is seen as the time when lunar science emerged from the dark ages as a result of the geophysical and sample investigations made possible by the Apollo flights to the moon. After a brief summary of the Apollo missions and laboratory investigative techniques, the film treats the major epochs in lunar history uncovered by the investigations. Finally, the moon is depicted as having a practical role in the future of science and technology, as well as serving as the pattern for the future exploration of space.

JSC
Apollo Flights; Lunar Evolution; Lunar Exploration; Lunar Programs; Moon; Space Exploration

19950010527 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

Apollo 15: In the mountains of the Moon

Jan 1, 1971; In English; 28 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--95-34903; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

This video features the following: (1) extra vehicle activity (EVA); (2) the three traversed of the lunar surface; (3) film taken from the lunar Rover; (4) hammer and feather tests of Galileo’s theory on falling objects in gravity fields; (5) Worden’s EVA; (6) subsatellite launching; (7) X-ray pulsar observations; and (8) splash down with one parachute collapsed.

JSC
Apollo 15 Flight; Extravehicular Activity; Lunar Exploration System For Apollo

19950012639 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

Mercury: Exploration of a planet

Jan 1, 1976; In English; 22 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--95-39134; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

The flight of the Mariner 10 spacecraft to Venus and Mercury is detailed in animation and photography. Views of Mercury are featured. Also included is an animation on the origin of the solar system. Dr. Bruce C. Murray, director of the Jet Propulsion Laboratory, comments on the mission.

JSC
Mercury 10 Space Probe; Mercury (Planet); Solar System Evolution; Venus (Planet)

19950014779 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

Moon: Old and new

Jan 1, 1970; In English; 25 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--95-42155; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

This video presents the moon as studied by man for more than 20 centuries. It reviews the history of lunar studies before the first moon landing, major things learned since Apollo II, and closes with a resume of lunar investigations scientists would like to undertake in the future.

Author
Apollo Spacecraft; Lunar Exploration; Moon

19950018252 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA

Mars observer mission: Mapping the Martian world

Jan 1, 1992; In English; 7 min. 14 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--95-47244; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The 1992 Mars Observer Mission is highlighted in this video overview of the mission objectives and planning. Using previous photography and computer graphics and animation, the main objectives of the 687 day (one Martian year) consecutive orbit by the Mars Observer Satellite around Mars are explained. Dr. Arden Albee, the project scientist, speaks about the pole-to-pole mapping of the Martian surface topography, the planned relief maps, the chemical and mineral composition analysis, the gravity fields analysis, and the proposed search for any Mars magnetic fields.

CASI
Gravitational Fields; Mars (Planet); Mars Exploration; Mars Observer; Mars Satellites; Mars Surface; Mission Planning; Planetary Magnetic Fields; Planetary Mapping; Satellite-Borne Photography; Topography

19950022757 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA

Collection of Magellan Venus radar mapping results

Mar 8, 1991; In English; 6 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--95-46003; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Through computer animation several geological features of Venus are presented in this video. The Sif Mons, a 1.2 mile high volcano and the Gula Mons, a 1.8 mile high volcano are shown. Also, radar images of a rift valley, several impact craters, and a coronas can be seen. The video ends with a northeast view of Eistla Regio.

CASI
Computer Aided Mapping; Planetary Geology; Planetary Mapping; Radar Imagery; Radar Maps; Venus (Planet); Venus Surface

19950023543 Interface Video Systems, Inc., Washington, DC, USA

Rover story

Jul 9, 1990; In English; Sponsored by NASA; Washington; 6 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--95-56825; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Future Mars exploration missions and operations are discussed using computer animation along with proposed vehicles and equipment, for example, Mars surface land rover. There is a Presidential Address by President George Bush where he discusses future goals for space exploration. This video also

223
This video is a compilation of visualizations, animation and some actual shots from the Galileo mission. It shows the trajectories of the mission around Jupiter and its natural satellites. Most of the video is comprised of computer animations of the spacecraft's trajectory, encounters with the Galilean satellites Io, Europa and Ganymede, as well as their atmospheric and surface structures. Computer animations of plasma wave observations of Ganymede's magnetosphere, a surface gravity map of Io, the Galileo/Jo flyby, the Galileo space probe orbit insertion around Jupiter and actual shots of Jupiter's Great Red Spot are presented. Panoramic views of our Earth (from orbit) and moon (from orbit) as seen from Galileo as well as actual footage of the Space Shuttle/Galileo liftoff and Galileo's space probe separation are also included.

CASI

Galileo spacecraft; Unmanned spacecraft; Jupiter (Planet); Galileo Project; Galileo Probe; Galilean Satellites; Flyby Missions

Outreach

Outreach Program, which offers the public the chance to suggest new ideas for space research and exploration.

Author

Apollo 14 Flight: Astronauts; Lunar Exploration; Lunar Surface; Moon: Weighlessness

1999#003277 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

Apollo 14 mission to F. Mauro

Beatley, Brian D., editor, NASA Lyndon B. Johnson Space Center, USA; Apr 1, 1991; In English; 28 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP NASA-VT-95-500565; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The 1971 Apollo 14 Mission to Fra Mauro, a lunar highland area, is highlighted in this video. The mission's primary goal was the collection of lunar rocks and soil samples and lunar exploration. The soil and rock sampling was for the geochronological determination of the Moon's evolution and its comparison with that of Earth. A remote data collection station was assembled on the Moon and left for continuous data collection and surface monitoring experiments. The Apollo 14 astronauts were Alan B. Shepard, Edgar D. Mitchell, and Stuart A. Roosa. Astronauts Shepard and Mitchell landed on the Moon (February 5, 1971) and performed the sampling, the EVA, and deployment of the lunar experiments. There is film-footage of the lunar surface, of the command module's approach and landing, and lunar module docking, and of Mission Control.

CASI

Apollo 14 Flight; Astronauts; Geochronology; Highlands; Lunar Exploration; Lunar Exploration System For Apollo; Lunar Rocks; Lunar Soil; Lunar Surface; Manned Spacecraft; Soil Sampling

1999#116267 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA

Voyager Outreach Program

Sep. 17, 1998; In English; Videotape: 1 hr., 1 min. 29 sec. playing time, in color, with sound
Report No.(s): NONP NASA-VT-1999020757; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This NASA JPL (Jet Propulsion Laboratory) video presents a collection of the best videos that have been published of the Voyager mission. Computer animation/simulations comprise the largest portion of the video and include outer planetary magnetic fields, outer planetary surfaces, and the Voyager spacecraft trajectory. Voyager visited the four outer planets: Jupiter, Saturn, Uranus, and Neptune. The video contains some live shots of Jupiter (actual), the Earth's moon (from orbit), Saturn (actual), Neptune (actual) and Uranus (actual), but is mainly comprised of computer animations of these planets and their moons. Some of the individual short videos that are compiled are entitled: The Solar System, Voyage to the Outer Planets; A Tour of the Solar System; and the Neptune Encounter. Computerized simulations of viewing Neptune from Triton, Diving over Neptune to Meet Triton, and Catching Triton in its Retrograde Orbit are included. Several animations of Neptune's atmosphere, rotation and weather features as well as significant discussion of the planet's natural satellites are also presented.

CASI

Voyager Project; Space Probes; Space Missions; Neptune (Planet); Unmanned Spacecraft; Voyager 1 spacecraft; Voyager 2 spacecraft; Computer Animation

1999#116236 NASA Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA

Galileo Outreach Program

Sep. 17, 1998; In English; Videotape: 1 hr. 23 min. 4 sec. playing time, in color, with sound
Report No.(s): NONP NASA-VT-1999020758; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This NASA JPL (Jet Propulsion Laboratory) video production is a compilation of the best short movies and computer simulation/animations of the Galileo spacecraft's journey to Jupiter. A limited number of actual shots are presented of Jupiter and its natural satellites. Most of the video is comprised of computer animations of the spacecraft's trajectory, encounters with the Galilean satellites Io, Europa and Ganymede, as well as their atmospheric and surface structures. Computer animations of plasma wave observations of Ganymede's magnetosphere, a surface gravity map of Io, the Galileo/Jo flyby, the Galileo space probe orbit insertion around Jupiter, and actual shots of Jupiter's Great Red Spot are presented. Panoramic views of our Earth (from orbit) and moon (from orbit) as seen from Galileo as well as actual footage of the Space Shuttle/Galileo liftoff and Galileo's space probe separation are also included.

CASI

Galileo spacecraft; Unmanned spacecraft; Jupiter (Planet); Galileo Project; Galileo Probe; Galilean satellites; Flyby Missions

1999#116454 NASA Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA

Mars Pathfinder and Mars Global Surveyor Outreach Program

Sep. 17, 1999; In English; Videotape: 51 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP NASA-VT-1999020757; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This videotape is a compilation of the best NASA JPL (Jet Propulsion Laboratory) videos of the Mars Pathfinder and Mars Global Surveyor missions. The mission is described using animation and narration as well as some actual footage of the entire sequence of mission events. Included within these animations are the spacecraft orbit insertion; descent to the Mars surface; deployment of the airbags and instruments; and exploration by Sojourner, the Mars rover. JPL activities at spacecraft control during significant mission events are also included at the end. The spacecraft cameras pan the surrounding Mars terrain and film Sojourner traversing the surface and inspecting rocks. A single, brief, processed image of the Cydonia region (Mars face) at an oblique angle from the Mars Global Surveyor is presented. A description of the Mars Pathfinder mission, instruments, landing and deployment process, Mars approach, spacecraft orbit insertion, rover operation are all described using computer animation. Actual color footage of Sojourner as well as a 360 deg pan of the Mars terrain surrounding the spacecraft is provided. Lower quality black and white photography depicting Sojourner traversing the Mars surface and inspecting Martian rocks also is included.

CASI

Mars Pathfinder; Mars Global Surveyor; Mars Landing; Mars Surface; Roving Vehicles; Computer Animation

1999#116711 NASA Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA

Galileo Science Summary October, 1999

Oct. 29, 1997; In English; Videotape: 17 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP NASA-VT-1999020666; No Copyright; Avail: CASI; BI02, Videotape-Beta; V02, Videotape-VHS

This video is a compilation of visualizations, animation and some actual shots from the Galileo mission. It shows the trajectories of the mission around Jupiter that took the mission to Jupiter, and the various orbits of the spacecraft around the planet, that allowed for the views of several of Jupiter's moons from which the visualizations of this video are taken. It mainly shows the visualization-
tions of the Galileo’s view of Jupiter’s atmosphere, Io, Ganymede, and Europa. There is no spoken presentation, the views are announce with slides prior to the presentation. Orchestrated selections from Vivaldi’s Four Season’s serves as background.

NASA
Galileo Project: Galileo Spacecraft; Ganymede; Io; Jupiter (Planet); Jupiter Atmosphere; Europa

19990116991 NASA Kennedy Space Center, Cocoa Beach, FL USA Shoemaker–Levy Comet Impact with Jupiter Press Briefing Jul. 18, 1994; In English; Videotape: 46 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–1999206992; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A press briefing about the impact of the G fragment of Comet Shoemaker-Levy on the planet Jupiter is presented. The briefing occurred on July 18, 1994 just hours after the impact. Still black and white pictures taken from the Hubble Space Telescope are presented. Eugene Shoemaker, co-discoverer of the Comet, and Heidi Hammel, Principal Investigator for the Hubble Imaging team at MIT present preliminary results of the study of images and answer questions about the impact and the results of the impact on Jupiter.

CASI
Shoemaker-Levy 9 Comet; Jupiter (Planet); Cometary Collisions; Craters; Hypervelocity Impact

19990117115 NASA Kennedy Space Center, Cocoa Beach, FL USA Galileo Probe: Spacecraft Mission to Jupiter Press Release Sep. 1989; In English; Videotape: 9 min. playing time, in color, no sound Report No.(s): NONP–NASA–VT–199207897; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video is a compilation of three short videos related to the Galileo mission. The first section shows animation of the descent of the Galileo probe into the atmosphere of Jupiter. It includes cutaway views of the atmosphere showing the different layers. This descent will represent the first entry into the atmosphere of an outer planet in our solar system. A second section shows some live shots of the development and drop chute tests of the Galileo spacecraft. A third section is an animation that shows the Probe mission. It shows visualizations from the launch, including the Venus flyby, the separation of the probe and the orbiter, and the trajectory of the planetary arrival. It also shows the descent of the probe into the atmosphere.

CASI
Galileo Spacecraft; Galileo Project: Jupiter (Planet)

19990117249 NASA Kennedy Space Center, Cocoa Beach, FL USA Galileo Earth/Moon 2 Press Conference Live from JPL Dec. 22, 1992; In English; Videotape: 11 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–199206983; No Copyright; Avail: CASI; B01, Videotape-Beta: V01, Videotape-VHS

The end of a press conference and short views of the Earth from the two Earth-Moon flybys of the Galileo spacecraft are presented. An audio playback of the Plasma Wave Instrument is also presented. The views of the Earth are from December 11, 1990, December 8, 1989 and December 22, 1992. The views from December 11, 1990 show panoramic views of the Earth as seen from space, the views from December 8, 1992 show close-up views of the Earth, and the views from December 22, 1992 include some simulations from the views taken on December 8, 1992.

CASI
Earth (Planet): Galileo Project

20000800248 NASA Kennedy Space Center, Cocoa Beach, FL USA Comet Shoemaker–Levy 9 Impact Press Conference Jul. 20, 1994; In English; Videotape: 1 hr 2 min. 34 sec. playing time, in color, with sound Report No.(s): NONP–NASA–VT–199208079; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

A press conference held on July 20, 1994 is presented. Leading off the press conference was an announcement about a major discovery that was made possible from the study of the impact. The participants in the panel were: (1) Roger Yelle from the University of Arizona, (2) Renee Prange of the Institute Astrophysique Spatiale, (3) Lucy McFadden of the University of California, and the University of Maryland, (4) David Levy, the co-discoverer of the Shoemaker-Levy comet. The moderator for this conference was Steven Maran of the Goddard Space Flight Center. Roger Yelle, who had been working on analyzing spectographic evidence, made the announcement that sulfur in the form of S2 had been discovered. There was also discussion about the interactions of the atmosphere with the fragments. This interaction had caused a shift in the aurora of Jupiter. The observations of the impact sites made by amateurs were discussed. A summary of the observations from different observatories was also given. Included in these observations were reports from the airborne Kuiper Observatory Telescope and the McDonald observatory.

CASI
Atmospheres; Cometary Collisions; Fragments; Shoemaker-Levy 9 Comet; Sulfur (Planet); Jupiter (Planet); Jupiter Atmosphere

20000800254 NASA Kennedy Space Center, Cocoa Beach, FL USA Galileo Earth Moon Flyby Dec. 08, 1992; In English; Videotape: 45 min. 22 sec. playing time, in color, with sound Report No.(s): NONP–NASA–VT–199207899; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video has five sections. The first is a live discussion of the information that scientists hope to gain by the Galileo flyby of the Moon. This section has no introduction. There is a great deal of the discussion about the lunar craters and lunar volcanism. There is also some discussion of the composition of the far side of the moon. The second section is a short animation that shows the first step to Jupiter with particular emphasis on the gravitational assisted velocity boost, which was planned to give the spacecraft the requisite velocity to make the trip to Jupiter. The next section is an update of the status of the flyby of the Moon, and the Earth, with an explanation of the trajectory around the earth, and the moon. A photograph of the tracking station in Canberra, Australia is included. The next section is a discussion with the person charged with the procurement of the instrumentation aboard the spacecraft; the importance of the lunar flyby to assist in the calibration of the instruments is discussed.

CASI
Galileo Spacecraft; Moon; Galileo Probe; Galileo Project; Interplanetary Trajectories; Swingby Technique; Gravitational Effects

20000800448 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA Voyager II Encounter with Neptune: Voyager/Neptune Briefing Aug. 07, 1989; In English; Videotape: 1 hr. 57 min. 39 sec. playing time, in color, with sound Report No.(s): NONP–NASA–VT–199206990; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The main focus of this lecture is to discuss the relative size of the planets, the formation of the solar system, details of atmospheric motion (atmospheric dynamics), the aspects of the magnetic fields, different ring systems, and the Triton satellite. The study evolves around the planets of Jupiter, Saturn, Uranus, and Neptune. Their temperature and absorption properties of the ice are discussed. Two of the chemicals being absorbed by the ice are ammonia and methane. Also discussed are the belt and zonal circulation models, jet streams, plumes and clouds, magnetic fields, planetary rings, the pressure on Triton, the atmosphere of Titan, Cassini, Aria, Ganymede, Ariel, Miranda, Io, Europa, Amalthea, Rhea, Dione, Tethys, Enceladus, Metis, Hyperion, Oberon, Titania, and Umbriel. The lecture also contained some computerized simulation and various images from Voyager.

CASI
Solar System: Flyby Missions; Voyager 2 Spacecraft; Saturn (Planet); Uranus Satellites; Uranus (Planet); Jupiter Satellites; Jupiter (Planet); Neptune Satellites; Neptune (Planet)

20000800442 NASA Kennedy Space Center, Cocoa Beach, FL USA Shoemaker–Levy 9 Comet Impact Briefing Jul. 21, 1994; In English; Videotape: 1 hr. 2 min. 37 sec. playing time, in color, with sound Report No.(s): NONP–NASA–VT–199206979; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

A press conference held on July 21, 1994, about the impact of some of the...
fragments from Comet Shoemaker-Levy is presented. The press conference opened with a still of Jupiter, showing the impact site of several fragments. The following people were on the panel: (1) Hal Weaver, from the Space Telescope Science Institute, (2) Rita Beebe from New Mexico State University, (3) Lucy McFadden from the University of California and the University of Maryland, (4) David Levy, the co-discoverer of the Shoemaker-Levy comet. The moderator was Eugene Shoemaker. The discussion was about the impact of the fragments on Jupiter. There were 21 pieces that were counted from earlier observations. There was some discussion about the further fragmentation of Q into two pieces.

There was also some discussion about the impact on the planet of several fragments. These were due to hit ten hours apart on the same spot. There were reports from the observatories around the world, including a tape from the Lowell Observatory, a summary of the views from the Galileo orbiter, a video of the impacts from the G fragment, and views of the results from the impact of the C and G fragments as viewed from Australia.

CASI
Cometary Collisions: Fragmentation; Shoemaker-Levy 9 Comet; Jupiter (Planet); Jupiter Atmosphere

This NASA Kennedy Space Center video production presents Part 2 of a press conference held at JPL on August 8, 1989. The briefing in its entirety covers the Galileo Project’s mission design from launch to completion in 1997 and is moderated by JPL Public Information Mgr. Robert Macmillan. Part 3 of the 3 part video series centers on the Galileo science goals, which are to explore not only Jupiter but the entire Jovian system, and the individual instruments that will make these objectives possible. Dr. Torrence V. Johnson (Project Scientist) introduces Dr. Richard Young (Probe Scientist (AMES)) and Dr. Clayne M. Yeates (Acting Science Mission Design Manager) who discuss the six main instruments included on the Probe and the Orbiter experiments and instrumentation, respectively. The video is rounded out by a period in which the Science Writer’s are given an opportunity to ask questions of the seven member panel.

CASI
Galileo Project; Galileo Spacecraft; Spacecraft Instruments; Space Exploration

This NASA Kennedy video production presents Part 3 of a press conference held at JPL on August 8, 1989. The briefing in its entirety covers the Galileo Project’s mission design from launch to completion in 1997 and is moderated by JPL Public Information Mgr. Robert Macmillan. Part 3 of the 3 part video series centers on the Galileo science goals, which are to explore not only Jupiter but the entire Jovian system, and the individual instruments that will make these objectives possible. Dr. Torrence V. Johnson (Project Scientist) introduces Dr. Richard Young (Probe Scientist (AMES)) and Dr. Clayne M. Yeates (Acting Science Mission Design Manager) who discuss the six main instruments included on the Probe and the Orbiter experiments and instrumentation, respectively. The video is rounded out by a period in which the Science Writer’s are given an opportunity to ask questions of the seven member panel.

CASI
Galileo Project; Galileo Spacecraft; Spacecraft Instruments; Space Exploration

This NASA Kennedy Space Center video production presents Part 2 of a press conference held at JPL on August 8, 1989. The briefing in its entirety covers the Galileo Project’s mission design from launch to completion in 1997 and is moderated by JPL Public Information Mgr. Robert Macmillan. Part 2 of the 3 part video series begins with Richard J. Spehalski’s (Galileo Project Manager) description of the spacecraft and mission operations. E. Chemack gives a slide presentation of a Galileo spacecraft model and some design features unique to the spacecraft. John Givens (Probe System Design Manager) then presents a brief overview of the mission and subsystems surrounding the Galileo Space Probe. Neal E. Ausman, Jr. (Mission Director) ends the video with a discussion of mission operations including slides of the Galileo launch scenario and a trajectory correction maneuver.

CASI
Galileo Project; Galileo Spacecraft; Galileo Probe

This NASA Kennedy video production presents Part 1 of a press conference held at JPL on August 8, 1989. The briefing in its entirety covers the Galileo Project’s mission design from launch to completion in 1997 and is moderated by JPL Public Information Mgr. Robert Macmillan. Part 1 of the 3 part video series includes presentations by Richard J. Spehalski (Galileo Project Manager) and Clayne M. Yeates (Acting Science Mission Design Manager). Mr. Spehalski’s presentation includes actual footage of spacecraft preparations at Kennedy Space Center and slides of mission timelines. Dr. Yeates discusses the Galileo mission in chronological order and includes slides of the interplanetary trajectory, encounter geometry, propellant margins vs. launch date, and planned earth images.

CASI
Galileo Spacecraft; Galileo Project; Mission Planning; Flyby Missions

This NASA Kennedy video production presents Part 3 of a press conference held at JPL on August 8, 1989. The briefing in its entirety covers the Galileo Project’s mission design from launch to completion in 1997 and is moderated by JPL Public Information Mgr. Robert Macmillan. Part 3 of the 3 part video series centers on the Galileo science goals, which are to explore not only Jupiter but the entire Jovian system, and the individual instruments that will make these objectives possible. Dr. Torrence V. Johnson (Project Scientist) introduces Dr. Richard Young (Probe Scientist (AMES)) and Dr. Clayne M. Yeates (Acting Science Mission Design Manager) who discuss the six main instruments included on the Probe and the Orbiter experiments and instrumentation, respectively. The video is rounded out by a period in which the Science Writer’s are given an opportunity to ask questions of the seven member panel.

CASI
Galileo Project; Galileo Spacecraft; Spacecraft Instruments; Space Exploration

This NASA Kennedy video production presents Part 2 of a press conference held at JPL on August 8, 1989. The briefing in its entirety covers the Galileo Project’s mission design from launch to completion in 1997 and is moderated by JPL Public Information Mgr. Robert Macmillan. Part 2 of the 3 part video series begins with Richard J. Spehalski’s (Galileo Project Manager) description of the spacecraft and mission operations. E. Chemack gives a slide presentation of a Galileo spacecraft model and some design features unique to the spacecraft. John Givens (Probe System Design Manager) then presents a brief overview of the mission and subsystems surrounding the Galileo Space Probe. Neal E. Ausman, Jr. (Mission Director) ends the video with a discussion of mission operations including slides of the Galileo launch scenario and a trajectory correction maneuver.

CASI
Galileo Project; Galileo Spacecraft; Galileo Probe

This NASA Kennedy video production presents Part 1 of a press conference held at JPL on August 8, 1989. The briefing in its entirety covers the Galileo Project’s mission design from launch to completion in 1997 and is moderated by JPL Public Information Mgr. Robert Macmillan. Part 1 of the 3 part video series includes presentations by Richard J. Spehalski (Galileo Project Manager) and Clayne M. Yeates (Acting Science Mission Design Manager). Mr. Spehalski’s presentation includes actual footage of spacecraft preparations at Kennedy Space Center and slides of mission timelines. Dr. Yeates discusses the Galileo mission in chronological order and includes slides of the interplanetary trajectory, encounter geometry, propellant margins vs. launch date, and planned earth images.

CASI
Galileo Spacecraft; Galileo Project; Mission Planning; Flyby Missions
Satellites; Interplanetary trajectories; CASI 

methods used to ensure the safety of the capsules containing fire hazardous ternperattu'e. A video of the arriwtl of the spacecraft at KSC and final tests and fore Radioisotope heater units are used to keep the equipment at operational Galileo will travel from the sun precludes the use of solar energy lbr heat. There-
flybys are reviewed. Detailed designs of the orbiter are shown. The mission trajectory and gravity assists from planetm T arid sohu" 

arrival of the Galileo Orbiter at KSC. The required steps prior to tile lauudl are 

Galileo Project Scientist at JPL. The briefing begins with an announcement of the 

(CPL); Dick Spehalski, Galileo Project Manager at JPL; and Terrence Johnson, 

director of Payload and operations at Kennedy; Donald E. Wilinmls, Commander 

Dec. 01, 1992; In English; Videotape: 1 hr, 2 min., 20 sec., playing time, in color, with sound 

Report No.(s): NONP-NASA-VT--2000001077; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS 

This NASA Kennedy Space Center (KSC) video release (Part 1 of 2) begins 

with a presentation given by William J. O’Neil (Galileo Project Manager) 

describing the status and position of the Galileo spacecraft 7 days prior to the 

Galileo Earth/Moon News Conference, Part 1 

Galileo Earth/Moon News Conference, Part 2 

Dec. 01, 1992; In English; Videotape: 1 hr, 2 min., 20 sec., playing time, in color, with sound 

Report No.(s): NONP-NASA-VT--2000001077; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS 

This NASA Kennedy Space Center (KSC) video release presents Part 3 of the 

press conference can be found in document numbers NONP-NASA-VT-2000001073, and NONP- 

NASA Kennedy Space Center, Cocoa Beach, FL USA 

Galileo Probe Science Update: Observing Changes on Europa and in Jupiter's System 

Aug. 13, 1996; In English; Videotape: 1 hr. 9 min. 10 sec. playing time, in color, with sound 

Report No.(s): NONP-NASA-VT--2000008134; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS 

This NASA Kennedy Space Center (KSC) video release presents a news 

briefing from the Jet Propulsion Laboratory (JPL) featuring video presentations 

by Dr. Alfred McEwen (Univ. of Arizona, Lunar and Planetary Lab.), Dr. Ronald Greeley (Arizona St. Univ.), Dr. Andrew Ingersoll (California Inst. of Tech.), and Dr. Diana Blaney (Jet Propulsion Lab.). Discussions center on the atmos-
pheric and surface features of Jupiter and two of its moons, Europa and Io. Possible energy mechanisms that create atmospheric features of Jupiter, such as the Great Red Spot, as well as possible thunderstorm and lightning activity associated with these features are included. Discussions of the craters and fractures on the icy surface of Europa, surface features of Io, two of which are named Loki and Pele, believed to be of volcanic origin, as well infrared observations of volca-

nism on Io are presented. The individual presentations are followed by a question and answer period with scientists from JPL and other NASA centers. The video ends with computer animations, as well as actual footage, of features on Jupiter and its satellites taken from the Galileo spacecraft. Some of these images were seen previously in the individual presentations. 

CASI 

Galileo Spacecraft: Jupiter (Planet); Jupiter Satellites
Galileo Project; Galileo Probe; Jupiter Atmosphere

20000015388 NASA Kennedy Space Center, Cocoa Beach, FL USA
Galileo Space Probe News Conference, Part 1
Jan. 22, 1996; In English; Videotape: 1 hr., 2 min. 26 sec. playing time, in color, with sound
Report No.(s): NONP--NASA-VT-2000001073; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This NASA Kennedy Space Center (KSC) video release presents Part 1 of a press conference regarding the successful entry of the Galileo Space Probe into Jupiter’s atmosphere. The press conference panel is comprised of twelve principal investigators and project scientists that oversee the Galileo mission. Among these panelists, William J. O’Neil (Jet Propulsion Lab.) begins the video praising all of the scientists that worked on the orbiter mission. He then presents a visual overview of Galileo’s overall mission trajectory and schedule. Marcie Smith (NASA Ames Research Center) then describes the Galileo Probe mission and the overall engineering and data acquisition aspects of the Probe’s Jupiter atmospheric entry. Dr. Richard Young (NASA Ames Research Center) follows with a brief scientific overview, describing the measurements of the atmospheric composition as well as the instruments that were used to gather the data. Atmospheric pressure, temperature, density, and radiation levels of Jupiter were among the most important parameters measured. It is explained that these measurements would be helpful in determining among other things, the overall dynamic meteorology of Jupiter. A question and answer period follows the individual presentations. Atmospheric thermal structure, water abundances, wind profiles, radiation, cloud structure, chemical composition, and electricity are among the topics discussed. Parts 2 and 3 of the press conference can be found in document numbers NONP--NASA-VT-2000001074, and NONP--NASA-VT-2000001075.

CASI
Galileo Project; Galileo Probe; Atmospheric Entry

200000120450 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA
Galileo Update: The Search for Water in Jupiter’s Atmosphere
Jun. 05, 1997; In English; Videotape: 1 hr. 12 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP--NASA-VT-2000008140; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This videotape presents a panel discussion press conference about the attempts to discover if there is moisture in the atmosphere of Jupiter. David Seidel, of the Jet Propulsion Laboratory (JPL) moderates the discussion. The panel consists of Andrew Ingersoll, California Institute of Technology, Tobias Owen, of the University of Hawaii, Glenn Orton, Robert Carlson of JPL, and Ashwin Vasavada, a graduate student at Cal Tech. Each of the panelists discusses evidence for moisture in Jupiter’s atmosphere. They show video tapes of either animation or shots from the Galileo mission or diagrams of the atmosphere of Jupiter. The videos clips that are shown, include a brief summary of the Galileo mission. A diagram showing the layers of Jupiter’s atmosphere is discussed. One panelist discusses and shows shots from the nightside of Jupiter. Another video clip shows evidence for convergence downdrafts around dry spots. Evidence for thunderstorms and updrafts is also reviewed. Shots of the giant red spot on Jupiter are shown, and explanations are given as to what it may be.

CASI
Galileo Project; Jupiter Atmosphere; Moisture; Jupiter (Planet); Vertical Air Currents; Atmospheric Circulation

2000000121095 NASA Kennedy Space Center, Cocoa Beach, FL USA
Galileo Science Update
Dec. 16, 1997; In English; Videotape: 1 hr. 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP--NASA-VT-2000008139; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Live footage shows Jane Platt, JPL Public Information Office, introducing the moderator of the panel discussion. The moderator introduces the panel members include Bill O’Neil, Project Manager Galileo Primary Mission, Dr. Torrence V. Johnson: Galileo Project Scientist, Prof. Ronald Greeley from Arizona State University Galileo Imaging Team, Bob Mitchell Project Manager Galileo Europa Mission, and Dr. Karen Burcham Galileo Science Planning Manager. The panelists give the audience information about the Galileo Mission and answers questions from the audience and from Kennedy Space Center. An animation of the Galileo Spacecraft approaching and passing Europa is presented. The panelists mentions High Resolution Images, Detail Gravity studies, Spectral Maps of non-ice materials, Jupiter studies, Callisto studies, Europa studies, and Io studies.

CASI
Galileo Spacecraft; Flyby Missions; Galileo Project; Europa; Io; Callisto; Jupiter (Planet)

20000027670 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA
MGS Images of Mars
Jun. 23, 1999; In English; Videotape: 4 min. 21 sec. playing time, in color, with sound
Report No.(s): NONP--NASA-VT-20000033901; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The Mars Global Surveyor (MGS) camera captured images of a pit formed when a straight-walled trough collapsed. The heart shaped pit is about 2.3 kilometers (1.4 miles) wide. It is located on the east flank of the Alba Patera volcano in northern Tharsis.

CASI
Images; Mars Global Surveyor; Mars Surface; Troughs

200000027767 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA
Mars Global Surveyor MOC Images
Jul. 05, 1999; In English; Videotape: 3 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP--NASA-VT-20000033902; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Images of several dust devils were captured by the Mars Orbiter Camera (MOC) during its global geology campaign. The images shown were taken two days apart, May 13, 1999 and May 15, 1999. Dust devils are columnar vortices of wind that move across the landscape and pick up dust. They look like mini tornadoes.

CASI
Images; Mars Global Surveyor; Dust

200000027711 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA
Mars Global Surveyor Images
Jun. 29, 1999; In English; Videotape: 2 min. 26 sec. playing time, in color, with sound
Report No.(s): NONP--NASA-VT-20000033899; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

High resolution images that help scientists fine tune the landing site for NASA’s Mars Surveyor lander mission are shown. These images reveal a smooth surface in the southern cratered highlands near the Nepenthes Mensae.

CASI
Images; Mars Global Surveyor; Images

200000027712 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA
Mars Images MOC2–186 through 199
Apr. 07, 1999; In English; Videotape: 3 min. 12 sec. playing time, in color, with sound
Report No.(s): NONP--NASA-VT-20000033899; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Mars Global Surveyor images of the following are shown: Margin of lava flow in Daedalia Planum; Ripples in cratered terrain north of Hesperia Planum; Martian variety exhibited by the Olympia Fossae; East Tholusion chauma wall, Vales Marineris.

CASI
Images; Mars Global Surveyor; Mars Images; Mars Surface; Craters; Mars (Planet)
Live footage shows the speakers participating in the Magellan Press Conference and question and answer session. Speakers include Huntress, Spear, Ledbetter, Johnson, McCarthy, and Saunders. The speakers are shown answering questions from various NASA centers, and participating audience members from many different industries. They discuss the start and stop date for the mapping. Also shown are animation and radar images of Venus and Artemis. This is tape 2 of 2; tape 1 has a report number NONP-NASA-VT-2000036552.

CASI
Conferences: Magellan Project (NASA); Space Exploration; Venus Surface

Magellan Press Conference (1 of 2)
Aug. 09, 1990; In English; Videotape: 1 hr. 2 min. 31 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2000036566; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Live footage shows several speakers participating in the Magellan Press Conference. Speakers include the Director of Solar System Exploration Division West Huntress, Magellan Project Manager Tony Spear, Spacecraft Team Chief W. Ledbetter, Radar System Chief Engineer T. Johnson, and Magellan Project Manager from Hughes Aircraft Co. T. McCarthy. The speakers discuss the Venus Orbiting Insertion (VOI), radar system components, spacecraft development, mission objectives, and the flight plans. This is tape 1 of 2; tape 2 has a report number NONP-NASA-VT-2000036565.

CASI
Conferences: Magellan Project (NASA); Magellan Spacecraft (NASA); Venus Orbiting Imaging Radar (Spacecraft); Space Exploration; Venus (Planet)

Titan III Mars Explorer and Uncrating at PHSF
2000036169 NASA Kennedy Space Center, Cocoa Beach, FL USA
Titan III Launch Replays
2000036162 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA
Magellan Press Conference (2 of 2)
Oct. 29, 1991; In English; Videotape: 23 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP--NASA-VT-2000036566; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video presents Magellan Science update on the most recent findings from the Magellan Mission to Venus. Brian Dunbar, NASA Public Affairs, introduces Dr. Wes Huntress, Division Director Solar System and Exploration Division. Dr. Huntress explains the Magellan Mission to Venus, which tested the temperature and emissivity of Venus, and collected high resolution radar imagery of 92% of the surface of the planet. Dr. Steve Saunders, Magellan Project Scientist, Jet Propulsion Lab, presents a visual global view of the North Pole of Venus. He also presents planet wide patterns of fracture on Venus. Dr. Saunders showed a video presentation of radio mapping results from Artemis. Dr. Wood, Radar Investigator, Smithsonian Astrophysical Observatory explains Mat Mons, which is the second highest mountain on Venus. Dr. John Wood also presents a video presentation of his findings. Dr. Gordon Pettengill, Principle Investigator, Massachusetts Institute of Technology, presents a video on the Topography of the Magellan Mission, which is able to give resolution ten times finer and further into the South and into the North than was possible earlier. The video of the Magellan Science update ends with a question and answer period.

CASI
Titan 3 Launch Vehicle; Mars Exploration; Interplanetary Transfer Orbits; Delivery; Upper Stage Rocket Engines; Payloads

Titan III Mars Observer Arrival and Uncrating at PHSF
Jul. 09, 1992; In English; Videotape: 8 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP--NASA-VT-2000081541; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This NASA Kennedy Space Center video presents live footage of the delivery of the Titan III Mars Explorer Transfer Orbital Stage (TOS) to the Payload Hazardous Servicing Facility (PHSF). The TOS is a single-stage, solid propellant upper stage vehicle used to propel a spacecraft from low Earth orbit toward its ultimate destination. The TOS is delivered to the PHSF where it is designed to accommodate a variety of NASA and NASA customer payloads and can be used as a payload processing facility (PPF) or a hazardous processing facility (HPF).

CASI
Titan 3 Launch Vehicle; Mars Missions; Mars Observer; Payloads; Titan 3 Launch Vehicle

Galileo -- Gymnede Family Night
Jun. 26, 1996; In English; Videotape: 1 hr. 30 min. playing time, in color, with sound
Report No.(s): NONP--NASA-VT-200036029; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

When the Galileo spacecraft flew by Ganymede, Jupiter’s and the solar system’s largest satellite, on June 26, 1996, the project scientists and engineers gather with their friends and family to view the photos as they are received and to celebrate the mission. This videotape presents that meeting. Representatives from the various instrument science teams discuss many of the instruments aboard Galileo and show videos and pictures of what they have seen so far. This video is continued on Videotape number NONP--NASA-VT-2000036568.

CASI
Galileo Spacecraft; Ganymede; Jupiter (Planet); Galilean Satellites; Jupiter Red Spot; Jupiter Satellites

TITAN III Launch Replys
Sep. 25, 1992; In English; Videotape: 9 min. playing time, in color, without sound
Report No.(s): NONP--NASA-VT-2000081549; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows several views of the launching of the Mars Observer Titan
The Mars Observer mission spacecraft was primarily designed for exploring Mars and the Martian environment. The Mars Observer was launched on September 25, 1992. The spacecraft was lost in the vicinity of Mars on August 21, 1993 when the spacecraft began its maneuvering sequence for Martian orbital insertion. This videotape shows a press briefing, held after the spacecraft had not responded to attempts to communicate with it, to explain to the press the problems and the steps that were being taken to re-establish communication with the spacecraft. The communications had been shutdown prior to the orbital insertion burn to protect the instruments. At the time of the press conference, the communications system was still not operational, and attempts were being made to re-establish communication. Bob McMillan of the Public Affairs Office at JPL gives the initial announcement of the continuing communication problem with the spacecraft. McMillan introduces William Pietrowski, acting director of solar system exploration, who reiterates that there is indeed no communication with the Observer spacecraft. He is followed by Glen Cunningham, the Project Manager of the Mars Observer who speaks about the attempts to re-establish contact. Mr. Cunningham is followed by Satenos Dallas, the Mission Manager for the Mars Observer Project, who speaks about the sequence of events leading up to the communication failure, and shows an animated video presenting the orbital insertion maneuvers. The briefing was then opened up for questions from the assembled press, both at JPL and at the other NASA Centers. The questions are about the possible reasons for the communication failure, and the attempts to restore communications with the spacecraft. Dr. Arden I. Albee, chief scientist for the Mars Observer Mission, joined the other panel members to answer questions. At the end of the press briefing the animation of the Mars orbital insertion is shown again.

CASI

Failure; Orbit Insertion; Mars Probes; Mars Missions

CASI

Titan; Launch Vehicles; Titan Project; Mars Observer; Launching
The NASA news format primarily focuses on the 3 month orbit of Mars and the images obtained by the Observer spacecraft. The spacecraft orbits 316 miles from the surface and rotates once every 100 minutes. Other topics include the MODE mini-lab, Goddard student programs, and Pluto.

CASI
Mars Observer: Spacecraft Orbits; Mars (Planet)

2001082169 Space Telescope Science Inst., Baltimore, MD USA
Worlds Smaller than Saturn
Mar. 01, 2001; In English; Videotape: 64 min. 7 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–2001030026; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Computerized animations show the following: (1) an artist’s conception of a Saturn-like extrasolar planet; (2) star and planet motion; and (3) young stellar disk and planet formation. Footage shows the outside of the Mauna Kea Observatories in Hawaii and Geoff Marcy and Paul Butler inside while they are processing information. Then a press conference, “Worlds Smaller than Saturn,” is seen. Ames Kenney, Origins Science Director, NASA Headquarters, introduces Geoff Marcy, Paul Butler, Alan Boss, and Heidi Hammel. They discuss the discovery of the two new Saturn-sized extrasolar planets that are orbiting the stars HD46375 and 79 Seri, giving details on the search technique and size distribution. They then answer questions from the press.

CASI
Extrasolar Planets; Planetary Evolution

92 SOLAR PHYSICS
Includes solar activity, solar flares, solar radiation and sunspots. For related information see 93 Space Radiation.

1994081814 NASA, Washington, DC, USA
Unmasking the Sun
Nov 1, 1998; In English; 3 min. 42 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190393; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This videotape describes solar-related research at the Mt. Palomar Observatory.

CASI
Observatories: Solar Physics; Sun

1994091049 NASA Ames Research Center, Moffett Field, CA, USA
C 141 KAO solar eclipse mission
Apr 1, 1988; In English; 4 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190474; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video presents the C 141 Kuiper Airborne Observatory Solar Eclipse Mission.

CASI
Kuiper Airborne Observatory: Solar Eclipses

20010637654 Space Telescope Science Inst., Baltimore, MD USA
Final Blaze of Glory
[2001]; In English; Videotape: 14 min. 57 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001026549; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video gives an overview of planetary nebulae through a computerized animation, images from the Hubble Space Telescope (HST), and interviews with Space Telescope Science Institute Theorist Dr. Mario Livio. A computerized animation simulates a giant star as it swallows its smaller companion. HST images display various planetary nebulae, such as M2-9 Twinjet Nebula, NGC 3568, NGC 3918, NGC 5307, NGC 6826, NGC 7099, and Hubble 5. An artists conception shows what our solar system might look like in a billion years when the Sun has burned out and cast off its outer layers in a shell of glowing gas. Dr. Livio describes the shapes of the planetary nebulae, and gives three reasons to study planetary nebulae, and what the observations made by HST have meant to him. A succession of 17 HST images of planetary nebulae are accompanied by music by John Surra.

CASI
Giant Stars; Planetary Nebulae

93 SPACE RADIATION
Includes cosmic radiation and inner and outer Earth radiation belts. For biological effects of radiation on plants and animals see 52 Aerospace Medicine. For theory see 73 Nuclear Physics.

2000020781 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–37: Gamma Ray Observatory
Jan. 29, 1991; In English; Videotape: 16 min. 2 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000013426; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This NASA Kennedy Space Center (KSC) video release presents footage of pre-flight activities involving the STS-37 primary payload, the Gamma Ray Observatory (GRO). The GRO is shown being removed from the transport aircraft to one of the runways at Kennedy. Other footage includes Kennedy work crews moving the GRO into position as well as discussions between the STS-37 astronauts and the work crews regarding GRO operation.

CASI
Gamma Ray Observatory: Cape Kennedy Launch Complex

2000024867 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–37 The Payload bay door closing at PCR Pad B
Apr. 02, 1991; In English; Videotape: 5 min. in length in color with background sounds
Report No.(s): NONP–NASA–VT–2000013433; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS–37 mission was to deploy the Gamma Ray Observatory. The mission was launched at 9:22:44 am on April 5, 1991, onboard the space shuttle Atlantis. This videotape shows the payload bay doors being closed. Included are views of the Gamma Ray Observatory in the payload bay, and the clean room operations in the Payload Changeout Room (PCR).

CASI
Bays (Structural Units); Clean Rooms; Doors; Gamma Ray Observatory; Space Transportation System

2000036682 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–37 Gamma Ray Observatory Arrival and VPF Activities
Feb. 09, 1991; In English; Videotape: 28 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000013435; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows the STS-37 Gamma Ray Observatory, its move to the airlock, the removal of its plastic covering, and its lift to the work-stand.

CASI
Gamma Ray Observatory; Gamma Ray Telescopes; Gamma Ray Astronomy; Spaceborne Astronomy; Air Locks

20000037776 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–37: Gamma Ray Observatory (2 of 2)
Mar. 24, 1991; In English; Videotape: 55 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000013425; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows various unedited Gamma Ray Observatory (GRO) compiled processing shots. Shots depict work being performed on the STS-37 GRO payload, and the STS-37 Shuttle Amateur Radio Experiment (SAREX).

CASI
Gamma Ray Observatory; Spaceborne Astronomy; Spaceborne Telescopes; Spaceborne Experiments
2049938193 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-37: Gamma Ray Observatory Removal from Canister at the PHSF
Feb. 08, 1990; In English; Videotape 10 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--200046434; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-37 mission was to deploy the Gamma Ray Observatory. The mission was launched at 9:22:44 a.m. on April 5, 1991, onboard the space shuttle Atlantis. This video shows the Gamma Ray Observatory being moved from the canister in the Payload Hazardous Servicing Facility (PHSF) to the work area.

Author
Gamma Ray Observatory: Space Transportation System

---

99

GENERAL
Includes aeronautical, astronomical, and space science related histories, biographies, and pertinent reports too broad for categorization; histories or broad overviews of NASA programs such as Apollo, Gemini, and Mercury spacecraft, Earth Resources Technology Satellite (ERTS), and Skylab; NASA appropriations hearings.

19940009130 NASA, Washington, DC, USA
Highlights, 1981
Dec 1, 1981; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--93-185323; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video presentation covers Shuttle flights 1 and 2, SpaceLab, mobile workstation, Voyager 2 Saturn, Infrared Astronomy Satellite, Hubble Space Telescope, Kandor Airborne Observatory, High Altitude Earth Survey, LANDSAT, aerodynamic research, electric cars, wind energy, XV-15, Quiet Supersonic Research Aircraft, X-14 BTOL, 40 x 80 Wind Tunnel, and turboprop research.

Author (revised)
Aerospace Engineering; NASA Programs: NASA Space Programs: Research and Development

19940009160 NASA Hugh L. Dryden Flight Research Facility, Edwards, CA, USA
Flight operations highlights, tapes 1 and 2
Apr 1, 1990; In English; 1 hr 40 min. playing time, in color, NO sound
Report No.(s): NONP-NASA-VT--93-185308; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

Historical film footage of the X-series aircraft (including Yeager's X-1 flight), lifting bodies, and early Apollo landing tests is presented.

Author (revised)
Flight Operations: Histories

19940010768 NASA, Washington, DC, USA
The 1969 highlights
Dec 1, 1969; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--93-190428; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video includes Mariners to Mars; Orbiting Solar Observatory; Orbiting Geophysical Observatory; sounding rockets; weather satellites - Tiros and Nimbus; applications technology; advanced research; space shuttle research; VSTOL; jet noise abatement; and Apollo 9, 10, 11, and 12 missions.

CASI
Aerospace Engineering; NASA Programs: NASA Space Programs: Research and Development: Space Missions

19940010769 NASA, Washington, DC, USA
The 1972 highlights
Jan 1, 1973; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--93-190429; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This document includes Mariners to Mars, Pioneer to Jupiter, Orbiting Astronomical Observatory, Small Astronomy Satellite, sounding rockets, earth resources, Nimbus weather watch, communication satellites, aerodynamics, wind tunnel research; STOL, noise abatement, lifting bodies, US/Soviet cooperation, preparation for Skylab, and the Apollo 16 and 17 missions.

CASI
Aerospace Engineering; NASA Programs: NASA Space Programs: Research and Development: Space Missions: Spacecraft

19940010770 NASA, Washington, DC, USA
The 1965 highlights
Dec 1, 1965; In English; 4 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--93-190430; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This document includes Ranger to the Moon, Mariner to Mars, Tiros weather watch, Early Bird satellite, scientific satellites, sounding rockets, aeronautical research, preparation for the moon, and manned Gemini flights.

CASI
Aerospace Engineering; NASA Programs: NASA Space Programs: Research and Development: Space Missions: Spacecraft

19940010771 NASA, Washington, DC, USA
The 1967 highlights
Dec 1, 1967; In English; 15 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--93-190431; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This document includes Surveyor, Lunar Orbiter, Apollo 4, Bionasatellite, Orbiting Geophysical Observatory, Orbiting Solar Observatory, Explorers, Applications Technology satellites, operational satellites, Mariner to Venus, San Marco, sounding rockets, and aeronautical research.

CASI
Aerospace Engineering; NASA Programs: NASA Space Programs: Space Missions: Spacecraft

199400106842 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-26 through STS-34, deploy activities
Dec 1, 1989; In English; 28 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--93-190364; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

This video shows on orbit deployments since Shuttle flights resumed in 1988. These deployments include TDRS-C and TDRS-D, and the Magellan and Galileo spacecrafts.

CASI
Deployment: Galileo Spacecraft: Magellan Spacecraft (NASA); Orbital Launching; Space Shuttle Missions; TDRS Satellites

199400106849 NASA, Washington, DC, USA
NACA--NASA: 75 years of flight
Oct 1, 1990; In English; 3 min. 11 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--93-190246; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This document presents historical footage used to recollect the last 75 years of aeronautical and space-related research.

CASI
Aeronautics; Aerospace Engineering; Histories; NASA Programs

199400106870 NASA, Washington, DC, USA
The 1966 highlights
Dec 1, 1966; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--93-190241; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The videotape includes footage of the following: space and aeronautic montage, Surveyor lands on the Moon, Lunar Orbiter, weather satellites, Orbiting Geophysical Observatory, Pogo's, Pioneer, sounding rockets, solar eclipse, X-15, lifting bodies, solid rockets, nuclear powered engines, Project Gemini ends, and Apollo-Saturn.

CASI
Apollo Project; Lifting Bodies; Lunar Exploration; Lunar Orbiter; OGO; X-15 Aircraft
19940410879 NASA, Washington, DC, USA
NATO: The 25th year
Sep 1, 1983; In English; 50 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190254; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
This video tape chronicles NASA's research and development programs,
especially regarding space travel from 1958 to 1983.
CASI
NASA Space Programs: Space Exploration

19940410893 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Apollo presentation for Astrodrome
Aug 1, 1989; In English; 7 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190332; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
This video features a condensed look at Apollo milestones. It was created
for presentation at the Houston Astrodrome during Apollo 11's 20th Anniversary
celebrations.
CASI
Apollo Project: Space Missions

19940410898 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
President Kennedy's speech at Rice University
Nov 1, 1988; In English; 34 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190329; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
This video tape presents unedited film footage of President John F. Kennedy's
speech at Rice University, Houston, Texas, September 12, 1962. The speech
expresses the commitment of the USA to landing an astronaut on the Moon.
CASI
Apollo Project: Manned Space Flight

199404108921 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
ASTP 15th anniversary clip–media release
Sep 1, 1990; In English; 42 min. playing time, in color, no sound
Report No.(s): NONP-NASA–VT–93–190331; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
This release is comprised of 5 separate clips, including the following: CL
762 Astronauts/Colunists Visit to RSC and Walt Disney World; CL 739 ASTP
Joint Crew Activities; CL 748 ASTP Astronauts/Comonists Horlock Ranch
Visit; CL 758 F-21 ASTP Training - US/USSR; and CL 743 ASTP Joint Crew
Training in the Soviet Union.
CASI
Apollo Soyuz Test Project: Astronaut Training: Astronauts: Cosmonauts: Space
crews

199404108937 NASA, Washington, DC, USA
The 1973 highlights
Dec 1, 1973; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190422; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
These highlights include man in space, Pioneer to Jupiter, Mariner to Venus
and Mercury, sounding rockets, comet Kohoutek, Earth resources, and aeronau-
tics.
CASI
Earth Resources: Kohoutek Comet: Mariner-Mercury 1973: Sounding Rockets

199404108938 NASA, Washington, DC, USA
The 1978 highlights
Dec 1, 1978; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190423; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
These highlights include the space shuttle, new astronauts, Pioneers to
Venus, Voyagers to Jupiter and Saturn, High Energy Astronomy Observatories
Space Telescope, LANDSAT/Seasat, space applications, wind energy research,
and aeronautics.
CASI
Energy Technology: HEAO: Pioneer Space Probes: Space Shuttles

199404108939 NASA, Washington, DC, USA
The 1977 highlights
Dec 1, 1977; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190424; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
These highlights include the Space Shuttle, the Voyagers, LANDSAT,
aeronautics, Spacecraft, HEAO-1, and energy research.
CASI
Energy Technology: HEAO-1: LANDSAT Satellites: Space Shuttles: Spacecraft

19940410940 NASA, Washington, DC, USA
The 1968 highlights
Jan 1, 1969; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190425; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
These highlights include the Space Shuttle, the Voyagers, LANDSAT,
sounding rockets, radio astronomy Explorer, Orbiting Astronomical Observatory,
Nimbus, lifting bodies, X-15 Program, 7/V, model research, jet noise reduction,
flight safety, nuclear engines, Project Apollo (testing and training), and Apollo
5,6,7, and 8.
CASI
B-70 Aircraft: Flight Safety: Jet Aircraft Noise: Lifting Bodies: Noise Reduction:
OSO: OGO: Pioneer Space Probes: Sounding Rockets: Surveyor Project

19940410942 NASA, Washington, DC, USA
The 1970 highlights
Dec 1, 1970; In English; 28 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190426; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
These highlights include the 1970 solar eclipse, Tiros, Nimbus, Intelsat,
wake turbulence, the Peru earthquake, Oregon fishing grounds, Apollo 13, SL-C
static firing, McDonnell/Douglas 90-day confinement test, and the moon from
Galileo to 1971.
CASI
Earthquakes: Galileo Spacecraft: Intelsat Satellites: Marine Resources: Solar
Eclipses: Turbulent Wakes

19940410944 NASA, Washington, DC, USA
The 1971 highlights
Dec 1, 1971; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190427; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
These highlights include Mariner orbit of Mars, Interplanetary Monitoring
Platform, Orbiting Solar Observatory, small scientific satellite, sounding
rockets, Stratoscope 11, earth resources, aeronautics, jet noise abatement, airport
runway safety, Apollo 14 and 15, and Skylab.
CASI
Accident Prevention: Imp: Jet Aircraft Noise: Mariner Spacecraft: Noise Reduc-
tion: OSO: Runways: Small Scientific Satellites: Sounding Rockets

19940410951 NASA, Washington, DC, USA
Sights and sounds of space
Nov 1, 1989; In English; 3 min. 19 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190408; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video details the progress of the first musician's work, based on the
STS-26 mission, in the NASA Fine Arts Program.
CASI
Music: Space Shuttle Mission 51-F

19940410961 NASA Ames Research Center, Moffett Field, CA, USA
Unitary plan wind tunnel landmark dedication and revitalization
Sep 1, 1990; In English; 21 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190447; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
This video shows construction scenes of unitary plan wind tunnel, aerials,
and views of various models, including an MD-II in the 11 ft, an Apollo in the
8x7, Dymasor in the 8x7, a one inch scale shuttle in the 8x7, and an artist's concept of a 12 ft test section.

CASI

Construction; Landmarks: Reconstruction; Test Chambers; Wind Tunnels

1994-011835 NASA, Washington, DC, USA

The 1982 highlights

Dec 1, 1982; In English; 14 mm. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-19649; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video includes STS 3 & 4, Challenger completed, unmanned launches, the Hubble Space Telescope, Pioneers 8 & 9 encounter, Mars Pictures, LANDSAT 4, wind energy, ion-electric engines, solar powered medical system, medical image analysis, rotor systems research aircraft, XV-15, propfan research, aircraft icing studies, and Oshkosh Stinson.

CASI

Aircraft icing: Challenger (Orbiter); Hubble Space Telescope; LANDSAT 4; Mars 4 Spacecraft; Pioneer Space Probes; Prop-Fan Technology; Propeller Fans; Rotor Systems Research Aircraft; Space Transportation System; Space Transportation System 3 Flight; Space Transportation System 4 Flight; Wind-power Utilization; XV-15 Aircraft

1994-011836 NASA, Washington, DC, USA

The 1980 highlights

Dec 1, 1980; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-190470; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video includes Voyager 1 to Saturn, Solar Maximum Mission, sounding rockets/balloons, Space Shuttle, GOES 4 weather satellite, Mount St. Helen's Research, wind energy, rotor systems research aircraft, quiet short-haul aircraft, AD-1 Scissor Wing, and automated pilot advisory system.

CASI

 Automated Pilot Advisory System: Balloon Sounding; GOES 4; Meteorological Satellites: Oblique Wings; Rocket Sounding; Rotor Systems Research Aircraft; Solar Maximum Mission: Space Shuttle; Voyager 1 spacecraft

1994-011596 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

History of the manned space flight program

Aug 1, 1990; In English; 13 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-190325; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Astronaut Marshall Ivanov tracks the history of America's space program, from Alan Shepard's Mercury flight to Space Shuttle flight STS-26.

CASI

 Histories: Manned Space Flight; NASA Space Programs

1994-0114507 NASA, Washington, DC, USA

Langley's 50th year

Oct 1, 1967; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-198212; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video gives an historical overview of Langley Research Center's major achievements in aeronautics and astronautics research between the years 1917-1967. Historical footage accompanies explanation of research into wind tunnel, spin tunnel, and hydrodynamic test tanks for studying aircraft airflow, wartime research into underwater combat ditching, diving, and braking, the X series aircraft experiments with supersonic flight, helicopter and vertical Take Off and Landing (VTOL) aircraft, airport landing studies, and early prototypes for the Space Shuttle.

CASI

 Histories: Hydrodynamics; Research Projects: Space Shuttles; Wind Tunnels

1994-029667 NASA Lewis Research Center, Cleveland, OH, USA

 NASA report to education, volume 6

Sep 1, 1989; In English; 26 min. 46 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-12946; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Segments include NASA Spacelink, STS-28 Mission, Voyager encounters Neptune, robotics development at GSFC, and the National Boy Scout Jamboree.

CASI

 Computer Networks; Education: NASA Programs; Robotics: Space Exploration; Voyager Project

1994-029283 NASA Lewis Research Center, Cleveland, OH, USA

Astronauts Part 5: Astronaut Collins

Jan 11, 1989; In English; 28 min. 57 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-13532; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

This video is an interview with Michael Collins about his accomplishments, NASA's accomplishments, and the future.

LeRC

Apolis Project: Astronauts

1995-0004300 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

Dryden year in review: 1992

Jan 1, 1993; In English; 4 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-23632; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

This video reviews the research work done at Dryden for the year 1992.

DFRC

General Overviews; NASA Programs: Research Facilities

1995-0004301 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

NACA/NASA history at Dryden, part 1 and 2

May 4, 1990; In English; 50 min. 30 sec. playing time, in color, no sound
Report No.(s): NONP-NASA-VT-94-23633; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Two video tapes of raw material show examples of research activity at the center from the 1950's to the 1980's.

DFRC

 Histories: NASA Programs: Research Facilities

1995-0004338 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

Dryden summer 1994 update

Jul 8, 1994; In English; 17 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-23659; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

This video presents a complete, technically detailed report on all Dryden projects, achievements, and employee activities for 1994.

DFRC

Aeronautical Engineering: Research and Development; Research Projects

234
with Eurus the Monkey, President Kennedy’s speech in Washington about the Space Program, Project Gemini - the 2-manned space flight, and the near disastrous recovery of Virgil Grissom from splash down.

CASI

Astronauts: Communication Satellites; Histories: Meteorological Satellites; NASA Space Programs; Space Flight

20010018719 NASA Kennedy Space Center, Cocoa Beach, FL USA

Beyond Earth’s Boundaries

Oct. 01, 1987; In English; Videotape: 5 min. 28 sec. playing time, in color, with sound

Report No.(s): NONP NASA–VT–2001023144; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

An overview of the Lost River System (a method of detecting dry riverbeds) is given, including details on location identification and imaging techniques.

CASI

Imaging Techniques: Rivers; River Basins: Earth Observations (From Space)
Title Index

Numbers
1990 ASCAN ground egress/parasail, 203
1990 ASCAN land survival training, 203
1995 ASCAN Training: Land Survival, 205
1998 Mars Missions Science Briefing, 11

A
A collection of The Movies, 194
A future view of computational science in aircraft, 1
A New Beginning, 147
A/C 67 Investigation Board Final Report, 212
AC 67 Launch Video, 22
AC–67 Press Conference, 183
AC–67/FLTSATCOM Launch with Isolated Cam Views/ Freeze of Lightning/ Press Conference, 182
Acoustic climb to cruise test, 5
Activities of the NASA centers, 193
Adamson, Jim, 204
Advanced microsensors, 214
Advanced Solid Rocket Motor, 185
Aero–Space Plane: Flexible access to space, 176
Aeronautics and Space Reports number 267:
Comet impacts Jupiter, 217
Aerospace test facilities at NASA LERC Plum-brook, 18
Airborne Arctic stratospheric expedition: Ozone, 3
Aircraft to medicine, 201
Airflow research, 1
Airline safety and economy, 2
All systems go, 28
An announcement by Dan Goldin, 212
Ancient skills: Modern use, 202
And then there was Voyager, 221
Answering the space medicine challenge, 200
Anton Grdina Primary Achievement Program, 210
Apollo 10 – 11, 12
Apollo 11 Facts [Lunar EVA], 14
Apollo 11 Facts [Post Flight Press Conference], 14
Apollo 11 Facts Project [EVA Training/Wash-
ington, D. C. Tour], 13
Apollo 11 Facts Project [Mission Control During Spacecraft Recovery], 13
Apollo 11 Facts Project [On–Orbit Activities], 13
Apollo 11 Facts Project [Orbital Module Checkout], 13
Apollo 11 Facts Project [Pre–Launch Activities and Launch], 13
Apollo 11 Facts Project [Prelaunch Press Conference/EVA Training], 13

Apollo 11 Facts Project [Spacecraft Retrieval and the Crew in the Anti–Contamination Chamber], 13
Apollo 11 Facts Project [Tracking], 13
Apollo 11 Facts Project: Earth Views and Crew Activities, 14
Apollo 11 Facts: Ceremony in the Astrodome, 14
Apollo 11 Facts: First Moonwalks, 15
Apollo 11 highlights, 8
Apollo 11 Launch, 178
Apollo 11 Onboards, 14
Apollo 11 Recovery, 13
Apollo 11: 20th anniversary, 8
Apollo 11: For all mankind, 10
Apollo 11: The Goddard connection, 8
Apollo 11: The Twentieth Year, 113
Apollo 12 Mission Summary and Splashdown, 100
Apollo 12: Pinpoint for science, 10
Apollo 13 Facts, 15
Apollo 13 Facts [Orbit Activities], 15
Apollo 13 Facts [Post Flight Press Confer-
ence], 15
Apollo 13 Facts [Post Mission Free Assembly], 15
Apollo 13 Facts: Conference, 15
Apollo 13 Facts: Recovery, 14
Apollo 13: Houston, we’ve got a problem, 20
Apollo 13 mission to Fra Mauro, 224
Apollo 14: Sheppard hitting golf ball on Moon, 224
Apollo 15: In the mountains of the Moon, 223
Apollo 16: Nothing so hidden, 223
Apollo 17: On the shoulders of giants, 223
Apollo Presentation, 185
Apollo presentation for Astrodome, 233
Arctic ozone, 196
Arctic ozone expedition, 195
Arrival of SOHO Satellite at Kennedy Space Center– Atlas Launch, 179
ASCAN Training: Egress and Parasail Training, 205
ASRM testing at Stennis Space Center (proposed), 186
Assisting wine growers, 199
Asteroid Composite Tape, 217
Asteroids and Comets Outreach Compilation, 217
ASTP 15th anniversary clip–media release, 233
Astro smile, 23
ASTRO–1 to explore invisible universe, 185
Astronaut Mamoru Mohri Leaves Patrick Air Base after the Scrub of STS–99 Due to Mechanical Failure, 185
Astronauts number 1, 201
Astronauts number 2, 8
Astronauts number 3, 8
Astronauts number 3, part 2, 8
Astronauts Part 5: Astronaut Collins, 234
Astronomers Ponder Lack of Planets in Glob-
ular Cluster, 219
Atlas 2 Animation, 22
Atlas Centaur 77 GOES–J Mated to Centaur at Cape Canaveral Air Station Complex
363, 20
Atlas Centaur 77 GOES–J Wet Dress Rehearsal
at Cape Canaveral Air Station, 180
Atlas First Stage Erection, GEOS I, 20
Atlas GEOS–J Arrives at KSC and Uncanning at Astrotech, 179
Atlas GEOS–J Pad Activity with Blockhouse, 19
Atlas of TOMS ozone, 197–198, 196
Atlas SOHO Booster and Centaur Erection, 179
ATLAS SOHO Presentation, SAEF 2, 11
Atlas SOHO Wet Dress Rehearsal, 20
ATLAS–1 Video News Release, 21
ATLAS–2 Video News Release, 21
Atlas–SOHO Propulsion Unit and Electrical Module Uncrating at SAEF–2, 20
ATLAS–SOHO: Satellite Arrival and Uncrating, Uncrating of the Propulsion Unit and Electric Module, 181
Atlas–Uncrating of SOHO satellite at the SAEF 2, 182
Atlas/Centaur 121 SOHO Launch, 22
Atlas/Centaur–SOHO Pre–Launch News Conference, 22
Atmosphere of Venus, 222
Automated directional solidification furnace, 208
Back to propellers, 5
Ban Joule II–S Footage, 147
BBXRT clip: The Broad Band X–ray Telescope, 215
Best of Hubble Space Telescope, 215
Better airplane wings, 186
Better way to fly, 3
Beyond Earth’s Boundaries, 235
Black Holes Shed Light on Galaxy Formation, 218
Brown, Mark, 202
Building 46 grand opening, 17
Building a lunar base, 189
Building the Integrated Test Facility: A foundation for the future, 7

C
C 141 KA0 solar eclipse mission, 231
Challenger Anniversary Resource Tape, 41
Challenger Center, 209
Hey, 177
High Heat Flux Facility, 6
High resolution microwave survey, 189
High temperature NASP engine seal development, 192
High velocity gas gun, 175
Highlights, 1981, 232
Historical Footage of John Glenn Friendship 7, 81
History of the manned space flight program, 234
HL-10 dedication ceremony, 4
HL-20 personnel launch system, 1
Houston, I think we've got a satellite, 176
HST Briefing: HST Science Overview, 215
Hubble Identifies Source of Ultraviolet Light in an Old Galaxy, 218
Hubble Images from 1996, 215
Hubble Space Telescope, 215
Hubble Space Telescope Briefing: HST Science Overview, 216
Hubble Space Telescope Spacecraft Overview Briefing, 216
Hubble Space Telescope Spacecraft Overview Briefing, 216
Hubble Space Telescope Spacecraft Overview Briefing, 216
Hubble’s Panoramic Portrait of a Vast Star-Forming Region, 217
Human factor studies, 16
Hurricane Andrew mission, 199
Hyper-X Model Testing with Animation, 5

G
Galaxy Group Stephan’s Quintet Video File
HubbleMinute: Battle Royal in Stephan’s Quintet, 219
Galileo – Ganymede Family Night, 229
Galileo Earth/Moon Flyby, 225
Galileo Earth/Moon 1 encounter, 222
Galileo Earth/Moon 2 Press Conference Live from JPL, 225
Galileo Earth/Moon News Conference, 226, 227
Galileo Mission Science Briefing, 227
Galileo Outreach Compilation, 224
Galileo Press Conference from JPL, 88, 178
Galileo probe ready to go, 220
Galileo probe spacecraft mission to Jupiter, 220
Galileo Probe: Spacecraft Mission to Jupiter Press Release, 225
Galileo Science Summary October, 1997, 224
Galileo Science Update, 228
Galileo Science Update Europa Unveiled, 54
Galileo Science Update: Observing Changes on Europa and in Jupiter’s System, 227
Galileo Science Writers’ Briefing, 226
Galileo Space Probe News Conference, 227, 228
Galileo Update: The Search for Water in Jupiter’s Atmosphere, 228
Galileo: The Jovian laboratory, 221
GAS highlights, 1988, 7
Gearing up for 1988, 24
Gemini 8, This is Houston, flight, 177
GEOS-1 Satellite Applications Briefing, 182
Geotail Video News Release, 181
Getting it right, making it better, 212
GFSC-TV demo tape, 16
Giant Star Clusters Near Galactic Core, 218
Glacier Bay, Alaska, from the Ground, Air, and Space, 195
Global climate study, 197
Global Greenhouse Expedition, 196
Go for Assembly: Building the International Space Station, 183
Go for EVA, 29
Goddard Space Flight Center robotics demo, 192
GOES 9 Spacecraft at Astrotech Plus Exterior and Logo, 179
Goldstone, 19
GSFC Fun Run, 200

H
Hernandez Engineering: NASA, 177
Hey, 177
High Heat Flux Facility, 6
High resolution microwave survey, 189
High temperature NASP engine seal development, 192
High velocity gas gun, 175
Highlights, 1981, 232
Historical Footage of John Glenn Friendship 7, 81
History of the manned space flight program, 234
HL-10 dedication ceremony, 4
HL-20 personnel launch system, 1
Houston, I think we’ve got a satellite, 176
HST Briefing: HST Science Overview, 215
Hubble Identifies Source of Ultraviolet Light in an Old Galaxy, 218
Hubble Images from 1996, 215
Hubble Space Telescope, 215
Hubble Space Telescope Briefing: HST Science Overview, 216
Hubble Space Telescope Spacecraft Overview Briefing, 216
Hubble Space Telescope Spacecraft Overview Briefing, 216
Hubble’s Panoramic Portrait of a Vast Star-Forming Region, 217
Human factor studies, 16
Hurricane Andrew mission, 199
Hyper-X Model Testing with Animation, 5
In-situ monitoring of crystal growth using improved Optical Techniques for Studying Sonic and Supersonic Injection into Mach 5 Flow, 191
Improved mapping system, 194
Improved Optical Techniques for Studying Sonic and Supersonic Injection into Mach 3 Flow, 191
In-situ monitoring of crystal growth using MEFHISTO, 187
Indianapolis Clip review, 210
Inertial oscillation of a vertical rotating draft with application to a supercell storm: Video supplement to NASA Technical Paper 3230, 198
Inertial Upper Stage, 175
Insight to global change: EOS/SAR mission, 196
INTEL SAT V-A (F-10) Launch, 22
International food research project, 203
International Space Station General Resource Reel, 184
International Space Station Overview, 183
International Space Station Video Progress Report, 184
International Space Station: Expedition 2000, 178
International Space University, 211
ISS Animation Resource Reel, 183
ISS Expedition 1 Crew Interviews: Sergei K. Krikalev, 122
ISS Expedition 1 Crew Interviews: William M. Shepherd, 121
ISS Expedition 1 Crew Interviews: Yuri P. Gidzenko, 123
ISS Expedition 1 Pre-Launch Press Conference, 184
ISS General Resource Reel, 15, 183
ISS Node 1 and 2 Resource Reel, 15
ISS Service Module Pre-Launch, 184

J
John C. Stennis Space Center overview, 18
Johnson Space Center and downtown Houston, Texas aerials, 191

K
KSC technology: Automated Orbiter window inspection system, 27
KSC wildlife show, 199

L
Langley overview, 6
Langley’s 50th year, 234
Laser artery repair, 200
Launch, entry, and landing resource clip, 22
LDEF update, 176
Leading-edge vortex system details obtained on F-106B aircraft using a rotating vapor screen and surface techniques, 1
Legacy of Gemini, 10
Legacy of Skylab, 185
Life and the solar system: The CRAF and Cassini missions, 220
Life saving satellites, 2
Life sciences program, 199
Liloff to learning: Assignment space, 32
Live from Antarctica, volume 4, 198
Live from Antarctica: The coldest, windiest place on Earth, 198
Live from Antarctica: Then and now, 197
Living in space, 205
Living well in space: Clinical care challenge, 200
Living well in space: Ensuring crew capability, 200
Living well in space: Monitoring environment, 260
LLRV/Apollo 11 25th anniversary, 9
Lockheed Stabilizer System for space exercise equipment, 205
Long Duration Exposure Facility, 175
Long Duration Exposure Facility is coming home, 175
Long Duration Exposure Facility retrieval animation, 175
Looking Back, Looking Forward: Forty Years of US Human Spaceflight, 12
Louisiana delta study, 196
Low thrust propulsion, 185
Lunar base concepts, 220
Lunar Curatorial Facility resource, 17
Lunar ranging, 214
Lunar/Mars exploration for synthesis group, 224

M
Magellan collection of radar calibration results, 222
Magellan Press Conference (1 of 2), 229
Magellan Press Conference (2 of 2), 118, 229
Magellan Science Briefing from NASA Headquarters, 229
Magellan to Venus, 8
Magellan, Galileo, and Ulysses, 221
Malcolm Baldrige National Quality Award winners 1989, 212
Manned vehicle systems research facility, 17
Mark 111 suit test evaluation in WETF with Jerry Ross, 205
Mars Climate Orbiter, 177
Mars Global Surveyor Images, 228
Mars Global Surveyor MOC Images, 228
Mars Images MOC2--106 through 109, 228
Mars look-alike, 195
Mars Observer, 22
Mars Observer Lecture: Mars Orbit Insertion, 230
Mars observer mission: Mapping the Martian world, 223
Mars Observer Orbit Insertion Briefing, 16
Mars Observer Press Conference, 230
Mars Observer Press Conference JPL, 230
Mars Observer Spacecraft Processing, 21
Mars Pathfinder and Mars Global Surveyor Outreach Compilation, 224
Mars Pathfinder B-foil, 223
Mars rover sample return mission, 7
Mars Surveyor '98 Animation from JPL, 117
Mars: Five views on what is known, 221
Marsville: The cosmic village, 210
Medical imaging, 213
Memorial service for the mission 51-L crew (edited), 27
Mercury: Exploration of a planet, 223
Mesoscale lightning, 198
Meteor 3/TOMS launch of 15 August 1991 in Plesetsk, USSR, 19
MGS images of Mars, 228
Microlensing: Globular Cluster M22 Video File, 216
Mid-deck experiments, STS--26, 187
Mir 18 post flight presentation, 177
Mission adaptive wing, 3
Mission San Marco, 19
Monitoring history, 213
Moon: Old and new, 223
Moonwalking Series, Episode 2: Adapting to a Space Environment, 205
Movement in microgravity, 24
Multi-Purpose Logistics Module Briefing, 153
Multi-Purpose Logistics Module Briefing (Part 1 of 6), 230
NASA fire crash research, 1
NACA--NASA: 75 years of flight, 232
NACA/NASA history at Dryden, part 1 and 2, 234
NACA/NASA: X--1 through X--31, 1
NASA Administrator Dan Goldin Speaks to the Press at the Shuttle Landing Facility After the Landing of STS--95, 98
NASA and the SR--71: Back to the future, 4
NASA experiences in the Goddard MMS, 211
NASA images 10, 186
NASA images 11, 219
NASA images 12, 220
NASA images 13, 220
NASA images 14, 18
NASA images 15, 18
NASA images 16, 214
NASA images 6, 2
NASA images 7, 214
NASA images 8, 175
NASA images 9 no. 3005, 9
NASA report to education, volume 6, 234
NASA report to education, volume 7, 220
NASA report to education, volume 9, 210
NASA space astronomy update 6, 215
NASA SpaceLink computer, 206
NASA Today -- Mars Observer Segment (Part 4 of 6), 230
NASA Today: Mars Observer Segment, 230
NASA: The 25th year, 233
NASA: The state of the agency, 212
NASA's Hubble Space Telescope: The challenge and complexity of operations, 215
National Aero--Space Plane, 3
National Aero--Space Plane resource reel, 3
National aerospace plane, 187
National Anthem, 185
National Boy Scout Jamboree, 210
Neptune encounter highlights, 220
New insulin pump, 200
New look at the old Moon, 223
New Mission Control Center Briefing, 11
New prosthetic devices, 201
NEWEST 1990 no. 4007, 210
Newton in space, 208
Newtonian Dynamics in Space, 208
NIST: Information management in the AMRF, 213
NIST Automated Manufacturing Research Facility (AMRF): March 1987, 189
NIST: Information management in the AMRF, 213
Node Resource Tape, 14
Ocean wave study, 199
October 1979--1989 Southern Hemisphere total ozone as seen by TOMS, 196
One fantastic ride, 186
Op. No A4495 Columbia, STS--93 Chandra—Breakfast, Suiting, and Walkout, 92
Orbiter Umbilical Hinge Door Problem, 121
Orbiting solar operations, 175
Orion Nebula Movie, 218
OV--105 Endeavour Main Engine Press Showing at VAB, 186
Ozone hole, 196
Ozone hole airborne Arctic stratospheric expedition (pre-flight), 196

P
Pathfinder: Shuttle exhibit, 26
Pegasus Departs from KSC, 182
Perseus: Global watcher, 4
PET team, 211
Pioneer--Venus press clip, 217
Planetary Rover Program, 9
Plant research, 199
PMMW Camera TRP, 191
Polynomials, 208
President Clinton's Arrival at CCAS and Visit to KSC for Launch of STS--95, 99
President Kennedy's speech at Rice University, 233
Pressure Wave Propagation in a Screech Cycle, 59
Programmable Remapper project, 207

Q
Quasar Host Galaxies/Neptune Rotation/Galaxy Building Blocks/Hubble Deep Field/Saturn Storm, 219
Quest for excellence 5, 212

R
RADARSAT Launch, 21, 120
RADARSAT Launch VAFB, 20
Radio controlled for research, 6
Recycling in space, 202
Refocusing space technology, 214
Research excitation system flight testing, 4
Restoring Miss Liberty, 187
Return to flight 1, 211
Return to flight 3, the journey continues, 211
Return to space, 26
Return to Space Mission: The STS--26 crew report, 23
Revitalizing general aviation, 5
Riblets: New speed technology, 190
Richards, Dick: Training clip, 18
Robotic Assisted Microsurgery -- RAMS FY'07, 201
Robotics, 26
Robotics Demo Peer Group review, 193
Robotics for Space Station tape 2, 192
Robotics for Space Station, tape 1, 192
Robotics in space, 192
Rollout of Endeavour at Palmdale, California (Part 1 of 2), 134
Rollout of Endeavour at Palmdale, California (Part 2 of 2), 134
Rotating unbalanced mass proof of concept, 209
Rotor stator CGI, 5
Rotocraft research, 6
Rover story, 223

S

SAMPLE (Solar Array Module Plasma Interactions Experiment), 195
SAMS (space acceleration measurement system), 585
Sampling Yellowstone, 195
Science operation in space: Lessons, 25
Scientific balloons, 2
Scientific harvest, 10
Sciences and cosines Part 1 of 3, 207
Sciences and cosines Part 2 of 3, 207
Sciences and cosines Part 3 of 3, 207
Six degree of freedom, 210
Skylab: Space Station 1, 184
Skylab: The second manned mission. A scientific harvest, 10
SOHO Mate Spacecraft to Payloads, 148
SOHO Mission Science Briefing, 181
SOHO Payload Mate to Atlas/Centaur at the SAEF 2, 180
SOHO Solid Rocket Booster Installation, 186
Solar connection, 186
Solid surface, 187
Southern and Northern Hemispheres total ozone as seen by TOMS, 197
Space 2000 Symposium, 11
Space acceleration measurement system, 210
Space adaptation, 200
Space astronomy update, 215
Space basic, 214
Space classroom, 209
Space electronics video: Research for today and tomorrow, 189
Space exploration initiative, 8
Space flight: The application of orbital mechanics, 15
Space Shuttle highlights, 23
Space Shuttle Propulsion, 155
Space Station: Ground Support, 155
Space Station: The Orbiter, 158
Space Station Freedom, 100
Space Station quarterly, May 1992, 176
Space Station resource reel, 176
Space Station: The link to America’s future, 175
Space suit design, 205
Spacelab Life Sciences–1, 200
Spacelab Skylab: Wings of Discovery, 185
Spacewalk 16, 209
Spacewalk 17: O’Leary’s Mars, 221
Spinning Stardust into Planets, 219
SPRITE video news release, 197
SSME testing at Stennis Space Center, 585
Standards for excellence, 211
Starbase Launch Coverage, 20
Starfire I/Consort III Launch, 182
Starris Space Center 1992, 18
STEP: A future revision, today, 212
STl: Managing a universe of information, 213
Stock footings of Goddard Space Flight Center and Headquarters, 16
STOVL, 4
STS 101: Post Flight Presentation, 120
STS 103: Post Flight Crew Presentation, 100
STS 41 D: Post-Flight Press Conference with Highlights from JSC, 585
STS 41 D: Post-Flight Press Conference with Highlights from JSC, 88
STS 41 G: Mission Highlights, 86
STS 53 flight day 4 highlights/MIR–Shuttle rendezvous, 28
STS 53: Post flight presentation, 28
STS Flight 64 mission highlights, 28
STS–100 Crew Activity Report: Flight Day 1 Highlights, 155
STS–100 Crew Activity Report: Flight Day 2 Highlights, 156
STS–100 Crew Activity Report: Flight Day 3 Highlights, 155
STS–100 Crew Activity Report: Flight Day 4 Highlights, 157
STS–100 Crew Activity Report: Flight Day 5 Highlights, 156
STS–100 Crew Activity Report: Flight Day 6 Highlights, 157
STS–100 Crew Activity Report: Flight Day 7 Highlights, 157
STS–100 Crew Activity Report: Flight Day 8 Highlights, 155
STS–100 Crew Activity Report: Flight Day 9 Highlights, 155
STS–100 Crew Activity Report: Flight Day 10 Highlights, 159
STS–100 Flight Day 11 Highlights, 157
STS–100 Flight Day 12 Highlights, 156
STS–100 Flight Day 5 Highlights, 157
STS–100 Flight Day 9 Highlights, 157
STS–100 Mission Highlights Resource Tape, 161, 162
STS–100 Mission Highlights Resource Tape, 161, 162
STS–100 Post Flight Presentation, 159
STS–101 / Atlantis EVA briefing, 119
STS–101 Crew Activity Report Flight Day 02 Highlights, 117
STS–101 Crew Interview / Mary Ellen Weber, 111
STS–101 Crew Interview / Scott Horowitz, 111
STS–101 Crew Interview / Robert N. Cottle, 110
STS–101 Mission Highlights Resource Tape, Part 1 of 3, 142
STS–101 Mission Highlights Resource Tape, Part 2 of 3, 141
STS–101 Mission Highlights Resource Tape, Part 3 of 3, 141
STS–101 Mission Overview Briefing, 154
STS–101: Atlantis Orbiter Upgrade Briefing, 120
STS–101: CAR / Flight Day 03 Highlights, 117
STS–101: Crew Activity Report / Flight Day 5, 118
STS–101: Crew Activity Report / Flight Day 6, 118
STS–101: Crew Activity Report / Flight Day 9 Highlights, 119
STS–101: Crew Activity Report CAR/Flyght Day 04 Highlights, 118
STS–101: Crew Activity Report/Flight Day 10 Highlights, 119
STS–101: Crew Activity Report/Flight Day 8 Highlights, 119
STS–101: Crew Activity Report/Flight Day 8 Highlights, 119
STS–101: Crew Interview – Allan Swadley, 117
STS–101: Crew Interview / James S. Voss, 111
STS–101: Crew Interview / Jeffrey N. Williams, 111
STS–101: Crew Interview / Susan J. Helms, 112
STS–101: Crew Interview / Yuri Vladimirovich Usachev, 113
STS–101: Flight Day Highlights / CAR, 118
STS–102 Countdown Status, 154
STS–102 Countdown Status Briefing, 154
STS–102 Crew Activity Report/Flight Day 1 Highlights, 151
STS–102 Crew Activity Report/Flight Day 10 Highlights, 152
STS–102 Crew Activity Report/Flight Day 11 Highlights, 152
STS–102 Crew Activity Report/Flight Day 12 Highlights, 152
STS–102 Crew Activity Report/Flight Day 13 Highlights, 152
STS–102 Crew Activity Report/Flight Day 2 Highlights, 151
STS–102 Crew Activity Report/Flight Day 3 Highlights, 151

T–5
STS-38: LDEF EVA training in WETF with Low and Dunbar, 203
STS-38 mission highlights resource tape, 7
STS-38 onboard 16mm photography quick release, 24
STS-38 post-flight press conference, 174
STS-38: LDEF Move from SAEF II to Hanger "C"-CCAFS, 112
STS-33 Carter and Thornton during WETF activities, 204
STS-33 crew post flight film, 25
STS-33 emergency egress training, 203
STS-33 EVA prep and post with Gregory, Blaha, Carter, Thornton, and Musgrave in FTF, 25
STS-33 launch and landing clip, 23
STS-33: At Pad B – IEA Removal; STS-32: In the VAB HB1 – IEA Removal, 114
STS-33: Removal of the I.E.A, at Pad B and Inspection at the ARF, 114
STS-34 Arriflex and IMAX camera training, 191
STS-34 Chang-Diaz and E. Baker during Galileo contingency training in WETF, 203
STS-34 crew bailout exercise in CCT, 202
STS-34 final bench review, 202
STS-34 Galileo integrated deploy sm, 24
STS-34 Galileo PCR at Pad & Galileo in Atlantis, 111
STS-34 McCully and Baker during IFM training, 24
STS-34 mission highlights resource tape, part 1, 24
STS-34 onboard 16mm photography quick release, 24
STS-34 post-flight press conference, 24
STS-34 Space Shuttle Portable Onboard Computer (SPOC) briefing, 24
STS-34: Atlantis Stacking Activities in the VAB, 116
STS-34: Galileo Payload Canister Doors Closing in VPF, 115
STS-34: Galileo Processing, 112
STS-34: Galileo TCDT, 115
STS-34: JPL RTG Safety Tests, 113
STS-34: Mission Overview Briefing, 114
STS-35 Crew training: bailout in CCT, firefighting, TAGS class and bailout in WETF, 202
STS-35 crew training: EMU walk through and EVA prep and post, 202
STS-35 crew trash compactor briefing, 16
STS-35 EVA payload training in WETF, 202
STS-35 integrated sm in SMS and MOCR, 16
STS-35 mission highlights resource tape, 25
STS-35 onboard photography quick release, 25
STS-35 payload specialists Durrance and Parise: 70mm photo training and cabin familiarization, 191
STS-35 post-flight press conference, 23
STS-35: ASTRO-1 Assembly at O&C, 114
STS-35: Astro-1 BBRRT Problem Area, 112
STS-35: Astronaut Departure, 112
STS-35: Helicopter Footage Orbiters on Both Pads A and B, 113
STS-35: Mission Highlights Resource Tape, 115
STS-35: Post Launch News Conference, 112
STS-35/ASTRO-1: Breakfast/Suit-Up/Depart O & C / Ingress / Launch with Isolated Views, 116
STS-35/ASTRO-1: Day-1 Down-links, 116
STS-35/Astro-1: Editors Work Tape, 114
STS-35/Astro-1: Launch T-20 Through Orbit with Replays (tape 2 of 2), 115
STS-36: Turbo Pump Deinstalled and Being Inspected, 193
STS-36: crew EVA prep and post-training, bailout exercises, final bench review, 204
STS-36 crew preflight brief, 25
STS-36: Breakfast / Suit-Up / C-7 Ex / Launch and Landing at Edwards, 115
STS-36: Hydrogen Turbo Pump Removal Prep, 115
STS-36: Isolated Camera Breakfast Suit-Up Walkout, 115
STS-37: astronauts Ross and Apt during CETA hardware checkout, 204
STS-37: Breakfast / Ingress / Launch & ISO Camera Views, 191
STS-37: CETA evaluation with Ross, 202
STS-37 Gamma Ray Observatory Arrival and VPF Activities, 231
STS-37 Landing, 110
STS-37 Mission Overview: Lead Flight Director Briefing, 102
STS-37: Payload Gamma Ray Observatory Pad-B in ICR, 104
STS-37: Post-flight Crew Press Conference, 100
STS-37 Rollout to Pad B, 101
STS-37: The Payload bay door closing at PCR Pad B, 231
STS-37: Downlinks M. E. T., 116
STS-37: Gamma Ray Observatory, 231
STS-37: Gamma Ray Observatory (2 of 2), 231
STS-37: Gamma Ray Observatory Removal from Canister at the PHSE, 232
STS-37: TCDT Pad B Atlantis GRO (1 of 3), 117
STS-37: TCDT Pad B Atlantis GRO (2 of 3), 117
STS-37: TCDT Pad B Atlantis GRO (3 of 3), 116
STS-37: Atlantis/GRO, 103
STS-37: GRO Crew Arrival and TCDT Activities, 110
STS-38 Atlantis Crew Arrival, 132
STS-38 crew training: Habitation equipment procedures, bailout in CCT, 70mm photo class, EVA prep and post, and firefighting, 204
STS-38 Rollback from Pad A to VAB, 131
STS-38: Rollout to Pad A, 132
STS-38: Brief Tightening, 122
STS-38: Landing at Kennedy Space Center/ Crew Exit, 132
STS-38: Post Landing News Conference, 122
STS-39 Activities in Orbiter Bay, 139
STS-39 Compimed Orbiter Footage, 107
STS-39 Discovery in the VAB and Columbia Tow From HI-2, 122
STS-39 Discovery Rollback to the OPF High Bay, 122
STS-39 IBSS SPASS II Rotation and Installation, 122
STS-39: Landing at KSC, 122
STS-39: OMS Pod Thuster Removal/Replace, 122
STS-39: Payloads in Canister at VPF, 122
STS-40 crew during spacelab Sim, 18
STS-40: Gat Away Special Experiment Preflight Briefing, 123
STS-40 SRB/MPL Rollout to Pad B, 123
STS-40 TCDT, 123
STS-40 Temperature Probe and MDM, 131
STS-40: Hinge Inspection, 121
STS-40: SLS-1 Breakfast/Suit-Up/Depart O&C/Ingress/Launch with isolated Views, 123
STS-40: SLS-1: Lift to Cargo Bay, 121
STS-40/SLS-1: Move from Work Stand to Canister, 123
STS-41 Activity/Rollover Preparations/Lift Preparations in VAB/Mated, 139
STS-41 crew training bailout in CCT, 16mm camera class EVA prep, habitation equipment procedures, and food tasting, 18
STS-41 mission highlights resource tape, 26
STS-41 onboard 16mm photography quick release, 26
STS-41: post-flight press presentation, 26
STS-41 Ulysses Breakfast, Suit-up, C-7 Exit, Launch and ISOS Cam Views, 124
STS-41 Ulysses Compiled Flow Tape, 135
STS-41 Ulysses Launch (10/06/90), Ulysses Deploy (10/06/90), Landing (10/10/90), 124
STS-41 Ulysses TCDT Activities, 123
STS-41 Ulysses: Ulysses – The Movie, 123
STS-41 VCS training with mission specialist Bruce Melnick and Bill Shepard, 192
STS-41: Discovery Payload Bay Door Investigation, 121
STS-41 Ulysses Canmcor Footage Replay of Ulysses Deploy on 10/06/90, 124
STS-41D Post Flight Press Conference with Highlights, 89
STS-41G TCDT, 86
STS-42 Discovery Rollout to Pad A, 131
STS-42 Discovery/Breakfast, Suit-Up, Depart O&C, Ingress, Launch, On-Orbit, and Landing, 129
STS-42 mission highlights resource tape. Part 1 of 2, 32
STS-42 mission highlights resource tape. Part 2 of 2, 32
STS-42 Preflight Background Briefing Life Sciences (MSFC), 129
STS-42 Discovery/MJ-1 Admiral Richard Truly Press Briefing, 124
STS-43 Astronaut Arrival for TCDT, 131
The world’s largest wind tunnel, 6
The world’s most powerful computer, 206
Thermocapillary convection in evaporating sessile drops, 190
Time of Apollo, 10
TITAN III Launch Replays, 229
Titan III Mars Explorer Transfer Orbital Stage Delivery to the PHSF, 229
Titan III Mars Observer Arrival and Uncrating at PHSF, 229
Titan III Mars Observer Press Showing at the PHSF, 230
TITAN III/Mars Observer Flow Tape for Playback, 230
TITAN III/Mars Observer Post-Launch Press Conference, 22
TOMS computer graphics, 195
TOPEX Press Conference (2 of 2), 182
TOPEX/POSEIDON Launch from Guiana Space Center Aboard an Ariane 42P, 182
Toys in space, 2, 28
TRW Video News: Chandra X-ray Observatory, 178
Twenty-five years of progress. Part 1: Birth of NASA. Part 2: The Moon—a goal, 234
Two-dimensional scramjet inlet unstart model: Wind-tunnel blockage and actuation systems test, 190

U
Ulysses News Conference, 215
Ulysses: A solar odyssey, 8
Unistick vehicle controller, 192
Unitary plan wind tunnel landmark dedication and revitalization, 233
United States/Russia space cooperation document, 176
University Joint Venture: JOVE, 212
Unmasking the Sun, 231

V
Venus lightning, 198
Views from space, 193
Virtual reality, 206
Voyager 2: Neptune encounter, 220
Voyager Briefing: Expectations of the Neptune Encounter, 226
Voyager encounter highlights, 219
Voyager encounters Uranus, 220
Voyager II Encounter with Neptune: Voyager/Neptune Briefing, 225
Voyager last picture show, 221
Voyager Outreach Compilation, 224
Voyager science summary tape, 222
Voyager: National Air and Space Museum, 221
Voyager’s last encounter, 221
VSTOL Systems Research Aircraft (VSRA) Harrier, 3

W
Way station to space: The history of Stennis Space Center, 18
Welcome to Outer Space, 11
Welcome to the Ohio Aerospace Institute, 210
What is the Value of Space Exploration? — A Prairie Perspective, 195
What’s killing the trees?, 196
WHIPICE, 2
White Sands Test Facility, 19
WIND Mated to Delta, 180
Wind shear and heavy rain, 198
Wind Tunnel Tests of an Inflatable Airplane, 2
Worlds Smaller than Saturn, 231

X
X-29: Experiment in flight, 3
X-29: Research aircraft, 3
X-31 resource tape, 4
X-31 tailless testing, 4
X-33, X-34, X-37 Press Conference (Tape 2), 114
X-34 Captive Carry & Seunghy Lee Interview, 113
X-38 Phase 3 Drops V-132 FF, 113
X-43 Composite Tape, 114
XTE Delta 2nd Stage Erection at Complex 17A, Cape Canaveral Air Station, 180
XTE Payload at Hangar AO, 180
XTE Science Briefing from KSCNF, 12
XTE Solid Motor Installation at Pad 17–A, Cape Canaveral Air Station, 186
XV-15: Tiltrotor, 3

Y
Yohkoh Soft X-ray Telescope, 215

Z
Zarya Resource Reel, 184
ZENO: A critical fluid light scattering experiment, 190
Zvezda Launch Coverage, 184
Subject Term Index

A
ABERRATION, 216
ACCELERATION (PHYSICS), 185, 210
ACCELEROMETERS, 121, 185, 210
ACCIDENT INVESTIGATION, 27, 212
ACCIDENT PREVENTION, 233
ACCIDENTS, 1
ACID RAIN, 196
ACOUSTIC LEVITATION, 62
ACOUSTICS, 5
ACTIVITY (BIOLOGY), 50
ACTS, 128, 147
ADAPTATION, 53
ADAPTERS, 78, 98
ADVANCED LAUNCH SYSTEM (STS), 28
ADVANCED SOLID ROCKET MOTOR (SRM), 186
ADVANCED TECHNOLOGY LABORATORY, 29
AERIAL EXPLOSIONS, 41
AERIAL PHOTOGRAPHY, 191
AERODYNAMICS, 299
AEROSMITH, 89
AERODYNAMIC CHARACTERISTICS, 2
AERODYNAMIC LOADS, 2
AERODYNAMIC STABILITY, 2, 45, 198
AERODYNAMIC STALLING, 2
AERODYNAMICS, 6
AERONAUTICAL ENGINEERING, 234
AERONAUTICS, 232
AEROSPACE ENGINEERING, 18, 177, 186, 199, 210, 214, 232
AEROSPACE ENVIRONMENTS, 29, 78, 205, 214
AEROSPACE INDUSTRY, 210, 212
AEROSPACE MEDICINE, 28, 29, 32, 199, 200
AEROSPACE PLANES, 176, 187, 192, 193
AEROSPACE SAFETY, 23, 24, 200
AEROSPACE SCIENCES, 83, 154, 209, 210, 213
AEROSPACE SYSTEMS, 179
AEROSPACE TECHNOLOGY TRANSFER, 5, 28, 194, 201, 215, 214
AGENA ROCKET VEHICLES, 177
AGING (MATERIALS), 213
AIR BREATHING BOOSTERS, 114
AIR BREATHING ENGINES, 114
AIR FLOW, 1
AIR LAUNCHING, 5, 113, 123, 182
AIR LOCKS, 54, 55, 57, 78, 133, 156, 157, 159, 160, 161, 167, 204, 231
AIR POLLUTION, 198
AIR PURIFICATION, 199
AIR SAMPLING, 198
AIR TRANSPORTATION, 2
AIR WATER INTERACTIONS, 199
AIRBORNE EQUIPMENT, 196
AIRBORNE-SPACEBORNE COMPUTERS, 4, 24
AIRCRAFT ACCIDENTS, 2, 3
AIRCRAFT COMPARTMENTS, 99, 115, 205
AIRCRAFT CONFIGURATIONS, 5
AIRCRAFT CONSTRUCTION MATERIALS, 187
AIRCRAFT CONTROL, 6
AIRCRAFT DESIGN, 1, 2, 4, 186
AIRCRAFT ENGINES, 5
AIRCRAFT HAZARDS, 2
AIRCRAFT ICING, 2, 6, 234
AIRCRAFT LANDING, 5, 99, 148
AIRCRAFT MAINTENANCE, 2, 19, 180
AIRCRAFT MANEUVERS, 5
AIRCRAFT MODELS, 3, 6
AIRCRAFT NOISE, 5, 209
AIRCRAFT PERFORMANCE, 5
AIRCRAFT PILOTS, 16
AIRCRAFT PRODUCTION, 102
AIRCRAFT SAFETY, 2
AIRCRAFT STABILITY, 198
AIRCRAFT SURFACES MOVEMENTS, 122
AIRFORCES, 2
AIRFRAMES, 114
AMERICAN INDIANS, 202
ANALOG DATA, 206
ANDROMEDA GALAXY, 218
ANGLE OF ATTACK, 4
ANGLES (GEOMETRY), 207
ANIMATION, 206
ANNUAL VARIATIONS, 196, 197
ANOMALIES, 20
ANTARCTIC REGIONS, 195, 196, 198
ANTENNAS, 101, 152, 153
APOLLO 11 FLIGHT, 8, 9, 10, 13, 14, 15, 99, 114, 178, 185
APOLLO 12 FLIGHT, 10, 100
APOLLO 13 FLIGHT, 14, 15, 29
APOLLO 14 FLIGHT, 224
APOLLO 15 FLIGHT, 8, 223
APOLLO 16 FLIGHT, 8, 223
APOLLO 17 FLIGHT, 223
APOLLO FLIGHTS, 10, 223
APOLLO PROJECT, 8, 10, 232, 233, 234
APOLLO SOYUZ TEST PROJECT, 223, 233
APOLLO SPACECRAFT, 223
APOLLO TELESCOPE MOUNT, 10
APPLICATIONS OF MATHEMATICS, 207, 208
APPLICATIONS PROGRAMS (COMPUTERS), 2, 206
APPROACH, 110
ARCTIC REGIONS, 3, 195, 196
ARIBANE LAUNCH VEHICLE, 182
ARRIVALS, 102, 148, 179, 181
ARTERIES, 200
ARTIFICIAL SATELLITES, 33
ASCENT, 16
ASIA, 195
ASSEMBLIES, 183
ASSEMBLING, 112, 114, 131, 148, 149, 178, 184
ASTEROID COLLISIONS, 217
ASTEROID MISSIONS, 21, 98, 217
ASTEROIDS, 217
ASTRO MISSIONS (STS), 25, 114, 115, 116, 185, 202
ASTRONAUT LOCOMOTION, 28, 202
ASTRONAUT MANEUVERING EQUIPMENT, 202, 204
ASTRONAUT PERFORMANCE, 26, 154, 155, 157, 164, 165
ASTRONAUT TRAINING, 6, 13, 14, 16, 17, 18, 24, 26, 81, 86, 96, 97, 98, 100, 101, 102, 103, 106, 107, 110, 111, 113, 115, 116, 117, 123, 124, 127, 129, 130, 132, 134, 136, 137, 138, 146, 141, 143, 144, 146, 147, 148, 150, 155, 159, 160, 161, 162, 166, 176, 183, 190, 191, 200, 201, 202, 203, 204, 205, 233
ASTRONOMICAL OBSERVATORIES, 57, 214, 218, 226
ASTRONOMICAL PHOTOGRAPHY, 215
ASTRONOMICAL POLARIMETRY, 29
ASTRONOMICAL SPECTROSCOPY, 29
ASTRONOMY, 56
ASTROPHYSICS, 103, 111
ATLANTIC OCEAN, 195
ATLAS CENTAUR LAUNCH VEHICLE, 12, 20, 22, 95, 178, 186, 212
ATLAS LAUNCH VEHICLES, 20, 21, 22, 179
ATMOSPHERIC CIRCULATION, 19, 197, 198, 228
ATMOSPHERIC COMPOSITION, 196, 198
ATMOSPHERIC ENTRY, 14, 32, 228
ATMOSPHERIC MODELS, 198
ATMOSPHERIC RADIATION, 197
ATTITUDE (INCLINATION), 45, 46
ATTITUDE CONTROL, 46
AUDIO EQUIPMENT, 191
AURORAS, 225
AUSTRALIA, 195
AUTOMATED PILOT ADVISORY SYSTEM, 234
AUTOMATIC CONTROL, 3, 189, 213
AUTONOMIC NERVOUS SYSTEM, 71, 74

ST–1
F
F—104 AIRCRAFT, 1
F—106 AIRCRAFT, 1
F—15 AIRCRAFT, 4, 5, 6
F—16 AIRCRAFT, 2, 4
F—18 AIRCRAFT, 4
F—8 AIRCRAFT, 1
FACILITIES, 17, 209
FAILURE, 54, 135, 182, 230
FAIRINGS, 97, 179
FAR ULTRAVIOLET RADIATION, 57
FAR UV SPECTROSCOPIC EXPLORER, 97
FASTENERS, 93, 211
FEMALES, 101
FIBER OPTICS, 206
FIRE FIGHTING, 18, 147, 204
FIRES, 1, 187, 204
FIRING (IGNITING), 91, 146
FISHES, 194
FISHING, 194
FIXTURES, 98
FLAME PROPAGATION, 187
FLEET SATELLITE COMMUNICATION SYSTEM, 182
FLIGHT CONDITIONS, 6
FLIGHT CONTROL, 3, 4, 6, 11, 44, 45, 49, 51, 57, 75, 89
FLIGHT CREWS, 16, 31, 32, 38, 39, 41, 42, 43, 44, 47, 52, 57, 58, 59, 65, 66, 71, 73, 77, 78, 79, 85, 86, 97, 98, 101, 132
FLIGHT HAZARDS, 183, 212
FLIGHT INSTRUMENTS, 3
FLIGHT MANAGEMENT SYSTEMS, 2
FLIGHT MECHANICS, 227
FLIGHT OPERATIONS, 7, 19, 21, 26, 30, 180, 232
FLIGHT PATHS, 110
FLIGHT PLANS, 108
FLIGHT RULES, 7
FLIGHT SAFETY, 1, 2, 19, 108, 233
FLIGHT SIMULATION, 17, 101, 102, 116, 117, 209
FLIGHT SIMULATORS, 96
FLIGHT STRESS (BIOLOGY), 28
FLIGHT TESTS, 3, 4, 5, 6, 32, 64, 65, 117
FLOW DISTRIBUTION, 5, 188, 189, 190
FLOW VISUALIZATION, 1, 190, 191
FLUID DYNAMICS, 33, 47
FLUID FLOW, 190
FLUID INJECTION, 191
FLUID JETS, 188, 189
FLUIDS, 190
FLY BY WIRE CONTROL, 1
FLYBY MISSIONS, 117, 178, 224, 225, 226, 227, 228
FOLDING STRUCTURES, 102
FOOD, 203, 204
FOOD PRODUCTION (IN SPACE), 202
FORECASTING, 197
FOREST FIRES, 195, 196
FOREST MANAGEMENT, 196
FORESTS, 196
FOSSILS, 190
FRAGMENTATION, 226
FRAGMENTS, 218, 225
FREE FLOW, 190
FREE MOLECULAR FLOW, 79
FREON, 188, 189
FRIENDSHIP 7, 8, 81
FUEL CAPSULES, 113
FUEL INJECTION, 191
FUEL PUMPS, 193
FUEL TANKS, 107
FUNCTIONAL DESIGN SPECIFICATIONS, 176
FURNACES, 33, 49, 208
G
GALACTIC BULGE, 218
GALACTIC CLUSTERS, 215, 219
GALACTIC EVOLUTION, 219
GALACTIC NUCLEI, 218
GALACTIC STRUCTURE, 218
GALAXIES, 216, 217, 218, 219
GALILEAN SATELLITES, 224, 227, 229
GALILEO PROBE, 220, 221, 224, 225, 226, 227, 228
GALILEO PROJECT, 88, 178, 221, 224, 225, 226, 227, 228, 229, 232, 233
GAMMA RAY ASTRONOMY, 231
GAMMA RAY OBSERVATORY, 95, 102, 103, 104, 214, 231, 232
GAMMA RAY TELESCOPES, 231
GANYMEDE, 225, 229
GARBAGE, 16
GAS GIANT PLANETS, 216, 219
GAS GUNS, 175
GAS JETS, 59
GEMINI 8 FLIGHT, 177
GEMINI FLIGHTS, 10
GEMINI SPACECRAFT, 177
GENERAL AVIATION AIRCRAFT, 2, 5
GENERAL OVERVIEWS, 7, 9, 221, 234
GEODETIC ACCURACY, 194
GEODETICAL SURVEYS, 194, 195
GEODESIC, 198
GEOSAT PROJECT, 179
GEOSYNCHRONOUS ORBITS, 95
GET AWAY SPECIALS (STS), 7, 27, 36, 43, 123
GIANT STARS, 218, 231
GIOTTO MISSION, 175
GLACIAL DRIFT, 195
GLACIERS, 195
GLIDERS, 4
GLOBAL POSITIONING SYSTEM, 46, 107, 197
GLOBAL WARMING, 196, 197
GLOBULAR CLUSTERS, 29, 217
GLOVES, 204
GOES, 4, 234
GOES 7, 95
GOES 9, 95
GOES SATELLITES (ESA), 21, 179, 182
GOESARI PROJECT, 179
GREENHOUSE EFFECT, 196
GREENHOUSE EFFECTS, 27, 28, 40, 45, 48, 49, 56, 62, 64, 75, 76, 79, 85, 130, 146, 177, 185, 199, 205, 208, 225
GRAVATIONAL EFFECTS, 27, 28, 40, 45
GRAVITATIONAL FIELDS, 53, 187
GRAVITATIONAL PHYSIOLOGY, 29, 130, 182, 199, 200
GREECE, 208
GREENHOUSE EFFECT, 196
GROUND BASED CONTROL, 11, 13, 25, 64, 131, 146, 147
GROUND HANDLING, 19, 20, 91, 92, 99, 110, 122, 180
GROUND OPERATIONAL SUPPORT SYSTEM, 11
GROUND STATIONS, 19, 116, 185
TASTE, 203
TECHNOLOGICAL FORECASTING, 83, 177, 212, 224
TECHNOLOGY ASSESSMENT, 177, 187, 189, 212
TECHNOLOGY TRANSFER, 213
TECHNOLOGY UTILIZATION, 5, 28, 189, 192, 194, 195, 199, 213, 214
TELECOMMUNICATION, 114
TELECONFERENCING, 82, 107, 114, 201
TELEOPHTRS, 193, 207
TELEROBOTICS, 193, 201
TELEVISION SYSTEMS, 33, 43, 66, 102, 210
TELSTAR PROJECT, 89
TEMPERATURE CONTROL, 200
TEMPERATURE PROBES, 131
TERMINOLOGY, 207
TERRAIN, 108, 194
TEST CHAMBERS, 234
TEST FACILITIES, 6, 7, 16, 18, 19
TEST FIRING, 6, 86, 116, 117, 185, 186
TEST RANGES, 5, 7
TEST STANDS, 6
TESTS, 192
TETHERED SATELLITES, 38, 40, 41, 42, 44, 130, 135, 136, 139, 177
TETHERLINES, 183
TEXTS, 213
THEOREM, 207
THEORETICAL PHYSICS, 177
THERMAL CONTROL COATINGS, 26
THERMAL INSULATION, 57, 171
THERMAL MAPPING, 194
THERMOELECTRIC GENERATORS, 113
THRUST VECTOR CONTROL, 3
THUNDERSTORMS, 197, 198
TILT ROTOR AIRCRAFT, 3
TILT ROTOR RESEARCH AIRCRAFT PROGRAM, 3
TITRATING RATORS, 3
TIME MEASUREMENT, 216
TITAN, 230
TITAN III LAUNCH VEHICLE, 229, 230
TITAN PROJECT, 230
TITANIUM, 187
TOPEX, 182, 183
TOPOLOGY, 198
TORQUE, 122
TORQUE MOTORS, 209
TOTAL OZONE MAPPING SPECTROMETER, 19, 196, 197
TOUCHDOWN, 5, 85, 109, 110, 132
TRACKING (POSITION), 116, 207
TRACKING RADAR, 10
TRACKING STATIONS, 19
TRAINING AIRCRAFT, 6, 106
TRAINING DEVICES, 14, 96, 132, 147, 159
TRAINING EVALUATION, 100
TRAINING SIMULATORS, 18, 81, 96, 101, 102, 111, 116, 117, 123, 170, 200
TRAJECTORIES, 217, 227
TRANSFER OF TRAINING, 211
TRANSFER ORBITS, 128, 230
TRANSFERRING, 93, 94, 137, 151
TRANSISTORS, 6, 87, 88
TRANSIENT, 1
TRANSPARENT ENGLISH, 89
TRANSPORTATION, 92
TREADMILLS, 131
TRENDS, 212
TRIANGLES, 208
TRIGONOMETRY, 207
TRITON, 220
TROUGHS, 228
TRUSSES, 137, 162, 173, 174
TURBINE PUMPS, 193
TURBOPROP AIRCRAFT, 186
TURBOPROP ENGINES, 5
TURBULENT WAKES, 233
TURRLES, 197
U.S.R. SPACE PROGRAM, 176
UKRAIN, 69
ULTRASONIC TESTS, 201
ULTRASONICS, 214
ULTRAVIOLET ASTRONOMY, 36, 215
ULTRAVIOLET RADIATION, 21, 218
ULTRAVIOLET SPECTRA, 215
ULTRAVIOLET SPECTROMETERS, 56
ULTRAVIOLET TELESCOPES, 29, 215
ULYSSES MISSION, 8, 26, 123, 124, 135, 215, 221
UMBILICAL CONNECTORS, 29
UNCONTROLLED REENTRY (SPACECRAFT), 214
UNITS OF MEASUREMENT, 187, 212
UNITY CONNECTING MODULE, 76, 77, 78, 79, 80, 82, 83, 85, 93, 94, 103, 118, 126, 127
UNIVERSE, 111
UNIVERSITIES, 211, 215
UNIVERSITY PROGRAM, 210, 211, 213
UNLOADING, 124, 158, 162, 181
UNMANNED SPACECRAFT, 177, 219, 224
UPGRADING, 120
UPPER ATMOSPHERE, 197
UPPER ATMOSPHERE RESEARCH SATELLITE (UARS), 33, 143, 146
UPPER STAGE ROCKET ENGINES, 97, 180, 229
URANUS (PLANET), 220, 225
URANUS SATELLITES, 225
V
VSTOL AIRCRAFT, 3
VACUUM DEPOSITION, 35
VALVES, 141, 160, 168
VAPOR PHASES, 190
VEGA PROJECT, 175
VEGETATION GROWTH, 46, 69
VENUS (PLANET), 9, 198, 220, 222, 223, 229
VENUS ATMOSPHERE, 222
VENUS CLOUDS, 198
VENUS ORBITING IMAGING RADAR (SPACECRAFT), 116, 229
VENUS PROBES, 116
VENUS SURFACE, 223, 229
VERTICAL AIR CURRENTS, 198, 228
VERTICAL FLIGHT, 182
VERTICAL LANDING, 3, 182
VERTICAL TAKEOFF, 3, 182
VESTS, 203
VIBRATION DAMPING, 51
VIBRATION EFFECTS, 205
VIBRATION TESTS, 33
VIDEO COMMUNICATION, 107, 201
VIDEO EQUIPMENT, 201
VIDEO TAPES, 52
VIEWING, 99
VIRGINK MARs PROGRAM, 175
VINEYARDS, 199
VIRTUAL REALITY, 102, 111, 159, 192, 206, 207
VISION, 209
VISUAL PERCEPTION, 209
VISUAL TASKS, 209
VOICE CONTROL, 192
VOICE OF AMERICA, 42
VOLCANOES, 197
VOLCANOLOGY, 54
VORTICES, 1
VOYAGER 1 SPACECRAFT, 219, 224, 234
VOYAGER 2 SPACECRAFT, 219, 220, 221, 224, 225, 226
VOYAGER PROJECT, 9, 219, 220, 221, 222, 224, 226, 234
WALKING MACHINES, 197
WASTE DISPOSAL, 16
WATER, 51, 203
WATER COLOR, 199
WATER LANDING, 14, 203
WATER TREATMENT, 199
WATER VAPOR, 191
WATER WAVES, 199
WATERWAYS, 208
WAVE PROPAGATION, 59
WEATHER, 107, 108, 110, 183, 198, 212
WEATHER FORECASTING, 137, 138, 143, 144, 149, 154, 164, 165, 198
WEATHER STATIONS, 198
WEIGHTLESSNESS, 25, 28, 29, 53, 68, 121, 208, 224
WEIGHTLESSNESS SIMULATION, 17, 18, 200, 201, 202, 203, 204
WILD 2 COMET, 20, 217
WILDLIFE, 199
WIND SHEAR, 198
WIND TUNNEL TESTS, 6, 190, 191, 209
WIND TUNNELS, 6, 207, 209, 234
WINDPOWER UTILIZATION, 234
WING CAMBER, 3
WING PROFILES, 3
WINGS, 1, 2, 186
WORKSTATIONS, 189

X
X RAY ASTRONOMY, 11, 12, 87, 95, 97, 99, 103, 215
X RAY ASTROPHYSICS FACILITY, 6, 85, 87, 92, 95, 96, 97, 98, 99, 103, 178, 214
X RAY SOURCES, 12
X RAY SPECTRA, 12
X RAY SPECTROMETERS, 145
X RAY TELESCOPES, 12, 112, 215
X RAY TIMING EXPLORER, 11, 12, 20, 178, 179, 180, 181, 183, 186
X-15 AIRCRAFT, 232
X-29 AIRCRAFT, 3, 4
X-30 VEHICLE, 11
X-31 AIRCRAFT, 4, 5, 176
X-34 REUSABLE LAUNCH VEHICLE, 113
X-37 VEHICLE, 114
X-38 CREW RETURN VEHICLE, 113
X-43 VEHICLE, 5, 114
XV-15 AIRCRAFT, 3, 220, 234

Y
YELLOWSTONE NATIONAL PARK
(ID-MT-WY), 195, 196

Z
ZARYA CONTROL MODULE, 15, 76, 77, 78, 79, 80, 81, 82, 85, 93, 94, 103, 118, 125, 126, 127, 184
# NASA Video Catalog

This report lists 1878 video productions from the NASA STI Database.