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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:

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- 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 audiovisual material, ordering information, and order forms are also available.
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<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>
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<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>
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<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>
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<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>
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<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>
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<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>
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<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>
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</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 astronomical 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
Includes atmospheric, water, soil, noise, and thermal pollution.

46 Geophysics
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
Includes weather observation forecasting and modification.

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.

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.

52 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 Science. For the effects of space on animals and plants see 51 Life Sciences.

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

54 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 16 Space Transportation and 52 Aerospace Medicine.

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.
60 Computer Operations and Hardware 206
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.

61 Computer Programming and Software 206
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 207
Includes feedback and control theory, information theory, machine learning, and expert systems. For related information see also 54 Man/System Technology and Life Support.

64 Numerical Analysis 207
Includes iteration, differential and difference equations, and numerical approximation.

66 Systems Analysis and Operations Research 208
Includes mathematical modeling of systems; network analysis; mathematical programming; decision theory; and game theory.

70 Physics (General) 208
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.

71 Acoustics 208
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.

74 Optics 209
Includes light phenomena and the theory of optical devices. For lasers see 36 Lasers and Masers.

80 Social and Information Sciences (General) 209
Includes general research topics related to sociology; educational programs and curricula.

81 Administration and Management 211
Includes management planning and research.

82 Documentation and Information Science 212
Includes information management; information storage and retrieval technology; technical writing; graphic arts; and micrography. For computer documentation see 61 Computer Programming and Software.
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.

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.

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

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

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.

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

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.

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

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### 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

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  - $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)

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- $24.00 International

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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.
# NASA Scientific and Technical Information Program

## VIDEO ORDER FORM

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<td>34 min.</td>
<td>Beta</td>
<td>PAL</td>
<td>P02</td>
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## 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)
- Visa □ MC □ American Express □ Diner’s Club

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## 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)

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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.

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

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

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

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  - (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

Card No. __________________________ (Required to validate credit card order)

Exp. Date __________ (mm/dd/yy)

Signature __________________________

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  - $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 $__________
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.

Applications of Mathematics; Geological Surveys; Greece; Histories; Hydrology; Islands; Waterways
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.

1994004066 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.
CASI
Accidents; Crashes; Fires; Flight Safety

1995000437 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA
Dryden and transonic research
May 27, 1992; In English; 20th Anniversary 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.
DFRC
Flow Control; Research; Supercritical Wings; Transonic Flow

1995004337 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--23649; 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.
DFRC
Research Aircraft; Research Projects

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 14 Fluid Mechanics and Heat Transfer.

1994000418 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.
Author (revised)
Aircraft Design: Computational Fluid Dynamics: Research Facilities

1994004159 NASA Langley Research Center, Hampton, VA, USA
ILL-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 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 natural laminar flow and turbulent airflow patterns as they occur. Langley researchers explain possible use of this technology in supersonic flight.
CASI
Air Flow; Coatings; Flow Visualization; Laminar Flow; Wings

19940014491 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 presents clips (in-flight, ground crew, pilots, etc.) of almost everything from X-1 through X-31.
DFRC
Research Aircraft; Research Projects

19940022688 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; enhancer 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
Scientific balloons

This video discusses how NASA uses large helium-filled balloons to take payloads up 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

F-16XL interview with Marta Bohn-Meyer

Marta Bohn-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 airflow design, chord optimization, introduction of a suction bubble to maintain pressure distribution, and CFD, both theoretical and actual phenomena, are discussed. Bohn-Meyer discusses the difference 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.

DERC

Airfoil Design; Airfoils; F-16 Aircraft

Wind Tunnel Tests of an Inflatable Airplane

This video provides a wind tunnel investigation of aerodynamic and structural deflection characteristics of an inflatable airplane. 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. The inflation pressure during the test was indicated to be 70 psi.

CASI

Inflatable Structures; Wings; Buckling; Deflection; Aerodynamic Stability; Aerodynamic Loads; Aerodynamic Characteristics

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.

CASI

Aircraft Safety; NASA Programs; Research and Development; Research Facilities
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.

1995/011932 NASA Ames Research Center, Moffett Field, CA, USA VSTOL Systems Research Aircraft (VSRA) Harrier
Dec 1, 1994; In English; 9 min. 30 sec. playing time, in color, with sound Report No.(s): NONP–NASA–VT–95–37002; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
NASA's Ames Research Center has developed and is testing a new integrated flight and propulsion control system that will help pilots land aircraft in adverse weather conditions and in small confined areas (such as, on a small ship or flight deck). The system is being tested in the VSTOL (Vertical/Short Takeoff and Landing) Systems research Aircraft (VSRA), which is a modified version of the U.S. Marine Corps’s AV-8B Harrier jet fighter, which can take off and land vertically. The new automated flight control system features both head-up and panel-mounted computer displays and also automatically integrates control of the aircraft’s thrust and thrust vector control, thereby reducing the pilot’s workload and helping stabilize the aircraft for landing. Visiting pilots will be encouraged to test the new system and provide formal evaluation flights data and feedback. An actual flight test and the display panel of control system are shown in this video.
CASI
Automatic Control; Flight Control; Harrier Aircraft; Head-Up Displays; Research Aircraft; Thrust Vector Control; VSTOL Aircraft; Vertical Landing; Vertical Takeoff

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 95 Technology Utilization and Surface Transportation.

1994/001813 NASA Ames Research Center, Moffett Field, CA, USA Airborne Arctic stratospheric expedition: Ozone
Dec 1, 1988; In English; 5 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–93–185319; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video shows the rollout of the ER-2 and DC-8 at Ames, takeoffs and landings, and operations aboard the DC-8 and ER-2 in Punta Arenas, Chile. Animation of the north polar regions showing the ozone hole is also included. 
Author (revised)
Arctic Regions; Expeditions; Ozone Depletion; Stratosphere

1994/001848 NASA, Washington, DC, USA Mission adaptive wing
Oct 1, 1986; In English; 3 min. 7 sec. playing time, in color, with sound Report No.(s): NONP–NASA–VT–93–190245; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This document looks at an aircraft wing that can change shape in flights from a flat to curved surface according to the necessary flight mode.
CASI
Mission Adaptive Wings; Wing Camber; Wing Profiles

1994/0016850 NASA, Washington, DC, USA National Aero–Space Plane
Jul 1, 1990; In English; 3 min. 3 sec. playing time, in color, with sound Report No.(s): NONP–NASA–VT–93–190247; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This document presents a series of takes and sequences of model photography of the 1991 NASP design.
CASI
Aircraft Models; National Aerospace Plane Program; Photography

1994/0016854 NASA, Washington, DC, USA X–29: Experiment in Flight
Jan 1, 1991; In English; 2 min. 51 sec. playing time, in color, with sound Report No.(s): NONP–NASA–VT–93–190248; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This document examines the goals and accomplishments of the forward swept-wing X–29.
CASI
Flight Tests; Swept Forward Wings; X–29 Aircraft

Jan 1, 1991; In English; 2 min. 35 sec. playing time, in color, with sound Report No.(s): NONP–NASA–VT–93–190251; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This document explains the technology of the XV-15 aircraft that takes off and lands like a helicopter and flies like a jet.
CASI
Tilt Rotor Aircraft; Tilt Rotor Research Aircraft Program; Tilting Rotors; XV–15 Aircraft

1994/001923 NASA, Washington, DC, USA Better way to fly
Feb 1, 1988; In English; 3 min. 31 sec. playing time, in color, with sound Report No.(s): NONP–NASA–VT–93–190244; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This document shows the advanced cockpit making piloting more efficient and flying safer.
CASI
Cockpits; Flight Control; Flight Instruments

1994/0014489 NASA, Washington, DC, USA X–29: Research aircraft
Jan 1, 1991; In English; 2 min. 35 sec. playing time, in color, with sound Report No.(s): NONP–NASA–VT–94–198217; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
A preliminary look at the Ames Dryden Flight Research Center in the context of the X–29 aircraft is provided. The uses of the X–29’s 30 deg forward swept wing are examined. The video highlights the historical development of the forward swept wing, and its unique blend of speed, agility, and slow flight poten-
The central optimization of the wing, the forward canard, and the rear flaps by an onboard flight computer is also described.

**NASA**

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

19940029059 NASA, Washington, DC, USA

**Perseus: 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**

19940029284 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**

19940004299 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;

B02, Videotape-Beta; V02, 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**

19950004303 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**

19950004304 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**

19950004328 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**

19950004329 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**

19950004330 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

**F–15 835 (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**

19950004331 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**

19950004332 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**

19950004333 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**

19950004339 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) testbed provided for the Pentagon’s ‘tailless’ and quasi-tailless vehicle configuration testing.

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

1995010567 NASA, Washington, DC, USA

**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.

CASI

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

1995010578 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

**F-15 resource tape**
Jun 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.

CASI

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

1995010579 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

**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.

DERC

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

219950033438 NASA Dryden Flight Research Center, Edwards, CA USA

**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--20000439976; 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 207 Mach 6 Wind Tunnel. Visualization data runs are performed in the wind tunnel. Also seen is a brief interview with Vincent Rauch the Hyper-X Program Manager. Animation includes the flight model of the Hyper-X vehicle.

CASI

**Hypersonic Flight; X-43 Vehicle; Pegasus Air-Launched Booster; Air Launching**

1995010567 NASA, Washington, DC, USA

**Rotorator 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.

Author (revised)

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

1995010567 NASA Lewis Research Center, Cleveland, OH, USA

**Futurepath 2**
Apr 1, 1989; In English; 28 min. 48 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--93--185320; 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.

Author

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

1995010567 NASA Lewis Research Center, Cleveland, OH, USA

**Futurepath 1**
Apr 1, 1989; In English; 8 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--93--190236; 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.

CASI

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

1995010567 NASA, Washington, DC, USA

**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.

CASI

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

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 08 Aircraft Design. Testing and Performance and 06 Avionics and Aircraft Instrumentation.

19940009135 NASA Ames Research Center, Moffett Field, CA, USA

**Rotorator 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.

Author (revised)

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

19940009150 NASA Lewis Research Center, Cleveland, OH, USA

**Futurepath 2**
Apr 1, 1989; In English; 28 min. 48 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--93--185320; 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.

Author

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

19940009150 NASA Lewis Research Center, Cleveland, OH, USA

**Futurepath 1**
Apr 1, 1989; In English; 8 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--93--190236; 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.

CASI

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

19940009871 NASA, Washington, DC, USA

**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.

CASI

**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.

19940010865 NASA Lewis Research Center, Cleveland, OH, USA

**Futurepath 2**
Apr 1, 1989; In English; 28 min. 48 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--93--185320; 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.

Author

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

19940010871 NASA, Washington, DC, USA

**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.

CASI

**Civil Aviation: NASA Programs; Prop-Fan Technology; Propeller Fans; Research and Development**
This video shows astronaut Rick Hauck at the Shuttle Training Aircraft (STA), CU’s of the heads-up display, and air-to-air exercises.

Astronaut Training; Head-Up Displays: Training Aircraft

1995-044305 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

1995-044336 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–94–23648; No Copyright; Avail: CASI; B01, Videotape-Beta; V03, Videotape-VHS

This video presentation is a news release highlighting the F-15 Highly Integrated Digital Electronic Controls (HIDEC) Propulsion Controlled Aircraft (PCA) software through June 1993 at Dryden.

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

20000010606 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

Live footage of a preflight interview with Mission Specialist Claude Nicollier is seen. The interview addresses many different questions including why Nicollier 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 Nicollier’s responsibility during any of the given four space walks scheduled for this mission.

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).

1994-0010852 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

1994-0114489 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 Report No.(s): NONP–NASA–VT–94–198201; No Copyright; Avail: CASI; 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

1994-014490 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 ft and 80 x 120 ft 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

1994-0292964 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

1994-029245 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–94–15354; 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

1995-004135 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–94–23139; 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

1995-004140 NASA, Washington, DC, USA

The model builders
Dec 1, 1991; In English; 2 min. 52 sec. playing time, 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.

CASI
Scale Models; Spacecraft Design; Spacecraft Models

199503-04298 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--2363S; 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

199503-04402 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

199503-04426 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

199503-04434 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

199503-04435 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.

199403-09158 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS--32 mission highlights resource tape
Mar 1, 1990; In English; 55 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--93--185306; 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

199403-09167 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--185313; 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 ocellot 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

199401-0935 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 (GAS): NASA Programs; Space Shuttle: Spaceborne Experiments

199401-0996 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 (POWG) meeting, a Flight Rules meeting, and a Flight Operation Review (FOR) meeting.

CASI
Flight Operations; Flight Rules: Mission Planning; Space Transportation System Flights: Spacecrafts

199401-0998 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
19940011827 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’.

CASI
Mercury Spacecraft: Suborbital Flight

19940011028 NASA Lewis Research Center, Cleveland, OH, USA

Astronauts number 3
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

John Glenn’s flight into space is reviewed. This is a re-release of ‘The Flight of Friendship’.

CASI
Astronauts: Friendship 7; Mercury Ma-6 Flight

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 Neil Armstrong giving their recollections of the mission are shown.

CASI
Astronauts: Histories; Manned Space Flight Network; Moon; Spacecraft Exploration; Space Flight Network, composed of ground tracking stations, and tracking stations aboard ships and airplanes, which maintained communications between the orbiter and Earth.

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

19940014508 NASA, Washington, DC, USA

Space Exploration initiative
Jul 1, 1990; In English; 3 min. 17 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-198213; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

An overview of President Bush’s Space Exploration Initiative (SEI) and it’s three main components, Space Station Freedom, a Permanent Lunar Base, and a Manned Mission to Mars is provided. Computer simulations of the Space Station Freedom and Permanent Lunar Base are shown, and an animated sequence describes a Mars mission where heavy lift vehicle will bring components of a Mars spacecraft into orbit, where it will be put together by astronauts using a robotic arm. The Mars spacecraft is shown orbiting Mars and discharging a lander to the surface, carrying human explorers. The video also details the SEI’s Outreach Program, designed to garner interest in and ideas for Space Exploration.

CASI
Lunar Bases: Manned Mars Missions; Space Exploration; Space Station Freedom

19940027314 NASA, Washington, DC, USA

Apollo 11 highlights
Jan 1, 1990; In English; 26 min. 37 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-9963; 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, shots 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

19940029868 NASA 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 is a film to film transfer of a Media Four production by Charles Finney about the Ulysses Mission to the Sun. The prelaunch production uses graphics, animation, and live footage to describe how Ulysses will use the gravity of Jupiter to lift it out of the ecliptic plane into polar orbit around the Sun.

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; 28 min. 54 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-12950; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

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

CASI
Astronauts: Friendship 7; Mercury Ma-6 Flight

19940029871 NASA Lewis Research Center, Cleveland, OH, USA

NASA images 14
May 10, 1988; In English; 29 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-12951; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video looks at the Apollo 15 mission to the Appenine Mountains.

CASI
Apollo Project; Apollo 15 Flight; Lunar Exploration

19940029872 NASA Lewis Research Center, Cleveland, OH, USA

NASA images 15
May 15, 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 Descartes region.

CASI
Apollo Project; Apollo 16 Flight

19940031684 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
Challenger Center: Rendezvous with Comet Halley no. 3072
Dec 1, 1989; In English; 9 min. 47 sec. 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 video presentation introduces the Challenger Center and the rendezvous with Comet Halley in the 2061 scenario.
LeRC
Mariner Program; NASA Space Programs; Pioneer Project; Space Exploration; Voyager Project

1995004108 NASA Lewis Research Center, Cleveland, OH, USA
Challenger Center: Return to the Moon no. 4065
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
L1RV/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.
DRC
Apollo 11 Flight: General Overviews; Lunar Landing; Lunar Landing Modules

1995004317 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–68 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

1995004319 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–61 post flight press conference
Jan 1, 1994; In English; 26 min. 15 sec. playing time, in color, with sound
Report No. (s): NONP–NASA–VT–94–23619; 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; Spacecraft Launching

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
19950112625 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**Skylab: 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 operation, followed by the installation of the parashute after 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; Spaceborne Experiments; Spacecraft Docking; Spacecraft Launching**

19950112643 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 illustrates 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**

19950112644 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 Minskog mammals and Arabella, the spider), observations of student experiments, exercise routines, and the enabling of the Earth Resources Experiments Package. Also shown is planet Earth documentation, 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**

19950112645 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**Time of Apollo**

Jan 1, 1975; 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**

19950113579 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 assignments 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 shown.

CASI

**Astronauts: Challenger (Orbiter); Launching; Night Flights (Aircraft); Spaceborne Experiments; Spacecraft Landing**

19950119004 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 animation, 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 Allen Bean. Thirty-six seconds into the November 14, 1969 launch, the spacecraft was hit by lightning from the thunderstorm surrounding the launch site. In spite of this mishap, the vehicle and astronauts were not harmed and continued with their mission. The Yankee 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 satellite. After lunar surface exploration, soil sample collection, satellite maintenance, 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 (Launching); Lunar Exploration; Lunar Landing; Lunar Orbit; Lunar Surface; Manned Spacecraft; Moon**

199501192586 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 Exploration; Lunar Landing; Lunar Orbit; Lunar Surface; Manned Spacecraft; Moon**

19950126746 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.

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

19990032587 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--1999037064; No Copyright; Avail: CASI; B03, 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 address 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.

CASI
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--1999053374; 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.

CASI
Conferences; Mars Exploration; Mars (Planet); Mars Sample Return Mission; Mars Surveyor 98 Program; Extraterrestrial Life; Exobiology

19990116371 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--1999020512; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
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.

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

19990032783 NASA Johnson Space Center, Houston, TX USA
New Mission Control Center Briefing
May 16, 1995; In English; Videotape: 58 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000039783; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Live footage shows panelists, Chief Center Systems Division John Muratore, and Acting Chief, Control Center Systems Division, Linda Uljon, giving an overview of the new Mission Control Center. Muratore and Uljon talk about the changes and modernization of the new Center. The panelists mention all the new capabilities of the new Center. They emphasize the Distributed real time command and control environment, the reduction in operation costs, and even the change from coaxial cables to fiber optic cables. Uljon also tells us that the new Control Center will experience its first mission after the launch of STS-70 and its first complete mission (both launching and landing) during STS-71.

CASI
Command and Control; Ground Based Control; Flight Control; Ground Operational Support System; Control Systems Design; Systems Integration

2000068146 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta XTE Press Briefing
Dec. 08, 1995; In English; Videotape: 30 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000078611; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Live coverage of the pre-launch Delta X-Ray Timing Explorer (XTE) press briefing is presented. George Diller, NASA Public Affairs, introduces the panel. The panel consists of Floyd Curington, NASA Launch Manager, Kennedy Space Center; David Mitchell, Launch Vehicle Manager, NASA Goddard Space Flight Center; Dale Schulz, Mission Director, XTE Project Manager Goddard Space Flight Center; Dr. Hale Bradt, XTE Principle Investigator, Massachusetts Institute of Technology (MIT); and Joel Tumbiolo, Launch Weather Officer, Department of the Air Force. The launch of the Delta XTE spacecraft atop the Delta 230 expendable launch vehicle is discussed. Once lifted into orbit, the XTE spacecraft will embark on a two-year mission to carry out an in-depth study of x-ray sources in the universe. Floyd Curington gives the lift-off schedule, fueling, and countdown of the spacecraft. David Mitchell discusses the launch sequence and spacecraft separation, Dale Schulz presents views of the instrument side of the XTE. Dr. Hale will be studying compact stars such as light dwarfs, neutron stars and quasars. Joel Tumbiolo presents the weather forecast for the December 10, 1995 launch. The press briefing ends with a question and answer period.

CASI
Delta Launch Vehicle; Prelaunch Summaries; X Ray Timing Explorer; X Ray Astronomy

2000005212 NASA Kennedy Space Center, Cocoa Beach, FL USA
ATLAS SOHO Presentation, SAEF 2
Aug. 23, 1995; In English; Videotape: 5 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000078653; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Live footage of the Solar and Heliospheric 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

200000668800 NASA Kennedy Space Center, Cocoa Beach, FL USA XTE Science Briefing from KSCNFL 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 x-rays, neutrons 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 scientists and managers associated with the XTE satellite. The moderator for the press briefing is Jim Sahl, from the Public Affairs Office at Goddard Space Flight Center (GSFC). He introduces Alan Banner, of the High Energy Astrophysics at NASA Headquarters; Fred Lamb, from the University of Illinois; Richard Mashezky, 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. Banner 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. Mashezky explains 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 (PCA.) Mr. Schultz presents a videotape tour of the XTE, in which he shows the scientific instruments and the 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

20000064903 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)

20000064904 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 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 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. Jean Louis Bougeret, Principle Investigator, Radio/Plasma Wave Experiment, Paris; and Dr. Eugeny Mazets, Co-Principal 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 emphasis 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

200100658651 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–2001089380; No Copyright; Avail: CASI; B04, 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 'Humans 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 spaceflight. 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 Sims fairbridge; (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 for Human Space Flight, NASA, and William Shepherd, Commander of Expedition 1, International Space Station. CASI

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

200100675599 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, as 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); Astronaut Training; Crew Procedures (Preflight); Apollo 11 Flight

2001106405. NASA Johnson Space Center, Houston, TX USA
Apollo 11 Facts Project [On-Orbit Activities]
Jun. 20, 1994; In English; Videotape: 1 hr. 30 min. playing time, in color, with sound
Report No.(s): NONP NASA VT 20011717304; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

Footage is seen 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); Spacecrews

2001106406. NASA Johnson Space Center, Houston, TX USA
Apollo 11 Recovery
Jun. 17, 1994; In English; Videotape: 1 hr. 28 min. 49 sec. playing time, in color, without sound
Report No.(s): NONP NASA VT 2001171206; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

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

2001106407. NASA Johnson Space Center, Houston, TX USA
Apollo 11 Facts Project [Prelaunch Press Conference/EVA Training]
Jun. 16, 1994; In English; Videotape: 1 hr. 22 min. 13 sec. playing time, in color, with sound
Report No.(s): NONP NASA VT 2001169786; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

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

2001106408. NASA Johnson Space Center, Houston, TX USA
Apollo 11 Facts Project [EVA Training/Washington, D. C.; Tour]
Jun. 20, 1994; In English; Videotape: 1 hr. 15 min. 46 sec. playing time, in color, without sound
Report No.(s): NONP NASA VT 2001173324; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

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

2001106409. NASA Johnson Space Center, Houston, TX USA
Apollo 11 Facts Project [On-Orbit Lunar Module Checkout]
Jun. 20, 1994; In English; Videotape: 1 hr. 20 min. 30. sec. playing time, in color, with sound
Report No.(s): NONP NASA VT 2001172114; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

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. The Moon is seen in its entirety and in close detail. Aldrin gives a brief demonstration on how the astronauts eat in space.

CASI
Moon; Spacecrews; Apollo 11 Flight; Crew Procedures (Inflight)

2001106410. NASA Johnson Space Center, Houston, TX USA
Apollo 11 Facts Project [Spacecraft Retrieval and the Crew in the Anti-Contamination Chamber]
Jun. 17, 1994; In English; Videotape: 1 hr. 14 min. 34 sec. playing time, in color, no sound
Report No.(s): NONP NASA VT 2001169770; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

Footage shows the launch of the Apollo 11 spacecraft and the retrieval of the module after reentering Earth’s atmosphere and landing in the ocean (reentry and landing scenes not included). President Richard Nixon is seen greeting the crew of Apollo 11 while they are in the anti-contamination chamber.

CASI
Spacecraft Landing; Apollo 11 Flight

2001106411. NASA Johnson Space Center, Houston, TX USA
Apollo 11 Facts Project [Preflight Activities and Launch]
Jun. 16, 1994; In English; Videotape: 1 hr. 32 min. 12 sec. playing time, in color, no sound
Report No.(s): NONP NASA VT 2001168953; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

The crewmembers of Apollo 11, Commander Neil A. Armstrong, Command Module Pilot Michael Collins, and Lunar Module Pilot Edwin E. Aldrin, Jr., are seen during various stages of preparation for the launch of Apollo 11, including suitup, breakfast, and boarding the spacecraft. They are also seen during mission training, including preparation for extravehicular activity on the surface of the Moon. The launch of Apollo 11 is shown. The ground support crew is also seen as they wait for the spacecraft to approach the Moon.

CASI
Spacecrews; Spacecraft Launching; Crew Procedures (Preflight); Apollo 11 Flight

2001106412. NASA Johnson Space Center, Houston, TX USA
Apollo 11 Facts Project [Mission Control During Spacecraft Recovery]
Jun. 17, 1994; In English; Videotape: 1 hr. 29 min. 30. sec. playing time, in color, without sound
Report No.(s): NONP NASA VT 200117305; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

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

2001106413. NASA Johnson Space Center, Houston, TX USA
Apollo 11 Facts Project [Tracking]
Jun. 16, 1994; In English; Videotape: 1 hr. 32 min. 49 sec. playing time, in color, no sound
Report No.(s): NONP NASA VT 2001169711; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS
This video shows footage of the ground support team tracking Apollo 11’s progress on its way to the Moon.

Apollo 11 Onboards
20010115233 NASA Johnson Space Center, Houston, TX USA
Apollo 11 Facts Project: Earth Views and Crew Activities
June 17, 1994; In English; Videotape: 1 hr. 32 min. 54 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001185535; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The crew members 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.

CAS

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

Apollo 11 Facts [Post Flight Press Conference], Part 1 of 2
20010116556 NASA Johnson Space Center, Houston, TX USA
Apollo 11 Facts: Post Flight Press Conference, Part 1 of 2
June 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).

CAS

Apollo 11 Flight: Postflight Analysis

Apollo 11 Facts: Postflight Analysis: Moon
20010116507 NASA Johnson Space Center, Houston, TX USA
Apollo 11 Facts [Post Flight Press Conference], Part 2 of 2
July 07, 1994; In English; Videotape: 1 hr. 4 min. long, in color, with sound
Report No.(s): NONP--NASA--VT--2001181396; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS


CAS

Apollo 11 Flight: Postflight Analysis

Apollo 11 Facts: Ceremony in the Astrodome
20010117030 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.

CAS

Astronauts: Apollo 11 Flight

Apollo 11 Facts: Recovery
20010117032 NASA Johnson Space Center, Houston, TX USA
Apollo 13 Facts: Recovery
June 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
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

20010117839 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 13 astronauts, James Lovell, Jr., John Swigert, Jr., and Fred Haise, Jr., are shown during an interview, answering questions about the mission.

CASI

Astronauts: Apollo 13 Flight

20010117840 NASA Johnson Space Center, Houston, TX USA

Apollo 13 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 13 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 13 Flight: Astronauts: Postflight Analysis

20010117841 NASA Johnson Space Center, Houston, TX USA

Apollo 13 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 Kranz 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 with the help of Tony England, Bill Peters, and Dick Thomson. 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.

The press conference section of this video has sound, the headlines section does not.

CASI

Apollo 13 Flight: Spacecraft Landing: Procedures

20010117842 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

20010117843 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

20010117167 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–20001181432; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

Footage is seen of the Earth from the Apollo 13 spacecraft as it travels towards the Moon. The crew, 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.

CASI

Apollo 13 Flight: Spacecraft: CreW Procedures (Inflight); Lunar Surface: Apollo 11 Flight

20010117192 NASA Johnson Space Center, Houston, TX USA

Apollo 13 Facts
Jan. 01, 2001; In English; Videotape: 1 hr. 28 min. 17 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20001181443; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

Footage is seen 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.

19940011626 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
20000880177 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-200081555; 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 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, Spacecraft Builders, Flight Engineers, Operations Office, and the Ground Data System Office. Dr. William Potradowski, 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 Beemer, Manager of the Engineering Office. The thrust for the Mars Orbit Insertion is described by Ronald Klemastion, 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-200081555 for a continuation of this discussion with Marvin Traxler.

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

20000880367 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-200081555; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

For the first part of this briefing, see NONP-NASA-VT-200081555. 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 Whetzel, 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 Mars Observer 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, 1994; 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 CCT learning how to work the trash compactor on the middeck.

Author
Garbage; Spacecraft; Waste Disposal

19940106314 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-35 integrated sim in SMS and MOCR
May 1, 1994; 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 intercuts 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-93-190288; 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
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

1994010800 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

This is a primer on orbital mechanics originally intended for college-level physics students.

CASI
Orbital Mechanics; Space Navigation
Astronaut Training, Mission, Spacecraft; Weightlessness

1994010826 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
The 61-M long duration sim video highlights resource tape
Jan 1, 1988; In English; 37 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190367; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
This video shows the crew on the middeck mockup during the long duration sim. The video also shows the FCR during the sim.
CASI Astronaut Training: Space Environment Simulation; Space Shuttle Missions

1994010828 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-30 Magellan deploy Sim in SMS and MOCR
Feb 1, 1989; In English; 9 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190448; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
The Space Shuttle crew is shown in SMS training for the Magellan spacecraft deploy. Intercuts of the MOCR are included.
CASI Astronaut Training: Magellan Spacecraft (NASA); Space Shuttle Missions

1994010845 NASA Ames Research Center, Moffett Field, CA, USA
Manned vehicle systems research facility
Mar 1, 1989; In English; 8 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190369; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This videotape presents a guided tour of the Manned Vehicle Systems Research Facility (MVSRF) at ARC.
CASI Flight Simulation; Man-Machine Systems; Research Facilities

1994010858 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-26 IUS and latch contingency training
Mar 1, 1989; In English; 16 min. 33 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190359; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
Astronauts Nelson and Lounge are shown in the WETF while astronauts Covey and Hilmers observe topside.
CASI Astronaut Training: Astronauts; Spacecrafts; Weightlessness Simulation

1994010859 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-26 generic integrated IUS deployment simulation
Feb 1, 1989; In English; 16 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190360; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
The crew is shown in the SMS during TDRS deployment training. It includes intercuts of the MOCR.
CASI Astronaut Training: Inertial Upper Stage; Simulation; Space Shuttle Missions; Spacecrafts; TDR Satellites

1994010860 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-26 EVA rescue training
Jul 1, 1989; In English; 15 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190361; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video shows astronauts Covey, Hilmers, and Hauck training in SES. It involves a simulated EVA rescue using the RMS. A computer-generated image is used to simulate the movement of a free-floating astronaut for grapple with the arm.
CASI Astronaut Training: Computerized Simulation; Extravehicular Activity; Remote Manipulator System; Rescue Operations; Space Shuttle Missions

1994010913 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Building 46 grand opening
Feb 1, 1989; In English; 5 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190321; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video tape shows the grand opening ceremonies of Building 46 Central Computer Facility at the NASA Johnson Space Center.
CASI Facilities; Research Facilities

1994010920 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Lunar Curatorial Facility resource
Jul 1, 1989; In English; 6 min. 46 sec. playing time, in color, no sound
Report No.(s): NONP-NASA-VT–93–190328; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video tape shows daily activities in the Lunar Curatorial Facility. The video covers the various studies being conducted on lunar dust, rock, and core samples brought back by Apollo crews.
CASI Lunar Dust; Lunar Rocks; Lunar Soil; Research Facilities

1994010969 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-31 Hubble Space Telescope deploy: Training at MDF with Hawley
Apr 1, 1990; In English; 7 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190279; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Astronaut Steve Hawley is shown working with the Hubble Space Telescope mockup on the Remote Manipulator System mockup above the Manipulator Development Facility (MDF).
CASI Astronaut Training: Hubble Space Telescope; Space Shuttle Missions

1994010976 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-31 HST deploy sim in SMS and MOCR
Apr 1, 1990; In English; 15 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190280; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
This video shows the crew on a simulated middeck during the Hubble Space Telescope (HST) deploy simulation. Intercuts from the MOCR is included.
CASI Astronaut Training: Hubble Space Telescope; Simulation

1994010977 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-31 crew training inflight maintenance and bailout exercises in CCT and WETF
Mar 1, 1990; In English; 19 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190281; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
The crew is shown in the CCT practicing on orbit maintenance tasks, along with bailout procedures. The crew is also shown practicing water survival techniques in the Weightless Environment Training Facility (WETF).
CASI Astronaut Training: Bailout; Crew Procedures (Inflight); Maintenance Training; Space Shuttle Missions; Weightlessness Simulation

1994010978 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-31 crew training: firefighting, food tasting, EVA prep and post
Mar 1, 1990; In English; 17 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190281; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

CASI
The Space Shuttle crew is shown lighting a pond of gasoline and then performing firefighting tasks. The crew is also shown tasting food including lemonade, chicken casserole, and tortillas, and performing extravehicular activity (EVA) equipment checkouts in the CET middeck and airlock.

CASI
Astronaut Training: Consumables (Spacecrew Supplies); Fire Fighting; Space Vehicle Checkout Program; Spacecraft Maintenance

19940810979 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-40 crew during space lab sim
Aug 1, 1990; In English; 12 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190290; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Crew members working in the SLS-1 simulator are shown. Activities in the module mockup include work with the cardiovascular equipment, Body Mass Measurement Device, and Jellyfish experiment.

Author (revised)
Exobiology: Life Sciences; Simulators; Space Shuttle Missions; Space Transportation System Flights: Spaceborne Experiments; SpaceLab, SpaceLab Payloads

19940810994 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Richards, Dick: Training clip
Jul 1, 1989; In English; 12 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190300; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Astronaut Richards is shown during his ASCAN training, including weightless environment training facility (WETF) training and various simulations.

CASI
Astronaut Training: Astronauts: Space Environment Simulation: Training Simulators; Weightlessness Simulation

19940811000 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

19940811010 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–26 long duration simulation: Crew entering SMS
Sep 1, 1988; In English; 2 min. 45 sec. 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

19940811044 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–41 crew training bailout in CCT, 16mm camera class EVA prep, habituation equipment procedures, and food tasting
Sep 1, 1990; In English; 17 min. 27 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190314; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

This videotape shows the crew during several training exercises including work in the CCT, photography class, and food tasting.

CASI
Astronaut Training: Bailout: Photography; Space Transportation System Flights

19940827368 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 spacebound 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 CRES 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

19940828652 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

19940829654 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

19940829661 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

19940829265 NASA John C. Stennis Space Center, Bay Saint Louis, MS, USA
Way station to space: The history of Stennis Space Center
Jun 1, 1994; In English; 25 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12947; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

The 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

20000131228 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-103 Payload Removal From Shipping Canister FISH: Discovery Hubble Repair Mission
Aug 16, 1999; In English; Videotape: 3 min., 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–200008207; 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 Spacehab pallet that contains the tools and replacement parts necessary to service the HST.

CASI

Space Transportation System; Space Shuttle Payloads: Discovery (Orbiter); Ground Handling

20000158142 NASA Kennedy Space Center, Cocoa Beach, FL USA

Atlas GEOS–3 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–200007862; 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, launchespace 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

Flight Safety; Prelaunch Tests: Propulsion; Space Shuttles: Test Facilities

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

Delta, America's space ambasador
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

19950811225 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, USSR., with the TOMS payload being launched on a Soviet Meteor.

CASI

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

19990932573 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

19990932574 NASA Johnson Space Center, Houston, TX USA

Delta II Stardust Mission Briefing
Jan. 13, 1999; In English; Videotape: 1 hour 2 min. 13 sec. 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 on the 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
2000007587 NASA Kennedy Space Center, Cocoa Beach, FL USA
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-VT-2000078623; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, 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

2000007588 NASA Kennedy Space Center, Cocoa Beach, FL USA
Stardust Launch Coverage
Feb. 07, 1998; In English; Videotape: 1 hour playing time, in color, with sound
Report No.(s): NONP-NASA-VT-1999036754; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
The ground crew is shown building the Stardust launch vehicle. Important visual images include loading the launch vehicle, erecting the Solid Rocket Boosters, the countdown and launch of the Delta Rocket, separation of the four Boosters, and the main engine cut off. The cut off of the main engine marks the beginning of the second stage engine. During its circular path, Stardust collects interstellar and cometary dust from the Wild 2 comet.

CASI
Launch Vehicles; Intertellar Matter; Cosmic Dust; NASA Space Programs; Mars Sample Return Missions; Wild 2 Comet; Stardust Mission

20000058133 NASA Kennedy Space Center, Cocoa Beach, FL USA
Atlas--SOHO 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-VT-2000078562; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The uncrating of the Atlas-SOHO’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

20000058134 NASA Kennedy Space Center, Cocoa Beach, FL USA
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-VT-2000078549; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, 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 Flights; Atlas Centaur Launch Vehicle; Preflight Operations

20000058140 NASA Kennedy Space Center, Cocoa Beach, FL USA
Atlas SOHO Wet Dress Rehearsal
Oct. 30, 1995; In English; Videotape: 7 min. playing time, in color, no sound
Report No.(s): NONP-NASA-VT-2000078549; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, 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

20000058141 NASA Kennedy Space Center, Cocoa Beach, FL USA
Atlas First Stage Erection, GEOS I
Jun. 24, 1994; In English; Videotape: 4 min. 58 sec. playing time, in color, without sound
Report No.(s): NONP-NASA-VT-2000078627; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This NASA Kennedy Space Center video presents the launch activities of the Delta X-Ray Timing Explorer and scrub aboard a McDonnell Douglas Delta 11 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
Footage shows the erection of the Atlas GEOS 1 on the launch pad.

CASI

Construction: GEOS Satellites (ESA); Atlas Launch Vehicles

200000058191 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

200000059202 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–2000078326; No Copyright; Avail: CASI
B05, 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

200000059206 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
B03, 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–2000078323.

CASI

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

200000060840 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

200000060841 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 Emissions; Radiation; Space Shuttle Missions

200000060864 NASA Kennedy Space Center, Cocoa Beach, FL USA

Delta XTE Spacecraft Activities at CCSK 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)

2000000602363 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 Vehicles

2000000602366 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–2000081547; 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**

- **ATLAS-2**, was designed to collect data on the relationship between the sun's energy output and Earth's middle atmosphere and how these factors affect the ozone layer. The ATLAS-2 flew on the Space Shuttle Discovery's mission S5T-56, launched on April 8, 1993. The video tape consists of an animated tour of the instruments that were included as part of the mission. The first half of the tape shows the various instruments, pointing to each in turn and identifying each by the associated initialisms. The instruments identified were: the Atmospheric Trace Molecule Spectroscopy (ATMOS), Millimeter Wave Atmospheric Sounder (MAS), Shuttle Solar Backscatter Ultraviolet/A (SSBUV/A) spectrometer, Solar Spectr... (SOLCON). The second half of the animation shows the same tour without the pointing or the identification of the instruments.

- **Solar Instruments**: Space Transportation System Flights; Radiation Measuring Instruments

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**TITAN IIIM: Mars Observer Post-Launch News Conference**

- **Report No.(s): NONP--NASA--VT--2000185153;** No Copyright; Available: CASI; B01, Videotape-Beta: V01, Videotape-VHS

The news conference begins with salutations and the layover. The first panel consists of the 1st row, with the following panelists: Marshall Space Flight Center; and David Evans, Mars Observer, Director from Langley Research Center; Sid Sauer, Transfer Orbit Stage, Director from Marshall Space Flight Center; and David Evans, Mars Observer, Director from the Jet Propulsion Laboratory. The speakers discuss the launch procedures, activities, and some trouble that the Observer is having. The panelists also see...ing the audience with questions from both the audience as well as other NASA Centers.

**CASI**

- **Titan Launch Vehicles**: Mars Observer; Conferences

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**Mars Observer Post-Launch Press Conference**

- **Report No.(s): NONP--NASA--VT--2000008153;** No Copyright; Available: CASI; B01, Videotape-Beta: V01, Videotape-VHS

The Observer is still alive 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**: Prelaunch Tests; Mars Missions; Mars Satellites

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**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.
Aerospace Safety; Bailout; Space Shuttle Mission 61-A; Spacecrews

STS-29 post-insertion/deorbit prep and crew bailout
Jan 1, 1989; In English; 12 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-185314; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Crew enters CCT after donning vests where they practice post insertion
deorbit prepared for bailout procedure. Entire crew takes turns bailing out
through the side hatch of the CCT.

Author
Aerospace Safety; Bailout; Space Shuttle Mission 61-A; Spacecrews

STS-33 launch and landing clip
Nov 1, 1989; In English; 20 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-190265; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Launch (from engine gimbal to loss of sight) and landing of the Shuttle at
Edwards AFB, California, from ground-based cameras is shown.

Author (revised)
Space Shuttles; Space Transportation System; Spacecraft Landing; Spacecraft Launching

STS-35 post-flight press conference
May 1, 1990; In English; 18 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-190287; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

The following contains footage selected and narrated by the crew. The
footage covers the following areas: launch, work with the ASTRO-1 payload,
onboard activities, and landing.

Author (revised)
Space Shuttles; Space Transportation System; Spacecraft Landing; Spacecraft Launching

STS-29 post-flight press conference
May 1, 1989; In English; 15 min. 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 tape contains footage selected and narrated by the STS-26 crew
including launch, TDRS-C/IUS (Tracking and Data Relay Satellite C / Inertial
Upper Stage) deployment, onboard activities, and landing.

CASI
Deployment: Space Shuttle Missions; TDR Satellites

Space Shuttle highlights
Jan 1, 1985; In English; 3 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-190404; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This videotape recaps the space shuttle successes of 1984: STS 41-B, STS
41-C, STS 41-G, and 51-A.

CASI
NASA Programs: Space Shuttles; Space Transportation System Flights

Return to Space Mission: The STS-26 crew report
Feb 1, 1989; In English; 17 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-190366; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

This videotape features footage from NASA’s return to space flight after the
51-L accident. The videotape is narrated by the crew, and it includes the
following: launch, landing, and the TDRS/IUS deployment.

CASI
Deployment: Space Missions; Space Transportation System Flights; Spacecraft Landing; Spacecraft Launching
Aerospace: Space Shuttle Mission 51-F: Spacecraft Reliability

Astronaut Training; Operations (highlights: Galileo Spacecraft; Space Shuttle Missions; Spacecrews)

ASMGD wires.

B01, Videotape-Beta; V01, Videotape-VHS

Report No(s): NONP NASA VT 93-190415; No Copyright; Avail: CASI

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

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

CASI

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

19940010880 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

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

Aug 1, 1989; In English; 7 min. 10 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.

CASI

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

19940010881 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-34 post-flight press conference

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

This video tape features scenes shot by the crew of onboard activities including launch, Hydride deploy, onboard crew activities, and landing.

CASI

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

19940010882 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-34 onboard 16mm photography quick release

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

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

CASI

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

19940010883 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-34 mission highlights resource tape, part 1

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

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

CASI

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

19940010884 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-34 McCully and Baker during IFM training

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

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

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

19940010885 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-34 Galileo integrated deploy sim

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

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

CASI

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

19940010900 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-29 mission highlights resource tape

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

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

CASI

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

19940010902 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-32 onboard 16mm photography quick release

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

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

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

19940010906 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-32 LDEF approach in SES

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

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

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

19940010911 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-31 Post-Flight Conference

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

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

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

19940010916 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

Movement in microgravity

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

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

CASI

Bioastronautics: Microgravity; Weightlessness

19940101925 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, walking 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; Spacecrews

19940101927 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; Spacecrews

19940101930 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

19940101934 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/2US onboard crew activities and landing. It 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; Spacecrews; TDR Satellites

19940101950 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
operation onboard Shuttle flights. Shuttle astronauts Dunbar, Seddon, Hoffman, Cleave, Ross, and ChengDiaz also show how crew live and work in space.

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

19940810995 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.
CASI
* Astronaut Training: Space Transportation System Flights; Spacecraft Maintenance; Thermal Control Coatings

19940811043 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–93–190311; 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.
CASI
* Deployment: Space Transportation System Flights: Ulysses Mission

19940811045 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.
CASI
* Deployment: Space Transportation System Flights: Ulysses Mission

19940811048 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.
CASI
* Deployment: Space Transportation System Flights: Ulysses Mission

19940814447 NASA, Washington, DC, USA
Robotics
Aug 1, 1995; 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.
CASI
* External Tanks; Remote Manipulator System; Robotics; Robots; Space Shuttles; Spacecraft Maintenance; Thermal Control Coatings

19940814481 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.
CASI
* Computer Animation: Heavy Lift Launch Vehicles: Orbital Assembly: Orbital Maneuvering Vehicles; Shuttle Derived Vehicles: Space Exploration: Space Stations: Spacecraft Design

19940814482 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 sidewire 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.
CASI
* Discovery (Orbiter); Manned Space Flight; Space Shuttle Missions; Space Transportation System Flights

19940814598 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 never 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.
CASI
* Museums: Space Shuttle Ordbitors

19940829665 NASA John F. Kennedy Space Center, Cocoa Beach, FL, USA
STS–59/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-59 mission. Video segments include breakfast, suit-up, departure, launch, on-orbit operations, and landing.
CASI
* Astronaut Performance: Flight Operations: Space Shuttle Missions

19940829993 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 covers the post-flight conference following the STS-57 mission. Video segments include a press conference and crew interviews.
CASI
* Astronauts; Mission Control Center; Press Conferences; Space Shuttles; Space Transportation System Flights: Spaceborne Experiments

26
This video contains footage selected and narrated by crew members.

**CASI**

**Space Shuttle Missions; Space Transportation System**

**1994020828** NASA, Washington, DC, USA

**Space Shuttle 51-L: Challenger**

Jan 1, 1994; In English; 45 min. playing time, in color, with sound
Report No(s): NONP-NASA-VT-94-12965; 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 Lyndon B. Johnson Space Center, Houston, TX, 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-94-23138; 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. 4098**

May 1, 1990; In English; 12 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**

**1995004122** NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**STS-66 mission highlights resource tape**

Jan 1, 1994; In English; 57 min. 30 sec. 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 Shuttle Payloads; Space Transportation System Flights; Spaceborne Experiments**

**1995004123** NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**STS-62 mission highlights resource tape**

Jan 1, 1994; In English; 57 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**

**1995004124** NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**STS-59 mission highlights resource tape**

Jan 1, 1994; In English; 57 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**

**1995004679** NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**From undersea to outer space: The STS-40 jellyfish experiment**

Jan 1, 1994; In English; 15 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-66 mission highlights resource tape**

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**

**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-94-28240; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This contains important visual events including launch, onboard activities and experiments, Space Radar Laboratory-2 (SRL-2), Get Away Special canisters (GAS cans), 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); Deaths; Shuttle Mission 51-L: Spacecrews**

**19950095485** 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.

**SSTC**

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

19950114696 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 walk space by Dr. Bernard Harris, the first black astronaut to walk in space. This video was recorded on February 6, 1995.**

**CAS**

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

19950115141 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 preflight 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, shown by the astronauts during the entire STS 63 flight, being shown.

**CAS**

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

19950115878 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) suitting up, the payload activities with the Shuttle arm, the deployment of the Spartan satellite, the tethered spacecraft of Lee and other in-space experiments with Lee and Meade (includin a body roll), the pre-liftoff and actual landing, and some footage of the Mission Operations Control Room watching the Space Shuttle maneuverers are included.

**CAS**

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

19950116855 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–95–438944; 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 (Marco Remco, 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 (gravity, slinky, 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.

**CAS**

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

19950117244 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 Thoron, 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.

**CAS**

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

19950117245 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 Bag, Bryan O’Connor, Tamara Jernigan, and Sidney Gutiérrez) show, using footage and highlights from their mission, how microgravity causes changes in the human body. TheSTS-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.

**CAS**

Aerospace Medicine; Biological Effects; Chemical Reactions; Flight Stress
Go for EVA
Apr 5, 1995; In English; Its Liftoff to Learning Series; 13 mn. 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
In this educational video series, 'Liftoff to Learning', astronauts from the STS-37 Space Shuttle Mission (Jay Apt, Jerry Ross, Ken Cameron, Steve Nagel, and Linda Godwin) show what EVA (extravehicular activity) means, talk about the history and design of the space suits and why they are designed the way they are, describe different ways they are used (payload work, testing and maintenance of equipment, space environment experiments) in EVA work, and briefly discuss the future applications of the space suits. Computer graphics and animation is included.
CASI
Aerospace Environments: Equipment Specifications; Extravehicular Mobility Units; Space Exploration: Space Shuttle Payloads: Spaceborne Experiments; Spacecraft Maintenance; Structural Design; Umbilical Connectors; Weightlessness

STS–66 mission highlights resource tape
Jan 1, 1995; In English; 54 mn. 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-66 Space Shuttle Atlantis Mission in November 1994. Astronauts included: Don McMonagle (Mission Commander), Kurt Brown, Ellen Ochoa (Payload Commander), Joe Tanner, Scott Parazynski, and Jean-Francois Clervoy (collaborating French astronaut). Footage includes: pre-launch setup, entering Space Shuttle, countdown and launching of Shuttle, EVA activities (ATLAS-3, CRISTA/SPAS, SSETI/UV, ESCAPE-2), on-board experiments dealing with microgravity and its effects, protein crystal growth experiments, daily living and sleeping compartment footage, earthviews of various meteorological processes (dust storms, cloud cover, ocean storms), pre-landing and landing footage (both from inside the Shuttle and from outside with long range camera), and tracking and landing shots from inside Mission Control Center. Included is air-to-ground communication between Mission Control and the Shuttle. This Shuttle was the last launch of 1994.
CASI
Advanced Technology Laboratory: Descent; Earth Orbits; Extravehicular Activity; Microgravity; Space Shuttle Missions: Space Shuttles; Space Transportation System Flights: Spaceborne Experiments; Spacecraft Telescopes; Spacecraft Launching; Spacecraft Orbits

STS–67 post flight presentation
Apr 3, 1995; In English; 41 mn. 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-67 Space Shuttle Mission. The astronauts were: Steve Oswald (Mission Commander), Bill Gregory (Shuttle Pilot), John Grunsfeld (Mission Specialist), Sam Durrance (Payload Specialist), Ron Parise (Payload Specialist), and Tammy Jernigan (Payload Commander). Footage includes: pre-launch setup and launch (liftoff), the deployment of the telescope package payload (Hokins UV telescope, Wisconsin UV polarimeter, and Asteroid Tracker) for their astronomical observations of different stellar objects, inside Shuttle shots of data collection stations, protein crystal growth experiments, medical BSO of head and eye functions in microgravity environment, storm activity over the USA and other Earth observation shots, Mid-deck Act Control Experiments, school-Shuttle direct radio communication, and descent and landing footage. This launch was a night launch and the flight was a 17 day flight (extended two days from original flight plan).
CASI
Aerospace Medicine: Earth Observations (From Space); Gravitational Physiology; Payload Deployment & Retrieval System; Physiological Tests; Polarimeters; Radio Communication; Space Shuttle Missions; Space Shuttle Payloads; Space Transportation System Flights; Spaceborne Astronomy; Spaceborne Experiments; Ultraviolet Telescopes

CASI
Aerospace Medicine: Earth Observations (From Space); Gravitational Physiology; Payload Deployment & Retrieval System; Physiological Tests; Polarimeters; Radio Communication; Space Shuttle Missions; Space Shuttle Payloads; Space Transportation System Flights; Spaceborne Astronomy; Spaceborne Experiments; Ultraviolet Telescopes
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


Jul 16, 1995; In English; 30 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-95-59168; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The fourth day of STS-70 mission of Space Shuttle Discovery is contained on this video. With the spacecraft continuing to perform flawlessly, Discovery’s crew begins work with various experiments, ranging from biological studies to use of earth-observing cameras. The crew held a press conference via satellite link and answered questions from reporters in Florida and Ohio.

CASI


Jul 15, 1995; In English; 30 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-95-59169; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The third day of the STS-70 mission of Space Shuttle Discovery is contained on this video. Astronauts Kregal and Thomas begin the day by working with the Hercules camera, which will record pinpoint data on the surface location of Earth observation imagery. Other work includes operations with an experiment that gauges astronauts’ reflexes and hand-eye coordination. During the day, the crew spoke with World War 2 veteran, Harland Clasen, and ABC’s Mike and Matt Show and the Toledo Blade newspaper (Toledo, Ohio) interviewed the astronauts via satellite link.

CASI


Jul 14, 1995; In English; 24 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-95-59170; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The second day of STS-70 Space Shuttle Discovery mission is contained on this video. The crew is shown on board Shuttle working on a variety of secondary experiments. These range from the Hercules camera, which imprints the latitude and longitude of areas photographed on Earth, to the Windex, which studies of the glow created as the Shuttle’s surfaces interact with atomic oxygen in low Earth orbits. Also featured are astronauts Henricks, Kregal, and Weber answering questions from the general public via use of The New York Times On-Line Services.

CASI


Jul 13, 1995; In English; 29 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-95-59171; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
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 satellites, the sixth and last such satellite to be deployed from a space shuttle. The STS-70 crew consisted of Commander Tom Henricks, Pilot Kevin Kregal, 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

19950126118 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Liftoff to learning: Assignment space
Mar 27, 1995; In English; Sponsored by NASA, Washington; 16 min. 05 sec. playing time, in color, with sound; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The crew of the STS-58 Space Shuttle Columbia -- Commander John Blaln, Pilot Richard Searfoss, Payload Commander Rhea Seddon, Mission Specialist Shannon Lucid, Mission Specialist David Wolf, and Payload Specialist William McArthur host this educational video (part of the Liftoff to Learning series). The Astronauts help students to understand the importance of safety procedures on Earth as well as in space. They also discuss the effects of microgravity on various experiments in space.

CASI
Astronauts; Columbia (Orbiter); Education; Space Shuttles; Students

19950127307 EVKO Productions, Inc., Alexandria, VA, USA
The Space Shuttle: America's team reaching for the future
Jan 1, 1995; In English; Sponsored by NASA, Washington; 23 min. 19 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--95--63906; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video features the different NASA research centers and their contributions toward NASA's space program. It includes the following research centers: NASA headquarters, Ames Research Center, Goddard Flight Research Center, Jet Propulsion Laboratory, Johnson Space Flight Center, Kennedy Space Flight Center, Langley Research Center, Lewis Research Center, and Marshall Space Flight Center.

CASI
NASA Space Programs: Research Facilities; Space Shuttles

19950127859 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-42 mission highlights resource tape. Part 1 of 2
Jan 1, 1992; In English; 44 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--95--63905; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The mission of STS-42, the first International Microgravity Laboratory (IML-1), is highlighted. The main purpose of this seven-member crew (including Payload specialist Raberto Bondar from Canada and Payload specialist Ulf D. Merbold from Germany) to perform different experiments at microgravity environment. The experiments were focussed on the following two major study areas: (1) life sciences (bioreactors, biostack, space physiology), mental workload and performance, Microgravity vestibular investigattion, etc.; and (2) material sciences (critical point facility, cryostat, fluid experiment system, mercury iodide crystal growth and vapor crystal growth systems). Cargo bay and middeck experiments; Earth views (Quebec, Manicougan Reservoir, St. Lawrence River, and Mountain range); and orbiter activities are also included.

CASI
Aerospace Medicine; Experimentation: Life Sciences: Microgravity; Space Shuttles; Space Transportation System

19950127860 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-42 mission highlights resource tape. Part 2 of 2
Jan 1, 1992; In English; 44 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--95--64175; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This second part of the STS-42 mission highlights resource tape presents the special events that had happened during the 8 days, 1 hour, 14 minutes, and 45 seconds mission duration. These special events include: phone calls from President Bush, German Officials, and Canadian Officials; special appearance in Super Bowl pre-game events; and in-flight press conference.

CASI
Experimentation: Life Sciences: Microgravity; Space Transportation System; Spacecrafts: Space Shuttle

19960102557 NASA, Washington, DC, USA
STS-43 post flight press conference
Jan 1, 1992; In English; 30 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--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 Amazon oil fires; cloud cover; and B/W lightning 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

19960102558 NASA, Washington, DC, USA
STS-70 post flight presentation
Peterson, Glen, editor, NASA, USA; Aug 1, 1996; In English; 32 min. 21 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--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 (Cmd.), Kevin Kregal (Pilot), Major Nancy Currie (MS), Dr. Mary Ellen Weber (MS), and Dr. Don Thomas (MS), discuss their mission and accompanying experiments. Pre-launch, 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 changes 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, and 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 Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System Flights; Spaceborne Experiments; TDR Satellites

1996010166 NASA, Washington, DC, USA
STS-7 launch and land
Aug 2, 1993; In English; 55 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--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 Cmrd. H. Bob Crippen, Pilot Rich Hauck, 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.
woman to fly in space. There is a large amount of footage of the Space Shuttle by the aircraft that accompanies the Shuttle launches and landings. CASI

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

19960808168 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' Gorman (Mission Specialist); James 'Jim' Buchli (MS); and Mark Brown (MS). Step-by-step pre-launch and ascent 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-Deck Zero Gravity Experiment (MODE); the Sam/Cream device; the Shuttle Activation Monitor/Cosmic Ray Effects and Activation Monitor Experiment; and the Physiology and Anatomy of 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)

19960808169 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 interviewer, 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 Gorman, MS James Buchli, and MS Mark Brown. CASI

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

19960808428 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 Jemison. The primary goal of this mission was the set-up and carrying out of experiments in the accompanying Japanese Spacelab (SL-3) 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 side 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

199608081487 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

Artifical Satellites; Cameras; Deployment; Space Shuttle Payloads; Space Shuttles; Spacelaborography

199608081778 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 Gorman, 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-Deck 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

199608082572 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 Hendrick, 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

33
The STS-69 mission is highlighted in this first part of a two part video set. The flight crew consisted of: Cmdr. Dave Walker, Pilot Ken Cockrell, and Mission Specialists Jim Voss, Jim Newman, and Mike Gernhardt. 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 M88-1 cannon demonstration, a tower 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 include 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.

**CAS1**

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

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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

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

**CAS1**

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

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STS-69 flight day 2 highlights

Sep 8, 1995; In English; 24 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 790 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: Cmdr. Dave Walker, Pilot Ken Cockrell, and Mission Specialists Jim Voss and Mike Gernhardt.

**CAS1**

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

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STS-69 flight day 11 highlights

Sep 17, 1995; In English; 34 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, Cmdr. 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.

**CAS1**

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

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STS-69 flight day 5 highlights

Sep 11, 1995; In English; 13 min. 42 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

On the fourth 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 5 year old Madeleine 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 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.

**CAS1**

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

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STS-69 flight day 6 highlights

Sep 12, 1995; In English; 34 min. 35 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, Cmdr. 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 Cmdr. 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 fo themselves performing routine daily tasks (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...
1996/00/02583 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 Specialists Jim Voss, Jim Newman, and Mike Gernhardt, were awakened by the theme song from the movie 'Patter.' 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.
CASI

1996/00/02584 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.
CASI

1996/00/02585 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 unbent 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). 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.
CASI

1996/00/03228 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–95–1995005639; 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 Curie, 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/Satellites (PARE/NIH-R), the Biorobot Demonstration System (BDS), the Commercial Protein Crystal Growth (CPCG) studies, the Space Tissue Low/NIH-C experiment, the Biological Research in Canisters (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.
CASI

1996/00/07440 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–95–1995005602; 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 flight crew consisted of Cmdr. Vladimir Dezhurov, Flight Engineer Gennady Strekalov, and Cosmonaut-Researcher Dr. Norman Thagard. The Mir 18 crew consisted of Cmdr. Anatoly Solovyev 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
experiments and observations. In-cabin experiments included the IMAX Camera System tests and the Shuttle Amateur Radio Experiment-2 (SAREX-2). There is footage of the shuttle landing.

CASI
Earth Orbits: Mir Space Station; Orbital Rendezvous; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecru...
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 Transportation System Flights; Spaceborne Experiments; Spacecrews; Spacelab

19960080845 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-95-199506232; 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 '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 Protein Crystal Growth (PCG) experiment, the Astroculture(tm)(ASC) experiment, the Drop Physics Module (DPM) experiment, and the Surface Tension Driven Convection Experiment (STDCE). The experiments shown include the Surface Tension Driven Convection Experiment (STDCE), the Drop Physics Module (DPM) experiment, and 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

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

19960080846 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-95-199506233; 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 '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 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

19960080847 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-95-199506234; 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 '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 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

19960080848 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-95-199506235; 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 '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 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

19960080849 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-95-199506236; 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 '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 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

19960080850 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-95-199506237; 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 '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) and the Surface Tension Driven Convection Experiment (STDCE). Thermists are used in the STDCE to study the 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 Astronaut (man(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 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 Structural 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 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 plaques 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 the 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**
STS-75 Flight Day 7

Feb. 26, 1996; In English; Videotape: 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–96–1996037042; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this seventh 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 performing several of the USA Microgravity Payload-3 (USMP-3) experiments. There is an in-orbit interview by several of the astronauts with newspaper reporters. An announcement is made by Mission Control that Cmdr. Allen has become the first American Astronaut to log 1000 flight hours in space, with Payload Cmdr. Franklin Chang-Diaz coming in second.

CASI
Space Transportation System: Space Transportation System Flights; Space Crews; Microgravity; Space Shuttle Payloads; Spaceborne Experiments; Columbia (Orbiter)

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; Space Crews; Microgravity: Space Shuttle Payloads; Spaceborne Experiments; Earth Observations (From Space); Columbia (Orbiter)

STS-75 Flight Day 9

Mar. 01, 1996; In English; Videotape: 17 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–96–1996037044; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this ninth 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 tracking the free-floating tethered satellite and performing various experiments from the USA Microgravity Payload-3 (USMP-3). An in-orbit interview with Allen, Cheli, and Guidoni by the Italian news media is shown. The astronauts answer a variety of questions concerning the loss of the tethered satellite, and the progress of the other mission experiments. Earth views include a sunset and horizon shots.

CASI
Space Transportation System: Space Transportation System Flights; Space Crews; Spaceborne Experiments; Microgravity: Space Shuttle Payloads; Space Shuttle Missions; Columbia (Orbiter); Earth Observations (From Space); Space Communication; Tethered Satellites

STS-75 Post Flight Presentation

Mar. 28, 1996; In English; Videotape: 38 min. 18 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–96–1996039902; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of the STS-75 Space Shuttle, 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), present a post flight analysis of their mission through the use of color slides and video footage. Prelaunch and launch activities are shown along with Earth entry and landing footage. Both middeck and payload bay microgravity experiments are shown and briefly discussed. The deployment and loss of the European Tethered Satellite experiment are presented and discussed. Earth views include the Nile Valley, Chad, the Himalayas and Mount Everest, and China. A unique moonset is also shown.

CASI
Space Transportation System: Space Transportation System Flights; Space Crews; Microgravity: Space Shuttle Payloads; Spaceborne Experiments: Columbia (Orbiter)

STS-75 Post Flight Presentation

Feb. 25, 1996; In English; Videotape: 22 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–96–1996037040; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fifth 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 viewing the tethered satellite and performing experiments, both onboard the shuttle and with the TSS. An accident occurs in which the tether breaks and the satellite is shown floating away from the shuttle. There is an in-orbit interview with reporters from Johnson Space Center after the accident occurred, in which they discuss the reasons for the accident and how the experiment can be salvaged.

CASI
Space Transportation System: Space Transportation System Flights; Space Crews; Microgravity: Space Shuttle Payloads; Spaceborne Experiments; Space Communication; Space Shuttle Missions; Space Shuttle Payloads

STS-75 Post Flight Presentation

Feb. 26, 1996; In English; Videotape: 18 min. 25 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 Nicollier (ESA), are shown checking one of the leaking hydraulic systems onboard the Space Shuttle Atlantis. There was an in-orbit interview with the astronauts by the host of the NBC show, ‘Nightside’. The construction of the SPACEHAB unit also was started.

CASI
Space Transportation System: Space Transportation System Flights; Space Crews; Microgravity; Space Shuttle Payloads; Spaceborne Experiments; Columbia (Orbiter)

STS-75 Post Flight Presentation

Feb. 29, 1996; In English; Videotape: 14 min. 30 sec. 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 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 checking one of the leaking hydraulic systems onboard the Space Shuttle Atlantis. There was an in-orbit interview with the astronauts by the host of the NBC show, ‘Nightside’. The construction of the SPACEHAB unit also was started.

CASI
Space Transportation System: Space Transportation System Flights; Space Crews; Microgravity; Space Shuttle Payloads; Spaceborne Experiments; Columbia (Orbiter)
Space Transportation System; Space Transportation System Flights; Spacecrews; Spacecraft Electronic Equipment; Space Shuttle Missions; Space Shuttle Payloads; International Cooperation: Columbia (Orbiter)

1996025963 NASA Johnson Space Center, Houston, TX USA
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; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this first 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), were shown performing pre-launch and launching activities. This international space mission’s primary objective is the deployment of the Tethered Satellite System Reflight (TSS-1R) to a 12 mile length from the shuttle, a variety of experiments, and the satellite retrieval. These experiments include: Research on Orbital Plasma Electrodynamics (ROPE); TSS Deployer Core Equipment and Satellite Core Equipment (DCORE/SCORE); Research on Electrodynamic Tether Effects (RETE); Magnetic Field Experiments for TSS Missions (TEMAC); Shuttle Electrodynamics Tether Systems (SETS); Shuttle Potential and Return Electron Experiment (SPREE); Tether Optical Phenomena Experiment (TOP); and Observations at the Earth’s Surface of Electromagnetic Emissions by TSS (OESSE). The mission’s secondary objectives were those experiments found in the USA Microgravity Payload-3 (USMP-3), which include: Advanced Directed Artificial Solidification Furnace (AASF), Material for l’Etude des Phenomenes Interessant la Solidification sur Terre et en Orbite (MEPHISTO); Space Acceleration Measurement System (SAMS); Orbital Acceleration Research Experiment (OARE); Critical Fluid Scattering Experiment (ZENO); and Isothermal Dendritic Growth Experiment (IDGE).

CASI

Space Transportation System Flights; Space Transportation System; Spacecrews; Tethered Satellites; Spaceborne Experiments; Space Shuttle Missions; Space Shuttle Payloads; Payload Delivery (STS); Payload Retrieval (STS); Columbus (Orbiter); International Cooperation; Earth Observations (From Space)

1996025964 NASA Johnson Space Center, Houston, TX USA
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–96–1996036745; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
In this post flight presentation video for the STS-72 mission, the flight crew, Cmdr. Brian Duffy, Pilot Brent Jett, and Mission Specialists Daniel T. Barry, Winston E. Scott, Leroy Chiao, and koichi Wakata (NASA), discuss their mission using flight footage and slides. The pre-launch and launching activities are shown. Using the robot arm inside the space shuttle’s cargo bay, the Japanese Space Flyer Unit (JFU) is retrieved and berthed and the Office of Aeronautics and Space Technology (OAST) flyer satellite is deployed, retrieved, and reberthed. Chiao and Barry performed the first of the two 6 1/2 hour EVAs and Chiao and Scott performed the second. In both EVAs, the thermal properties of the new space suits were tested, along with new tools and equipment that will eventually be used to build the International Space Station. Space shuttle landing activities are also shown. Earth views include cloud shadows, Africa, Brazil, Australia, and Mt. Kilimanjaro.

CASI

Extravehicular Activity; Space Transportation System; Space Transportation System Flights; Spacecrews; Space Shuttle Missions; Space Shuttle Payloads; Scientific Satellites; Japanese Spacecraft; Spaceborne Experiments; Space Shuttle Orbiters; Payload Delivery (STS); Payload Retrieval (STS)

1996025965 NASA Johnson Space Center, Houston, TX USA
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; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Th 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 was the rendezvous and space docking with the Russian Mir Space Station. Video film footage includes: prelaunch and launch activities; shuttle launch; installation of the Russian-made docking module to the orbiter; in-orbit rendezvous; in-orbit docking between Mir and the orbiter; general crew activities; transfer of supplies, equipment, and a crystal growth experiment to Mir; data collection of Mir thruster firings; undocking maneuvers and Mir fly around; pre-return checkout of flight systems; and 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
Atlantis (Orbiter); Manned Space Flight; Space Transportation System; Spacecraft Docking; Spacecraft Launching; Orbital Rendezvous; Mir Space Station; Spaceborne Experiments; Flight Crews; Cosmonauts; Astronauts

1996025966 NASA Johnson Space Center, Houston, TX USA
Challenger Anniversary Resource Tape
1996; In English; Videotape: 32 min. 50 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT–96–1996031302; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
This commemorative video marks the tenth anniversary, January 28, 1986, of the ninth Challenger flight and the seven astronauts onboard who died when the Challenger exploded 73 seconds into flight. The flight crew was comprised of Cmdr. Francis R. Scobee, Pilot Michael J. Smith, and Mission Specialists Judith A. Resnik, Ellison S. Onizuka, Ronald E. McNair, Gregory Jarvis (Hughes Aircraft representative), and S. Christie McAuliffe (teacher). The flight crew is shown performing preflight training, physiological tests, environmental tests, press conferences, prelaunch activities, and launch activities. The Challenger explosion is shown from both the launch site and from the control center. Various rescue operations, news coverage, and shots of the wreckage after salvage are also presented. President Ronald Reagan is shown giving a tribute at the memorial service for the flight crew. The video ends with a flyby salute and pictures of each of the members of the Challenger.

CASI
Challenger (Orbiter); Space Shuttle Missions; Space Transportation System; Flight Crews; Aerial Explosions; Spacecraft Launching; Astronauts; Space Transportation System

1996025998 NASA Johnson Space Center, Houston, TX USA
STS-75 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; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this fifteenth 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 various experiments. Chang-Diaz gives a short presentation about the importance of certain crystals and their use in research. A water vapor exhaust test is performed with the shuttle’s exhaust jets. Earth views include land and water masses, the horizon, and there are views of the shuttle’s cargo bay.

CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Spaceborne Experiments; Space Shuttle Missions; Space Shuttle Payloads; Columbia (Orbiter); Earth Observations (From Space); Space Communication; Microgravity
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 news 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; Columbia (Orbiter); Space Communication; Spaceborne Experiments; Earth Observations (From Space)

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. Middeck Glovebox 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)

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 Middeck Glovebox 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; Columbia (Orbiter); Spaceborne Experiments; Space Shuttle Missions; Space Shuttle Payloads; Earth Observations (From Space); Space Communication; Voice of America

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 Cockrell, and Mission Specialists Mike Gennhardt, 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 5 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
Spartan Satellites; Spacecrews; Space Transportation System; Endeavour (Orbiter); Extravehicular Activity; Spaceborne Experiments; Space Transportation System Flights; Space Shuttle Missions; Space Shuttle Payloads; Rocket Engines

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-96–1996034086; 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 J. 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 spacesuits 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 to miss the inactive 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

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-96–1996039900; 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

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-96–1996039898; 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 Overmyer 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-
nauts also took time out from their transfer and resupply activities to talk with Charlie Gibson of ‘Good Morning America’.

CASI

Space Transportation System Flights: Space Transportation System: Comets; Media News

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–96-19960339806; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this sixth day of the STS-76 mission, the flight crew, Cmdr. Kevin P. Chilton, Pilot Richard A. Scarmass, 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 Atlanta’s 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–96-19960339805; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this seventh day of the STS-76 mission, the flight crew, Cmdr. Kevin P. Chilton, Pilot Richard A. Scarmass, 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 Oumisfeno, 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 Kalamingrad for their support throughout the joint phase of the mission.

CASI

Space Transportation System Flights: Space Transportation System: Crew Procedures [Inflight]; Media News

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–96-19960313040; No Copyright; Avail: CASI; B02, Videotape-Beta; 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 Middack experiments (Advanced Protein Crystallization Facility (APCF), the Astroculture(utm) (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 (GFCC), 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, recovery, 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; Bhusan; Philadelphia; and the Himalayas).

CASI

Space Shuttle Orbiters: Space Transportation System Flights; Flight Crews; Space Shuttle Missions; Spacelabs; 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-Beta; 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 (Italy), and Mission Specialists Jeffrey Hoffman, Maurizio Cheli (ESA) and Claude Nicollier (ESA), are shown, via satellite-dowlinking, 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: Colonial Orbiters; Spaceships; 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-Beta; 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. Berry, 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 Flight (OAST-FLYER) spacecraft, and two 6 1/2 hour spacewalks to test hardware and tools that will be used to assemble the International Space Station. Secondary objectives included the Shuttle Solar Backscatter Ultraviolet (SSBUV-8), the Shuttle Laser Altimeter (GAS(5)) (SLA-01/GAS(5)), the National Institutes of Health (NIH) GAS(5), the Space Tissue Loss (STL/NH-C), and Thermal Energy Storage (TES-2) experiments. Get-Away-Specials (GAS) included the USAF Academy G-342 Flexible Beam Experiment (FLEXBEAM-2), the Society of Japanese Aerospace Companies G-459 Protein Crystal Growth Experiments, and the Jet Propulsion Laboratory (JPL) GAS Ballast Can with Sample Remm Experimnt. This flight launch was shown at various angles and distances from the launching pad.

CASI

Get Away Specials (GAS); Endeavour (Orbiters); Space Transportation System; Flight Crews; Space Transportation System Flights; Spaceborne Experiments; Spacecraft Launching; Payload Retrieval (STS): Japanese Spacecraft; Scientific Satellites

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-Beta; 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. Berry, Winston E. Scott, and Koichi Wakata (NASDA), awakens to a traditional
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 (Orbitor); 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. Scourfield, 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), Optizons Liquid Phase Sintering Experiment (OLPSE), 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 KidSat, 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; Space Shuttle Payloads; Mir Space Station

19960826036 NASA Johnson Space Center, Houston, TX USA
STS-75 Flight Day 14
Mar. 06, 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 Cmdr. Franklin Chang-Diaz, Payload Specialist Umberto Guidoni (Italy), and Mission Specialists Jeffrey Hoffman, Maurizio Cheli (ESA) and Claude Nicollier (ESA), are shown conducting material burn tests and physiological experiments. Earth views include cloud cover, sunrise, atmospheric boundary layer, Florida, Amazon River, Bresil coast line, and the Pacific Ocean.

CASI
Space Transportation System; Space Transportation System Flights; Spacecrafts; Physiology Tests; Spaceborne Experiments; Combustion Physics; Space Shuttle Missions; Space Shuttle Payloads; Columbia (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–96–1996030745; 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 Cmdr. Franklin Chang-Diaz, Payload Specialist Umberto Guidoni (Italy), and Mission Specialists Jeffrey Hoffman, Maurizio Cheli (ESA), and Claude Nicollier (ESA), are shown performing middeck and Microgravity lab experiments, including the Materiel pour l' Etude 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; Columbus (Orbiter); 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 Nicollier (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–96–1996038090; 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. Scourfield, 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 Onufrenko talk with NASA Administrator Dan Goldin via satellite link. Lucid will be joining the cosmonauts, Onufrenko 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. Scourfield, and Mission Specialists Linda M. Godwin, Michael R. Clifford, and Ronald M. Sega are shown undocking from the Mir Space Station. With Mir some 60 nautical miles behind them, the Atlantis astronauts prepared for the return to Earth. Chilton, Scourfield and Clifford perform a routine checkout of Atlantis' flight control surfaces and a hotfire 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
1996028533 NASA Johnson Space Center, Houston, TX USA
STS-76 Post Flight Press Conference
Apr. 15, 1996; In English; Videotape: 22 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–96–1996047714; No Copyright; Avail:
CASI; B02, Videotape-Beta; V02, Videotape-VHS
The flight crew of the STS-76 Space Shuttle Orbiter Atlantis; Cmdr. Kevin
P. Chilton, Pilot Richard A. Searfoss, and Mission Specialists Linda M. Godwin,
Michael R. Clifford, and Ronald M. Sega present an overview of thier mission.
Highlights STS-76 include the first spacewalks by U.S. astronauts while
the shuttle is attached to the Russian Space Station Mir, and the transfer of Shannon
W. Lucid to the Mir-21 crew; the first American woman to serve as a Mir station
researcher. She will remain aboard the orbiting station until Atlantis again docks
with Mir in early August. Video footage includes the following: prelaunch and launch activities; the crew eating break-
fast; shuttle launch; retrieval of the Japanese Space Flyer Unit (SFU); suit-up and
EVA-1; EVA-2; crew members performing various physical exercises; various earth views; and the night landing of the shuttle at KSC.
CASI
Space Transportation System: Endeavour (Orbiter); Physical Exercise: Microgravity; Gravitational Effects; Extravehicular Activity

1996028548 NASA Johnson Space Center, Houston, TX USA
STS–77 Flight Day 10
May 28, 1996; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–96–1996060599; No Copyright; Avail:
CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this tenth 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., perform
a routine check of the shuttle’s flight control surfaces and reaction control system
jets, wrap up work with a number of scientic investigations, and begin securing
the cabin for the trip back to Earth. Most experiments aboard the shuttle have
been completed and stowed away, although a few will operate throughout the
night and be deactivated once the crew wakes. Crew members Andy Thomas, a
native of Australia, and Marc Garneau, a Canadian, each receive special greetings
today as STS-77 nears its end. South Australia Premier Dean Brown called
Thomas with congratulations early this morning as the shuttle passed above
Brown’s ofce in Adelaide, Australia, Thomas’ hometown. Later, Canadian
Prime Minister Jean Chrétien called Garneau to congratulate him on the mission
and the joint Canadian Space Agency and NASA experiments that were conducted.
CASI
Space Transportation System Flights: Flight Control; Jet Control; Control Surfaces

1996028549 NASA Johnson Space Center, Houston, TX USA
STS–77 Flight Day 9
May 27, 1996; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–96–1996060598; No Copyright; Avail:
CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this ninth 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., make the
third 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 tumbling 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.
CASI
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

19960828572 NASA Johnson Space Center, Houston, TX USA
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; B02, Videotape-Beta; V02, 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 Rucno, Jr., and Marc Garneau, Ph.D., can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and take-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 Flights; Spacecraft Launching; Ignition

19960828575 NASA Johnson Space Center, Houston, TX USA
STS–74 Mission Highlights Resource Tape
Apr. 08, 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; B03, Videotape-Beta; V03, 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: pre-launch 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: Spacecraft Launching; Orbital Rendezvous; Mir Space Station; Spacecraft Docking

19960828598 NASA Johnson Space Center, Houston, TX USA
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 Rucno, Jr., and Marc Garneau, Ph.D., take time out from their schedule to discuss the progress of the mission with reporters. Casper said the flight has been highly successful so far, having accomplished all of the goals. Mission Specialists Dan Bursch and Andy Thomas described protein crystal growth and plant growth experiments being conducted throughout the flight in the Spacehab module, and Mario Rucno discussed testing soft drink samples in the Fluids Generic Bioprocessing Apparatus.

CASI

Space Transportation System Flights: Protein Crystal Growth; Vegetation Growth

19960828599 NASA Johnson Space Center, Houston, TX USA
STS–77 Flight Day 6
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 Rucno, Jr., and Marc Garneau, Ph.D., spend some time relaxing, then go back to working in the Spacehab module and preparing to revisit a small cylindrical satellite that they deployed on the mission’s third day. Commander John Casper and Pilot Curt Brown monitor Endeavour’s systems. Mission Specialist Mario Rucno tests an attitude determination system using the GPS attitude and navigation experiment called GANE. The remaining crew members Mission Specialists Andy Thomas, Dan Bursch and Marc Garneau monitor the health of experiments ongoing in the Spacehab and on the middeck of the orbiter. The crew also conduct a health check of the Aquatic Research Facility (ARF) which contains starfish, mussels and sea urchins.

CASI

Space Transportation System Flights: Sea Urchins; Global Positioning System; Attitude Control; Attitude (Inclination); Spacecraft

19960828600 NASA Johnson Space Center, Houston, TX USA
STS–77 Flight Day 5
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 Rucno, Jr., and Marc Garneau, Ph.D., spend the first half of their workday assisting payload controllers with investigations into materials processing of samples and the growth of crystals. The progress of starfish and mussel development in a spaceborne aquarium in the Spacehab module in the Shuttle’s cargo bay is seen. The crew then move off in different directions to support work with many of the experiments that make up the fourth mission of the Spacehab pressurized module. Endeavour is about 64 miles away from the Passive Aerodynamically Stabilized Magnetically Damped Satellite–Satellite Test Unit, or PAMS–STU, which was deployed from a canister in the payload bay on day four. Since mission day five coincided with Memorial Day, the crew started the ‘Indy 500’ from earth orbit.

CASI

Space Transportation System Flights: Deployment; Crystal Growth; Earth Orbits; Inflatable Spacecraft

19960828601 NASA Johnson Space Center, Houston, TX USA
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 Rucno, Jr., and Marc Garneau, Ph.D., turned their attention to the deployment of a small technology demonstration satellite known as PAMS. The Passive Aerodynamically Stabilized Magnetically Damped Satellite uses aerodynamic stabilization to orient itself properly and demonstrates a technique that could prolong the lifetime of a satellite by reducing or eliminating the requirement for attitude control propellants. After Mission Specialist Mario Rucno deploys the satellite from a canister in the payload bay on day four, the crew started the ‘Indy 500’ from earth orbit.

CASI

Space Transportation System Flights: Deployment; Payloads; Attitude (Inclination); Attitude Control
expenditure and pulmonary function continue throughout the day, as well as the processing of advanced semiconductor materials and alloys in the Advanced Gradient Floating 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

Space Transportation System Flights; SpaceLab; Semiconductors (Materials): Pulmonary Functions; Microgravity; Human Body

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 awakened by CNN. The crew continues with tests to measure life sciences and microgravity experiments. The crew is shown continuing to operate and maintain the experiment equipment.

CASI

Space Transportation System Flights; SpaceLab; Semiconductors (Materials): Pulmonary Functions; Microgravity; Human Body; Human Behavior; Bones

STS-78 Flight Day 8
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 to serve 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 half-way mark of the mission, the crew continues to 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; SpaceLab; Semiconductors (Materials): Pulmonary Functions; Microgravity; Life Sciences; Gravitational Effects

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 crews’ ability to adapt to microgravity.

CASI

Space Transportation System Flights; Eye (Anatomy); Coordination; Head Movement; Microgravity: Nausea; SpaceLab

STS-78 Flight Day 4
Jun. 23, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP--NASA--VT--96--1996085864; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fourth 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 continues to operate and maintain the experiment equipment.

CASI

Space Transportation System Flights; Muscles; Microgravity; Lungs; SpaceLab

STS-78 Flight Day 15
Jul. 04, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP--NASA--VT--96--1996085853; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fifteenth day of the STS-78 mission, the crew is seen continuing with the ASTRO-D experiment, which measures the effects of microgravity on the human musculoskeletal system and the muscles and bones that support the body. The crew is shown continuing with the experiments, while also conducting tests to measure life sciences and microgravity effects. The crew is shown continuing to operate and maintain the experiment equipment.

CASI

Space Transportation System Flights; Physical Exercise; Muscles; Microgravity; Lungs; Ergometers; Dynamometers
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. Henricks 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.

**CAS1**

*Space Transportation System Flights: Spacelab; Microgravity; Langs*

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**STS-78 Flight Day 1**

Jun. 21, 1996; In English; Video tape: 15 min. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-96-1996085867; No Copyright; Avall: CAS1; B01, Videotape-Beta; V01, Videotape-VHS

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**STS-78 Flight Day 2**

Jun. 21, 1996; In English; Video tape: 15 min. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-96-1996085866; No Copyright; Avall: CAS1; B01, Videotape-Beta; V01, Videotape-VHS

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**STS-78 Flight Day 3**

Jun. 22, 1996; In English; Video tape: 15 min. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-96-1996085865; No Copyright; Avall: CAS1; B01, Videotape-Beta; V01, Videotape-VHS

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**STS-78 Flight Day 4**

Jun. 23, 1996; In English; Video tape: 15 min. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-96-1996085864; No Copyright; Avall: CAS1; B01, Videotape-Beta; V01, Videotape-VHS

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**STS-78 Flight Day 5**

Jun. 24, 1996; In English; Video tape: 15 min. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-96-1996085863; No Copyright; Avall: CAS1; B01, Videotape-Beta; V01, Videotape-VHS

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**STS-78 Flight Day 6**

Jun. 25, 1996; In English; Video tape: 15 min. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-96-1996085862; No Copyright; Avall: CAS1; B01, Videotape-Beta; V01, Videotape-VHS

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**STS-78 Flight Day 7**

Jun. 26, 1996; In English; Video tape: 15 min. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-96-1996085861; No Copyright; Avall: CAS1; B01, Videotape-Beta; V01, Videotape-VHS
The experiments primarily focusing on the effects of weightlessness on human physiology. Results from the studies of muscle activity, task performance, and sleep will help future mission planners organize crew schedules for greater efficiency and productivity. For a second consecutive day, Henriicks, Kregel, Thirsk, and Favre continued to enter responses to a battery of problem-solving tasks on the Performance Assessment Work Station, a laptop computer.

**CASI**

Space Transportation System Flights; Sleep; Productivity; Problem Solving; Payloads; Muscular Function; Human Performance; Activity (Biology)

STS-78 Flight Day 12
Jul. 01, 1996; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP- NASA–VT–1996093586; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

On this twelfth day of the STS-78 mission, the flight crew, Cmdr. Terrence T. Henriicks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Limnehan, 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 Columbia’s flight with WBDM Radio in Chicago.

**CASI**

Space Transportation System Flights; Space Shuttles: Microgravity; Human Body; Human Behavior

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 Urals 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 separation maneuver to enable Atlantis to break away from Mir. On board Atlantis, the six-member crew is settling back into its normal routine with a thirty 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 Missions

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 Readly and Korzun fire small maneuvering jets on their spacecraft to test the ability of ARIS to damp out any disturbances created by the firings. Walz also is 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 photo-

**CASI**

Space Transportation System Flights; Space Shuttle Missions; Space Flight

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 latches 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; Supplying; Mir Space Station; Orbital Rendezvous; Space Shuttle Missions; Space Flight
On this eighth 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, were seen bidding the crew of Mir farewell and then closing the hatches between their two spacecraft in preparation for undocking. The nine astronauts and cosmonauts gathered in the Core Module of the Russian space station for a formal goodbye. With the official ceremony complete, the crewmembers shared a final meal together and exchanged private farewells as Shannon Lucid prepared to return home in Atlantis and her replacement on Mir, John Blaha, began a four-month stay on the station. Walz and Apt and Mir 22 Commander Valery Korzun with assistance from Flight Engineer 2 John Blaha, swung the hatches between their spacecraft closed concluding five days of joint operations. The vestible between Atlantis and Mir was depressurized and leak checks were performed in readiness for undocking.

CASI

Space Transportation System Flights: Mir Space Station; Space Flight; Space Missions

1997000568 NASA Johnson Space Center, Houston, TX USA

STS-79 Flight Day 8

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. Readdy, Pilot Terrence W. Wilcutt, Mission Specialists, Thomas D. Akers, Shannon Lucid, Jay Apt, and Carl E. Walz, in the first full day of joint Shuttle/Mir operations begin in with the transfer of a biotechnology investigation and logistical supplies from Atlantis to Mir. The Biotechnology System, an investigation that will study the long-term development of cartilage cells in microgravity, was transported to Mir early this morning. During his planned four-month stay on Mir, John Blaha will take weekly samples of the culture which may provide researchers with information on engineering cartilage cells for possible use in transplantation. They also took time out of their schedules to talk with Good Morning America’s Elizabeth Vargas in a brief interview. Prior to beginning the day’s transfer activities, all nine astronauts and cosmonauts participated in a joint planning session to outline the day’s schedule.

CASI

Space Transportation System Flights: Supplying; Biotechnology; Microgravity; Space Flight; Space Missions; Space Navigation; Mir Space Station

1997000587 NASA Johnson Space Center, Houston, TX USA

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. Readdy, Pilot Terrence W. Wilcutt, Mission Specialists, Thomas D. Akers, Shannon Lucid, Jay Apt, and Carl E. Walz, share a brief 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. Readdy and Apt floated through several of Mir’s modules and back into Atlantis’ double Spacehab module during the tour pointing out the numerous transfer items stowed on both spacecraft. Readdy, 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 Flight; Space Missions

1997000590 NASA Johnson Space Center, Houston, TX USA

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. Readdy, 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 in the shuttle’s payload bay, packing materials and supplies and filling the first four containers of water which will be delivered to the Mir Space Station. Apt and Walz set up the Active Rack Isolation System experiment in the Spacehab, a prototype of an International Space Station payload system designed to eliminate vibrations or disturbances caused by crew activity or engine firings. The double-rack which houses ARIS also contains almost 400 pounds of Russian food which is being used to simulate the weight and mass of a scientific investigation for this first test.

CASI

Space Transportation System Flights: Water; Supplying; Payloads; Space Shuttle Missions

1997000588 NASA Johnson Space Center, Houston, TX USA

STS-78 Mission Highlights Resource Tape

Oct. 09, 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 Cdr. Susan J. Helms, Mission Specialists Richard M. Limnell, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, Pd.D. and Robert B. Thursk, 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 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 Missions; Space Flight; Launching; Space Transportation System Flights

1997000586 NASA Johnson Space Center, Houston, TX USA

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. Readdy, Pilot Terrence W. Wilcutt, Mission Specialists, Thomas D. Akers, Shannon Lucid, Jay Apt, and Carl E. Walz, in the first full day of joint Shuttle/Mir
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-76 Mission Highlights Resource Tape
Oct. 09, 1996; In English; Videotape: 66 min. 57 sec. 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-76 mission, Cmdr. Andrew M. Allen, Pilot Scott J. Horowitz, Payload Cmdr. Franklin R. Chang-Diaz, Mission Specialists Maurizio Cheli, Jeffrey A. Hoffman, and Chadric Nicollot, 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-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 then answers questions from the press.

CASI
Space Transportation System Flights; Space Transportation System; Spacecrews; Launching; Flight Crews

STS-78 Post Flight Presentation
Oct. 09, 1996; In English; Videotape: 56 min. 57 sec. 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-78 mission, Cmdr. Kevin R. Chilton, Pilot Curtis L. Brown, Jr., and Mission Specialists Andrew S.W. Thomas, Ph.D., Daniel W. Bursch, Mario Runco, Jr., 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 Flights; Space Transportation System; Spacecrews; Flight Crews; Countdown; Video Tapes

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--19970021179; 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, Marsha 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 analysis 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 Center, 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, Marshall S. Ivins, Peter J.K. Wisoff, and John Blaha, and the 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 spacecrafts in excellent shape, the nine crewmembers float back and forth between Atlantis and the Mir, hauling bags of water, catchets of logistical supplies and equipment hardware. The supplies and hardware will be used by the 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 Center, 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, Marshall 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 Center, 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 Center, 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, Marshall S. Ivins, Peter J.K. Wisoff, and John Blaha, and the cosmonauts of the Mir Space Station continue to transfer hundreds of pounds of food, water 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 Center, 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 E. 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 Center, 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 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. 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 Center, 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 robot 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: Satellite 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

1997012054 National Aeronautics and Space Administration. Lyndon B. Johnson Space Center, Houston, TX USA
STS-80 Flight Day 14
Jan. 03, 1997; In English; Videotape: 10 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. Michael A. Baker, Pilot Brent W. Jett, Mission Specialists, John M. Grunsfeld, Martha S. Ivins, Peter J.K. Wisoff, and John Blaha, prepare for the return 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-81 Flight Day 10
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; B03, Videotape-Beta; V03, Videotape-VHS

On this tenth day of the STS-81 mission, the flight crew, Cmdr. Michael A. Baker, Pilot Brent W. Jett, Mission Specialists, John M. Grunsfeld, Martha S. Ivins, Peter J.K. Wisoff, and John Blaha, prepare for the return 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

1997012057 National Aeronautics and Space Administration. Lyndon B. Johnson Space Center, Houston, TX USA
STS-81 Flight Day 9
Nov. 20, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA–VT–97–1997021163; 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
during a news conference. The crewmembers again conduct small engine firings to maintain that distance prior to the retrieval of the satellite.

CASI
Space Transportation System Flights; Engine Design; Conferences; Crews

1997012108 National Aeronautics and Space Administration. Lyndon B. Johnson Space–Center, Houston, TX USA
STS–81 Flight Day 4
Jan. 15, 1997; In English; Videotape: 20 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–97–1997021181; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this fourth day of the STS-81 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 Jerry M. Linenger, prepare for the fifth breakup 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 hatch 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.
CASI
Space Transportation System Flights; Spacecraft Docking; Spacecrews; Mir Space Station; Supplying

1997012109 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: CASI; 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, busily begin final preparations for the release of Wake Shield. Jones powers up the shuttle’s Canadian-built robot arm and grapples the satellite, while Jernigan powers up the Orbiter Space Vision System, which will be used to track precisely the Wake Shield’s location. Cockrell places Columbia in a gravity-gradient attitude to minimize disturbances during the release. Jones uses the robot arm to hold Wake Shield in position for a two-and-a-half-hour cleansing by atomic oxygen molecules before moving the arm to the deploy position.
CASI
Space Transportation System Flights; Spacecrews; Space Exploration; Space Flight; Space Missions

1997012110 National Aeronautics and Space Administration. Lyndon B. Johnson Space–Center, Houston, TX USA
STS–81 Flight Day 8
Jan. 19, 1997; In English; Videotape: 15 min. 51 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–97–1997022178; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
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, Marsha S. Ivins, Peter J.K. Wisoff, and John Blaha, bid farewell to Jerry Linenger and cosmonauts of Mir. Prior to hatch closure, the astronauts and cosmonauts conduct a formal farewell ceremony in the Mir Core Module. They then field questions from Russian and U.S. reporters in a joint news conference. Commander Mike Baker, Pilot Brent Jett and Mission Specialists Jeff Wisoff, John Grunsfeld, Marsha 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 hatches on the two spacecraft are closed.
CASI
Space Transportation System Flights; Spacecrews; Space Flight; Space Missions

1997012113 National Aeronautics and Space Administration. Lyndon B. Johnson Space–Center, Houston, TX USA
STS–80 Flight Day 11
Nov. 30, 1996; In English; Videotape: 13 min. 53 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–97–1997021160; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this eleventh 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, attempt the flight of three planned spacewalks. Jernigan and Jones can be seen in the airlock attempting to open a stuck hatch. After several attempts at trying to open the hatch, the mission management team cancels the spacewalk.
CASI
Space Transportation System Flights; Airlocks; Hatches; Space Flight; Space Missions

1997012104 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: CASI; 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.
CASI
Space Transportation System Flights; Spacecrews; Extravehicular Activity; International Space Station

1997012105 National Aeronautics and Space Administration. Lyndon B. Johnson Space–Center, Houston, TX USA
STS–80 Flight Day 8
Nov. 27, 1996; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–97–1997022163; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
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 launches 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.
CASI
Space Transportation System Flights; Robot Arms; Payloads

1997012106 National Aeronautics and Space Administration. Lyndon B. Johnson Space–Center, Houston, TX USA
STS–80 Flight Day 7
Nov. 26, 1996; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–97–1997021164; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this seventh 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, retrieve the Wake Shield Facility, completing a successful mission by the free-flying satellite, which was able to grow all seven of its planned thin semi-conductor films over a period of three
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; Spacecruises; 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; Spacecruises; 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,
Mehran 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 re-used 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, Cmdr. Michael
A. Baker, Pilot Brent W. Jett, Mission Specialists, John M. Grunsfeld, Marsha 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 Hierarch multipurpose facility which is designed to investigate the effects
of microgravity and radiation on plant tissue, cell and fission 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;
Spacecruises; 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, Cmdr. Michael A.
Baker, Pilot Brent W. Jett, Mission Specialists, John M. Grunsfeld, Marsha 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 flyaround of 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; Spacecruises; Space
Flight; Space Missions

1997012160 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 includes 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 activi-
ties 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 re-used 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–1997026555; 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 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
re-used 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 (SRBs) from the
shuttle. The crew completes the first major objective of the mission with the
deployment of the Orbiting Retrievable Free and Extreme Ultraviolet Spectrom-
eter (ORFEUS) on the reusable Shuttle Pallet Satellite. The crew then begins
final preparations for the release of Wake Shield. Jones powers up the shuttle’s
Canadian-built robot arm and grapples the satellite, while Jernigan powers up the
Orbiter Space Vision System, which will be used to track precisely the Wake
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 Wake
Shield in position for a two-and-a-half hour cleansing by atomic oxygen mole-
cules before moving the satellite to the deploy position. The failure of the batch to
properly open causes the cancellation of all EVA's planned for this mission by
Jernigan and Jones. The mission ends with the shuttle landing at the Kennedy
Space Center.

CASI

1997017656 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 walls 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

1997017657 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 Army 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

1997017658 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

1997017659 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 received 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

1997017664 NASA Johnson Space Center, Houston, TX USA
STS–82 Day 06 Highlights-Feb. 16, 1997; In English; Videotape: 18 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–1997026062; No Copyright; Avail: CASI; B02; Videotape-Beta; V02; Videotape-VHS

The sixth 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: Spacecruks: Reaction Wheels

1997017665 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

Space Transportation System: Hubble Space Telescope; Space Shuttles; Space Flight: Space Shuttle Missions: Space Transportation System Flights

1997017672 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–1997026064; 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

Space Transportation System Flights: Space Shuttle Missions: Space Shuttle Payloads: Countdown; Spacecrews; Launching; Ignition

1997017673 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–1997026066; 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

Space Transportation System Flights: Space Shuttle Payloads; Spacecrews; Remote Manipulator System: Hubble Space Telescope

1997017674 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–1997026065; 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

Space Shuttle Missions: Space Transportation System Flights: Hubble Space Telescope; Spacecrews; Space Flight

1997017675 NASA Johnson Space Center, Houston, TX USA

STS-82 Post Flight 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. Still, Payload Cmdr. Janice E. Voss, Mission Specialists Donald Thomas and Michael Gernhardt, and Payload Specialists Roger Crouch and Greg Lineris, 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 Still, Spacelab Module narration by Voss, mission control narration by Cmdr. Halsell, experiment narration by Thomas and Crouch. Also included are video views of the Baja Peninsula, Sinai 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 Bahama Island, Nile River, Baja Peninsula, Indus River of India, and Gudalupe Island.

CASI

Space Transportation System Flights: Spacelab; Spacecrews; Photographs; Launching; Comets
On this fifth day of the STS-83 mission, the flight crew, Cmdr. James D. Halsell Jr., Pilot Susan L. Still, Payload Cmdrs. Janice E. Voss, Mission Specialists Michael L. Gernhardt and Donald A. Thomas, and Payload Specialist Gregory T. Linteris 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 Expedition Processing of Experiments to the Space Station (EXPRESS) Rack, the Electromagnetic Containerless Processing Facility (TEPUS), 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 Middock Glovebox (MGBox) developed by the Marshall Space Flight Center (MSFC) and the High-Packed Digital Television (Hi-PAC 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 checkout, countdown, and landing. 

CASI
Space Transportation System Flights: Spaceborne Experiments: Spacelab; Space Processing: Low Gravity Manufacturing; Spacelab Payloads; Spaceborne Experiments: Low Gravity Manufacturing
On this third day of the STS-83 mission, the flight crew, Cmbr. Jannes 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. Lintert and Roger K. Crouch continue to conduct experiments. The crew of the Microgravity Science Laboratory mission has successfully activated all Spacehab facilities with help from the science teams on the ground.

CASI
Space Transportation System Flights: Spacecraft: Postflight Analyses; Astronauts

1997027236 NASA Johnson Space Center, Houston, TX USA
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, Cmbr. 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. Lintert and Roger K. Crouch continue to conduct experiments. The crew of the Microgravity Science Laboratory mission has successfully activated all Spacehab facilities with help from the science teams on the ground.

CASI
Space Transportation System Flights: Spacecraft: Postflight Analyses; Astronauts

1997027237 NASA Johnson Space Center, Houston, TX USA
STS-83 Day 01
Jul. 01, 1997; In English; Videotape: 21 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--1997047944; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-83 mission, the flight crew, Cmbr. 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. Lintert 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: Spacecraft Launching; Spacecraft: Spaceborne Experiments; Astronauts; Space Processing: Preflight Operations

1997027679 NASA Johnson Space Center, Houston, TX USA
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, Cmbr. 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 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: Spacecrafts: Space Stations: Payloads: Astronauts

1997027680 NASA Johnson Space Center, Houston, TX USA
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, Cmbr. 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, present a post flight analysis of their mission through the use of color slides and video footage. Pre-launch 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: Spacecrafts: Postflight Analyses; Astronauts

1997027685 NASA Johnson Space Center, Houston, TX USA
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, Cmbr. 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 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: Spacecrafts: Postflight Analyses; Astronauts

1997027686 NASA Johnson Space Center, Houston, TX USA
STS-84 Day 06 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, Cmbr. 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 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: Spacecrafts: Payloads: Astronauts

1997027687 NASA Johnson Space Center, Houston, TX USA
STS-84 Day 07 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, Cmbr. 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) are seen saying their final farewells and closing the hatches on their two spacecraft. This wrap up five days of joint operations in which about 7,000 pounds of supplies, experiments and water were transferred between the two vehicles, as well as
The text contains descriptions of various space missions and activities, including the STS-84 mission. Key points include:

- Astronauts and cosmonauts get down to business, first conducting a joint safety briefing to familiarize themselves with each other’s craft.

STS-84 Day 01 Highlights

STS-84 Day 02 Highlights

STS-84 Day 03 Highlights

STS-84 Day 04 Highlights

STS-84 Day 05 Highlights

STS-84 Day 06 Highlights

STS-84 Day 07 Highlights

STS-84 Day 08 Highlights

STS-84 Day 09 Highlights

STS-84 Day 10 Highlights

STS-84 Day 11 Highlights

STS-84 Day 12 Highlights

STS-84 Day 13 Highlights

STS-84 Day 14 Highlights

STS-84 Day 15 Highlights

STS-84 Day 16 Highlights

STS-84 Day 17 Highlights

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STS-84 Day 91 Highlights

STS-84 Day 92 Highlights

STS-84 Day 93 Highlights

STS-84 Day 94 Highlights

STS-84 Day 95 Highlights

STS-84 Day 96 Highlights

STS-84 Day 97 Highlights

STS-84 Day 98 Highlights

STS-84 Day 99 Highlights

STS-84 Day 100 Highlights
tion process, as the research efforts of the Microgravity Science Laboratory (MSL) mission get into full swing.

CASI

Space Transportation System Flights: Spacecrews; Payloads

1997028440 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 Cm_d. Janice E. Voss, Mission Specialists Michele L. Gemhardt 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; Space Shuttles; Payloads

1997028441 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 Cmdr. Janice E. Voss, Mission Specialists Michele L. Gemhardt 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: Payloads: Spacecrews

1997028442 NASA Johnson Space Center, Houston, TX USA

STS-94 Day 05 Highlights
Jul. 06, 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 Cmdr. Janice E. Voss, Mission Specialists Michele L. Gemhardt 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

1997028458 NASA Johnson Space Center, Houston, TX USA

STS-94 Day 05 Highlights
Jul. 05, 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: Spaceflights; Space Shuttles; Payloads

1997028460 NASA Johnson Space Center, Houston, TX USA

STS-94 Day 01 Highlights
Jul. 01, 1995; In English; Videotape: 18 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 orbital crew of mission STS-83), Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists Michele L. Gemhardt 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 Shuttles Boosters; Launching; Solid Rocket Engines

1997028466 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 Cmdr. Janice E. Voss, Mission Specialists Michele L. Gemhardt 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 Curiuming in Solid-Liquid Mixtures experiment.

CASI

Space Transportation System Flights: Spacecrews: Spacelab: Protein Crystal Growth; Microgravity

1997028467 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 Cmdr. Janice E. Voss, Mission Specialists Michele L. Gemhardt 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 Medallie Glovebox (MGX) unit; and the Internal Flows in a Free Drop Experiment (IFFE). The IFFE experiment involves containerless processing of materials using acoustic positioning techniques.

CASI

Space Transportation System Flights: Spacelab; Spacecrews; Payloads; Acoustic Levitation

1997028468 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 Cmdr. Janice E. Voss, Mission Specialists Michele L. Gemhardt 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 - provide on-orbit assistance to...
ground controllers throughout the mission conducting these, and as many as 30
other, experiments in the Spacelab pressurized module. The goal is to emulate
what laboratory work will be like on the future International Space Station.
CASl
Space Transportation System Flights: Spacecrews; Spacelab; International
Space Station

19970128469 NASA Johnson Space Center, Houston, TX USA
STS--94 Day 11 Highlights
Jul. 11, 1995: In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1997051165; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
On this eleventh day of the STS-83 mission, the flight crew, Cdmd. 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.
CASl
Space Transportation System Flights: Spacecrews; Microgravity Applications;
Space Flight

19970128470 NASA Johnson Space Center, Houston, TX USA
STS--94 Day 10 Highlights
Jul. 10, 1995: In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1997051164; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
On this tenth day of the STS-94 mission, the flight crew, Cdmd. 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 more than one week into mission.
The seven crewmembers aboard Columbia are continuing their around-the-clock
science investigations in the Spacelab module, focusing on how various mate-
rials and liquids change and behave in a microgravity environment.
CASl
Space Transportation System Flights: Spacecrews; Spacelab; Microgravity

19970128477 NASA Johnson Space Center, Houston, TX USA
STS--94 Day 07 Highlights
Jul. 07, 1995: In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1997051161; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
On this seventh day of the STS-94 mission, the flight crew, Cdmd. 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 continue their around-the-clock
scientific effort to examine how various materials and liquids change and behave
in the weightless environment of space. With Columbia providing a stable plat-
form for scientific activity, the seven-member crew has been able to devote its
time, to the more than 3 Microgravity Science Laboratory (MSL) experi-
ments on board.
CASl
Space Transportation System Flights: Spacecrews; Payloads; Microgravity

19970128512 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--1997051168; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
On this fifteenth day of the STS-94 mission the flight crew, Cmmd. 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 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.
CASl
Space Transportation System Flights: Spacecrews; Space Shuttle Orbiters;
Microgravity

19970828513 NASA Johnson Space Center, Houston, TX USA
STS--94 Day 16 Highlights
Jul. 16, 1995: In English; Videotape: 12 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1997051169; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
On this sixteenth 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 prepara-
tion for return to the Kennedy Space Center in Florida.
CASl
Space Transportation System Flights: Spacecrews: Astronauts; Microgravity;
Space Flight

19970829326 NASA Johnson Space Center, Houston, TX USA
STS--85 Day 01 Highlights
Aug. 07, 1997: In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1997047849; 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 Cmdr. N. Jan Davis (Ph.D.), Mission
Specialist 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.
CASl
Space Transportation System Flights: Spacecrews; Countdown; Launching;
Space Exploration; Space Flight

19970835046 NASA Johnson Space Center, Houston, TX USA
STS--85 Day 06 Highlights
Aug. 12, 1997: In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1997047847; 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
Specialist 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 plat-
form and protect sensitive microgravity processing experiments from vibrations.
CASl
Space Transportation System Flights: Spacecrews; Microgravity

19970835047 NASA Johnson Space Center, Houston, TX USA
STS--85 Day 08 Highlights
Aug. 11, 1997: In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1997047848; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
On this fifth 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
Specialist Robert L. Curbeam, Jr. and Stephen K. Robinson (Ph.D.), and
Payload Specialist Bjarni V. Tryggvason once again test the small robotic arm
serving as a prototype for one that will fly as part of the Japanese Experiment
Module on the International Space Station. Simulated orbital replacement unit
detachment and reattachment will be the focus. Bob Curbeam discusses the prog-
cess of the flight with a television station in St. Louis, before continuing his work with the Bioreactor Demonstration System designed to perform cell biology experiments under controlled conditions. Immediately after Curbeam’s interview, Canadian Payload Specialist Bjarni Tryggvason is set to talk to elementary and high school students at a summer camp in SASKatchewan, Canada.

CASI

Space Transportation System Flights: Space Transportation System; Robot Arms; Japanese Space Program; International Space Station

19970835048 NASA Johnson Space Center, Houston, TX USA

STS–84 Mission Highlights Resource Tape

Jun. 24, 1997; In English; Videotape: 58 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1996047850; 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 Cmdr. Jean-Francois Clervoy (ESA), Mission Specialists Edward T. Lu, Carlos J. Noriega, Elena V. Kondakova, and Jerry M. Linenger 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. The rendezvous with the Mir Space Station, along with onboard activities, and landing are included. Also included are shuttle-to-ground transmission between the crew and Mission Control and various earthviews.

CASI

Space Transportation System Flights; Mir Space Station; Launching; Ignition; Countdown

19970835055 NASA Johnson Space Center, Houston, TX USA

STS–85 Day 10 Highlights

Aug. 16, 1997; In English; Videotape: 12 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997047840; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this tenth 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 watch over an experiment designed to study how cooling systems operate in space. With operating problems resolved on the two-phase fluid loop experiment, or TPFLEX (troposphere flex), investigators expect to get all the data planned for the mission. Robinson later assisted, where necessary, with the CRISTA-SPAS rendezvous activities.

CASI

Space Transportation System Flights; Space Transportation System; Payloads

19970835056 NASA Johnson Space Center, Houston, TX USA

STS–85 Day 11 Highlights

Aug. 17, 1997; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997047841; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this eleventh 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 finish packing up the last of the loose items in the crew cabin, and the shuttle’s payload bay doors will be closed. Returning to Earth with the astronauts will be the German-built Cryogenic Infrared Spectrometers and Telescopes for the Atmosphere-Shuttle Pallet Satellite-2 (CRISTA-SPAS-2), which spent nine days flying in formation with Discovery and recording data about the composition of the Earth’s atmosphere, and the Technology Applications and Science-1 (TAS-01) and International Extreme Ultraviolet Hitchhiker-2 (IEH-02) instruments, which scanned the Earth and the solar system from the payload bay. Also aboard will be the Japanese-built Manipulator Flight Demonstration (MFD) experiment, which tested a small robotic arm destined for use on the future International Space Station.

CASI

Space Transportation System Flights; Space Transportation System; Shuttle Pallet Satellites; Robot Arms; Manipulators; International Space Station; Astronauts

19970835057 NASA Johnson Space Center, Houston, TX USA

STS–85 Day 8 Highlights

Aug. 14, 1997; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997047843; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this eighth 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 entered the final portion of its 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 Vasili Tsibliev and Flight Engineer Alexander Luzkin 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; Gravitational Effects

19970835058 NASA Johnson Space Center, Houston, TX USA

STS–85 Day 9 Highlights

Aug. 15, 1997; In English; Videotape: 15 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997047844; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this ninth 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 watch over the Manipulator Flight Demonstration (MFD) experiment while Japanese investigators again maneuver the Small Fine Arm remotely from a control room near Mission Control. It is the final planned work with the arm during this mission. While MFD operations are ongoing, Robinson again uses the Southwest Ultraviolet Imaging System’s ultraviolet imaging telescope to observe Comet Hale-Bopp and Curbeam continues his work with the Bioreactor Demonstration System designed to perform cell biology experiments under controlled conditions. Tryggvason spends his day supporting data gathering with the Microgravity Vibration Isolation Mount experiment. Before the crew’s workday began, they discussed the mission’s progress with reporters in the U.S. and Canada as part of the traditional crew news conference. Questions ranged from life in space for the first time space travelers to providing a report card on the more than 24 experiments being conducted throughout the mission.

CASI

Space Transportation System Flights; Space Transportation System; Microgravity; Manipulators; Ground Based Control; Gravitational Effects; Flight Tests

19970835059 NASA Johnson Space Center, Houston, TX USA

STS–85 Day 83 Highlights

Aug. 09, 1997; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997047845; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

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 continue to conduct and monitor experiments that will help some researchers measure atmospheric phenomena while other crew members gather data on experiments and hardware that will be used on the International Space Station (ISS). Serving as a testbed for those ISS evalu-
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

Aug. 18, 1997; In English; Videotape: 54 min. 5 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--1997056808; No Copyright; Avail: CASI;
B03, Videotape-Beta: V03, Videotape-VHS

The flight crew of STS-94, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmndr. Janice E. Voss, Mission Specialists Michael L. Gernhardt and Donald A. Thomas, and Payload Specialists Gregory T. Listeris 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. The crew is seen continuing the payload activation process, as the research efforts of the Microgravity Science Laboratory (MSL) mission get into full swing. The crew is 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. The tape concludes with the re-entry and landing of the Shuttle.

CASI

Solid Propellant Rocket Engine; Space Shuttle Boosters: Space Shuttle: Microgravity; Launching; Ignition; Flight Crews; Countdown; booster rocket engines

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 Cmndr. 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 (SIR), the Cryogenic On-Orbit Long Life Active Refrigerator (COOLAR), Two Phase Flow (TPF), Critical Viscosity of Xenon (CVX) and were initializing the Solar Constant Experiment (SOIC) and preparing for its first observation. Work with the Japanese-built Manipulator Flight Demonstration (MFD) experiment 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 WBTV-TV, Charlotte, N.C., and WTVD-TV, Raleigh-Durham, N.C.

CASI

Space Transportation System Flights: Space Transportation System; Japanese Space Program; Manipulators; Spacecraft: Flight Tests

Aug. 08, 1997; In English; Videotape: 15 min. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--1997048742; 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 Cmndr. 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 (SIR), the Cryogenic On-Orbit Long Life Active Refrigerator (COOLAR), Two Phase Flow (TPF), Critical Viscosity of Xenon (CVX) and were initializing the Solar Constant Experiment (SOIC) and preparing for its first observation. Work with the Japanese-built Manipulator Flight Demonstration (MFD) experiment 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 WBTV-TV, Charlotte, N.C., and WTVD-TV, Raleigh-Durham, N.C.

CASI

Space Transportation System Flights: Space Transportation System; Japanese Space Program; Manipulators; Spacecraft: Flight Tests

Aug. 13, 1997; In English; Videotape: 15 min. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--1997047846; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

On this seventh day of the STS-85 mission, the flight crew, Cmdr. Curtis L. Brown, Jr., Pilot Kent V. Rominger, Payload Cmndr. N. Jan Davis (Ph.D.), Mission Specialists Robert L. Curbeam, Jr. and Stephen K. Robinson (Ph.D.), and Payload Specialist Bjarni V. Tryggvason continue to test the Manipulator Flight Demonstration experiment, or Small Fine Arm, supplied by the National Space Development Agency of Japan, which was powered up for a final day of operations. The tests today, however, center on the ability of the arm to be remotely operated from the ground instead of onboard by the crew. The ground-commanded maneuvers of the arm demonstrated the usefulness of conducting work in space even while the crew is asleep or busy with other tasks.

CASI

Space Transportation System Flights; Space Transportation System; Manipulators; Flight Tests

Aug. 16, 1996; In English; Videotape: 30 min. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--1996034079; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

On this ninth day of the STS-72 mission, the flight crew, Cmdr. Brian Daffy, Pilot Brent W. Jett, and Mission Specialists Leroy Chiao, Daniel T. Berry, Winston E. Scott, and Koichi Wakata (NASA), awakened to music from the movie Star Wars. The astronauts conducted a news conference via satellite and answered questions from both Japanese and U.S. reporters at the Kennedy Space Center and the Johnson Space Center. The preparation for the scheduled night landing continues from the previous day’s activities.

CASI

Space Transportation System; Space Transportation System Flights; Space Shuttle Missions; Flight crews; Astronauts; Endurance (Orbiter)
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 (NASDA), 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 new heating and cooling units in the spacestations will be tested during these EVAs.

CASI
Space Transportation System: Space Transportation System Flights; Extravehicular Activity; Endeavour (Orbiter); Space Shuttle Missions; Flight Crews; Spaceborne Experiments

On this eighth 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 (NASDA), awakened to the Alanis Morissette song, All I Really Want'. Secondary middeck experiments were completed along with the crew having some free personal time. Duffy, Scott, and Wakata were interviewed via satellite by students from Johns Hopkins, South Africa as part of the U.S. Information Agency’s Worldnet program. They answered general questions from the students regarding their mission, the spacewalks, and the International Space Station. Earth views included cloud cover, land masses, a close-up of a storm system over Houston, Texas, and various other night time shots of the Earth.

CASI
Space Transportation System: Space Transportation System Flights; Space Shuttle Missions; Flight Crews; Spaceborne Experiments; Communication Networks; Space Communication; Endeavour (Orbiter); Downlinking

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 (NASDA), 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 new heating and cooling units in the spacestations will be tested during these EVAs.

CASI
Space Transportation System: Space Transportation System Flights; Extravehicular Activity; Endeavour (Orbiter); Space Shuttle Missions; Flight Crews; Spaceborne Experiments

On this third 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 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: Space Transportation System Flights; Space Shuttle Missions; Flight Crews; Spacecraft Launching; Launch Vehicles; Ignition; Astronauts
toward Mir. After docking, the hatches between the two vehicles are swung open allowing Wetherbee and Mir Commander Anatoly Solovyev to greet each other in the airlock. Wetherbee hands Solovyev a new computer for the Mir which was brought into orbit by Atlantis for installation following the docking phase of the mission. The ten crewmembers 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

1998096564 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 forth 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

1998096565 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 Retrieval (STS)

1998096566 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

1998096567 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

1998096568 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

1998096569 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 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

1998096570 NASA Johnson Space Center, Houston, TX USA
STS–86 Day 08 Highlights
Sep. 30, 1997; In English; Videotape: 23 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997077156; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
On this sixth 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

1998097787 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;
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.

**CASE**

*Extravehicular Activity; Space Transportation System; Space Transportation System Flights; Space Shuttle Main Engine; Space Shuttle Missions; Space Shuttle Orbiters*

1998/09/3227 NASA Johnson Space Center, Houston, TX USA

**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.

**CASE**

*Space Transportation System; Space Transportation System Flights; Space Shuttles; Space Shuttle Missions*

1998/09/3834 NASA Johnson Space Center, Houston, TX USA

**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 Foale 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: prelaunch and launch activities; 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.

**CASE**

*Space Transportation System; Spacecraft Docking; Spacecraft Launching; Spacecrafts; Supplying; Mir Space Station*

1998/09/9058 NASA Johnson Space Center, Houston, TX USA

**STS-87 Day 2 Highlights**

Nov. 19, 1997; In English; Videotape: 20 min. 58 sec. playing time, in color, with sound

Report No(s): NONP-NASA-VT-19971125961; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

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 conduct experiments involving the effect of weightlessness on materials and fluids. They also work with an experiment to study Earth’s protective ozone layers.

**CASE**

*Space Transportation System; Space Transportation System Flights; Space Shuttles; Space Shuttle Missions; Space Shuttle Orbiters; Weightlessness*

1998/09/9788 NASA Johnson Space Center, Houston, TX USA

**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.

**CASE**

*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*

1998/09/9798 NASA Johnson Space Center, Houston, TX USA

**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-1997125965; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS


**CASE**

*Space Transportation System; Space Transportation System Flights; Space Shuttle Main Engine; Space Shuttle Missions; Space Shuttle Orbiters; Space Shuttle Payloads*

1998/09/9790 NASA Johnson Space Center, Houston, TX USA

**STS-87 Day 06 Highlights**

Nov. 24, 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 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 take time out from their duties to be interviewed by CNN. As they reach the one week mark of the STS-87 mission, whose primary objective is the rendezvous and space docking with the Russian Space Station Mir, video film footage includes: prelaunch and launch activities; 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.

**CASE**

*Space Transportation System; Space Shuttle Main Engine; Space Shuttle Missions; Space Shuttle Orbiters; Space Shuttle Payloads*

1998/09/9826 NASA Johnson Space Center, Houston, TX USA

**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 fourth 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 spacecraft 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.

**CASE**

*Extravehicular Activity; Space Transportation System; Space Transportation System Flights; Space Shuttle Main Engine; Space Shuttle Missions; Space Shuttle Orbiters*

1998/09/9827 NASA Johnson Space Center, Houston, TX USA

**STS-87 Day 14 Highlights**

Dec. 02, 1997; In English; Videotape: 15 min. 25 sec. playing time, in color, with sound

Report No(s): NONP-NASA-VT-1997125959; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

On this fourteenth 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 plan to conduct experiments involving the effect of weightlessness on materials and fluids. They also work with an experiment to study Earth’s protective ozone layers.

**CASE**

*Space Transportation System; Space Transportation System Flights; Space Shuttles; Space Shuttle Missions; Space Shuttle Orbiters; Weightlessness*
On this fourteenth 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, focus on completion of hands-on sample processing in the microgravity glovebox facility. They also prepare the spacesuits and tools that will be used for the EVA by Scott and Doi. The crew take time out from their schedule to discuss the mission with reporters from the U.S., Japan and the Ukraine during the traditional in-flight news conference.

CASI
Extravehicular Activity; Microgravity; Space Transportation System; Space Transportation System Flights; Spacecrews; Ukraine

19980109910 NASA Johnson Space Center, Houston, TX USA
STS-87 Day 12 Highlights
Nov. 30, 1997; In English; Videotape: 13 min. 47 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1997125957; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this twelfth 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 to look at how plant growth and composite materials are affected by microgravity. The astronauts use the glovebox facility to process samples for the Particle Entrainment and Pushing by a Solid/Liquid Interface experiment. 
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Vegetation Growth

19980109911 NASA Johnson Space Center, Houston, TX USA
STS-87 Day 11 Highlights
Nov. 29, 1997; In English; Videotape: 9 min. 31 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1997125956; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this eleventh 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 to look at how plant growth and composite materials are affected by microgravity. The astronauts use the glovebox facility to process samples for the Particle Entrainment and Pushing by a Solid/Liquid Interface experiment. 
CASI
Microgravity; Space Transportation System; Space Transportation System Flights; Spacecrews; Vegetation Growth

19980109912 NASA Johnson Space Center, Houston, TX USA
STS-87 Day 10 Highlights
Nov. 28, 1997; In English; Videotape: 15 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1997125955; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this tenth 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 to look at how plant growth and composite materials are affected by microgravity. The astronauts use the glovebox facility to process samples for the Particle Entrainment and Pushing by a Solid/Liquid Interface experiment. 
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Space Shuttle Main Engine; Space Shuttles

19980114807 NASA Johnson Space Center, Houston, TX USA
STS-87 Day 09 Highlights
Nov. 27, 1997; In English; Videotape: 14 min. 47 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1997125954; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this ninth 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 Orbiters; Space Shuttle Missions

19980115905 NASA Johnson Space Center, Houston, TX USA
STS-87 Day 08 Highlights
Nov. 25, 1997; In English; Videotape: 8 min. 38 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1997125967; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this seventh 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 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 Columbia's middeck; the experiment called 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; Space Transportation System Flights; Spacecrews; Space Flight: Space Shuttles

19980115906 NASA Johnson Space Center, Houston, TX USA
STS-87 Day 07 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 begin the final preparations for the EVA by Scott and Doi. They are to manually capture the SPARAN Satellite. After this is accomplished they are to test tools and techniques that will be required for the assembly of the International Space Station. 
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Crew Procedures (Inflight); Space Shuttles; Space Flight

19980115907 NASA Johnson Space Center, Houston, TX USA
STS-87 Day 06 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 in the mini laboratory called the microgravity glovebox facility. This facility allows crew members to interactively work with two different experiments today studying the formation of composite materials in an attempt to accurately map the roles of gravity-induced convection and sedimentation in the process by removing the gravity from the equation. 
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Microgravity; Crew Procedures (Inflight)

19980132333 NASA Johnson Space Center, Houston, TX USA
STS-89 Day 01 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; B01, Videotape-Beta; V01, 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 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: Spacecrafts; Launching; Booster Rocket Engines; Space Flight; Space Stations; Space Shuttle System Flights; Space Shuttle Orbits; Space Transportation System Flights, Spaceflight; Space Mechanics; Space Missions; Space Rendezvous; Orbital Mechanics; Orbital Maneuvers

STS-89 Day 0 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 Specialists 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 then gives a tour of the space shuttle.

CASI Space Shuttle Missions; Space Transportation System Flights; Space Transportation System, Spacecrafts; Microgravity

STS-89 Day 01 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 greet each other.

CASI Space Transportation System Flights; Spacecraft Docking; Spacecrafts; Space Rendezvous; Mir Space Station; Crew Experiment Stations

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–1997084742; 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 Cmdr. 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. 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 are 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)

STS-85 Postflight Presentation
Sep. 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 Cmdr. 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 Flights; Space Shuttle Payloads; Space Transportation System Flights

STS-89 Day 04 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; Spacecrafts; Space Shuttle Missions: Mir Space Station: Earth Observations (From Space)

STS-89 Day 05 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; Spacecrafts; Orbital Maneuvers; Orbital Rendezvous

STS-89 Day 06 Highlights
Jan. 20, 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 forth day of the STS-89 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, 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 Flights; Space Shuttle Payloads; Space Transportation System Flights
STS-89 Day 05 Highlights

Mar. 26, 1998; In English; Videotape: 14 min. 24 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1998074666; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

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

Mar. 27, 1998; In English; Videotape: 13 min. 49 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1998074667; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this sixth 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 Holoman 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

Mar. 28, 1998; In English; Videotape: 15 min. 13 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1998074668; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

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 Post Flight Presentation

Mar. 31, 1998; In English; Videotape: 20 min. 37 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1998070594; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The flight crew of the STS-89 Space Shuttle Orbiter Endeavour, 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 present an overview of their mission. It’s whose primary objective was the rendezvous and space docking with the Mir Space Station. Video film footage includes prelaunch and launch activities; shuttle launch; in-orbit docking between Mir and Endeavour; general crew activities; transfer of supplies, equipment, and microgravity experiments to Mir; undocking maneuvers and Mir fly around; pre-return checkout of flight systems; and reentry and landing of the orbiter. CASI

Endeavour (Orbiter); Mir Space Station; Orbital Rendezvous; Spacecraft Docking; Spacecraft Launching; Spacecrews; Orbital Servicing; Payload Delivery (STS); Payload Retrieval (STS)

STS-90 Day 08 Highlights

Apr. 2, 1998; In English; Videotape: 11 min. 32 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1998074669; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On this eighth day of the STS-90 mission, the flight crew, Cmdr. Richard A. Scouras, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Daifyd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Paseyk once again take part in a variety of human experiments designed to examine blood pressure regulation in microgravity. Crew members repeat an experiment in which they use an innovative technique called microincastrated. 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 hi-tech canister that pulls bodily fluids into 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 09 Highlights

Apr. 3, 1998; In English; Videotape: 11 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1998074670; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

On this ninth day of the STS-90 mission, the flight crew, Cmdr. Richard A. Scouras, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Daifyd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Paseyk, once again take part in a variety of human experiments designed to examine blood pressure regulation in microgravity. Crew members repeat an experiment in which they use an innovative technique called microincastrated. 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 hi-tech canister that pulls bodily fluids into 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 6 Highlights

Apr. 21, 1998; In English; Videotape: 21 min. 11 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998348921; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eighth day of the STS-90 mission, the flight crew, Cmdr. Richard A. Scarefoss, 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. Pavelczyk 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-90 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.

CASI

Space Transportation System Flights; Space Transportation System: Environmental Tests; Space Exploration: Space Flight

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STS–90 Day 07 Highlights

Apr. 20, 1998; In English; Videotape: 17 min. 13 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998348210; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this seventh day of the STS-90 mission, the flight crew, Cmdr. Richard A. Scarefoss, 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. Pavelczyk continue experiments that look at the autonomous 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.

CASI

Space Transportation System Flights; Space Transportation System: Lower Body Negative Pressure; Crews: Spacesuits

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STS–90 Day 08 Highlights

Jun. 08, 1998; In English; Videotape: 22 min. 1 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998358189; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eighth day of the STS-91 mission, the flight crew, Cmdr. Richard J. Precourt, Pilot Dominic L. Pudwill Gorie and Mission Specialists Wendy B. Lawrence, Franklin R. Chang-Diaz, Janet L. Kavandi, and Valery Victorovitch Ryumin focus on science investigations and participate in several special interviews and phone calls. Following yesterday’s undocking with the Russian Mir space station, crew members are given a couple of hours off duty during the day to provide a brief rest break from the hectic pace of their flight.

CASI

Space Transportation System; Space Transportation System Flights; Mir Space Station; Crew Workstations

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STS–90 Day 07 Highlights

Jun. 08, 1998; In English; Videotape: 19 min. 36 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998358188; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this seventh 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 Victorovitch 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.

CASI

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**

199802188717 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--199858184; No Copyright; Avail: CASI;

B01, Videotape-Beta; V01, Videotape-VHS

On this fourth day of the STS-91 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Dominic L. Pudwill Gore and Mission Specialists Wendy B. Lawrence, Franklin R. Chang-Diaz, Janet L. Kavandi, and Valery Victorovitich Ryumin are awakened to the sounds of 'South Australia,' honoring Thomas who is a native of Adelaide in South Australia. The nine 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 have 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**

199802120718 NASA Johnson Space Center, Houston, TX USA

**STS-91 Day 03 Highlights**

Jun. 04, 1998; In English; Videotape: 19 min. 19 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--199858183; No Copyright; Avail: CASI;

B02, Videotape-Beta; V02, Videotape-VHS

On this third day of the STS-91 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Dominic L. Pudwill Gore and Mission Specialists Wendy B. Lawrence, Franklin R. Chang-Diaz, Janet L. Kavandi, and Valery Victorovitich 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**

199802120720 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--199853507051; No Copyright; Avail: CASI;

B04, Videotape-Beta; V04, Videotape-VHS

The crew STS-91 mission, Cmdr. Charles J. Precourt, Pilot Dominic L. Pudwill Gore 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 several 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;**

199802188721 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-Beta; V02, Videotape-VHS

The flight crew of the STS-90 mission, Cmdr. Richard A. Searsco, 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. Pawelczyk 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**

199802188725 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-Beta; V02, Videotape-VHS

On this fifteenth day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searsco, 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. Pawelczyk turns 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 Pawelczyk 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**

199802188726 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-Beta; V01, Videotape-VHS

On this fourteenth day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searsco, 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. Pawelczyk focus on the efforts of Neuroral’s Neuronal 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 Pawelczyk -- perform the second and final in-flight dissections of the adult male rats on board. The crew euthanizes and dissects nine rats and removes the vestibular or balance organs of the inner ear; the cerebellum, 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 Kennedylab scientists.

CASI
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 sixth day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searsfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Limnehan, Daufydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey 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

On this twelfth day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searsfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Limnehan, Daufydd 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. Searsfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Limnehan, Daufydd 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 Limnehan 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; Space Transportation System Flights; Spacecrews; Eye Movements

STS-90 Day 04 Highlights
Apr. 17, 1998; In English; Videotape: 23 min. 31 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998348926; 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. Searsfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Limnehan, Daufydd 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 one 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 then 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; Spacecrews; Space Exploration; Space Flight

STS-90 Day 03 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 third day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searsfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Limnehan, Daufydd 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 Limnehan, 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 dissections of some of the research animals and an objects recognition test.

CASI
Space Transportation System Flights; Space Technology; Space Transportation System; Microgravity; Cardiovascular System; Anatomical Nervous System

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. Searsfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Limnehan, Daufydd 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 perfect tissue samples in weightlessness than can be achieved 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; Spacecrews; 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, Dafiyyd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk 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 readjusts; and the study of plant growth in space.

CASI

Space Transportation System; Solid Propellant Rocket Engines; Space Shuttle Boosters; Launching; Ignition; Countdown

199802190127 NASA Johnson Space Center, Houston, TX USA

STS–90 Day 1 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; A 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, Dafiyyd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk 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. Pawelczyk also takes part in the Valsalva test, which stimulates the pressure receptors in the neck and chest and measures those responses. Both Buckey and Pawelczyk participate as subjects and as operators in tests of the autonomic nervous system. All 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.

CASI

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

199802190128 NASA Johnson Space Center, Houston, TX USA

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; A 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, Dafiyyd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk are back on the job full-time as they begin the day six of on-orbit research on the human nervous system. Additional work with the Pulmonary Function Test (PFT) equipment which is collecting data on the crew’s breathing patterns and blood concentrations of oxygen and carbon dioxide also takes place.

CASI

Space Transportation System; Space Transportation System Flights; Space Exploration; Space Flight; Payload Delivery (STS); Space Shuttle Payloads; Space Shuttle Orbiters

199802190129 NASA Johnson Space Center, Houston, TX USA

STS–90 Day 05 Highlights
Apr. 14, 1998; In English; Videotape: 21 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998372736; No Copyright; A avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fifth day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafiyyd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk perform tests associated with the STS-90 Neurovestibular Team’s efforts to gain insight into the balance organs in the ear and all the connections that system has to the eyes, brain, and muscles in adapting to the weightless condition in space and then readapts to the gravity environment found on Earth.

CASI

Space Transportation System; Space Transportation System Flights; Space Shuttle Orbiters; Space Shuttle Payloads; Space Shuttles; Payload Delivery (STS)

199908080745 NASA Johnson Space Center, Houston, TX USA

STS–95 Day 09 Highlights
Nov. 07, 1998; In English; Videotape: 24 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998408700; No Copyright; A avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this 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, spend a good part of their day checking out important spacecraft systems for entry and landing. The commander and pilot begin the flight control system checkout by powering up one auxiliary power unit and evaluating the performance of aerodynamic surfaces and flight controls. The flight crew conducts a reaction control system hot fire, followed by a test of the communications system.

CASI

Space Transportation System Flights; Space Transportation System; Spacecrews; Flight Control; Control Surfaces; Auxiliary Power Sources

199908080748 NASA Johnson Space Center, Houston, TX USA

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; A 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.

CASI

International Space Station; Space Transportation System Flights; Space Transportation System; Space Shuttle Orbiters; Spacecrews; Bays (Structural Units)

199908080749 NASA Johnson Space Center, Houston, TX USA

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; A 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.

CASI

International Space Station; Space Transportation System; Space Transportation System Flights; Spacecraft Docking; Astronauts

75
On this fourth 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, are seen performing an evaluation of bone cell activity under microgravity conditions. Glenn then provides blood samples as part of the Protein Turnover Experiment, which is looking at the balance between the building and breakdown of muscle. He also works with the Advanced Organic Separations (ADSEP) experiment, to provide the capability to separate and purify biological materials in microgravity; and with the Microencapsulation Electrostatic Processing System (MEPS), that studies the formation of anti-tumor capsules containing two kinds of drugs.

**CAS**

*Space Transportation System: Space Transportation System Flights: Spacecrews; Microgravity*

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On this 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 Optical 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.

**CAS**

*Space Transportation System: Space Transportation System Flights: Spacecrews; Crew Observation Stations: Crew Experiment Stations*

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On this third 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, are seen checking out equipment that will be used for the deployment of the Spartan, a small, Shuttle-launched and retrieved satellite, whose mission is to study the Sun.

**CAS**

*Space Transportation System: Space Transportation System Flights: Spacecraft Launching: Spacecrews*

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On this eighth 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 how the muscle, intervertebral discs and bone marrow change due to microgravity. The results will then 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 muscle loss that occurs during space flight.

**CAS**

*Space Transportation System Flights: Space Transportation System: Spacecrews; Microgravity: Gravitational Effects: Chemical Analysis: Bone Marrow*

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On this first 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, are seen preparing a glovebox device in the middeck area of Discovery, an enclosed research facility that will support numerous science investigations throughout the mission. Payload Specialist John Glenn, activates the Microgravity Encapsulation Process experiment (MEPS). This experiment will study the formation of capsules containing two kinds of anti-tumor drugs that could be delivered directly to solid tumors with applications for future chemotherapy treatments and the pharmaceutical industry.

**Author**

*Space Transportation System Flights: Space Transportation System: Spacecrews; Gravitational Effects: Chemotherapy*
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 awakened with the song "Goodnight, Sweetheart, Goodnight." Pilot Rick Sturckow and Mission Specialist Jerry L. Ross make sure it is fully installed. Near the end of the space walk, the astronauts execute a sequence of maneuvers that will bring Endeavour directly above the module. Currie uses the robotic arm to capture the module. She then positions Zarya above Unity's docking mechanism.

**Space Transportation System Flights: Zarya Control Module: Unity Connecting Module; Spacecraft Docking: Space Flight; International Space Station**

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**STS-88 Day 6 Highlights**

Dec. 05, 1998; In English; Videotape: 25 min. 21 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--1998435147; No Copyright; Avail: CASI; B02, Videotape-Beta; B02, Videotape-VHS

On this fifth 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 sound "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.

**Space Transportation System Flights: Zarya Control Module: Extravehicular Activity: Spacecrafts: Space Flight; International Space Station; Unity Connecting Module: Manned Space Flight**

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**STS-88 Day 5 Highlights**

Dec. 06, 1998; In English; Videotape: 23 min. 35 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--1998435144; No Copyright; Avail: CASI; B02, Videotape-Beta; B06, Videotape-VHS

On this fourth 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 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 on one cable connection on the lower Pressurized Mating Adapter (PMA 2) to make sure it is fully installed. Near the end of the space walk, the astronauts conduct a detailed photographic survey of the space station from top to bottom. Finally, each astronaut tests 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 unfettered.

**Space Transportation System Flights: Extravehicular Activity: International Space Station: Unity Connecting Module: Large Space Structures**

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**STS-88 Day 4 Highlights**

Dec. 07, 1998; In English; Videotape: 27 min. 21 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--1998435146; No Copyright; Avail: CASI; B02, Videotape-Beta; B02, Videotape-VHS

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 check out the
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 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

19999014497. 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. 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: Space Transportation System: Space Shuttle Boosters: Space Shuttles: Space Missions

19999014505. 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. Scarefoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Limeham, Daifyld Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buekley and James A. Poutierczyk, 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: Space Transportation System: Space Shuttle Boosters: Space Shuttles: Space Missions

19999025559. 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, Manisha 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 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 Orbiters: Space Shuttle Missions: Payload Retrieval (STS); Booster Rocket Engines; Flight Crews; Spacecraft Modules; Spacecrafts
The STS-95 flight crew, Cmndr Curtis L. Brown, Pilot Steven W. Lindsey, Mission Specialists Scott E. Parazynski, and Pedro Duque, and Payload Specialists Chintali 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 “whiteroom” 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 (IEU) payloads are discussed in both the video and still photo presentation.

CASI

19990025526 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): NON--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: Spacecrafts: Flight Crews: Extravehicular Activity: Astronauts

199900255625 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): NON--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. 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

19990025592 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): NON--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 USA 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-4. 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 drug prediction technology by increasing the understanding of the fundamental flow phenomena in the upper atmosphere.

CASI
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; Zarya Control Module; Unity Connecting Module; Space Station Modules; Large Space Structures

19990825628 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

19990825629 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 Connecting Module; Zarya Control Module

19990825630 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; Large Space Structures; Orbital Workshops; Unity Connecting Module; Zarya Control Module

19990825761 NASA Johnson Space Center, Houston, TX USA
STS-95 Mission Highlights Resources Tape
Mar. 02, 1999; In English; Videotape: 54 min. 20 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 readyed 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-flier payload, and operations with the Hubble Space Telescope (HST) Orbiting Systems Test (HOST) and the International Extreme Ultraviolet Hitchhiker (IEH) payloads being carried in the payload bay. Throughout the presentation, the astronauts talk turns narrating particular aspects of the mission with which they were involved.

CASI
Discovery (Orbiter); Space Flight; Space Shuttle Boosters; Space Transportation System Flights; Hubble Space Telescope; Payload Retrieval (STS)

19990832584 NASA Johnson Space Center, Houston, TX USA
STS-88 Mission Highlights Resources Tape, Tape C
Mar. 02, 1999; In English; Videotape: 54 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-1999037061; 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 last of three videos which show the highlights of the mission. This video covers the last four days (day 9 - 12) of the mission. Important images include the closing of the UNITY Connecting Module’s hatch, the crew exercising, and the reentry of the spacecraft into Earth’s atmosphere.

CASI
Endeavour (Orbiter); Space Flight; Space Transportation System Flights; Manned Space Flight

19990832585 NASA Johnson Space Center, Houston, TX USA
STS-88 Mission Highlights Resources Tape, Tape B
Feb. 26, 1999; In English; Videotape: 1 hour 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-1999037062; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, 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. Tape two of three includes the installation of an S-Band to help monitor the UNITY Connecting Module, the opening of UNITY’s hatch, the opening of the main compartment hatch to ZARYA Control Module, and the repair of the inflight maintenance system.

CASI
Endeavour (Orbiter); Space Flight; Space Transportation System Flights; Manned Space Flight; International Space Station

80
CASI

STS-88 Mission Highlights Resources Tape, Tape A
May 31, 1999; In English; Videotape: 54 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--19990357063; No Copyright; Avail: CASI;
B02, 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.
CASI
Endeavour (Orbiters); Space Flight; Space Shuttle Boosters; Space Transportation System Flights; Manned Space Flight

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 Dominik L. Paviloff 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 reacled 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
Booster Rocket Engines: Space Transportation System Flights; Spacecrafts; Launching: Space Flight; Space Missions: Space Shuttles: Countdown

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 Bait-Out Training Program; and taking part in the crew photo session.
CASI
Astronaut Training: Training Simulators; In-Flight Simulation

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. Parazynski, 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 into 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 return of the Atlantis Space Shuttle into the Earth’s atmosphere.
CASI
Atlantis (Orbiters); Manned Space Flight; Spacecrafts; Mir Space Station; International Space Station

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.
CASI
Mercury Ma-6 Flight; Friendship 7; Launch Vehicles; Earth Orbits

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 Dominik L. Paviloff 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 into 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 module leak checks, greets 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 excercising. The film ends with the reentry of the Discovery Space Shuttle into the Earth’s atmosphere.
CASI
Discovery (Orbiters); Manned Space Flight; Spacecrafts; Mir Space Station; International Space Station

STS-96 FD 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, Rominger, Jernigan, and Barry discussed the progress of the mission with NBC’s “Today,” CBS “This Morning,” and CNN.
CASI
Discovery (Orbiters); Spacecrafts: International Space Station; Zarya Control Module: Spacecraft Transfer
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 hatch 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 spacecraft. 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 final preparations for their space walk. Views of the crew helping Barry and Jernigan suit up for their mission is also presented. Jernigan 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
Communications System on Unity. Views of the Orbiter docking system are also seen.

CASI

**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–VT–199904630; No Copyright; Avail: CASI;
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.

CASI

**Discovery (Orbiter): Spacecrafts; Manned Space Flight; Crew Procedures**

Inflight: Return to Earth Space Flight

19990653264 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–VT–1999068288; No Copyright; Avail: CASI;
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.

CASI

**Discovery (Orbiter): Spacecrafts; Manned Space Flight; Crew Procedures**

Inflight: Return to Earth Space Flight

19990653894 NASA Langley Research Center, Hampton, VA USA

Dan Goldin Presentation: Pathway to the Future
Apr. 05, 1999; In English; Videotape: 87 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–1999060454; No Copyright; Avail: CASI;
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 (mars 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-mars 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 lifecycle 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.

CASI

**Conferences; NASA Programs; Mission Planning; Technological Forecasting; Systems Engineering; Aerospace Sciences; Space Exploration**

19990450664 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–VT–1999046306; No Copyright; Avail: CASI;
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 STREL A, which the astronauts mount to the exterior of the Russian station segment, the SPACEHAB Ocean prospecting Space System Box (SHOSS), and a U.S. built crane called the ORU Transfer Device (OTD). Other payloads include the Student Tracking Atmospheric Research Satellite for Heuristic International Networking Equipment (STARSHINE), the Shuttle Vibration Forces Experiment (VFE), and the Orbiter Integrated Vehicle Health Monitoring - HEIDS Technology Demonstration (IVHM HTD). The traditional pre-launch breakfast, being suited up, entry into the Shuttle, and views of the lift-off 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.

CASI

**Discovery (Orbiter); Space Shuttle Missions; International Space Station; Spacecraft Docking; Spacecrafts**
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 conducted 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 (Orbiter); 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 STS reentry and landing 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. 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 orbiting outpost 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 spacewalk 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 repressurize the shuttle's cabin to its standard 14.7 pounds per square inch. The crew also readiness to deploy a small, student-built payload called STARSHINE (Student Tracked Atmospheric Research Satellite for Heuristic International Networking Equipment). In and around landing preparations and the STARSHINE deploy, the crew stow all equipment used throughout the mission. The STARSHINE satellite ejeets 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 his 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 (Orbiter); 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-1999084946; 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 (Orbiter); 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; 22p; 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 orbical 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, Steve 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
4:36 a.m. CDT by Collins and Coleman to do interviews with reporters from 4 major networks.

CASI
Flight Crews; Space Transportation System; Space Transportation System Flights; Imaging Techniques; Payloads; Manned Spacecraft

1999NO56588 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; Acacia: CASI; B02, Videotape-Beta: V02, Videotape-VHS
Columbia’s crew began packing up experiments and preparing to return to Earth tomorrow with a touchscreen 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 to 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 Massachusetts.
CASI
Space Transportation System; Spacecrews; Space Transportation System Flights; Touchdown; Manned Spacecraft

1999NO56589 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--1999088232; No Copyright; Acacia: 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. Astronaut 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 Coleman checked the bioprocessing experiments, and harvested mouse ear-cane 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

1999NO59798 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--19991229466; No Copyright; Acacia: 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 shown. 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 juice 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

1999NO116268 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--1999022513; No Copyright; Acacia: 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 Solids: 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)

1999NO116476 NASA Johnson Space Center, Houston, TX USA
STS-103 Crew Training
Oct. 08, 1999; In English; Videotape: 29 min. 17 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1999022514; No Copyright; Acacia: 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 (S3M3) 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 (EVA’s), 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 NBL (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 Simulator, System Engineering Simulator, the Alt Shroud Door Trainer, the Forward Shuttle Light Shield Simulator, and the Support Systems Module Bay Doors Simulator. They also trained and verified the flight Orbital Replacement Unit Carrier
19998116992 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-41G TCDT
Sep. 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

19998116993 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-26 SRB LIFT Forward Center Segment Joint Inspection
Apr. 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

19998116995 NASA Kennedy Space Center, Cocoa Beach, FL USA
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 five shots covering the day launch and landing of STS-51C/Discovery. The flight crew members were: Thomas K. Mattingly II, Commander; Loren J. Shriver, 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-I payload and was the first mission dedicated to the Department of Defense.

CASI
Space Shuttle Mission 51-C: Discovery (Orbiter); Spacecraft Landing; Spacecraft Landing

19998116996 NASA Kennedy Space Center, Cocoa Beach, FL USA
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. (Pinky) 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 (IRCFE); Aggregation of Red Blood Cells (ARC); Isodetic Focusinh Experiment (IFF); 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 all skirt to aft segment mating.

CASI
Space Shuttle Missions; Launching Sites; Launching Pads; Launching Bases

19998117116 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-51A: Mission Highlights
Nov. 1984; In English; Videotape: 60 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999207902; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The crew (Commander Frederick H. Hauck, Pilot David M. Walker, Mission Specialists Anna L. Fisher, Dale A. Gardner, and Joseph P. Allen) prepares for the 14th shuttle mission. The Canadian communications satellite TELESAT-H (ANIK) is attached to Payload Assist Module-D (PAM-D) and deployed into geosynchronous orbit on flight day two. Defense communications satellite SYNCOM IV-1 is deployed on day three. Allen and Gardner retrieve two malfunctioning satellites (PALAPA-B2 and WESTAR-VI). Fisher operates the remote manipulator system, grappling satellites and depositing them in the payload bay.

CASI
Space Missions; Space Transportation System Flights; Payload Assist Module

19998117117 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-26: O-Ring Installation and Inspection
Apr. 15, 1988; In English; Videotape: 5 min. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–1999207903; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This live action short sequence depicts a clean room setting of O-ring inspection and installation prior to mission STS-26.

CASI
O Ring Seals; Space Transportation System: Inspection; Installing

19998117118 NASA Johnson Space Center, Houston, TX USA
STS-41G: Mission Highlights
Oct. 31, 1984; In English; Videotape: 50 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999207905; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The crew (Commander Robert L. Crippen, Pilot Jon A. McBride, Mission Specialists Kathryn D. Sullivan, Sally K. Ride, and David C. Leestma, Payload Specialists Marc Garneau, and Paul D. Scully-Power) prepares for the 13th Shuttle Mission. Earth Radiation Budget Satellite (ERBS) is deployed less than nine hours into flight. Components of the Orbital Refueling System are connected, demonstrating that it is possible to refuel satellites in orbit.

CASI
Refueling; Space Transportation System Flights; Space Missions; Earth Radiation Budget

19998117250 NASA Johnson Space Center, Houston, TX USA
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 Tognini 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 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 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 Haignere on the Mir 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 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 F. O’Rourke, Pilot Frederick D. Gregory, Mission Specialists Donald H. Brown, 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; V03, 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 SPARTAN-1 satellite. Scenes include the crew in the mess deck via video link with Mission Control Center in celebration of the 160th 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 Hабавна, 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

STS–103 Flight Day 1 Highlights

Dec. 10, 1999; In English; Videotape: 19 min. 38 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1999213427; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage of the astronauts sitting around the table with the traditional cake is presented. The crew of Discovery, Mission 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 executing various activities. Live footage of Clervoy powering up the robotic arm is seen. While Clervoy powers the robotic arm, Brown and Kelly set up the tools for the various different space walks scheduled. Grunsfeld and Nicollier check out the space suits, and Smith and Foale tend to the space walk tools. Foale, Brown, Kelly and Clervoy are also shown participating in a series of interviews.

CASI

Space Transportation System; Space Transportation System Flights; Spacecrews; Crew Procedures (Inflight)

STS–103 Crew Activity Report/Flight Day 1 Highlights

Dec. 10, 1999; In English; Videotape: 19 min. 38 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1999213441; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Space Mission Specialist Jean-Francois Clervoy is seen. The interview addresses many different questions including why Clervoy became an astronaut, what were 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, replacement of the gyrosopes, transistors and computers. Also discussed is an explanation of the ESA (European Space Agency) involvement in this mission, and a brief touch on Clervoy’s responsibility during any of the given four space walks scheduled for this mission.

CASI

Hubble Space Telescope; Replacing Gyroscopes; Transistors; Computers; Discussion: Spacecrews; Crew Procedures (Inflight); Crew Procedures (Preflight)
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

20000004512 NASA Johnson Space Center, Houston, TX USA
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 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: Space crew: Crew Procedures (Inflight)

20000004517 NASA Johnson Space Center, Houston, TX USA
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

20000004522 NASA Kennedy Space Center, Cocoa Beach, FL USA
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 OPF 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) Ku-band antenna stow and deploy; (9) Tile work; (10) Oasis payload installation; (11) Solid rocket boosters arrival, preps and stacking; (12) Modified SRB segments: Arrival via train at KSC RPFS; (13) AFT segment rotation to vertical in RPFS; (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

20000004523 NASA Kennedy Space Center, Cocoa Beach, FL USA
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 facts: (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: Space crew: Discussion

20000004524 NASA Kennedy Space Center, Cocoa Beach, FL USA
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–20000001065; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

This two-tape Jet Propulsion Laboratory (JPL) video presentation presents a Dec. 8 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 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.) 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. Aulman, 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; instrumentation 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 System

20000004567 NASA Johnson Space Center, Houston, TX USA
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, what were 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: Space Maintenance

20000004568 NASA Johnson Space Center, Houston, TX USA
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
Today Discovery's astronauts begin preparing the spacecraft for its 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 begin 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 its checkout sequence before resuming science operations. Both the flight control system (FCS) and the reaction control jets (RCS) were without issue, with all systems ready to support Discovery's return to Earth.

CASI

Space Shuttle Missions; Lift Off (Launching); Cape Kennedy Launch Complex

STS-103 In VAB
Nov. 05, 1999; In English; Videotape: 5 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 Discovery's construction crew removing the plastic covering from the Payload Bay door seen.

CASI

Space Shuttle Payloads; Hubble Space Telescope

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 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 ram 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; Spacecrops; Deployment; Syncom 4 Satellite; Telstar Project
taking file pictures, the involvement of the National Imagery and Mapping Agency through the Air Force and later the Navy, and then finally, his selection by NASA.

Kregel became an astronaut, the events that led to his interest, his career path, and 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), with specific focus placed on why this SRTM flight is important, and what we will learn from the 3D topographic map of the Earth. The two antennas that will be taking the pictures, the involvement of the National Imagery and Mapping Agency (NIMA), EARTHCAM, a student-controlled camera on the Endeavour Orbiter, and Kregel’s responsibility during this 24 hour mission are also discussed. CASI:
Shuttle Imaging Radar; Earth Observations (From Space); Infrared Interferometers; Topography; Relief Maps; Earth Surface; Radar Maps; Radar Imagery

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 down-linked. 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:
Shuttle Imaging Radar; Earth Observations (From Space); Infrared Interferometers; Topography; Radar Maps; Radar Imagery; Earth Surface

Kregel’s responsibility during this 24 hour mission are also discussed. CASI:
Shuttle Imaging Radar; Earth Observations (From Space); Infrared Interferometers; Topography; Relief Maps; Earth Surface; Radar Maps; Radar Imagery
while the shuttle heads to Australia, and some beautiful panoramic views of the Earth are also seen.

CASI

Crew Procedures (Inflight): Spacecrews; Firing (Igniting); Orbital Maneuvers; Orbital Space Tests

20000011835 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): Spacecrews; Hubble Space Telescope; Electric Batteries; Remote Sensors; Spacecraft Maintenance

20000011037 NASA Johnson Space Center, Houston, TX USA STS–99 Crew Interviews: Gorie 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. Pudwell Gorie is seen. The interview addresses many different questions including why Gorie became an astronaut, the events that led to his interest, and his career path. Other interesting information that this one-on-one interview discloses 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 Gorie’s responsibility during this 24 hour mission.

CASI

Shuttle Imaging Radar; Infrared Radar; Radar Imagery; Topography; Relief Maps: Earth Surface

20000011225 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

200000111226 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 Clery (his third flight) will join spacewalkers 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, suitin, and departing the O&C (Operations and Checkout) before the 6:50 p.m. lift-off.

CASI

Discovery (Orbiter): Space Shuttle Payloads: Crew Procedures (Preflight); Preflight Operations

20000011227 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 Complin, Associate Director of the Hubble Space Telescope, brefing on the Hubble servicing mission.

CASI

Space Shuttle Payloads; Discovery (Orbiter): Orbital Servicing: Ground Support Equipment

20000011229 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

20000011230 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
Live footage of the fully assembled Discovery Orbiter on the Launch Pad 39B before the 6:50 p.m. lift off is shown.

CASI
Discovery (Orbiter); Space Transportation System; Launching Pads

Live footage of the full assembled Discovery Orbiter transported from the VAB (Vehicle Assembly Building) to the Launching Pad is shown.

CASI
Discovery (Orbiter); Ground Handling; Transportation

Live footage of a preflight interview with Mission Specialist Janice E. Voss is seen. The interview addresses many different questions including why Voss became an astronaut, the events that led to her interest, and her 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, space walk, 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 Heuristic International Networking Equipment (STARSHINE) are also discussed.

CASI
Crew Procedures (Inflight); Space Logistics; Consumables (Spacelab Supplies); Stowage (Onboard Equipment); Onboard Equipment; Portable Equipment; Materials Handling

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; Space crews; Crew Procedures (Preflight); Preflight Operations

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’Études 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; Space crews; Crew Procedures (Preflight); Preflight Operations
Live footage of the Payload Bay door closing is seen.

**CASI Payloads; Bays (Structural Units); Doors; Closures; Spacecraft Components**

Live footage of a preflight interview with Mission Specialist Tamara E. Jernigan is seen. The interview addresses many different questions including why Jernigan became an astronaut, the events that led to her interest, and her 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). Jernigan mentions Discovery's anticipated dock 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.

**CASI International Space Station: International Cooperation; Spacecraft Docking; Materials Handling; Stowage (Onboard Equipment)**

STS–96 Crew Interview: Ellen Ochoa
Mar. 17, 1999; In English; Videotape: 24 min. 59 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999213304; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

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.

**CASI International Space Station: International Cooperation; Unity Connecting Module; Spacecraft Docking; Space Logistics; Stowage (Onboard Equipment); Transferring; Materials Handling**

STS–96 Crew Interview: Dan Barry
Mar. 17, 1999; In English; Videotape: 32 min. 21 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999213300; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

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 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). Barry mentions Discovery's anticipated docking with the ISS, his role during the scheduled space walk with Tamara E. Jernigan and Daniel T. Barry, plans for the supply and equipment transfers, and a fly-around maneuver to take pictures of the ISS.

**CASI Space Shuttle Payloads: Proteina Crystal Growth**
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. Jemigian, 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 Networking 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—1999213302; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, 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 Prelight Press Briefing: Crew Escape/Crew Mission
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; V01, 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 scientific journalists. William A. Chandler (Asst. to the Dir. of Engineering and the NSTS Projects office) and an unidentified colleague present discussions involving fire crew’s duties during their mission is given by Commander Rominger.

CASI
Spacecraft: Space Transportation System; Space Missions

STS-88: Flight Crew During Breakfast, Suiting, and Departure from the Operations and Checkout Building
Dec. 03, 1999; 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; V01, Videotape-VHS

The crew (Commander Robert D. Cabana, Pilot Frederick W. Stuckrow, and Mission Specialists Nancy J. Currie, Jerry L. Ross, James H. Newman and Sergei K. Krikalev) begin with breakfast, then proceed to the suitting room. After suitting up, the astronauts board the bus in preparation for departure.

CASI
Spacecraft: Space Transportation System; Space Missions

STS-88: Flight Crew During Breakfast, Suiting, and Departure from the Operations and Checkout Building
Dec. 03, 1999; 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; V01, Videotape-VHS

The crew (Commander Robert D. Cabana, Pilot Frederick W. Stuckrow, and Mission Specialists Nancy J. Currie, Jerry L. Ross, James H. Newman and Sergei K. Krikalev) begin with breakfast, then proceed to the suitting room. After suitting up, the astronauts board the bus in preparation for departure.

CASI
Spacecraft: Space Transportation System; Space Missions

STS-26 Prelight Press Briefing: Shuttle Systems Changes, Part 2 of 9
Aug. 22, 1998; In English; Videotape: 46 min., 30 sec. playing time, in color, with sound
Report No.(s): NONP—NASA—VT—1999207916; 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 five member panel present individual viewgraph discussions followed by a question and answer period for the benefit of scientific journalists. William A. Chandler (Asst. to the Dir. of Engineering and the NSTS Projects office) and an unidentified colleague present discussions involving fire crew’s duties during their mission is given by Commander Rominger.

CASI
Space Shuttle Boosters: Space Shuttle Missions: Discovery (Orbiter); Safety Management

STS-26 Prelight Press Briefing: Crew Escape/Crew Mission, Part 4 of 9
Aug. 22, 1998; In English; Videotape: 56 min., 41 sec. playing time, in color, with sound
Report No.(s): NONP—NASA—VT—1999207914; 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 five member panel present individual viewgraph discussions followed by a question and answer period for the benefit of scientific journalists. William A. Chandler (Asst. to the Dir. of Engineering and the NSTS Projects office) and an unidentified colleague present discussions involving fire crew’s duties during their mission is given by Commander Rominger.

CASI
Space Shuttle Boosters: Space Shuttle Missions: Discovery (Orbiter); Safety Management

STS-26 Prelight Press Briefing: Shuttle Systems Changes, Part 2 of 9
Aug. 22, 1998; In English; Videotape: 46 min., 30 sec. playing time, in color, with sound
Report No.(s): NONP—NASA—VT—1999207916; 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 five member panel present individual viewgraph discussions followed by a question and answer period for the benefit of scientific journalists. William A. Chandler (Asst. to the Dir. of Engineering and the NSTS Projects office) and an unidentified colleague present discussions involving fire crew’s duties during their mission is given by Commander Rominger.

CASI
Space Shuttle Boosters: Space Shuttle Missions: Discovery (Orbiter); Safety Management

STS-26 Prelight Press Briefing: Crew Escape/Crew Mission, Part 4 of 9
Aug. 22, 1998; In English; Videotape: 56 min., 41 sec. playing time, in color, with sound
Report No.(s): NONP—NASA—VT—1999207914; 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 five member panel present individual viewgraph discussions followed by a question and answer period for the benefit of scientific journalists. William A. Chandler (Asst. to the Dir. of Engineering and the NSTS Projects office) and an unidentified colleague present discussions involving fire crew’s duties during their mission is given by Commander Rominger.

CASI
Space Shuttle Boosters: Space Shuttle Missions: Discovery (Orbiter); Safety Management

STS-26 Prelight Press Briefing: Shuttle Systems Changes, Part 2 of 9
Aug. 22, 1998; In English; Videotape: 46 min., 30 sec. playing time, in color, with sound
Report No.(s): NONP—NASA—VT—1999207916; 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 five member panel present individual viewgraph discussions followed by a question and answer period for the benefit of scientific journalists. William A. Chandler (Asst. to the Dir. of Engineering and the NSTS Projects office) and an unidentified colleague present discussions involving fire crew’s duties during their mission is given by Commander Rominger.

CASI
Space Shuttle Boosters: Space Shuttle Missions: Discovery (Orbiter); Safety Management
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

20000112424 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–1999207901; No Copyright; Avid: 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.
Halvorsen, 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, Goddess Space Flight Center(GFSC)) 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 (Orbit);
Spacecrows

20000112426 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; Avid: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The crew (Commander Charles J. Precourt, Pilot Dominic L. Padovill
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
Spacecrows; Space Transportation System Flights: Space Shuttle Missions;
Conversation

20000112885 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–2000068276; No Copyright; Avid: 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 Obser-
vatory 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 getting into spacesuits, and inspecting the equip-
ment.

CASI
Astronauts; Space Suits; Spacecrows

20000112889 NASA Kennedy Space Center, Cocoa Beach, FL USA
Atlas Centaur/GOES-J News Conference, Part 1 of 2
May 18, 1995; In English; Videotape: 1 hr. 2 min. 28 sec. playing time, in color,
with sound
Report No.(s): NONP–NASA–VT–19992000038; No Copyright; Avid: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

Live footage of the GOES-J Satellite News Conference is presented. The
participants of this conference include several NASA and NOAA officials. Floyd
Cunnington, NASA’s Launch Manager at the Kennedy Space Center, spoke briefly
about the AC-77 launch vehicle, Pat Symons, the NASA Launch Vehicle
Manager from the Lewis Research Center, discusses the launch vehicle, the
vehicle threat, the Centaur Liquid Hydrogen, and the parking orbit. Martin Davis,
NASA Mission Director from the Goddard Space Flight Center, touches on the
NOAA partnership. Steven Kirkner, NOAA’s GOES Systems Acquisitions
Manager, addresses issues of the National Weather Satellite, the 24-hour
observation, and the variable scan capacity of the satellite. Joel Tumbiolo,
Launch Weather Officer from the USAF 45th Space Wing, presents data images of
storm systems over Central United States; his main focus is on the Florida and
Gulf of Mexico areas. Tumbiolo also discusses avionics clouds and thunderstorms,
and question and answer session is presented. Immediately following this confer-
ence in the NOAA/GOES-J News Briefing. Live coverage of the presentation
with panelists Gary Davis, Director, Satellite Operations; Dr. James Pardom,
Chief Regional and Mesoscale Meteorology; Frederick Ostby, Director, National
Severe Storms Forecast Center; and Steven Kirkner, GOES System Acquisition
Manager is shown. Gary addresses the issue with the GOES-8 Satellite and the
solutions to the problems that were encountered, the GOES-9 Satellite launching,
its checkout and the reliability improvements that were made. Jim presents picto-
graphic comparisons between GOES-8 and GOES-7, the GOES-8 Imagery Noise
Levels, Hurricane Rosa, and the thunderstorm over the Northern Gulf of Mexico.
He also looks at storms in the Hudson Bay, Nova Scotia, and the Gulf of
Lawrence areas. The final speaker, Fred discusses GOES-8, Geostationary
Satellites, the Automatic Surface Observation System (ASOS), and the Doppler
Radar Network. This Abstract describes the content of tape 1 of 2, tape 2 has a

CASI
Atlas Centaur Launch Vehicle; GOES 9; GOES 8; GOES 7: Synchronous Plat-
forms; Geosynchronous Orbits; Conferences

20000112868 NASA Johnson Space Center, Houston, TX 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; Avid: 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 informa-
tion 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 observa-
tories 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

20000112869 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; Avid: 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

28080012870 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 Nacional 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 future 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

28080012871 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-93 Press Briefing: 5 Man Crew, Part 6 of 9
Aug. 22, 1998; 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

28080012872 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-11/41-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 spacecrew 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 un tethered. 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; Spacecrews

28080012947 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 J.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; Spacecrews; Space Transportation System Flights

28080012948 NASA Johnson Space Center, Houston, TX USA

STS-99 Crew Training
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; B03, Videotape-Beta; V03, Videotape-VHS
Live footage of the STS-99 crew members shows Commander Kevin R. Kregel, Pilot Dominic L. Padwill Gorrie, 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, SRIM (Shuttle Radar Topography Mission) Deploy and Mapping Activities, HDTV (High Definition Television) Camera Training, and Arecut Simulation. Footage also includes the six-member crew participating in a photo session.

CASI
Spacecrews; Astronaut Training; Ejection Training; Bailout; Training Simulators

28080012949 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 Tognini) are dressed in cleanroom suits while overseeing the solar panel installation.

CASI
Space Transportation System: Spacecrews; Solar Reflectors

28080013156 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 Candy Coleman, Steve 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 spacesuits, and then their crawl into the orbiter.

CASI
Spacecrews: Crew Procedures (Preflight); Astronauts; Preflight Operations
STS-93: Crew Watch the Installation of Chandra's Solar Panel in the VPF
May 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 Astronomy Facility; Panels

STS-93: Chandra Flight Crew During Breakfast, Suitsing 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 Astronomy Facility: Flight Crews; Crew Procedures (Preflight)

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 Astronomy Facility

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), Chushik 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; Spacecrops; Space Flight Training

STS-93: Crew Interview – Cathy Coleman
Jun. 23, 1999; In English; Videotape: 34 min. 39 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–1999020160; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
Live footage of a preflight interview with Mission Specialist Catherine G. 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

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–1999020159; 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 her 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 Solids: Applied Microgravity Research (GOSAMR) experiments, and the two observatories presently in orbit (Gamma Ray Observatory, and Hubble Space Telescope) are also discussed.
CASI

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 spacecraft. The spacecraft was previously mated to the Boeing Delta II rocket. Installation took place on Pad A of Launch Complex 17.
CASI
Fair UV Spectroscopic Explorer: Fairings: Cape Kennedy Launch Complex

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.
Microgravity

CASI

experiments in the payload bay, and some views of the astronauts working on one of the ITM-4 experiments. After shots of the STS-87 liftoff, the tape has footage showing the placement of the Fuse Lift onto the Adapter Ring. CASI

Payloads: Adapters; Fixtures

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 shows the crew boarding the T-38 jet and departing from the Shuttle Landing Facility (SLF).

CASI

Landing Sites: Spacecrafts; T-38 Aircraft

Nasa Kennedy Space Center, Cocoa Beach, FL USA

STS-96: Expedition Crew #2 and Work in Node #1 at the SSPF

May 03, 1999; 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 STS-93 crewmembers shows Commander Eileen M. Collins, Pilot Jeffrey A. Ashby, Mission Specialists Steven A. Hawley, Catherine G. Coleman, and Michel Tognoni observing and speaking with the engineers about some installations. Footage also shows the crew briefing the T-38 jet and departing from the Space Station Processing Facility (SSPF).

CASI

Launch Bases: Space Transportation System; Spacecrews

Nasa Kennedy Space Center, Cocoa Beach, FL USA

STS–93: Columbia/Chandra Crew Press Conference

Jan. 21, 1999; In English; Videotape: 29 min. playing time, in color, with sound. Report No.(s): NONP–NASA–VT–2000001827; 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 Astronomer (NEAR) of the asteroid EROS. The second presents close-up shots of the telescope at the Space Station Processing Facility (SSPF). Scenics 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

Nasa Kennedy Space Center, Cocoa Beach, FL USA

STS–93: Columbia/Chandra Crew Press Conference

Feb. 11, 1999; In English; Videotape: 7 min. playing time, in color, with sound. Report No.(s): NONP–NASA–VT–2000001856; 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 Dick D. Husband, Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev, showing 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

Astronaut Missions: Space Shuttle Payloads; X Ray Astrophysics Facility; Microgravity

Nasa Kennedy Space Center, Cocoa Beach, FL USA

STS–93: CEFT 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–2000002779; 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 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. Views of the empty payload shuttle bay are presented.

CASI

Spacecrews: Clean Rooms; Crew Procedures (Preflight); Preflight Operations; Inspection

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–2000002879; 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, Stephan K. Robinson, Pedro Duque, Payload Specialists Chiaki 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

Nasa Kennedy Space Center, Cocoa Beach, FL USA

STS–96: SPACEHAB Double MOD/ICU Going into the Payload Bay

Apr. 28, 1999; In English; Videotape: 5 min. playing time, in color, with sound. Report No.(s): NONP–NASA–VT–2000001651; 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

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–2000001856; 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 Dick 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

STS-95: Discovery Flight Crew Arrives at the Shuttle Landing Facility for TCDT
Oct. 6, 1998; In English; Videotape: 4 min. playing time, in color, with sound
Report No.: 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 (NASDA) 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

STS-93: Crew Arrival and PR Location
Feb. 8, 1999; In English; Videotape: 4 min. playing time, in color, with sound
Report No.: 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’Etudes 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)

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.: NONP-NASA-VT-2000010133; 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 by 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 Wojsalik, 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. Questions that follow, 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 Telescopes; X Ray Astrophysics Facility; Payload Integration; Pre-look Summaries; Space Shuttle Payloads; X Ray Astronomy; Orbital Maneuvers; Orbit Insertion; Satellite Orbits; Orbital Mechanics; Payload Delivery (STS)

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.: 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. PGHM is used to remove or insert the shuttle payload from the Orbiter.
CASI
Space Shuttle Payloads; Ground Handling; Payload Integration

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.: NONP-NASA-VT-2000010625; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

This NASA Kennedy Space Center video release presents a reenactment of the Apollo 11 mission on the 30th 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 spacecraft in general, anxieties or fears of the astronauts prior to the mission, and the overall effect that Apollo 11 had on the world.
CASI
Astronauts: Apollo 11 Flight; Lunar Landing; Lunar Flight; Astronauts

STS-96 Press Briefing and MODE-1 Egress Training for TCDT
Apr. 29, 1999; In English; Videotape: 6 min. playing time, in color, with sound
Report No.: 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-96. 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 suits), 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

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.: NONP-NASA-VT-2000010617; 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, Daniel 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 Gina Tucker behind him. The TCDD activities include simulated countdown exercises and inspection of the mission payloads in the orbiter’s payload bay.

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, Tamura 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 Jaskoika, 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–2000008135; 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 astronauts’ 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

2000014438 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–2000008141; 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 Cary Coleman, Steve Hawley and Michel Tognetti from the Centre National d’Etudes 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; Spacecraft; Crew Procedures (Preflight)
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’Eudes Spatiales (CNES). This videotape shows the crew having breakfast on the launch day, with the narrator introducing them. It then shows the crew’s final preparations and the entry into the shuttle, while the narrator gives information about each of the crew members. The countdown and launch is shown including the separation from the solid rocket boosters. The launch is reshown from 17 different camera views. Some of the other camera views were in black and white.

**STS-93 Columbia Flight Crew Photo Op & QA at Pad for TCDT**
Jun. 25, 1999; In English; Videotape: 35 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–2000001382; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, 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’Eudes Spatiales (CNES). This videotape shows the crew having breakfast on the launch day, with the narrator introducing them. It then shows the crew’s final preparations and the entry into the shuttle, while the narrator gives information about each of the crew members. The countdown and launch is shown including the separation from the solid rocket boosters. The launch is reshown from 17 different camera views. Some of the other camera views were in black and white.

**STS-95 CEIT in the OFF-2 and the MPPF**
Sep. 02, 1998; In English; Videotape: 12 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–2000001626; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-95 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 videotape shows the crew having breakfast on the launch day, with the narrator introducing them. It then shows the crew’s final preparations and the entry into the shuttle, while the narrator gives information about each of the crew members. The countdown and launch is shown including the separation from the solid rocket boosters. The launch is reshown from 17 different camera views. Some of the other camera views were in black and white.

**STS-95 Crew Activities Report/Flight Day 1 Highlights**
Feb. 11, 2000; In English; Videotape: 20 min. 29 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–2000001585; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows the crew of STS-95, Commander Curtis L. Brown, Pilot Steven W. Lindsey, Mission Specialists Scott E. Parazynski, Stephen K. Robinson, Pedro Duque, Payload Specialists Chiaki Mukai and John M. Grunske, seated in the dining room with the traditional cake. The crew is seen performing various pre-launch activities including suit-up, walk out to the Astrovan, and strap-in into the vehicle. Also seen are the retraction of the orbiter access arm and the gaseous oxygen main line, main engine start, booster ignition, liftoff, and separation of the solid rocket boosters. The Red Team (first of the dual shift crew) includes Kregel, Kavandi, and Thiele, who are shown conducting jet thruster firings, activating radar instruments, and deploying the boom (mass).

**STS-96 Breakfast / Ingress / Launch & ISO Camera Views**
Apr. 05, 1991; In English; Videotape: 25 min. playing time, mostly in color, with sound, some black and white footage included
Report No.(s): NONP–NASA–VT–20000013427; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows Commander of STS-96 mission, Kent V. Rominger, introducing the other crewmembers, Pilot Rick D. Husband, and Mission Specialists Tamara E. Jernigan, Ellen Ochoa, Daniel T. Barry, Julie Payne and Valery Ivanovich Tokarev. During the introduction, Rominger describes each crewmember’s responsibilities. He also mentions the deployment of STARSHEINE, and the scheduled space walk with Jernigan and Barry. Panoramic views of the shuttle on the launch pad are also shown.

**STS-99 Crew Activities Report/Flight Day 1 Highlights**
Feb. 13, 2000; In English; Videotape: 18 min. 18 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20000015186; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows the STS-99’s Blue Team Pilot Dominic L. Pudwill Gorie, and Mission Specialist Mamoru Mohri speaking with Dr. Bob Ballard and fielding questions from Fox News Network. During the interviews Janet E. Voss overscores the mapping activities. The Blue Team is also seen speaking with the Launch Control Center (LCC) troubleshooting a problem with a small nitrogen thruster mounted at the tip of the radar’s outboard antenna.

**STS-99 Flight Day Highlights 83 and Crew Activities Report**
Feb. 17, 2000; In English; Videotape: 20 min. 18 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20000015186; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows the STS-99’s Blue Team Pilot Dominic L. Pudwill Gorie, and Mission Specialist Mamoru Mohri speaking with Dr. Bob Ballard and fielding questions from Fox News Network. During the interviews Janet E. Voss overscores the mapping activities. The Blue Team is also seen speaking with the Launch Control Center (LCC) troubleshooting a problem with a small nitrogen thruster mounted at the tip of the radar’s outboard antenna.

**STS-101 Crew Equipment with which they will be working on orbit.**

**STS-101 CEIT in the OPF-2 and the MPPF**

**STS-101 Rollout to Pad B**
Mar. 15, 1991; In English; Videotape: 50 min. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–20000013430; 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 videotape shows the crew having breakfast on the launch day, with the narrator introducing them. It then shows the crew’s final preparations and the entry into the shuttle, while the narrator gives information about each of the crew members. The countdown and launch is shown including the separation from the solid rocket boosters. The launch is reshowed from 17 different camera views. Some of the other camera views were in black and white.

**STS-37 Rollout to Pad B**

**STS-37 Breakout / Ingress / Launch & ISO Camera Views**
Apr. 05, 1991; In English; Videotape: 25 min. playing time, mostly in color, with sound, some black and white footage included
Report No.(s): NONP–NASA–VT–20000013427; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, 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 videotape shows the crew having breakfast on the launch day, with the narrator introducing them. It then shows the crew’s final preparations and the entry into the shuttle, while the narrator gives information about each of the crew members. The countdown and launch is shown including the separation from the solid rocket boosters. The launch is reshowed from 17 different camera views. Some of the other camera views were in black and white.

**STS-37 Rollout to Pad B**

**STS-37 Breakfast / Ingress / Launch & ISO Camera Views**
Apr. 05, 1991; In English; Videotape: 25 min. playing time, mostly in color, with sound, some black and white footage included
Report No.(s): NONP–NASA–VT–20000013427; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, 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 videotape shows the crew having breakfast on the launch day, with the narrator introducing them. It then shows the crew’s final preparations and the entry into the shuttle, while the narrator gives information about each of the crew members. The countdown and launch is shown including the separation from the solid rocket boosters. The launch is reshowed from 17 different camera views. Some of the other camera views were in black and white.

**STS-37 Rollout to Pad B**

**STS-37 Rollout to Pad B**
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 Director discussing the STS-37 Atlantis shuttle mission. Questions include topics involving EVA safety, emergency EVAs, and what determines the day of primary payload deployment.

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 Director discussing the STS-37 Atlantis shuttle mission. Questions include topics involving EVA safety, emergency EVAs, and what determines the day of primary payload deployment.

Astronaut training; Space Transportation System: Preflight Operations; Launching Pads

STS-96: Flight Day 05 Highlights and Crew Activities Report

May 21, 1999; In English; Videotape: 1 hr. 5 min playing time, in color, with sound

Report No.(s): NONP-NASA–VT-2000010632; 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 astronaut 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 standing, bending, and painting the foam used in repairing the tank. An animation of the deployment of the STARSHINE satellite, International Space Station, and the STS-96 Mission is presented. Footage shows the students from Edgar Allen Poe Middle School sanding, polishing, and inspecting the mirrors for the STARSHINE satellite. Live footage also includes students from St. Michael the Archangel School wearing bunny suits and entering the clean room at Goddard Space Flight Center.

Astronaut Training; Training Simulators; Flight Simulation; Flight Training; Ejection Training; Bailout; Virtual Reality; Computerized Simulation; Extravehicular Activity; International Space Station
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. The mission was led by Commander Kevin Kregel. The crew was Pilot Dominic L. Padwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri, the National Space Development Agency (Japanese 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. The flight day activities, which required troubleshooting due to a balky small thruster.

STS-99 Crew Activities Report / Flight Day 07 Highlights
Feb 18, 2000; In English; Videotape: 24 min. 23 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT2000022260; 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. Padwill Gorie 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

STS-99/Chandra Science Briefing
Jul. 19, 1999; In English; Videotape: 36 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT2000008138; 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

STS-37/Atlantis/GRO
Apr. 11, 1991; In English; Videotape: 55 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT2000013422; 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 videotape 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 shown from several 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 a high gain antenna. The landing at Edwards Air Force Base is shown. The landing is also shown from several different cameras views.

CASI
Gamma Ray Observatory: Spacecraft: Launching: Extravehicular Activity: Horizontal Spacecraft Landing

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--VT2000027987; 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 Tomokazu Inoue launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour and system produced unrivaled 3-D images of the Earth's Surface. The mission was 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 Crew Arrival for Launch of SRTM, Endeavour
Jan. 27, 2000; In English; Videotape: 6 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–2000027985; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The primary objective of the SRTS-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 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 Rollover 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 SRTS-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 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
Endeavour (Orbiter); Launching; Space Transportation System

STS-99 Rollout 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 SRTS-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 Payload Door Closure in Orbiter Processing Facility # 2, Endeavour, (SRTM)
Nov. 29, 1999; In English; Videotape: 3 min. playing time in color, no sound except background sound Report No.(s): NONP–NASA–VT–2000027986; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The primary objective of theSTS-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 videotape shows the SRTM in Endeavour's payload bay, while the payload bay doors are being closed. There are some views of the Orbiter Processing Facility and technicians in the clean room environment.

CASI
Bays (Structural Unity); Doors; Endeavour (Orbiter); Shuttle Imaging Radar

STS-99 Payload Bay Door Opening at Pad 39A Endeavour
Jan. 17, 1999; In English; Videotape: 2 min. 20 sec., in color with background sound Report No.(s): NONP–NASA–VT–2000013432; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The primary objective of theSTS-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 Gamma Ray Observatory being placed in the payload bay of the shuttle. The Payload Changeout Room (PCR) and the clean room operations required to place the payload in the bay are shown.

CASI
Clean Rooms; Gamma Ray Observatory; Payloads; Space Transportation System; Controlled Atmospheres; Bays (Structural Unity)

STS-99 Rollout to SRTM 39A
Jan. 17, 2000; In English; Videotape: 3 min. playing time in color, no sound Report No.(s): NONP–NASA–VT–2000027984; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The primary objective of the SRTS-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 Crew Arrival for Launch of SRTM, Endeavour
Jan. 27, 2000; In English; Videotape: 6 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–2000027985; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The primary objective of the SRTS-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 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)
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

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--2000027989; 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 (Orbiter); Space Transportation System; Prelaunch Operations; Prelaunch Problems; Spacecraft Reliability

STS-99 Crew with Press, TCDT Crew Emergency Egress Training, Walkdown Pad 39A
Jan. 13, 2000; In English; Videotape: 12 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000027979; 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). In this tape Commander Kevin Kregel introduces the crew to the assembled press at the site.
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

STS-99 Crew Activities Report / Flight Day 9 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 modified 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 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, Moloka, Lanai and west Maui, Hawaii, Dallas, Texas; Saudi, 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

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 arrival of the crew at the Kennedy Space Center for a second attempt to launch. The first attempt was scrubbed due to mechanical problems. The crew is introduced to the press by Commander Kregel. Mamoru Mohri speaks to the press in English and Japanese and Gerhard Thiele makes a brief statement in German.

CASI
Space Transportation System: Spacecrews: Astronauts: Crew Procedures (Preflight)

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

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 and mate of the Shuttle Radar Topography Mission (SRTM) system from the Space Station Processing Facility (SSPF) to the Orbiter Processing Facility (OPF).

CASI

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, and Gerhard Thiele putting on equipment for ingress training.

CASI
Astronaut Training; Ingress (Spacecraft Passageways): Spacecrews: Crew Procedures (Preflight)

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 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
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 consist of NASA’s test Director Steve Altimus, the STS-99 Payload Manager Scott Higgenbotham, and the Shuttle Launch Director Ed Priselac. 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

20000026828 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-99 Countdown Status Press Conference

Feb. 10, 2000; In English; Videotape: 10 min. 40 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000027981; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the participants in the Press Conference disclosing the status of the STS-99 flight. The panel consists of NASA’s test Director Jeff Spaulding, the STS-99 Payload Manager Scott Higgenbotham, and the Shuttle Launch Director Ed Priselac. Bruce Bingham NASA’s Public Affairs introduces each panelist as they discuss the servicing of fuel tanks, checkout, closeouts, payload status, and favorable weather conditions. The panelists also answer questions from the audience. Also shown are various shots of the Shuttle on the launch pad.

CASI

Conferences: Checkout; Fuel Tanks; Countdown; Spacecraft Launching; Weather

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. Pudwill Gorie, Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri, and Gerhard J. Thielle, 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. Thielle, 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

20000027562 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS–99 Compiled Orbiter Footage

Apr. 07, 1991; In English; Videotape: 25 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000013423; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows the rollback of STS-39 to the VAB (Vehicle Assembly Building), the rollback of Discovery to the OPF (Orbiter Processing Facility) High Bay 2, Discovery ET Disconnect Door Hinges (Cacks), Discovery ET Disconnect Door Hinges (Edited) and Discovery in the VAB.

CASI

Discovery (Orbiter); Space Transportation System; Space Transportation System Flights; Spacecraft Maintenance

20000027508 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS–99 Flight Crew Post–Landing Press Conference

Feb. 23, 2000; In English; Videotape: 35 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000025580; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, 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 modified radar system. This radar system produced unrivalled 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 Priselac, 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 Priselac 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

20000027509 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS–99 CEII at the OPF 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 crewmembers of STS-99, Commander Kevin R. Kregel, Pilot Dominic L. Pudwill Gorie, Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri, and Gerhard J. Thielle, participating in Crew Equipment Interface Test (CEII) activities at the Orbiter Processing Facility (OPF). The crew is shown checking out and learning about the equipment.

CASI

Astronaut Training; Spacecraft Equipment; Onboard Equipment; Crew Procedures (Preflight); Preflight Operations
Astronauts; Shuttle Imaging Radar; Space Transportation System; Space Transportation System Flights: Spacecruises

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 Hennen, 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, Deutschem 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 avionics. A brief animated video showing how four beams would give a 225 km wide swath of the Earth topography was viewed. Thomas Hennen 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

The primary objective of the SIS-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 would 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 for Earth Sciences; General James C. King, Director National Imagery and Mapping Agency (NIMA); Professor Achim Bachem, Member of the Executive Board, Deutsches Zentrum für Luft- und Raumfahrt (DLR), the German National Aerospace Research Center; and Professor Sergio Deiulio, 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. Deiulio 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

20000277671 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99 Countdown Status Briefing
Jan. 30, 2000; In English; Videotape: 1 hr. 16 min. 22 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 Spaulding (NASA Test Director, Scott Higginbotham (STS-99 Payload Manager), and Ed Pruesel (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 closouts continued and the tanking process was in order. 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

2000027766 NASA Johnson Space Center, Houston, TX USA
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-2000036506; 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 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. 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

2000028408 NASA Johnson Space Center, Cocoa Beach, FL USA
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, and the down 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

2000028409 NASA Johnson Space Center, Houston, TX USA
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 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 (Launching)
complete high-resolution digital topographic database of Earth. This project is named the Shuttle Radar Topography Mission (SRTM).

**CASI**

**Spacecrafts; Conferences: Space Shuttle Missions**

**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 touchdowns 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**

**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-François Clerval, are seen passing over the Vacuum and Florida Peninsulas. Smith and Grunsfeld replace 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 departure 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**

**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 answered questions from the press. The shuttle is also shown on the pad.

**CASI**

**Astronaut Training; Equipment Specifications; T-38 Aircraft; Crew Procedures (Preflight)**

**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 attach Inertial Upper Stage (IUS). The commander of the mission was David M. Walker. The crew was pilot, Ronald J. Grabe, and mission specialists, Norman E. Thagard, Mary L. Cleave, 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**

**Launchdown: Launch Problems; Space Vehicle Checkout Program**

**STS–99 Endeavour: Launch Postponement Press Conference**

Jan. 31, 2000; In English; Videotape: 20 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000025570; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows Ron Dittemore, the Shuttle Program Manager from Johnson Space Center (JSC), participating in a Launch Postponement Press Conference discussing the status of the STS-99 flight. He addresses the condition which caused the postponement and the erroneous response from one of the Master Events Controllers (MEC). The moderator of this conference is Bruce Buckingham from NASA's Public Affairs Office, Ron answers questions from the audience about the MEC responsible for sending commands for launch, and the implications that it might have on the launch schedule.

**CASI**

**Conferences: Spacecraft Launching; Launch Dates; Delay; Prelaunch Problems; Weather; Spacecraft Reliability; Controllers**

**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–2000039778; 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 hydrazine-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**

**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)**

**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 Ingiss Training, Shuttle Simulator rendezvous Training, EVA Preparation, and ISS Stowage Training.

**Astronaut Training:** Ejection Training; Ballist; Virtual Reality; Spacecraft Cabins; Training Simulators

**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 reasons for the splitting of the objectives for STS-101 with STS-106. Horowitz also mentions the scheduled space-walk, 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 space-walk, and docking of the spacecraft. He stresses that he will have an added challenge during the space-walk, 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**

**STS-34 Galileo PCR at Pad & Galileo in Atlantis**
Sep. 12, 1989; 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 space-walk, 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 space-walk, and docking of the spacecraft.

**CASI**

- **Crew Procedures (Preflight): Spacecrews**

**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**

**STS-101: Hubble IST Science**
Apr. 08, 1999; 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. Boggess from NASA Goddard, the Center managing the HST Program; Dr. Bahcall, President Elect of the American Astronomical Union. Dr. Weiler opened the panel discussion by introducing other HST scientists who were in the audience. Dr. Bahcall explained the four major areas that astronomers hope to better understand using the HST data: (1) The size and the 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.

**CASI**

- **Crew Procedures (Preflight): Spacecrews; Astronauts; Space Transportation System; Space Transportation System Flights; Atlantis (Orbiter)**

**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 Specialists, Steven A. Hawley, Bruce McCandless II, and Kathryn D. Sullivan. The mission was launched on April 24, 1999. 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**
repaired equipment, and the change of the batteries. Voss explains why he, 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

2000032464 NASA Johnson Space Center, Houston, TX USA
STS–101: Crew Interview / Susan J. Helms
Mar. 21, 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

2000032470 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–31: Hubble in VPF 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

2000032471 NASA Kennedy Space Center, Cocoa Beach, FL USA
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 date, the avionics box on the BBXRT malfunctioned and had to be changed and retested.

CASI

Astronics: X Ray Telescopes: Clean Rooms

2000032479 NASA Kennedy Space Center, Cocoa Beach, FL USA
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–2000043349; 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

2000032488 NASA Kennedy Space Center, Cocoa Beach, FL USA
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 Durmance, and Ronald Parise. 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

2000032538 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–31: Hubble Discovery Payload Doors Closing
Apr. 08, 1990; In English; Videotape: 2 min. 20 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2000039774; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of mission STS-31 was to deploy the Hubble Space Telescope. The videotape shows the Hubble Space Telescope in Discovery’s payload bay in the Vertical Assembly Building (VAB) clean room, while the payload bay’s doors slowly close.

CASI

Hubble Space Telescope: Payloads: Discovery (Orbiter)

2000032539 NASA Kennedy Space Center, Cocoa Beach, FL USA
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

2000032577 NASA Johnson Space Center, Houston, TX USA
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)
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 crewmembers are seen getting their medical examinations, suiting up, and walking out to the Astro-van. 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 HB1 – IEA Removal
Nov. 14, 1989; In English; Videotape: 4 min. 6 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000039788; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The STS-33 at Pad 9 Integrated Electronic Assembly (IEA.) is shown. The STS-32 IEA removal in the Vehicle Assembly Building (VAB) High Bay 1 (HB.1) is also presented. The change out of the short 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–2000039789; 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. (US.B.I.).

CASI
Space Transportation System; Spacecraft Electronic Equipment

20000033819 NASA Kennedy Space Center, Cocoa Beach, FL USA STS–35: ASTRO–I Assembly at O&C
Apr. 03, 1989; In English; Videotape: 5 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000043445; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the assembly of the ASTRO-I 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–2000045251; 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–2000043974; 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 Office 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 iron batteries, hot control 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–2000039782; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows Milt Heifin, 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. Heifen 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.

CASI
Space Transportation System; Space Transportation System Flights: Atlantis (Orbiter)

20000034044 NASA Kennedy Space Center, Cocoa Beach, FL USA STS–31: Mission Highlights, Part 2
Jun. 21, 1990; In English; Videotape: 27 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000039776; 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 (Orbiter); Teleconferencing; Telecommunication: Conferences

20000034072 NASA Kennedy Space Center, Cocoa Beach, FL USA STS–35/Astro–I: Editors Work Tape
May 25, 1990; In English; Videotape: 53 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000043317; 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, Relolver to the Vehicle Assembly Building (VAB) from OPF, the STS-35/Astro rollout to Pad-A, Broad Band X-Ray Telescope (BBXRT) Servicing, and crew arrival for the Terminal Countdown Demonstration Tests (TCDT). The crewmembers of STS-35, Commander Vance D. Brand, Pilot Gary S. Gardner, and Mission Specialists Jeffrey A. Hoffman, John M. Lounge, Robert A. Parker, Samuel T. Durante, 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; Space Missions (STS); Spacelab Payloads**

2000034073 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-35: Astronaut Training; 2:38 Aircraft; Space Transportation System; Space Transportation

Dec. 02, 1990; In English; Videotape: 35 min. 25 sec. playing time, in color, with 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; Astronaut Missions (STS); Spacelab Astronomy

2000034088 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. Durrance, and Ronald A. Parise, participating in the traditional breakfast prior to launch. The crew is seen suiting 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); Astronaut Missions (STS); Spacelab Astronomy; Spacelab Payloads

2000034099 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-34: Galileo TCDT, 13-15 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 thermal Countdown and Demonstration Tests. The crew is seen arriving in the T-38 aircraft, driving the M133 vehicle. Upon arrival at Kennedy Space Center, Williams addresses the waiting audience. The crew discusses some of the experiments for their mission. They mention Remote Sensing, Recrystallization and Ozone experiments.

**CAS**

Astronaut Training; T-38 Aircraft; Space Transportation System; Space Transportation System Flights: Atlantis (Orbiter)

2000034125 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, suiting 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-2000043448; 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-2000043444; 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. Mullhane, David C. Hilmers, and Pierre J. Thuot, having the traditional breakfast, suiting 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-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. S. Asansen, Director Shuttle Engineer. The STS-31 launch was accomplished with very few problems. Terminal count was restarted and then 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. S. Asansen explains, in detail, how the problem was corrected.

**CASI**

Hubble Space Telescope; Space Transportation System; Spacecraft Launching
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

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.

CASI

Downlinking; Communication Satellites; Ground Stations; Space Transportation System; Space Transportation System Flights; Atlantis (Orbiter)

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.

CASI

Downlinking; Communication Satellites; Ground Stations; Space Transportation System; Space Transportation System Flights; Atlantis (Orbiter)
Mars Observer 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 deploying 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 98 from the launch complex during familiarization activities, and training with the MI13 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.

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 video tape 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.

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 Specialist Mary Ellen Weber, Jeffrey N. Williams, Susan J. Helms, Yuri V. Usachev. This video tape 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.

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, Susan J. Helms, and Yuri Vladimirovich Usachev. This video tape shows the activities of the second day of the flight. On this day the shuttle crew checked the equipment in preparation for rendezvous with the International Space Station. This video shows the astronauts entering the Spacelab, where the supplies bound for the space station are stored. There are also views of the robotic arm, which will be used during the spacewalk to maneuver Williams and Voss between Atlantis and the station.

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Mary Ellen Weber, Jeffrey N. Williams, James S. Voss, Susan J. Helms, and Yuri Vladimirovich Usachev. This videotape shows the activities of the third day of the flight. On this day the shuttle rendezvoused and docked with the station. The videotape shows the rendezvous and the docking maneuver, and some of the crew activities in the shuttle.

**International Space Station: Orbital Rendezvous: Space Transportation System:**

**Spacecraft Docking**

May 19, 2000; In English; Videotape: 17 min. 12 sec. playing time, in color, with sound
Report No.(s): NONP-NASA—VT—2000065771; 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 shows the launch of STS-101, beginning with the pre-flight breakfast and the crew’s introduction. The videotape next shows a pre-dawn view of the orbiter waiting the crew’s arrival. The crew is shown getting into their space suits and then climbing onboard the shuttle. In this videotape we are shown a few of the crew getting into their places onboard the shuttle. We are also shown the newly designed “glass cockpit”, which gives the pilot and the commander better views and are told that this is the first flight of the shuttle with the new design. After the hatch is closed, we see the shuttle launch into the night, followed by the Solid Rocket Boosters (SRB) separation.

**Launch:** Space Transportation System Flights: Spacecraft Launching; Spacecraft Docking; Crew Procedures (Preflight); Preflight Operations

May 19, 2000; In English; Videotape: 20 min. 31 sec. playing time, in color, with sound
Report No.(s): NONP-NASA—VT—2000068746; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fourth 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 performing final preparations for the scheduled space walk. Horowitz, Williams, and Voss are seen in the mid-deck before the space walk. Horowitz and Weber are also seen in the flight deck, powering up the robot-arm. During the space walk Voss is seen checking the American Cargo Crane-Orbital Replacement Unit Transfer Device. Voss and Williams are shown securing the American-built crane that was installed on the station last year. They are seen as they install the final parts (boom extension) of a Russian-built crane on the station. Voss and Williams are also shown as they replace a faulty antenna for one of the station’s communications systems on the Unity Module, and install several handrails and a camera cable on the station’s exterior.

**CASI**

**International Space Station: Spacecraft Docking: Extravehicular Activity: Unity Connecting Module**

May 23, 2000; In English; Videotape: 15 min. 58 sec. playing time, in color, with sound
Report No.(s): NONP—NASA—VT—2000068743; 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 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 ducting 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.

**CASI**

**Ducks:** Electric Batteries: International Space Station: Supplying: Unity Connecting Module; Zarya Control Module; Spacecraft Power Supplies: Crew Procedures (Inflight)

May 24, 2000; In English; Videotape: 16 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP—NASA—VT—2000068740; 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 shows the activities of the sixth day of the flight. The videotape begins with a shot of the Space Station. The narrator remarks that the transfer of supplies and equipment is continuing and the videotape shows the replacing of fans and smoke detectors. There is a group picture on board the station, after which a few questions were asked. The quality of the air inside the station is remarked on as being good. The quality of the air being...
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: Spacecrews; Installing; Logistics; Spacecraft Maintenance  

2000065609 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 hatchtes 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-booster 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: Spacecraft Docking; Hatches: Closing  

20000656093 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; International Space Station: Spacecraft Maintenance; Installing; Logistics; Spacecraft Maintenance  

20000656094 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 return 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 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. Biscanth answered questions from the press after he completed the briefing.  

CASI  

Extravehicular Activity; International Space Station: Space Transportation System; Spacecrews; Spacecraft Maintenance  

20000657498 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 Wongack 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 Tumbio 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  

20000657499 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 ionospheric 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  

20000657500 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
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 heliographic observations to be used in heliospheric studies. This videotape shows the pre-launched sequence 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 four 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: Liftoff (Landing); 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): NONP–NASA–VT–2000076142; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, 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

200001066867 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–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

200000963511 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): NONP–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. Voss, Susan J. Helms, and Yuri Vladinorich Usachev) describe the highlights of the STS 101 Mission. The primary scenes reviewed include the spacewalk, incremental assembly/upgrade, 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; Spacecrews; Space Stations; Space Transportation System

200000985114 NASA Johnson Space Center, Houston, TX USA
STS–16 Crew Interviews: Scott D. Altman
Jul. 19, 2000; In English; Videotape: 30 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000011953; 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 14 year career path through the Johnson Space Center (JSC) as an engineer before finally getting selected into the astronaut program. Other interesting information discussed in this one-on-one interview discusses the main goal of the STS-106 mission, and its scheduled docking with the new International Space Station (ISS) since the arrival and connection of the Zvezda Service Module. Altman also mentions his responsibility during the much-anticipated docking and scheduled spacewalk.

CASI Crew Procedures (Preflight); Spacecrews; Astronauts; Talking

200000985209 NASA Johnson Space Center, Houston, TX USA
STS–16 Crew Interviews: Yuri Malenchenko
Jul. 20, 2000; In English; Videotape: 1 hr. 9 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000011957; 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–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; Cosmonauts; Extravehicular Activity

200000985200 NASA Johnson Space Center, Houston, TX USA
STS–16 Crew Interviews: Boris Morukov
Jul. 20, 2000; In English; Videotape: 37 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000011955; 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 Russian Cosmonaut/Mission Specialist Boris Morukov, M.D., Ph.D. Among other topics, Morukov discusses his background in studying weightlessness at the Russian Institute for Biomedical Problems and how his experiences prepared him to become a Cosmonaut candidate. STS-106 is International Space Station assembly flight ISS–2A.2b and will
Accelerometers; Bays (Structural Units): Cargo

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

**International Space Station: Space Transportation System; Space Shuttle Missions; Astronauts**

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 spacecraft, 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**

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**

STS-106 Crew Interviews: Terrence W. Wilcutt
Jul. 19, 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

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 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**

STS-106 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–2000111959; 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 inhabitation, 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**

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 interviews address 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**

STS-106 Crew Interviews: William M. Shepherd
Feb. 19, 1991; In English; Videotape: 4 min. 14 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000113527; 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 lug hinges on the two 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

2000088453 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

2000088454 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. Lemoir, 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

2000088455 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-39: OMS Pod Thruster Removal/Replace
Feb. 04, 1991; In English; Videotape: 5 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 maneuvering 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

2000088479 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-20001138018; 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 17 sec 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. Blake Hammond, Jr.; and Mission Specialists Guion S. Bluford Jr., Gregory J. Harbaugh, Richard J. Hieb, Donald R. Monmargle, and Charles L. Veatch. 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

2000088480 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

2000088510 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 rollover 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 (Orbiter): Atiyield Surface Movements

2000088532 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

2000088173 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 transition 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
responsibilities during the much-anticipated two-day flight to the ISS, as well as the possibility of his space walk. 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 space walk. 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 TCDT 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 Fullford, as they arrive at Kennedy Space Center (KSC). The crew arrives on T-38 jets for Terminal Countdown Demonstration Tests (TCDT). The astronauts are seen participating in many different activities including the traditional breakfasL suit-up, simulated training, and some beautiful panoramic shots of the shuttle on the launch pad.

CASI
Spacecrews; Crew Procedures (Preflight); Astronaut Training

20000818755 NASA Kennedy Space Center, Cocoa Beach, FL USA STS--41 Ulysses: Ulysses -- The Movie Jun. 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-growing of gallium nitride, fluid behaviors, ecological alteration of plants, growth of semiconductors, thermal transfer, flux behavior, orbiter stability, and the effects of cosmic rays on floppy disks. Also shown is a video release of the STS-40/SLS-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 Fullford, are seen while they exercise and perform their experiments.

CASI
Space Transportation System; Columbia (Orbiter); Get Away Specials (STS); Spaceborne Experiments; Spacelab Payloads

20000883226 NASA Kennedy Space Center, Cocoa Beach, FL USA STS--41 Ulysses TCDT Activities Sep. 10, 1990; In English; Videotape: 28 min. playing time, in color, with sound Report No.(s): NONP--NASA--VT--2000122912; 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 (TCDT). 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

20000883363 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

20000883364 NASA Kennedy Space Center, Cocoa Beach, FL USA STS--40/SLS--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--20001118121; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the preparations of the SRB/MLP for the move to the work stand at Pad B.

CASI
Space Transportation System; Columbia (Orbiter); Get Away Specials (STS); Spaceborne Experiments; Spacelab Payloads

123
Live footage shows the SLS-1 (Spacelab Life Science) payload being lifted by a crane from the work stand to the canister.

CASI
Payload Transfer: Preflight Operations

20000838583 NASA Johnson Space Center, Houston, TX USA
STS–106 Crew Training
Jul. 27, 2000; In English; Videotape: 22 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–200011587; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Live footage of the STS-106 crew members 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 SpaceShuttle 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
Space Shuttle: Astronauts; Coonauts; Crew Procedures (Preflight); Astronaut Training

20000838886 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–41 Ulysses Launch (10/06/90), Ulysses Deploy (10/06/90), Landing (10/10/90)
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 crew members 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.

CASI
Ulysses Mission: Deployment; Payload Delivery (STS); Space Transportation System; Space Transportation System Flights; Discovery (Orbiter)

20000838887 NASA Kennedy Space Center, Cocoa Beach, FL USA
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

20000838888 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–41 Ulysses Breakfast, Suit-up, C–7 Exit, Launch and ISOS Cam Views
Oct. 06, 1990; In English; Videotape: 54 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000122911; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Live footage shows the crew members 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 preparation of the Ulysses Payload. Engineers are seen loading Ulysses to the upper stage, transferring Discovery to an upright position, bolting Discovery to the external tank, rolling Discovery out to the launch pad, and finally installing the Ulysses Payload inside Discovery. Also shown are both night and morning panoramic shots of the shuttle on the pad, main engine start, ignition, liftoff, booster separation, and various camera views of the launch.

CASI
Ulysses Mission: Space Transportation System; Space Transportation System Flights; Manned Space Flight; Discovery (Orbiter)

20000838776 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–41/Discovery Camcorder Footage Replay of Ulysses Deploy on 10/06/90
Oct. 08, 1990; In English; Videotape: 5 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000118125; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Live footage of the STS-41 deployment of the European Space Agency’s Ulysses probe is presented. Richard N. Richards, Commander, Robert D. Cabana, Pilot, Mission Specialists William M. Shepherd, Bruce E. Melnick and Thomas D. Akers are shown aboard the Space Shuttle.

CASI
Deployment: Space Probes; Space Transportation System: Ulysses Mission

20000102394 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–106 Crew Activity Report / Flight Day Highlights Day 2
Sep. 09, 2000; In English; Videotape: 15 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 a 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)

20000102606 NASA Johnson Space Center, Houston, TX USA
STS–106 Crew Activity Report/Flight Day 1 Highlights
Sep. 08, 2000; In English; Videotape: 17 min. 56 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--200013280; 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 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: Service Module (ISS); Spacecraft Docking; Orbital Rendezvous

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--200013582; 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--200013581; 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 checking 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 Activity Report/Flight Day 11 Highlights
Sep. 18, 2000; In English; Videotape: 20 min., 6 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000138904; 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--2000136103; 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 Orbit 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-Alegría, 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**

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2000112950 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**

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2000112965 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**

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2000112966 NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS-46 TCDT Slideware 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)**

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2000112967 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 Milt 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**

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2000114422 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**

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2000114428 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 undocking of Discovery from the International Space Station (ISS) as Lopez-Alegria is 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)**

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2000114429 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 hatch assembly that will later hold the solar array truss while Wakata operates the arm.

CASI

**International Space Station: Service Module (Iss); Discovery (Orbiter)**

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2000114430 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**
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 mating adapter (PMA-3), the common berthing mechanism (CBM), and the spaceswalks. 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*

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200001144899 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 mating adapter (PMA-3), and his spaceswalks. 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*

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200001144881 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–91 ACTS/TOS Payload Briefing
Jul. 06, 1993; In English; Videotape: 56 min. 31 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000157387; No Copyright; Avail: CASI; B02, Videotape-Beta; V03, Videotape-VHS

Richard Gehrely, 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*

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200001144879 NASA Johnson Space Center, Houston, TX USA
STS–92 Crew Interview/L. 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 mating adapter (PMA-3), and his spaceswalks. 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*
Mariana Long with the Center for Macromolecular Crystallography gives an overview of commercial protein 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.

CASI
Crystallography: Protein Crystal Growth: Crystals: Spaceborne Experiments

STS-46 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 Brewster 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.

CASI
Atlantis (Orbiter): Prelaunch Summaries: Spacecraft Launching

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, Marsha 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.

CASI
Spacecrews: Astronaut Training: Crew Procedures (Preflight)

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--2000157737; 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. Wisotz, 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 spacewalk while they install two DC-DC converter units and attach a second tool storage box on the Z1 truss.

CASI
International Space Station: Service Module (Iss); Discovery (Orbiter): Spacecraft Maintenance

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.

CASI
Spacecraft Launching: Discovery (Orbiter): Crew Procedures (Preflight); Spacecraft Landing

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.

CASI
Astronauts: Spacecrews: Spaceborne Experiments

STS-43 Atlantis/Breakfast & Suit-Up, Depart O&C, Ingress, Launch with Isolated Views, TDRS-F 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.

CASI
Deployment: Spacecraft Launching: Spacecraft Landing: Crew Procedures (Preflight)

STS-43 TDRS at the PCR/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.

CASI
TDR Satellites: Atlantis (Orbiter)

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.

CASI
Spacecraft Launching: Microgravity: Spaceborne Experiments; Prelaunch Summaries: Crew Procedures (Preflight); Spacecraft Landing

STS-42 Preflight Background Briefing Life Sciences (MSFC)
Jan. 10, 1990; 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
Reschke, Principal Investigator (PI) Microgravity Vestibular Investigation (MVI), explains what MVI is and the effects of space on the vestibular system. David Heathcote, PI for the Gravitational Plant Physiology Facility (GPPF), describes the GPPF’s on-board experiment involving the effects of light and gravity on plants. Claude Brilloout, Program Scientist of the Biorack Facility, gives an overview of the Biorack equipment and experiment. Alan Mortimer, Chief Life Sciences for the Canadian Space Agency (CSA), describes the on-board experiments for the long- and short-term effects of microgravity on humans and biotechnology (cell separation techniques). The men then answer questions from the press and NASA centers.

CASI

2000118228 NASA Kennedy Space Center, Cocoa 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

Spacecraft: Endeavour (Orbiter): Spacecraft Landing

2000118240 NASA Kennedy Space Center, Cocoa 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, Cocoa Beach, FL USA
STS-45/Atlas-1 Post-Landing Science Briefing from MSFC
Apr. 02, 1992; In English; Videotape: 24 min. 4 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-2000148101; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Dr. Torre gives an overview of the scientific goals of the Atlantis mission and the instruments on board, including Atlas-1. She summarizes the accomplishments of the mission and answers questions from the press. CASI

Atlantis (Orbiter): Postmission Analysis (Spacecraft): Postflight Analysis

2000118242 NASA Kennedy Space Center, Cocoa 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. Footage shows the activities and the Earth are shown, including footage taken over the Red Sea and central South America. Atlantis’ landing is also shown. CASI


2000118243 NASA Kennedy Space Center, Cocoa 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, Cocoa Beach, FL USA
STS-45/Atlas–1 TCDT Activities
Dec. 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 cockpit 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, Cocoa 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-2000167004; 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 Garneau 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: 15 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 Waka, 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)
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 (Reflight); Spacecraft Docking; Closing Hatches

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

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

Launchings: Atlantis (Orbiter); Spacecraft Landing; Crew Procedures (Preflight); Spaceborne Experiments

STS-45 Arias--l/Breakfast & Suit--Up, Isolated Views, On--Orbit Activities, and Landing with Isolated Views

Sep. 17, 2000; In English; Videotape: 61 min. 18 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2000148094; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

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

Discovery (Orbiter); Prelaunch Tests

STS-43 Discovery Rollout to Pad A

Dec. 19, 1991; In English; Videotape: 2 min. 36 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2000148078; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage is shown of the slow rollout of Discovery onto pad A. Different close-up and panoramic shots of the orbiter are also shown.

CASI

Discovery (Orbiter); Prelaunch Tests

STS-43 Astronaut Arrival for TCDT

Jul. 01, 1991; In English; Videotape: 3 min. 8 sec. playing time, in color, with sound (no narration)

Report No.(s): NONP--NASA--VT--2000148071; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage is shown of two T-38 aircrafts jetting on fire nmway after landing. The crew of STS-43 is shown getting out of the cockpiks and boarding a bus to leave the runway.

CASI

Astronauts: Crew Procedures (Preflight); T-38 Aircraft

STS-43 TCDT

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, suitmg 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/Visd 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--2000118116; 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

STS-44 Temperature Probe and MDM

May 22, 1991; In English; Videotape: 2 min. 14 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2000118114; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows close-up shots of the temperature probe for the Columbia orbiter.

CASI

Columbia (Orbiter): Temperature Probes

STS-38 Rollback from Pad A to VAB

Aug. 09, 1990; In English; Videotape: 13 min. 46 sec. playing time, in color, with sound (no narration)

Report No.(s): NONP--NASA--VT--2000113523; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Footage is shown of the slow rollback of Atlantis, travelling from pad A to the Vehicle Assembly Building (VAB).

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, 1990; 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 Mission Specialist Joseph Tamper is seen being interviewed.

2001011515 NASA Johnson Space Center, Houston, TX USA
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 rendez-vous 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

Preflight Summaries: International Space Station; Astronauts

20010001525 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

20010001526 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-2000177364; 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

20010001527 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

20010001528 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 spacecrafts.

CASI

Endeavour (Orbiter); Air Locks; Payloads; Crew Procedures (Inflight)

20010001529 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

20010001553 NASA Johnson Space Center, Houston, TX USA
STS-97 Crew Activity Report/Flight Day 6 Highlights
Dec. 03, 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 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 are seen saying good-bye to the International Space Station’s (ISS) resident crew (Commander Bill Shepherd, Pilot Yuri Gididzko and Flight Engineer Sergei Kriztalev) 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; Spacecraft; Crew Procedures (Inflight)
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

20010101557 NASA Johnson Space Center, Houston, TX USA
STS-97 Crew Activity Report/Flight Day 11 Highlights
Dec. 11, 2000; In English; Videotape: 14 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000179194; No Copyright; Avail: CASI;
B01, 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)

20010102014 NASA Johnson Space Center, Houston, TX USA
STS-97 Crew Activity Report/Flight Day 8 Highlights
Dec. 07, 2000; In English; Videotape: 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 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

20010101050 NASA Kennedy Space Center, Cocoa Beach, FL USA
Rollout of Endeavour at Palmdale, California (Part 1 of 2)
Apr. 25, 1991; In English; Videotape: 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 Sam Iacobelli, Executive Vice-President and CEO of Rockwell International, 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

20010101051 NASA Kennedy Space Center, Cocoa Beach, FL USA
Rollout of Endeavour at Palmdale, California (Part 2 of 2)
Apr. 25, 1991; In English; Videotape: 18 min. 14 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000152220; 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 20010010950), 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. Thorton, 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

2001011085 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; Videotape: 61 min. 56 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001001556; 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 Philadelphia.

CASI
Spacecraft Launching: Spacecraft Landing; Crew Procedures (Preflight); Crew Procedures (Inflight); Discovery (Orbiter); Spartan Satellites

20010101122 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-55 Crew Arrival
Mar. 17, 1993; In English; Videotape: 6 min. 46 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001001577; 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 lift-off delay. Each of the crew members gives a brief statement about their role and expectations for the mission.

CASI
Spacecrews: Crew Procedures (Preflight); Prelaunch Problems

20010101123 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-56 Astronaut Crew Arrival at KSC for Launch
Apr. 02, 1993; In English; Videotape: 11 min. 56 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001001557; 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 (Preflight); Prelaunch Summaries

20010101124 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-56 Atlas-2/TCDT Activities
Mar. 18, 1993; In English; Videotape: 22 min. 56 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001001551; 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 phases of training, including emergency egress training.

CASI
Crew Procedures (Preflight); Astronaut Training
STS-55 Mission Overview, Preflight Briefing from JSC
Feb. 07, 1992; In English; Videotape: 30 min. 9 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001001574; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Gary Cohen, Lead Flight Director, gives an overview of the STS-55 Columbia mission activities, objectives, payload, crew, and SpaceLab 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

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

Dick Young introduces Dr. Jack Kaye, Program Scientist for NASA, Bremen Shaw, Deputy Program Manager Space Shuttle, and Robert Steck, 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); Failure; Spacecraft Launching: Prelaunch Problems

STS-56 Preflight Briefs/Mission Overview from MSFC
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

Chuck Shaw, Lead Flight Director, and Teresa Vanhooser, Mission Manager, give an overview of the STS-56 Discovery mission’s objectives, activities, payloads (ATLAS-2, SPARTAN-201, etc.), and experiments. They then answer questions from the press.

CASI

Prelaunch Summaries; Spaceborne Experiments

STS-41 Ulysses Compiled Flow Tape
Oct. 01, 1990; In English; Videotape: 11 min. 30 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP--NASA--VT--2000118124; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Footage shows the unloading and installation of the Ulysses spacecraft into the payload bay of the Discovery Orbiter. Discovery is then seen during the rollout to the launch site.

CASI

Discovery (Orbiter); Ulysses Mission; Installing

STS-51 Crew Briefing
Jul. 06, 1993; In English; Videotape: 62 min. 32 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000152236; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Commander Frank L. Culbertson, Jr. introduces the crew of STS-51, Pilot William F. Readdy, and Mission Specialists James H. Newman Ph.D., Daniel W. Bursch, and Carl E. Walz, in a preflight conference. Each crew member gives an overview of the mission activities, objectives, and payload (ACTS-TOS, ORFEUS-SPAS, etc.), and answers questions from the press.

CASI

Spacecraft: Crew Procedures (Preflight); Prelaunch Summaries

STS-46 TSS-1
Feb. 07, 1992; In English; Videotape: 4 min. 3 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000152235; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

An overview of the Tethered Satellite System (TSS) is given. Simulations show the deployment and operation of TSS from the Atlantis Orbiter. The experimental applications and objectives are explained.

CASI

Atlantis (Orbiter); Deployment; Simulation; Tethered Satellites

STS-51 Mission Overview
Jul. 06, 1993; In English; Videotape: 32 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000152231; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Robert Castle, Lead Flight Director, gives an overview of the STS-51 Discovery mission, including details on the Space Shuttle, the payloads (ACTS-TOS, ORFEUS-SPAS, etc.), the crew, mission objectives, and the spacewalks to be performed. Simulations of the ACT-TS deployment and the ORFEUS-SPAS operations are shown.

CASI

Deployment; Discovery (Orbiter); Prelaunch Summaries

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 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, Intelsat 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, suiting up, and exiting the Operations and Checkout (O&C) Building.

CASI

**Endeavour (Orbiter); Checkout: Prelaunch Tests; Crew Procedures (Preflight)**

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**2001011189** 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--20000152211; 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**

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**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--20000152118; 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 Mae Jemison, and Payload Specialist Mano 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 questions from the press.

CASI

**Astronaut Training; Prelaunch Summaries; Crew Procedures (Preflight)**

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**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--20000152117; 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 Bomei J. Dunbar, Mission Specialists Ellen S. Baker and Carl J. Meade, and Payload Specialist Lawrence J. DeLucas 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**

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**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--20000152212; No Copyright; Avail: CASI;

B03, Videotape-Beta; V03, Videotape-VHS

Footage of various stages of the STS-49 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 InSight rescue and deployment on flight day 7, and some of the Space Station assembly techniques.

CASI

**Endeavour (Orbiter); InSight Satellite; Spacecraft Launching; Rescue Operations; Crew Procedures (Preflight); Crew Procedures (Inflight)**

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**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--20000148094; 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 (ESA); Tethered Satellite: Atlantis (Orbiter)**

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**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--20000148092; No Copyright; Avail: CASI;

B03, Videotape-Beta; V03, Videotape-VHS


CASI

**Spacecrews; Crew Procedures (Preflight); Spaceborne Experiments; Prelaunch Summaries**

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**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--20000148088; 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) deployment and retrieval are seen.

CASI

**EURECA (ESA); Spacecraft Launching; Spacecraft Landing; Crew Procedures (Preflight); Atlantis (Orbiter)**

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**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--20000148085; 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 Specialist F. Story Musgrave, Marco Rucno Jr., and James S. Voss, and Payload Specialists Thomas J. Hennen, 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**

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**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--20000148077; 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).

TDR Satellites: Inspection

200104011263 NASA Kennedy Space Center, Cocoa Beach, FL USA
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

200104011853 NASA Kennedy Space Center, Cocoa Beach, FL USA
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 Galvez, 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

200104011854 NASA Kennedy Space Center, Cocoa Beach, FL USA
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 Alternus, NASA Test Director, David Flowers, P-6 Truss Integration Engineer, and Ed Priselac, Shuttle Weather Officer. Mr. Alternus 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. Priselac gives a forecast for good launching weather. The men then answer questions from the press.

CASI
Countdown, Weather Forecasting: Trusses; Spacecraft Launching

200104001206 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-97 Countdown Status
Nov. 28, 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

George Diller, NASA Public Affairs, introduces Jeff Spaulding, NASA Test Director, David Flowers, P-6 Truss Integration Engineer, and Ed Priselac, Shuttle Weather Officer. Mr. Spaulding discusses the Shuttle status, successful countdown, and preflight preparations. Mr. Priselac describes a good weather forecast for the upcoming STS-97 Endeavour launch. The men then answer questions from the press.

CASI
Countdown; Prelaunch Summaries; Prelaunch Tests; Weather Forecasting; Spacecraft Launching

200104001186 NASA Kennedy Space Center, Cocoa Beach, FL USA
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

CASI
Astronaut Training; Prelaunch Summaries; Crew Procedures (Preflight)
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

2001011887 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–2001006008; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Danny Schack, 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. Schack describes the challenges of the mission, and the activities and objectives of the spacewalks. He then answers questions from the press. 

CASI 

Extravehicular Activity; Crew Procedures (Inflight); International Space Station; Prelaunch Summaries

2001011858 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–2001006007; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

CASI 

Spacecraft Launching; Weather Forecasting; Prelaunch Summaries

2001011860 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–2001004337; 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 (Preflight); Bailout; Extravehicular Activity

2001011861 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–2001001583; 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

2001011862 NASA Kennedy Space Center, Cocoa Beach, FL USA 

STS–55 Crew Briefing, Part 1 of 2 
Feb. 04, 1993; In English; Videotape: 24 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001001575; 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. Harris Jr., and Payload Specialist Dr. Ulrich Walter and Hans Schlegel, continue to answer questions from the press about the upcoming Columbia mission. 

CASI 

Prelaunch Summaries; Columbia (Orbiter)

2001011949 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 Spalding, NASA Test Director, Scott Higginbotham, KSC Payload Manager, and Ed Prisecar, Shuttle Weather Officer. Mr. Spalding discusses the successful countdown thus far and some of the prelaunch activities. Mr. Higginbotham describes the tow operations and possible changes in the payload configuration. Mr. Priseca forecasts good weather for the upcoming launch. The men then answer questions from the press. 

CASI 

Countdown; Weather Forecasting; Prelaunch Summaries

2001011950 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 F. Story Musgrave, Mario Runco, Jr., and James S. Voss, and Payload Specialists Thomas J. Hennem, is seen at breakfast and suiting 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)

2001011953 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 

Spacecraft; Prelaunch Summaries

2001011954 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**

**STS-46 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–20001011365; 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**

**STS-92 Preflight 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–20001007190; 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 that show the payload 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 Halloway, 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**

**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–20001007191; 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**

**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**

**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–2000148076; 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 successful countdown and launch of the STS-46 Atlantis mission. He then answers questions from the press.

CASI

**Tethered Satellites: Spacecraft Equipment**

**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–2000148077; 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.). Preflight 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**

**STS-56 Post Launch Press Conference**

Apr 09, 1993; In English; Videotape: 26 min. 13 sec. playing time, in color, with sound

Report No.(s): NONP-NASA–VT–20001005173; 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
Astronaut Training; Prelaunch Summaries; Bob Curbeam

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 and hardware it brings to the International Space Station (ISS). Mr. Curbeam discusses his role in the mission’s spacewalks and activities.

CASI
Astronaut Training; Prelaunch Summaries; Crew Procedures (Inflight); Payloads; Extravehicular Activity

2001012124 NASA Johnson Space Center, Houston, TX USA
STS-98 Crew Interview: Marsha Ivins
Jan. 04, 2001; In English; Videotape: 51 min. 29 sec. playing time, in color, with sound
Report No.(s): NONP NASA VT-2001007204; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The STS-98 Mission Specialist Marsha Ivins is seen being interviewed. She answers questions about her inspiration to become an astronaut, her career path, and her training. She gives details on the mission’s goals and significance, and the payload and hardware it brings to the International Space Station (ISS). Ms. Ivins discusses her role in the mission’s spacewalks and activities.

CASI
Astronaut Training; Prelaunch Summaries; Crew Procedures (Inflight); Payloads; Extravehicular Activity

2001012125 NASA Johnson Space Center, Houston, TX USA
STS-98 Crew Interview: Tom Jones
Jan. 04, 2001; In English; Videotape: 51 min. 29 sec. playing time, in color, with sound
Report No.(s): NONP NASA VT-2001007203; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The STS-98 Mission Specialist Tom Jones 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 and hardware it brings to the International Space Station (ISS). Mr. Jones discusses his role in the mission’s spacewalks and activities.

CASI
Astronaut Training; Prelaunch Summaries; Crew Procedures (Inflight); Payloads; Extravehicular Activity

2001012126 NASA Johnson Space Center, Houston, TX USA
STS-98 Crew Interview: Bob Curbeam
Jan. 04, 2001; In English; Videotape: 46 min. 36 sec. playing time, in color, with sound
Report No.(s): NONP NASA VT-2001007202; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The STS-98 Mission Specialist Bob Curbeam 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 and hardware it brings to the International Space Station (ISS). Mr. Curbeam discusses his role in the mission’s spacewalks and activities.

CASI
Astronaut Training; Prelaunch Summaries; Crew Procedures (Inflight); Payloads; Extravehicular Activity

2001012127 NASA Johnson Space Center, Houston, TX USA
STS-98 Crew Interview: Dick Young
Jan. 04, 2001; In English; Videotape: 48 min. 39 sec. playing time, in color, with sound
Report No.(s): NONP NASA VT-2001005159; 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 brief statements about the successful STS-56 Discovery mission and landing. They then answer questions from the press.

CASI
Spacecraft Landing; Postmission Analysis (Spacecraft); Postflight Analysis

2001012128 NASA Johnson Space Center, Houston, TX USA
STS-98 Post Launch Press Conference
Apr. 17, 1993; In English; Videotape: 19 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP NASA VT-2001001569; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The STS-98 Commander Ken Cockrell 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 and hardware it brings to the International Space Station (ISS). Mr. Cockrell discusses his role in the mission’s spacewalks and activities.

CASI
Astronaut Training; Prelaunch Summaries; Crew Procedures (Inflight); Payloads; Extravehicular Activity
Further details 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); Prelaunch Summaries; Astronaut Training

20010013128 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 Launching

20010013129 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–2000142667ar2; 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 resuming 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

20010013130 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–200014266car3; 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. Halsell, Jr. and Mission Specialists Mary Ellen Weber, Jeffrey N. 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.

**CASI**

**Spacecraft Landing; Atlantis (Orbiter); Crew Procedures (Inflight)**

20010013131 NASA Johnson Space Center, Houston, TX USA

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–2000142665art1; 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 Jim 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.

CASI

**Spacecraft Docking; International Space Station; Atlantis (Orbiter); Spacecraft Launching; Crew Procedures (Preflight); Crew Procedures (Inflight)**

20010013150 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS–45 Atlas–1 Compiled Processing Footage

Feb. 20, 1992; In English; Videotape: 36 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 (Atas-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.

CASI

**Checkout; Inspection; Atlantis (Orbiter); Preparation**

20010018389 NASA Johnson Space Center, Houston, TX USA

STS–102 Crew Interview/Paul Richards

Jan. 24, 2001; In English; Videotape: 32 min. 47 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001021777; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-102 Mission Specialist Paul Richards 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. Richards 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.

Author

**Spacecraft; Crew Procedures (Inflight); Prelaunch Summaries; International Space Station**

20010018392 NASA Johnson Space Center, Houston, TX USA

STS–102 Crew Interview/Jim Wetherbee

Jan. 26, 2001; In English; Videotape: 62 min. 22 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001021823; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

STS-102 Commander Jim Wetherbee 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. Wetherbee 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.

**Author**

**Spacecrafts; Crew Procedures (Inflight); Prelaunch Summaries; International Space Station**

20010018399 NASA Kennedy Space Center, Cocoa Beach, FL USA

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

Various shots highlight the STS-63 Endeavour mission. Footage shows the crew suiting up and leaving the Operations and Checkout (O&C) Building, the launch, and landing. Various on-orbit activities are seen, such as docking with the International Space Station (ISS), the spacewalks (installing the PV Module P6), array deployment, meeting the Expedition 1 crew, eating, and undocking. Shots show the northern lights and a meteoric entering Earth's atmosphere from above. The Andes can be seen from the Orbiter while the P6 arrays are deploying.

CASI

**Endeavour (Orbiter); International Space Station; Deployment; Spacecraft Docking; Spacecraft Launching; Crew Procedures (Inflight)**

20010018415 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS–52 Post Launch Press Conference

Oct. 22, 1992; In English; Videotape: 23 min. 3 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001017588; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Dick Young, NASA Public Affairs, introduces Brewer Shaw, Deputy Program Manager Space Shuttle, and Bob Steck, 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, the 100's exceedance of load on the external tank, and the reasons why the interest on the ISS, such as the food preparation area, the sleeping rooms, and the toilet.

CASI

**International Space Station; Spacecraft Docking; Spacecraft Launching; Spacecraft Landing; Crew Procedures (Inflight)**
flight rule for an upper limit of cross winds was waived. The men then answered
questions from the press.

CASI

Columbia (Orbiter); Countdown; Leakage; Loads (Forces); Spacecraft
Launchings; Prelaunch Summaries

200101081416 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–52 Astronaut Quick Facts for TCDT
Oct. 02, 1992; In English; Videotape: 10 min. 11 sec. playing time, in color, with
sound
Report No.(s): NONP–NASA–VT–2001017556; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Footage shows scenes of the Terminal Countdown 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 Specialists 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 (ProFlight)

200101081417 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–52 L-2 Spacelab/Iris 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–NASA–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

200101081436 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–NASA–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
(IMS-07/5A1 (MPLM-1)), and spacewalks. Thomas discusses the upcoming
transfer of the International Space Station’s (ISS) crew Expedition 1 and Expedi-
tion 2 and the role of the Mir Space Station in the evolution and success of the
ISS.

International Space Station: Spacecrews; Prelaunch Summaries; Crew Proce-
dures (Inflight)

200101081437 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–NASA–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

200101081493 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–186 Countdown Status Briefing
Sep. 04, 2000; In English; Videotape: 21 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20001023238; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
Joel Wells, NASA Public Affairs, introduces Jeff Spalding, NASA Test
Director, Scott Higgenbotham, Kennedy Space Center Payload Manager, and Ed
Priselac, Shuttle Weather Officer, who give an overview of the successful count-
down 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

200101081492 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–NASA–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

200101081494 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–48 UARS Release
Sep. 14, 1991; In English; Videotape: 62 min. 24 sec. playing time, in color, with
sound
Report No.(s): NONP–NASA–VT–2001023170; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, 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. Creighotn, 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 storage proce-
dures.

CASI

Upper Atmosphere Research Satellite (UARS); Crew Procedures (Inflight)

200101081495 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–55 Hydraulic Work in Alt Section of Columbia
Mar. 10, 1993; In English; Videotape: 3 min. 15 sec. playing time, in color, with
sound
Report No.(s): NONP–NASA–VT–2001023149; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Footage shows the ground crew doing hydraulic work in the aft section of the
Columbia Orbiter.

CASI

Columbia (Orbiter); Hydraulic Equipment

200101081496 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–55 D–2 Spacelab in Cargo Bay of Columbia in OPF Highbay 2
Jan. 14, 1992; In English; Videotape: 2 min. 22 sec. playing time, in color, with
sound
Report No.(s): NONP–NASA–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); Spacelab

200101081497 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–NASA–VT–2001023133; No Copyright; Avail: CASI;
CASI 2010188682 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-54 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–2001016665; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
CASI Crow Procedures (Inflight); Postlaunch Reports

CASI 2010188683 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-59 Endeavour Space Radar Lab I Antenna Installed on Pallet
Nov. 23, 1993; In English; Videotape: 5 min. 14 sec. playing time, in color, no sound
Report No.(s): NONP-NASA–VT–2001016669; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Footage shows the installation of the Space Radar Lab I Antenna onto the Endeavour Orbiter.
CASI Endeavour (Orbit): Installing; Radar Antennas; Spacecraft Equipment

CASI 2010188684 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-59 Space Radar Lab I Moved to Work Stand
Jan. 10, 1994; In English; Videotape: 7 min. 40 sec. playing time, in color, no sound
Report No.(s): NONP-NASA–VT–2001016693; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Footage shows the Space Radar Lab I being moved to the workstand.
CASI Endeavour (Orbit): Space Laboratories

CASI 2010188705 NASA Kennedy Space Center, Cocoa Beach, FL USA
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–2001023162; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Footage shows the crew of STS-53 (Commander David M. Walker, Pilot Robert D. Cabana, and Mission Specialists Gion 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)

CASI 2010188706 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–54 Tracking and Data Relay Satellite
Jan. 06, 1993; In English; Videotape: 27 min. 59 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–2001023161; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
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 TDRS Satellites: Satellite Design

CASI 201018797 NAS A Kennedy Space Center, Cocoa Beach, FL USA
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–2001023158; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Footage shows the crew of STS-54, Commander John H. Casper, Pilot Donald R. Monmogale, and Mission Specialists Mario Runco, Jr., Gregory J. Harbaugh, and Susan J. Helms 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

CASI 201018788 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–53 Launch and Landing
Dec. 09, 1992; In English; Videotape: 53 min. 42 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–2001023154; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
Footage of various stages of the STS-53 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 several medical experiments, such as taking a picture of the retina and measuring the pressure on the eyeball. One crewmember demonstrates how to use the rowing machine in an antigravity environment.
CASI Spacecraft Launching: Spacecraft Landing; Crew Procedures (Preflight); Crew Procedures (Inflight); Spaceborne Experiments

CASI 201018799 NASA Kennedy Space Center, Cocoa Beach, FL USA
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–2001023153; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
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

CASI 201018710 NASA Kennedy Space Center, Cocoa Beach, FL USA
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–2001023152; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
Louis Kaluzenio, Program Scientist, William T. 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 its x-ray astronomy, 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 (Orbit): X Ray Spectrometers; Payloads: Prelaunch Summaries

CASI 201018718 NASA Kennedy Space Center, Cocoa Beach, FL USA
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–2001023145; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
The activities of the STS-60 Discovery mission are reviewed, including...
details on the Wake Shield deployment, problems with the horizon sensor on the Shield, and the success of the thin film crystal growth experiment.

**CASI**

Deployment: Discovery (Orbiter); Crew Procedures (Inflight); Postlaunch Reports

20010118720 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-60 Firing Room Activities
Feb. 03, 1994; 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)

20010118721 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 Simmons, Houston Museum of Natural Science, give an overview of the spaceborne 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. Simmons then answer questions from the press.

**CASI**

Spaceborne Experiments: Gravitational Effects

20010118722 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-Beta; V01, Videotape-VHS

Footage shows the explosions of many early model rockets and aircraft.

**CASI**

Explosions: Combustion

20010118724 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-Beta; V01, Videotape-VHS


**CASI**

Compartments: Astronauts Training; Crew Procedures (Preflight)

20010118725 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-Beta; V02, Videotape-VHS

The crewmembers of STS-52, Commander James B. Wetherbee, Pilot Michael A. Baker, and Mission Specialists Charles L. Veach, William M. Shepherd, Tamara 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); Crew Procedures (Inflight); Spacecraft Launching; Spacecraft Landing; Spaceborne Experiments

20010118726 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

20010118754 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**

TDR Satellites; Cargo

20010118756 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)

20010118971 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-Beta; V04, Videotape-VHS

Footage of various stages of the STS-52 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 during medical experiments using the Lower Body Negative Pressure unit.

**CASI**

Crew Procedures (Preflight); Crew Procedures (Inflight); Spacecraft Landing; Spaceborne Experiments

20010118972 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 of various stages of the STS-62 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 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 (Preflight); Spacecraft Launching; Spacecraft Landing; Spaceborne Experiments

2001019905 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS–51 ACTS/TOS and SPAS Deploy

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 Orbital Station (ACTS/TOS) and the Shuttle Pallet Satellite (SPAS) as seen from the Discovery Orbiter.

CASI

ACTS: Shuttle Pallet Satellites; Deployment

2001019906 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS–48 Discovery/Prelaunch Activities with Isolated Views

Sep. 12, 1991; In English; Videotape: 48 min. 34 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001023180; 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 (Preflight); Spacecraft Launching

2001019907 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS–54 Astronaut Crew Emergency Egress Training, Press Q&A. TCDT

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 (Preflight); Prelaunch Summaries

2001019908 NASA Kennedy Space Center, Cocoa Beach, FL USA

Ban Joule Hi–8 Footage

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

2001019909 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS–47 Astronaut Crew Training Clip

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 Mae C. Jernson, and Payload Specialist Mmmoru Mohri, is seen during various parts of their training, including SAREX training in the Full Fuselage Trainer (FFT), 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: Egress; Fire Fighting; Training Devices

2001019910 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS–69 TCDT/Crew Emergency Egress, Walk Down, and Press Showing

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. Gernhardt, is seen during emergency egress training and answer questions from the press during the press showing.

CASI

Egress: Crew Procedures (Preflight); Astronaut Training; Prelaunch Summaries

2001019911 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS–69 Launch/Composite of Breakfast, Suiting, and Firing Room Activities

Sep. 07, 1995; In English; Videotape: 11 min. 44 sec. playing time, in color, no sound

Report No.(s): NONP–NASA–VT–2001023127; No Copyright; Avail: CASI;
B03. Videotape-Beta; V03. 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. Gernhardt, is seen at breakfast and suiting up in preparation for the launch of Endeavour. Footage shows Firing Room activities shortly before launch.

CASI

Crew Procedures (Preflight); Ground Based Control

2001019912 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS–60 Discovery/Breakfast, Suit up, Depart O&C, Launch, On–Orbit, Landing

Feb. 11, 1994; In English; Videotape: 53 min. 21 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 (Preflight); Spaceborne Experiments; Spacecraft Launching; Spacecraft Landing

2001019913 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS–83 TCDT Activities

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 (TCDT) activities. Included is footage of Emergency Egress Training and a press question and answer session.

CASI

Astronaut Training: Crew Procedures (Preflight); Prelaunch Summaries

2001019920 NASA Kennedy Space Center, Cocoa Beach, FL USA

A New Beginning

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;
B01, Videotape-Beta; V01, Videotape-VHS

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

2001010191655 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-59 Crew Arrival
Apr. 04, 1994; In English; Videotape: 25 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001023114; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
The crew of STS-59; Commander Sidney M. Gutierrez, Pilot Kevin P. Chilton, Payload Commander Linda M. Godwin, and Mission Specialists Jay Apt, Michael R. Clifford, and Thomas D. Jones, emerge from several T-38 aircraft. Commander Gutierrez introduces the crew and they each make a brief statement about the upcoming Endeavour mission.

CASI
Crew Procedures (Preflight); Prelaunch Summaries; Astronaut Training

2001010191656 NASA Kennedy Space Center, Cocoa Beach, FL USA
SOHO Mate Spacecraft to Payloads
Nov. 05, 1995; In English; Videotape: 19 min. 37 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP--NASA--VT--2001023113; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
Footage shows close-up shots of the SOHO spacecraft in the Spacecraft Assembly and Encapsulation Facility (SAEF-2).

CASI
Assembling; Spacecraft Modules

2001010191657 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-54 Tracking Data and Relay Satellite Briefing
Jun. 06, 1993; In English; Videotape: 27 min. 58 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001023110; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
George Diller, NASA Public Affairs, introduces Charles Vanek, Tracking Data and Relay Satellite (TDRS) Program Manager, who gives an overview of the TDRS program, operations, and system. He then answers questions from the press.

CASI
TDR Satellites; Prelaunch Summaries

2001010191658 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-55 Columbia/Breakfast, Suit-up, Depart O&C, Launch, On-Orbit, Landing
May 01, 1993; In English; Videotape: 55 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001023107; 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

20010101919731 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-59 Endeavour Arrival and Move to MDD
May 02, 1994; In English; Videotape: 18 min. 19 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP--NASA--VT--2001016066; 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

20010101919755 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, Mikhail Sinelnikov of PKA, Vasili Tsibliev of GCTC, Steve Mozes of CSA, Ian Pyke 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

20010101919759 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--2001024843; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
On this third day of the STS-98 mission, the Atlantis Orbiter approaches and docks with the International Space Station.

CASI
Atlantis (Orbiter); International Space Station; Spacecraft Docking

20010101919760 NASA Johnson Space Center, Houston, TX USA
STS-98 Crew Activity Report/Flight Day 1 Highlights
Feb. 08, 2001; In English; Videotape: 16 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001024842; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
On this first 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, are seen during various prelaunch activities. Scenes include the crew at breakfast, suiting up, and leaving the Operations and Checkout (O&C) Building. The launch of Atlantis is also shown.

CASI
Spacecraft Launching; Crew Procedures (Preflight)

20010101919849 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-49 Endeavour Mission Highlights Resource Tape, Part 2 of 2
Nov. 24, 1997; In English; Videotape: 44 min. 17 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000180489; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
Footage shows the in-flight and landing activities of the STS-49 Endeavour crew, 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. Thornton and Akers are seen during their spacewalks as they begin assembly on the Space Station Freedom in the payload bay of Endeavour. The crew is shown during de-orbit preparations (such as suiting up and closing the payload bay doors) and Endeavour is seen landing. Shots of
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 lighting illuminates the clouds.

CASI

Crew Procedures (Inflight); Spacecraft Landing; Assembling

2001019851 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-49 Crew Press Conference, Part 1 of 2
Apr. 08, 1992; In English; Videotape: 62 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000152224; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

The crew of STS-49, Commander Daniel C. Brandenstein, Pilot Kevin P. Chilton, Mission Specialists Pierre J. Thuot, Kathryn C. Thornton, Richard J. Hieb, Thomas D. Akers, and Bruce E. Melnick each give an overview of his or her part in the mission. Questions from the press are answered. This is part one of two videos.

CASI

Endeavour (Orbiter); Prelaunch Summaries; Crew Procedures (Preflight)

2001019852 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-53 Countdown Status Briefing
Nov. 30, 1992; In English; Videotape: 18 min. 1 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023157; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

George Diller, NASA Public Affairs, introduces Mike Leinbach, Shuttle Test Director, and Ed Prussell, Shuttle Weather Officer, USAF. They give a summary of the countdown for the launch of the STS-53 Discovery and information on the weather for the launch time. They then answer questions from the press.

CASI

Countdown; Weather Forecasting; Prelaunch Summaries

2001019855 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-52 Crew Briefing
Sep. 24, 1992; In English; Videotape: 44 min. 4 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001017547; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Commander James B. Wetherbee introduces the crew of STS-52, Columbia, Pilot Michael A. Baker, and Mission Specialists Charles L. Veach, William M. Shepherd, Tamara E. Jernigan, and Steven G. MacLean, in a preflight conference. Each crew member gives an overview of the mission objectives, experiments, payload (LAGEOS-II), and his/her role in the mission. They then answer questions from the press.

CASI

Prelaunch Summaries; Spaceborne Experiments; LAGEOS (Satellite); Crew Procedures (Inflight)

2001019859 NASA Johnson Space Center, Houston, TX USA

STS-98 Crew Activity Report/Flight Day 4 Highlights
Feb. 11, 2001; In English; Videotape: 27 min. 37 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001026557; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

On this fourth day of the STS-98 mission, Mission Specialists Bob Curbeam and Tom Jones are seen suited up in preparation for their upcoming spacewalks and during the spacewalks. The Destiny Laboratory Module is shown as it is lifted out of the payload bay of Atlantis and is attached to the International Space Station (ISS) by Jones.

CASI

International Space Station; Extravehicular Activity; Installing; Destiny Laboratory Module
crew (Commander Kenneth D. Cackrell, Pilot Mark L. Polanski, and Mission Specialist Martha S. Ivins) and the Expedition 1 crew (William M. Shepherd, Yuri P. Gidzenko, and Sergei K. Krikalev) join Curbeam and Jones to answer questions about the mission.

CASI

Crew Procedures (Inflight); Destiny Laboratory Module; Extravehicular Activity

20010202032 NASA Johnson Space Center, Houston, TX USA

STS-98 Crew Activity Report/Flight Day 8 Highlights
Feb. 15, 2001; In English; Videotape: 25 min. 29 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20010208016; 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

200102020281 NASA Johnson Space Center, Houston, TX USA

STS-97 Mission Highlights Resource Tape, Part 1
Feb. 20, 2001; In English; Videotape: 66 min. 57 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20010208105; 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) suit up, replays of the nighttime launch, Launch Control Center at Kenndy 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 2001020828). 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 2001020828).

CASI

Endeavour (Orbiter); Countdown; Spacecraft Launching; Crew Procedures (Preflight); Crew Procedures (Inflight)

200102020282 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–20010208104; 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 2001020281), 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 2001020283).

CASI

Endeavour (Orbiter); International Space Station; Deployment; Crew Procedures (Inflight); Extravehicular Activity

200102020283 NASA Johnson Space Center, Houston, TX USA

STS-97 Mission Highlights Resource Tape, Part 3
Feb. 20, 2001; In English; Videotape: 58 min. 54 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20010208103; 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 2001020281) and ‘STS-97 Mission Highlights Resource Tape, Part 2 of 3’ (document ID 2001020282), the activities of flight days seven through eleven are seen. Footage includes the crew discussing repair procedures for the Solar Array Wing (SAW) with mission managers, shots of the shuttle’s payload bay, the International Space Station (ISS) with Earth in the background, the Node Microelectrode/Orbital Debris Shield removal, the spacewalks performed by Mission Specialists Joseph Tanner and Carl J. Noriega, the undocking of Endeavour and ISS, the Orbital Manoeuvring System (OMS) firing, the payload bay doors closing, and the landing sequence of Endeavour. The Aurora Borealis and a night view of the French Riviera are seen from space.

CASI

International Space Station; Crew Procedures (Inflight); Extravehicular Activity; Spacecraft Landing; Spacecraft Docking

200102020287 NASA Johnson Space Center, Houston, TX USA

STS–98 Crew Activity Report/Flight Day 7 Highlights
Feb. 14, 2001; In English; Videotape: 12 min. 23 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20010207807; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this seventh day of the STS-98 mission, Pilot Mark L. Polanski and Mission Specialists Tom Jones, Bob Curbeam, and Martha Ivins are seen answering questions about the International Space Station (ISS), the mission’s spacewalks, and the Destiny Laboratory Module. Footage shows external views of the Atlantis Orbiter and ISS with a backdrop of Earth.

CASI

Atlantis (Orbiter); International Space Station; Extravehicular Activity; Crew Procedures (Inflight); Destiny Laboratory Module

200102020288 NASA Johnson Space Center, Houston, TX USA

STS–98 Crew Activity Report/Flight Day 6 Highlights
Feb. 13, 2001; In English; Videotape: 15 min. 36 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20010207807; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this sixth day of the STS-98 mission, Mission Specialists Bob Curbeam and Tom Jones are seen finishing the installation of the Destiny Laboratory onto the International Space Station (ISS) during their spacewalks.

CASI

International Space Station; Installing; Destiny Laboratory Module; Extravehicular Activity; Crew Procedures (Inflight)

200102020289 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–20010202129; 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

2001020202485 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–2001020948; 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 Specialists 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. 08, 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

The crews 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 pre-launch breakfast, suit-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 (Preflight)

STS–102 Crew Activity Report/Flight Day 2 Highlights
Mar. 09, 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 3 Highlights
Mar. 10, 2001; In English; Videotape: 16 min. 36 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001031588; 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: Hatches; Spacecraft Docking; Crew Procedures (Inflight)

STS–102 Crew Activity Report/Flight Day 4 Highlights
Mar. 11, 2001; In English; Videotape: 20 min. 32 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001031589; 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 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 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

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 6 Highlights
Mar. 13, 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 7 Highlights
Mar. 14, 2001; In English; Videotape: 22 min. 53 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001032303; 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 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
Internal Toilet: Space Station; 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: Crew Procedures (Inflight)

STS-102 Crew Activity Report/Flight Day 13 Highlights

Mar. 20, 2001; In English; Videotape: 20 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, and Expedition 2 (James Voss, Susan Helms, and Andrew Thomas) are seen in-flight performing spacewalks.

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).

Author
Internal Space Station; Space Station Modules; Crew Procedures (Inflight); Extravehicular Activity; Installing

STS-100 Crew Activity Report/Flight Day 14 Highlights

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 14th day of the STS-100 mission, Pilot 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 Activity Report/Flight Day 15 Highlights

Apr. 04, 2001; In English; Videotape: 26 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 15th day of the STS-100 mission, the crew of STS-100 (Commander James Wetherbee, Pilot James Kelly, and Mission Specialists Andrew Thomas and Paul Richards) are seen in the Discovery Orbiter as they answer questions about their in-flight performance and the mission’s goals and significance. CASI
Discovery (Orbiter); International Space Station; Space Station Modules; Crew Procedures (Inflight); Hatches; Spacecraft Docking

STS-100 Crew Activity Report/Flight Day 16 Highlights

Apr. 05, 2001; In English; Videotape: 25 min. 20 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 16th day of the STS-100 mission, Pilot 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. CASI
Extravehicular Activity; Prelaunch Summaries; Antennas; Installing; Orbital Rendezvous; Robot Arms; Spacecraft Docking

STS-100 Crew Activity Report/Flight Day 17 Highlights

Apr. 06, 2001; In English; Videotape: 28 min. 21 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001047828; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this 17th day of the STS-100 mission, the crew of STS-100 (Commander James Wetherbee, Pilot Sean Peak and Mission Specialist Les Johnson) are seen in the Discovery Orbiter as they answer questions about their in-flight performance and the mission’s goals and significance. CASI
Discovery (Orbiter); International Space Station; Space Station Modules; Crew Procedures (Inflight); Hatches; Spacecraft Docking

STS-100 Crew Activity Report/Flight Day 18 Highlights

Apr. 07, 2001; In English; Videotape: 26 min. 19 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001047829; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this 18th day of the STS-100 mission, the crew of STS-100 (Commander James Wetherbee, Pilot Sean Peak and Mission Specialist Les Johnson) are seen in the Discovery Orbiter as they answer questions about their in-flight performance and the mission’s goals and significance. CASI
Discovery (Orbiter); International Space Station; Space Station Modules; Crew Procedures (Inflight); Hatches; Spacecraft Docking

STS-100 Crew Activity Report/Flight Day 19 Highlights

Apr. 08, 2001; In English; Videotape: 26 min. 19 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001047830; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this 19th day of the STS-100 mission, the crew of STS-100 (Commander James Wetherbee, Pilot Sean Peak and Mission Specialist Les Johnson) are seen in the Discovery Orbiter as they answer questions about their in-flight performance and the mission’s goals and significance. CASI
Discovery (Orbiter); International Space Station; Space Station Modules; Crew Procedures (Inflight); Hatches; Spacecraft Docking

STS-100 Crew Activity Report/Flight Day 20 Highlights

Apr. 09, 2001; In English; Videotape: 26 min. 19 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001047831; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this 20th day of the STS-100 mission, the crew of STS-100 (Commander James Wetherbee, Pilot Sean Peak and Mission Specialist Les Johnson) are seen in the Discovery Orbiter as they answer questions about their in-flight performance and the mission’s goals and significance. CASI
Discovery (Orbiter); International Space Station; Space Station Modules; Crew Procedures (Inflight); Hatches; Spacecraft Docking
installation and capabilities of the Space Station robotic arm, UHF antenna, and Rafaello Logistics Module. Ashby then discusses his views about space exploration as it becomes an international collaboration.

CASI  
Extravehicular Activity; Prelaunch Summaries; Installing; Orbital Rendezvous; Robot Arms; Spacecraft Docking

2001033314  NASA Johnson Space Center, Houston, TX USA  
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 Rafaello Logistics Module. Parazynski 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

2001033315  NASA Kennedy Space Center, Cocoa Beach, FL USA  
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 Donatello. Ms. Rabbi then answers questions from the press.

CASI  
Construction; Logistics; Space Station Modules; Specifications; Prelaunch Summaries

2001033316  NASA Johnson Space Center, Houston, TX USA  
STS–100 Crew Interview: Yuri Lonchakov  
Apr. 02, 2001; In English; Videotape: 24 min. 56 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 Rafaello Logistics Module. Lonchakov 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

2001033317  NASA Kennedy Space Center, Cocoa Beach, FL USA  
STS–102 Expedition 2 Pre–Flight News Conference  
Feb. 28, 2001; In English; Videotape: 45 min. 10 sec. playing time, in color, with sound  
Report No.(s): NONP–NASA–VT–2001047880; No Copyright; Avail: CASI;  
B03, Videotape-Beta; V03, Videotape-VHS  
The crew of STS–102 (Commander James Wetherbee, Pilot James Kelly; STS–102, describing the system racks, cargo elements, and crew supplies delivered via the Leonardo Multi-Purpose Logistics Module. Mr. La Brode 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’ 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.

CASI  
International Space Station; Prelaunch Summaries; Space Station Modules; Spacecraft Docking

2001033320  NASA Johnson Space Center, Houston, TX USA  
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–2001047883; No Copyright; Avail: CASI;  
B03, Videotape-Beta; V03, Videotape-VHS  
STS–100 Mission Specialist Chris Hadfield 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 Rafaello Logistics Module. Hadfield then discusses his views about space exploration as it becomes an international collaboration.

CASI  
Extravehicular Activity; Antennas; Prelaunch Summaries; Installing; Orbital Rendezvous; Robot Arms; Spacecraft Docking

2001033589  NASA Kennedy Space Center, Cocoa Beach, FL USA  
STS–102 Expedition 2 Increment and Science Briefing  
Feb. 28, 2001; In English; Videotape: 38 min. 7 sec. playing time, in color, with sound  
Report No.(s): NONP–NASA–VT–2001048902; No Copyright; Avail: CASI;  
B03, Videotape-Beta; V03, Videotape-VHS  
Merri Sanchez, Expedition 2 Increment Manager, and Yuri Uri, 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. Ms. Uri 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-relex, 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 exoskeleton 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


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: Spacecrews: Prelaunch Summaries: Crew Procedures (Inflight)*

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 Dittemore, NASA Shuttle Program Manager; Tommy Holloway, NASA International Space Station Program Manager; Dave King, NASA Director of Shuttle Processing, and Captain 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*

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–2001044897; 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 hold times, the 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


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*

STS-102 Flight Crew Post-Landing Press Conference
Mar. 21, 2001; In English; Videotape: 24 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001052177; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS


CASI

*Astronaut Performance: Postlaunch Reports*

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 Johnston, 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 Presurized Mating Adapter (PMAS) and the retrieval of the rigid masts from the payload bay of Discovery. Mr. Johnston then answers questions from the press.

CASI

*ExtraVehicular Activity: Prelaunch Summaries: Crew Procedures (Inflight)*

STS-106 TCOT Photo Opportunity
Aug. 17, 2000; In English; Videotape: 19 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001052180; 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. Morozov are shown 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

*Spacecrews: Crew Procedures (Preflight)*

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 Englauf, 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. Englauf, Mr. Hill, and Ms. Castle then answer questions from the press.

CASI

*International Space Station: Spacecraft Docking: Crew Procedures (Inflight): Prelaunch Summaries*
STS-100 Crew Training: Astronaut Training; Crew Procedures (Preflight); Extravehicular Activity; Egress; Astronaut Performance

STS-98 Mission Highlights Resource Tape, Part 1 of 3
Apr. 13, 2001; In English; Videotape: 56 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001054056; No Copyright; Aval: CASI; B03, Videotape-Beta; V03, Videotape-VHS
A continuation of "STS-98 Mission Highlights Resource Tape, Part 1 of 3" (internal ID 2001054056), this video shows 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

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; Aval: CASI; B03, Videotape-Beta; V03, Videotape-VHS
A continuation of "STS-98 Mission Highlights Resource Tape, Part 1 of 3" (internal ID 2001054056) 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 Docking; Endeavour (Orbiter); International Space Station; Crew Procedures (Inflight)

STS-100 Crew Activity Report: Flight Day 1 Highlights
Apr. 24, 2001; In English; Videotape: 24 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001055992; No Copyright; Aval: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this third day of the STS-100 mission, the crewmembers of Endeavour (Commander Kent Rominger, Pilot Jeffery Ashby, and Mission Specialists Chris Hadfield, Scott Parazynski, John Phillips, Umberto Guidoni, and Yuri Valentinovich Lonchakov) are shown 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)

STS-100 Crew Activity Report: Flight Day 7 Highlights
Apr. 19, 2001; In English; Videotape: 20 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001055997; No Copyright; Aval: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this first day of the STS-100 mission, the crewmembers of Endeavour (Commander Kent Rominger, Pilot Jeffery Ashby, and Mission Specialists Chris Hadfield, Scott Parazynski, John Phillips, Umberto Guidoni, and Yuri Valentinovich Lonchakov) are shown 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

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--2001055998; No Copyright; Aval: 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 and construction of the Space Shuttle to its launch, on-orbit performance, and 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
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 Ergometer: Robot Arms; Crew Procedures (Inflight); Extravehicular Activity; Endeavour (Orbiter); International Space Station**

200103899 NASA Johnson Space Center, Houston, TX USA

**STS–100 Crew Activity Report: Flight Day 5 Highlights**

Apr 24, 2001; In English; Videotape: 31 min. 05 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 crews 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 Yuri Usachev and Flight Engineers James Voss and Susan Helms) are seen getting each other after opening the connecting hatchets 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); Spacecucks**

200103900 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 crews 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 unfolds from the payload bay.

Author

**Robot Arms; Spacecucks; Crew Procedures (Inflight); Endeavour (Orbiter)**

2001047481 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 crews 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)**

2001047555 NASA Johnson Space Center, Houston, TX USA

**STS–100 Flight Day 12 Highlights**

May 4, 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 crews 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 Yuri 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); Spacecucks**

2001047588 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**

2001047589 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**

2001047590 NASA Johnson Space Center, Houston, TX USA

**STS–104 Crew Interview: Charlie Hobough**

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 Hobough 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). Hobough 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; Crew Procedures (Inflight)

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; External Tasks; Extravehicular Activity; Spacecraft Docking; Prelaunch Summaries

2001047595 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

2001047633 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 Lunchakov are seen as they unload equipment from the Raffaello 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; Station Modules: Loading Operations

2001047634 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 relieves 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
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 Yuri Usachev and Flight Engineers James Voss and Susan Helms) are seen during the ceremonial 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 ‘Hi-Red 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 (EVA 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 Landing; Crew Procedures (Inflight)

STS-102 Mission Highlight Resource Tape, Tape 3 of 4, Part A

Jun. 21, 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 2 of 2’ (internal ID 2001096941), 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 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--2001101718; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video gives an overview of the STS-92 mission. The crew of the Discovery Orbiter, Commander Brian Duffy, Pilot Pami 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 Landing; Crew Procedures (Inflight)
B03, Videotape-Beta; V03, Videotape-VHS

The crewmembers 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
AstroNav Training: Extravehicular Activity; Shuttle Mission Simulator; Spacecraft Docking; Training Devices: Virtual Reality

2001066319 NASA Johnson Space Center, Houston, TX USA

STS–100 Post Flight Presentation
May 26, 2001; In English; Videotape: 19 min. 56 sec. playing time, in color, with sound
Report No(s): NONP NASA VT-2001107902; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The crewmembers of STS-100, Commander Kent Rominger, Pilot Jeffrey Ashby, and Mission Specialists Chris Hadfield, Scott Parazynski, John Phillips, Umberto Guidoni, and Yuri Valentinovich Lonchakov, narrate this video as footage from the ceremonial breakfast, crew suitaup, and launch of Endeavour are shown. Various on-orbit activities are shown, including the opening of the payload bay doors, the rendezvous and docking of Endeavour with the International Space Station (ISS), the installation and deployment of the ISS Canadian Robotic Arm, the spacewalks, and a video tour through the length of the ISS. The video ends with Endeavour’s undocking from the ISS and the landing of the orbiter.

CASI
Extravehicular Activity: International Space Station; Orbital Rendezvous; Robot Arms; Spacecraft Docking; Crew Procedures (Preflight); Spacecraft Launching; Endeavour (Orbiter)

2001066320 NASA Johnson Space Center, Houston, TX USA

STS–98 Post Flight Presentation
May 26, 2001; In English; Videotape: 19 min. 5 sec. playing time, in color, with sound
Report No(s): NONP NASA VT-2001107901; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The crewmembers of STS-98, Commander Kenneth Cockrell, Pilot Mark Polansky, and Mission Specialists Bob Curbeam, Tom Jones, and Marsha Ivins, narrate this video as footage from the ceremonial breakfast, crew suitaup, and launch of Atlantis are shown. Various on-orbit activities are shown, including the opening of the payload bay doors, the rendezvous and docking of Atlantis with the International Space Station (ISS), the spacewalks, the installation of the Destiny Laboratory Module, and the crew playing in microgravity. The video ends with Atlantis undocking from the ISS and the landing of the orbiter.

CASI
Destiny Laboratory Module; Extravehicular Activity; International Space Station; Orbital Rendezvous; Spacecraft Docking; Spacecraft Launching; Atlantis (Orbiter); Crew Procedures (Inflight)

2001066321 NASA Johnson Space Center, Houston, TX USA

STS–102 Post Flight Presentation
Jun. 18, 2001; In English; Videotape: 20 min. 39 sec. playing time, in color, with sound
Report No(s): NONP NASA VT-2001107900; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The crewmembers of STS-102, Commander James Wetherbee, Pilot James Kelly, and Mission Specialists Andrew Thomas and Paul Richards, narrate this video as footage of the ceremonial breakfast, crew suitaup, and launch of Discovery are seen. Various on-orbit activities are shown, including the opening of the payload bay doors, the rendezvous and docking of Discovery with the International Space Station (ISS), the spacewalks, and the transfer operations of moving cargo from the Leonardo Multipurpose Logistics Module. The video ends with Discovery undocking from the ISS and the landing of the orbiter.

CASI
Extravehicular Activity: International Space Station; Orbital Rendezvous; Spacecraft Docking; Spacecraft Launching; Crew Procedures (Inflight)

2001066389 NASA Johnson Space Center, Houston, TX USA

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 crewmembers 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

2001066390 NASA Johnson Space Center, Houston, TX USA

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)

2001066392 NASA Johnson Space Center, Houston, TX USA

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)

2001066393 NASA Johnson Space Center, Houston, TX USA

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 Yuriy Usachev is shown.

CASI
Air Locks; Extravehicular Activity; International Space Station; Crew Procedures (Inflight)
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 Usachev 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.

**Crew Procedures (Inflight): International Space Station; Leakage: Valves**

STS-104 Flight Day 5 Highlights

Jul. 16, 2001; In English; Videotape: 19 min. 30 sec. playing time, in color, with sound

- Report No.(s): NONP–NASA–VT–2001109807; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The crewmembers of STS-104, 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.

**Crew Procedures (Inflight): International Space Station; Expedition 3**

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.

**Crew Procedures (Inflight): International Space Station**

STS-104 Flight Day 7 Highlights

Jul. 18, 2001; In English; Videotape: 31 min. playing time, in color, with sound

- Report No.(s): NONP–NASA–VT–2001109810; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

External shots of the International Space Station (ISS) show the ISS' robotic arm in grappling position in preparation for lifting an oxygen tank out of the payload bay of Atlantis. Mission Specialists Michael Gernhardt and Jim Reilly are seen as they perform their spacewalks, installing the oxygen tank in place on the ISS.

**Crew Procedures (Inflight): International Space Station; Installing: External Tanks**

**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.

**Expedition 3 Crew Interview: Mikhail Turin**

Jul. 15, 2001; In English; Videotape: 41 min. 15 sec. playing time, in color, with sound

- Report No.(s): NONP–NASA–VT–2001108191; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Expedition 3 Flight Engineer Mikhail Turin 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. Turin 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.

**Expedition 3 Crew Interview: Scott Horowitz**

Jul. 23, 2001; In English; Videotape: 26 min. 16 sec. playing time, in color, with sound

- Report No.(s): NONP–NASA–VT–2001110186; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

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.

**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–2001110140; 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 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
Air Locks; International Space Station; Spacecrews; Crew Procedures (Inflight)

20010807429 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 Hobaugh, 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
Astronaut Training; Education; Astronauts; Crew Procedures (Inflight)

20010807437 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

20010807483 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

20010807484 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 Hobaugh, and Mission Specialists Mike Gernhardt, Jim Reilly, and Janet Kavandi) are seen as they say their farewells 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

20010807565 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

ST-S-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

20010807546 NASA Johnson Space Center, Houston, TX USA
STS–105 Crew Interview: Pat Forrester
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 Hobaugh, and Mission Specialists Mike Gernhardt, 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)

200108076272 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 and the Raffaello 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)

200108076273 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 seen 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 FFI, Long Rendezvous Training in the GNS (Navigation Simulator), and Post Insertion Operations Training at FFI.

CASI
Astronaut Training; Egress; Spacecrews

161
Astronaut Training, Space Stations; Extravehicular Activity

ID 2001117677, 'STS-100 Mission Resource Tape, Part 2 of 4' (internal ID 2001117678), this video shows footage from flight days 10 - 11. The undocking of Endeavour from the International Space Station is seen, and the landing of the orbiter is shown from various viewpoints.

CASI

Endeavour (Orbiter); International Space Station; Crew Procedures (Inflight); Spacecraft Docking; Spacecraft Landing

ID 2001117678, 'STS-100 Mission Resource Tape, Part 3 of 4' (internal ID 2001117678), and 'STS-100 Mission Resource Tape, Part 3 of 4' (internal ID 2001117680), this video shows footage from flight days 10 - 11. The undocking of Endeavour from the International Space Station is seen, and the landing of the orbiter is shown from various viewpoints.

CASI

Endeavour (Orbiter); International Space Station; Crew Procedures (Inflight); Spacecraft Docking; Spacecraft Landing

An overview of the STS-92 Discovery mission (crew: Commander Brian Duffy, Pilot Pamela Melroy, and Mission Specialists Koshi Wakata, Leroy Chiao, Peter Wisoff, Michael Lopez-Alegría, and William McArthur) is given through footage of each flight day. Scenes from flight days one through five show activities such as astronaut prelaunch procedures (breakfast, suit-up, and boarding Discovery), launch, rendezvous and dock with the International Space Station, various on-orbit activities such as the installation of the Z1 truss and the spacewalks performed by Chiao and McArthur. Footage from flight days 6 - 14 can be seen on 'STS-92 Mission Highlights Resource Tape, Part 2 of 4' (internal ID 2001120371), 'STS-92 Mission Highlights Resource Tape, Part 3 of 4' (internal ID 2001120376), and 'STS-92 Mission Highlights Resource Tape, Part 4 of 4' (internal ID 2001120371).

CASI

Extravehicular Activity; International Space Station; Trusses; Spacecraft Launching; Discovery (Orbiter); Crew Procedures (Preflight); Crew Procedures (Inflight); Initing
On this eighth day of the STS-105 mission, Expedition 2 crewmember 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)

20010876266 NASA Johnson Space Center, Houston, TX USA

STS–105 Flight Day 9 Highlights
Aug. 19, 2001; In English; Videotape: 25 min. playing time, in color, with sound
Report No.(s): NON–NASA–VT–2001128338; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this ninth day of the STS-105 mission, Mission Specialists Dan Barry
and Pat Forrester are seen during their spacewalks as they work on the exterior of the Destiny Laboratory Module, installing handrails and connecting cables. CASI

Destiny Laboratory Module: Extravehicular Activity: International Space Station: Crew Procedures (Inflight)

2001076390 NASA Johnson Space Center, Houston, TX USA
STS–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: Orbital Servicing: Crew Procedures (Inflight)

2001076472 NASA Johnson Space Center, Houston, TX USA
STS–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)

2001077940 NASA Johnson Space Center, Houston, TX USA
STS–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

On this 11th day of the STS-105 mission, the three crews, Expedition 2 (Commander Yuriy 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: Spacecrafts: Spacecraft Docking: Crew Procedures (Inflight)

2001077947 NASA Johnson Space Center, Houston, TX USA
STS–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)
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)

20011015089 NASA Johnson Space Center, Houston, TX USA Expedition 4 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--2001100992; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Expedition 4 Commander Yuri Usachev 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 90 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

20011015224 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--20011109435; 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 90 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

20011015230 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--20011109529; 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 90 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

20011016595 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--20011194277; 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, bailout training (with the Expedition 4 crew: Commander Yuri Usachev and Flight Engineers Carl Walz and Daniel Bursch) in CCT2, extravehicular activity (EVA) preparations, Space Station Mockup and Test/Training Facility (SSMTF) 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

20011016608 NASA Johnson Space Center, Houston, TX USA STS--108 Crew Interviews: Dora 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 Dora 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 Raffello 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 MPLM, and the way in which the old and new resident crews of ISS will exchanged. Godwin 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

2001101661 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 Raffello 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 MPLM, and the way in which the old and new resident crews of ISS will exchanged. Godwin 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

20011016602 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 Raffello 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. 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

200101116603 NASA Johnson Space Center, Houston, TX USA

STS-108 Crew Interviews: Dan Tani

Nov. 10, 2001; In English; Videotape: 35 min. 34 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--20011194274; 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’ (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 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

200101117169 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--20011188060; 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 Launching; Spacecraft Docking; Spacecrews; Crew Procedures (Inflight); Discovery (Orbiter)

200101122948 NASA Johnson Space Center, Houston, TX USA

STS-108 Flight Day 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--20011206814; 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, suit up, 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 (Preflight); Crew Procedures (Inflight); Endeavour (Orbiter)

200200013458 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--20011206813; 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 Raffaello Multipurpose Logistics Module.

CASI

Endeavour (Orbiter); Remote Manipulator System; Crew Procedures (Inflight)

200200022232 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 Onufriennko and Flight Engineers Carl Walz and Daniel Bursch) are seen during a ceremony of remembrance on 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 Raffaello Multipurpose Logistics Module.

CASI

Spacecrews; International Space Station; Spacecraft Docking; Crew Procedures (Inflight); Loading Operations
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.

STS-108 Flight Day 3 Highlights

Dec. 10, 2001; In English; Videotape: 28 min. 59 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–2001214917; No Copyright; Avail: CASE; 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 Gorrie, 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.

STS-108 Flight Day 4 Highlights

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; Avail: CASE; 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 activity 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 MikeGemhardt, Jim Reilly, and Janet Kavandi) gets 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).

STS-104 Mission Highlights Resource Tape

Dec. 12, 2001; In English; Videotape: 47 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–2001214905; No Copyright; Avail: CASE; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of 'STS-104 Mission Highlights Resource Tape, Part 1 of 4' (internal ID 2001214904), 'STS-104 Mission Highlights Resource Tape, Part 2 of 4' (internal ID 2001214902), and 'STS-104 Mission Highlights Resource Tape, Part 3 of 4' (internal ID 2001214906), this video shows footage from flight days ten (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.

STS-104 Mission Highlights Resource Tape, Part 4 of 4

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; Avail: CASE; 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 Gemhardt 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. 

Extravehicular Activity: Valves; Crew Procedures (Inflight); International Space Station

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–2001220994; No Copyright; Avail: CASE; 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 Gorrie, 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 fly-around.

STS-108 Flight Day 12 Highlights

Dec. 15, 2001; In English; Videotape: 43 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–2001220995; No Copyright; Avail: CASE; B03, Videotape-Beta; V03, Videotape-VHS

On this twelfth day of the STS-108 mission, the Expedition 4 crew (Commander Yuri Onufrienko and Flight Engineers Carl Walz and Daniel Bursch), and STS-108 crew (Commander Dominic Gorrie, Pilot Mark Kelly, and Mission Specialists Linda Godwin and Daniel Tani) are seen as the unmanned Endeavour undocks from ISS and performs the fly-around.
cru and Commander Culbertson answer questions from the press in an on-orbit interview.

**CASI**

**International Space Station: Crew Procedures (Inflight); Endeavour (Orbiter); Spacecraft Docking**

20020405646 NASA Johnson Space Center, Houston, TX USA

**STS-108 Flight Day 10 Highlights**

Dec. 15, 2001; In English; Videotape: 24 min. 40 sec. playing time, in color, with sound

Report No.(s): NONP NASA VT-20011220096; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this tenth day of the STS-108 mission, STS-108 Mission Specialist Linda Godwin is seen during unloading operations in the Raffaello Multipurpose Logistics Module (MPLM). The exterior of Endeavour and the International Space Station are shown as the Canadarm grapples the MPLM and transfers it to the payload bay of the orbiter.

**CASI**

**International Space Station: Crew Procedures (Inflight); Space Station Modules**

20020405809 NASA Johnson Space Center, Houston, TX USA

**STS-108 Flight Day 9 Highlights**

Dec. 14, 2001; In English; Videotape: 13 min. playing time, in color, with sound

Report No.(s): NONP NASA VT-20011218009; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this ninth 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 during a ceremony where the E3 crew officially hands over the control of the International Space Station to the E4 crew. Kelly, Godwin, and Tani are seen on the middeck involved in stowing equipment.

**CASI**

**International Space Station: Spacecrews; Loading Operations: Crew Procedures (Inflight)**

20020505897 NASA Johnson Space Center, Houston, TX USA

**STS-108 Flight Day 12 Highlights**

Dec. 17, 2001; In English; Videotape: 26 min. 37 sec. playing time, in color, with sound

Report No.(s): NONP NASA VT-20011220095; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this twelfth day of the STS-108 mission, the deployment of the Space Station-3 satellite is shown. Expedition 3 Commander Frank Culbertson, STS-108 Commander Dominic Gorie, Expedition 3 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 during a press conference where the E3 crew officially hands over the control of the International Space Station to the E4 crew. Kelly, Godwin, and Tani are seen on the middeck involved in stowing equipment.

**CASI**

**Crew Procedures (Inflight); Spacecrews**

200204022943 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-20020233710; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, 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 and his career path. He gives details about the mission’s goals and significance, which are all related to maintenance of the Hubble Space Telescope (HST). After the Columbia Orbiter rendezvous with the HST, extravehicular activities (EVA) will be focused on several important tasks which include: (1) installing the Advanced Camera for Surveys; (2) installing a cooling system on NICMOS (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: Spacecrews; Hubble Space Telescope; Spacecraft Maintenance; Crew Procedures (Inflight); Spacecrews**

200203022944 NASA Johnson Space Center, Houston, TX USA

**STS-109 Crew Interviews – Carey**

Feb. 04, 2002; In English; Videotape: 37 min. 7 sec. playing time, in color, with sound

Report No.(s): NONP NASA VT-20020233709; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, 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 Landing**

200203022865 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-20020233712; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, 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 his 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**

200203022866 NASA Johnson Space Center, Houston, TX USA

**STS–109 Crew Interviews: Michael J. Massimino**

Feb. 05, 2002; In English; Videotape: 36 min. 14 sec. playing time, in color, with sound

Report No.(s): NONP NASA VT-20020233713; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-109 Mission Specialist Michael J. Massimino 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 his role in the mission. He 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 also describes the...
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; Spacecrews; Orbital Rendezvous; Extravehicular Activity

20020226807 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 (M03) 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

20020226912 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 grappling 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

20020226954 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 Danie 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 eating food as they choose their menus for on-orbit meals.

CASI

Extravehicular Activity; Spacecrews; Training Simulators; Astronaut Training

20020227074 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)

20020227135 NASA Johnson Space Center, Houston, TX USA
STS–109 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, suit 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 base 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) is 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

20020228932 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 freon loops in the Orbiter’s radiator.

CASI

Astronauts; Columbia (Orbiter); Spacecraft Launching; Hubble Space Telescope
The 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 grappling, 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

STS-109 Flight Day 3 Highlights
Mar. 03, 2002; In English; Videotape: 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 grappling, 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

STS-109 Flight Day 4 Highlights
Mar. 04, 2002; In English; Videotape: 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 seensuiting 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; Crew Procedures (Inflight)

STS-109 Flight Day 2 Highlights
Mar. 02, 2002; In English; Videotape: 18 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2002043975; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Footage shows the cargo bay of the Columbia Orbiter, including the rigid array carrier, the solar arrays to be installed on the Hubble Space Telescope, and the robotic arm. Close-ups show several components of the flight support system. STS-109 Commander Scott Altman, Payload Commander John Grunsfeld, and Mission Specialist Nancy Currie are seen on the flight deck, and they answer questions about the stabilization of the freon flow, details of the upcoming rendezvous and capture of the Hubble Space Telescope, the scheduled spacewalks, and the social dynamics of the flight crew.

CASI

Columbia (Orbiter); Solar Arrays; Robot Arms; Support Systems

STS-109 Flight Day 7 Highlights
Mar. 07, 2002; In English; Videotape: 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 Fault 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 spacesuits 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); Spacecraft Maintenance

STS-109 Flight Day 9 Highlights
Mar. 09, 2002; In English; Videotape: 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 deploy 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)

STS-109 Flight Day 5 Highlights
Mar. 05, 2002; In English; Videotape: 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 the 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; Spacecraft Maintenance; Spacecraft Maintenance

STS-109 Flight Day 6 Highlights
Mar. 06, 2002; In English; Videotape: 33 min. 4 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2002046548; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On the sixth flight day of the STS-109 mission, the crewmembers of the Columbia Orbiter (Commander Scott Altman, Pilot Duane Carey, Payload Commander John Grunsfeld, and Mission Specialists Nancy Currie, James Newman, Richard Linnehan, and Michael Massimino) are shown in selected footage of their servicing mission to the Hubble Space Telescope (HST). The third of five extravehicular activities (EVA) is performed in which Linnehan and Grunsfeld replaced the HST's Power Control Unit (PCU). The astronauts' egress from the Orbiter was delayed after water was found in Grunsfeld's suit. The removal of the old unit was particularly difficult, given the difficulty of demating the PCU's 36 connectors encumbered by the heavy gloves of the astronaut's suit.
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.

**Extravehicular Activity: Hubble Space Telescope**

- 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; Avail: 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 schoolchildren. 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): Spacecru~**

- 2002030739 NASA Johnson Space Center, Houston, TX USA

**STS–105 Mission Highlights Resource Tape: Flight Days 4–6**

Part 2 of 4
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; Avail: 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 grasps 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 Engineer 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. The E2 crew shows the E3 crew around ISS. The crescent moon and the Earth is seen. The video concludes with a view of the HST in orbit.

**CASI International Space Station: Spacecru~; Loading Operations: Crew Procedures (Inflight); Space Station Modules**

- 2002030740 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; Avail: 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’, this video shows footage from flight days seven through nine of the STS–105 mission. Mission Specialists Dan Barry and Pat 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)**

- 2002030741 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; Avail: 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’, 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 removed 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 Engineer 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: Spacecru~; Spacecraft Docking; Crew Procedures (Inflight): Discovery (Orbiter)**

- 2002030742 NASA Johnson Space Center, Houston, TX USA

**STS–105 Mission Highlights Resource Tape: Flight Days 1–3**

Part 1 of 4
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; Avail: 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-Reflect 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; Spacecru~; Crew Procedures (Preflight); Crew Procedures (Inflight)**

- 2002030743 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; Avail: 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 broad 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 robot arm, the Remote Manipulator System, which was controlled by Commander Scott Altman. Following the completion of their spacewalks, 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.

**Astronauts: Robot Arms; Prelaunch Summaries**

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 SO 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.

**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.

**Astronauts: Trusses; 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 SO 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.

**Astronauts: Trusses; Crew Procedures (Inflight); 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.

**Astronauts: Crew Procedures (Inflight); Prelaunch Summaries**

STS–110 Crew Interview: 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 (30 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.

CASI

_Astronauts: Trusses; Crew Procedures (Inflight); 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.

CASI

_Spacecrews; Crew Procedures (Inflight); 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 Don Gorge), 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 Raffiello Multipurpose Logistics Module (MPLM) is unberthed from the shuttle payload bay and attached to the ISS.

CASI

_Endeavour (Orbiter); International Space Station; Orbital Rendezvous; Spacecraft Docking; Spacecraft Testing and Performance; Spacecraft Docking; Crew Procedures (Inflight)_

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 2002049311). 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) schedule 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 moving 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).

CASI

_International Space Station; Spacecrews; Extravehicular Activity; Earth Observations (From Space); Crew Procedures (Inflight)_

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 Dezhnrov) 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 Raffiello Multipurpose Logistics Module (MPLM). External shots show the MPLM dentating 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 byrondowns. ISS is seen against a backdrop of stars as Endeavour flies away. On the return flight to Earth, the Starshine 2 satellite is deployed. The video ends with the orbiter’s landing as seen from several view-points.

CASI

_Endeavour (Orbiter); International Space Station; Spacecraft Docking; Spacecraft Landing; Crew Procedures (Inflight)_

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 64 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.

1994009155 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

1994009161 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--185509; 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-S, retrieval of the Long Duration Exposure Facility, in-orbit activities, and the landing.

Author (revised)

Conférences: Space Transportation System: Space Transportation System Flights

1994000164 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

High velocity gas gun
Oct 1, 1988; In English; 3 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT—93–185311; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

A video tape related to orbital debris research is presented. The video tape covers the process of loading a High Velocity Gas Gun and firing it into a mounted metal plate. The process is then repeated in slow motion.

Author (revised)

Gas Guns; Hypervelocity Guns; Space Debris

19940001310 NASA Lewis Research Center, Cleveland, OH, USA

NASA images 8
Feb 1, 1988; In English; 28 min. 7 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT—93–190213; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

How various NASA satellites are used is illustrated. Satellites included are TIROS, ECHO, RELAY, HEAO, ERTS, LANDSAT, and ATS.

CASI

Satellite Communication: Satellite Imagery; Satellite Tracking

19940001754 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

19940001794 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

19940001796 NASA Goddard Space Flight Center, Greenbelt, MD, USA

TDRS video clip
Jan 1, 1989; In English; 57 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT—93–190383; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video presents Tracking and Data Relay Satellite and Goddard Space Flight Center involvement.

CASI

Satellite Communication: TDR Satellites

19940001801 NASA Marshall Space Flight Center, Huntsville, AL, USA

Space Station: The link to America's future
Feb 1, 1989; In English; 5 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT—93–190451; 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)

19940001823 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 video tape presents Tracking and Data Relay Satellite and Goddard Space Flight Center involvement.

CASI

Project

19940001885 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 documents the planned design and development of the Space Station.

CASI

NASA Space Programs: Space Station Freedom

19940001893 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—93–190467; 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

19940001965 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—93–190399; 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

19940001923 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

19940001972 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
1994/01/1337 NASA, Washington, DC, USA
Space Station resource reel
Jul 1, 1990; In English; 24 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-190471; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
This video presents a series of takes and sequences with model photography of 1990 Space Station design.
CASI
Space Stations: Spacecraft Design

1994/01/14448 NASA, Washington, DC, USA
LDEF update
Oct 1, 1989; In English; 3 min. 17 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-198199; 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 Orbital Environments: Environmental Tests; Long Duration Exposure Facility; Space Shuttle Payloads; Spacecraft Recovery

1994/01/14449 NASA, Washington, DC, USA
Designing Space Station
Oct 1, 1986; In English; 3 min. 23 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-198200; 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 erectorable 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 Maneuvering 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

1994/01/14492 NASA Goddard Space Flight Center, Greenbelt, MD, USA
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

1994/02/9053 NASA Goddard Space Flight Center, Greenbelt, MD, USA
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

1994/02/6055 NASA, Washington, DC, USA
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 multilateral, 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 using 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

1995/06/04137 NASA, Washington, DC, USA
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; Spacecraft Modules

1995/06/04141 NASA, Washington, DC, USA
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 feature also chronicles the development of the X-plane series, beginning with the X-1.
CASI
Aerospace Planes; National Aerospace Plane Program; X-31 Aircraft

1995/06/01626 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Houston, I think we've got a satellite
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 Endeavour. It includes the dramatic capture, repair, and reboot 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

176
The historical first docking in space with the Agena is completed. Camaros record the harrowing experiences of the astronauts as Gemini VIII wildly gyrates through space following a malfunction. The spacecraft is separated from the Agena, brought under control and reentry is achieved.

**JSC Agena Rocket Vehicles: Gemini Spacecraft: Gemini 8 Flight: Malfunctions; Spacecraft Docking**

Oct. 21, 1966; 26p; In English; 25 min. 30 sec. playing time, in color, with sound Report No.(s): NONP—NASA—VT—95—39135; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

In this 'Lift off to Learning' series, Loren Striver, commander of STS 46, and the other members of the mission (Claude Nicollier, Marsha Ivins, Andrew Allen, Jeffrey Hoffman, Franklin Chang-Diaz, and Franco Maerba) use computer graphics, and physical experiments to explain how the tethered satellite to be deployed during their mission will be raised, how it works, the influence of the Shuttle on the satellite and the satellite's influence on the Shuttle's orbit, the gravitational effects, and other effects concerning the Theoretical Physics used to plan this mission (gravity gradient force, center of mass, angular momentum, centrifugal force, and coriolis effect). This video ends with a discussion of the technology transfer and utilization of this tethered satellite concept and design.


Oct. 21, 1994; In English; 21 min. 11 sec. playing time, in color, with sound Report No.(s): NONP—NASA—VT—95—42566; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video, 'Hey! What's Space Station Freedom?', has been produced as a classroom tool geared toward middle school children. There are three segments to this video. Segment One is a message to teachers presented by Dr. Jeannine A. Duane, New Jersey, 'Teacher in Space'. Segment Two is a brief Social Studies to this video. Segment One is a message to teachers presented by Dr. Jeannine A. Duane, New Jersey, 'Teacher in Space'. Segment Two is a brief Social Studies presentation to this video. Segment Three is a message to students presented by Charles Walker, former Space Shuttle astronaut, teaches a group of middle school children, through models, computer animation, and actual footage, what Space Station Freedom is, who is involved in its construction, how it is to be built, what each of the modules on the station is for, and how long and in what sequence this construction will occur. There is a brief animation segment showing, through the use of cartoons, the children fly up to Space Station Freedom as astronauts, perform several experiments and are given a tour of the station, and fly back to Earth. Space Station Freedom will take four years to build and will have three lab modules, one from ESA and another from Japan, and one habitation module for the astronauts to live in.


Dec. 4, 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; B04, 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 (Planets): Mars Pathfinder: Mars Missions: Unmanned Spacecraft**

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; B04, 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 (Planets): Mars Surface: Mars Environment: Spacecraft Entry: Return to Earth Space Flight: Mars Sample Return Missions: Mars Surface Samples: Mars Climate Orbiter**

Dec. 14, 1993; In English; Videotape: 1 hour 25 min. playing time, in color, with sound Report No.(s): NONP—NASA—VT—1999036758; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

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**
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

19990117248 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

20000012873 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 Oubly, 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-200000038.

CASI
Atlas Centaur Launch Vehicle; Conferences

20000013559 NASA Kennedy Space Center, Cocoa Beach, FL USA
TRW Video News: Chandra X–ray Observatory
July 1999; 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 fly-by 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

20000014071 NASA Kennedy Space Center, Cocoa Beach, FL USA
Apollo 11 Launch
Jan. 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 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 Florida 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 skid separation and launch escape tower separation from the spacecraft.

CASI
Apollo 11 Flight: Liftoff (Launching); Countdown

20000033143 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–2000000334; No Copyright; Avail: CASI;
B03, 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 shots 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 soup 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 MMDF (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 Dunsmett, 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, infra-red 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

20000087588 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta XTE 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–2000007858; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This Kennedy Space Center video presents a live footage of Delta XTE moving to CX 17.

CASI
Delta Launch Vehicle; X Ray Timing Explorer; Ground Support Equipment; Space Transportation

20000087581 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta XTE 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–2000007859; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
The X-ray Timing Explorer (XTE) is a satellite that observes the fast-moving, high-energy world of black holes, neutron stars, X-ray pulsars, and bursts 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.

This Kennedy Space Center video presents a live footage of Delta XTE fairing installation at Complex 17-B.

Delta Launch Vehicle: Geomagnetic Tail; Earth Magnetosphere

This Kennedy Space Center video presents live footage of the Delta II Geotail Launch Vehicle test. The Geotail Satellite was launched aboard Delta II to study the dynamics of the Earth's magnetotail over a wide range of distance. The mission lasted almost four years.

Support Equipment

The Delta-II 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.

Military Spacecraft; Earth Observations (From Space); Satellite Constellations; Microsatellites

This video presents live footage 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; ATS Inuichi, Project Manager, ISAS (Institute of Space and Astronautical Science) Tokyo; Michael Calabrese, Program Manager, NASA Headquarters; Kenneth Sizemore, Project Manager, GSFC; Tono Uesugi, Project Manager, ISAS; John Beckham, Delta Launch Manager, GSFC; and Joel Umbiolo, Launch Weather Officer, CCABS (Cape Canaveral Air Force Station). ATS Inuichi 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 Uesugi discusses spacecraft readiness for the July 24, 1992 launch, and Joel Umbiolo 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.

Geosatellite: Geosatellite 1

This Kennedy Space Center video presents live footage of the GOES GOES-J satellite at Astrotech. This Kennedy Space Center video presents live footage of the GOES Geostationary Operational Environmental Satellite at Astrotech with views of its exterior and the Space Systems Loral logo. The GOES mission is to provide weather imagery and quantitative sounding data for weather forecasting and related services.

GOES 9: Geosatellite Systems

This Kennedy Space Center video presents live footage of the GOES Geostationary Operational Environmental Satellite at Astrotech with views of its exterior and the Space Systems Loral logo. The GOES mission is to provide weather imagery and quantitative sounding data for weather forecasting and related services.

Satellites; Arrivals

This 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-VHS

This video presents 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; ATS Inuichi, Project Manager, ISAS (Institute of Space and Astronautical Science) Tokyo; Michael Calabrese, Program Manager, NASA Headquarters; Kenneth Sizemore, Project Manager, GSFC; Tono Uesugi, Project Manager, ISAS; John Beckham, Delta Launch Manager, GSFC; and Joel Umbiolo, Launch Weather Officer, CCABS (Cape Canaveral Air Force Station). ATS Inuichi 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 Uesugi discusses spacecraft readiness for the July 24, 1992 launch, and Joel Umbiolo 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

Geosatellite: Geosatellite 1

This Kennedy Space Center video presents live footage of Delta XTE fairing installation at Complex 17-B.

Delta XTE Fairing Installation at Complex 17-B

This Kennedy Space Center video presents live footage of the Delta XTE (X-Ray Timing Explorer) fairing installation is presented. The fairing is installed to provide a smooth surface for the airflow. The primary purpose of the fairing is to reduce drag. The installation of the fairing occurred at complex 17-B (Cape Canaveral Air Station).

CASI

Fairings: X-Ray Timing Explorer; Delta Launch Vehicle; Installing

This Kennedy Space Center video presents live footage of the GOES Geostationary Operational Environmental Satellite at Astrotech with views of its exterior and the Space Systems Loral logo. The GOES mission is to provide weather imagery and quantitative sounding data for weather forecasting and related services.

CASI

GOES 9; Geosatellite Systems

This Kennedy Space Center video presents live footage of the GOES Geostationary Operational Environmental Satellite at Astrotech with views of its exterior and the Space Systems Loral logo. The GOES mission is to provide weather imagery and quantitative sounding data for weather forecasting and related services.

CASI

Delta II Geotail Test D5040

This video presents live footage of the Delta II Geotail Launch Vehicle test. The Geotail Satellite was launched aboard Delta II to study the dynamics of the Earth's magnetotail over a wide range of distance. The mission lasted almost four years.

CASI

Delta Launch Vehicle: Geomagnetic Tail; Earth Magnetosphere

This Kennedy Space Center video presents live footage of the Delta II Geotail Launch Vehicle test. The Geotail Satellite was launched aboard Delta II to study the dynamics of the Earth's magnetotail over a wide range of distance. The mission lasted almost four years.

CASI

Delta Launch Vehicle: Geomagnetic Tail; Earth Magnetosphere

This Kennedy Space Center video presents live footage of the GOES Geostationary Operational Environmental Satellite at Astrotech with views of its exterior and the Space Systems Loral logo. The GOES mission is to provide weather imagery and quantitative sounding data for weather forecasting and related services.

CASI

GOES 9; Geosatellite Systems

This Kennedy Space Center video presents live footage of the GOES Geostationary Operational Environmental Satellite at Astrotech with views of its exterior and the Space Systems Loral logo. The GOES mission is to provide weather imagery and quantitative sounding data for weather forecasting and related services.

CASI

Delta II Geotail Test D5040

This video presents live footage of the Delta II Geotail Launch Vehicle test. The Geotail Satellite was launched aboard Delta II to study the dynamics of the Earth's magnetotail over a wide range of distance. The mission lasted almost four years.

CASI

Delta Launch Vehicle: Geomagnetic Tail; Earth Magnetosphere

This Kennedy Space Center video presents live footage of the GOES Geostationary Operational Environmental Satellite at Astrotech with views of its exterior and the Space Systems Loral logo. The GOES mission is to provide weather imagery and quantitative sounding data for weather forecasting and related services.

CASI

GOES 9; Geosatellite Systems

This Kennedy Space Center video presents live footage of the GOES Geostationary Operational Environmental Satellite at Astrotech with views of its exterior and the Space Systems Loral logo. The GOES mission is to provide weather imagery and quantitative sounding data for weather forecasting and related services.

CASI

Delta II Geotail Test D5040

This video presents live footage of the Delta II Geotail Launch Vehicle test. The Geotail Satellite was launched aboard Delta II to study the dynamics of the Earth's magnetotail over a wide range of distance. The mission lasted almost four years.

CASI

Delta Launch Vehicle: Geomagnetic Tail; Earth Magnetosphere
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

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20000058130 NASA Kennedy Space Center, Cocoa Beach, FL USA

SOHO Payload Mate to Atlas/Centaur at the SAF-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

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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

This footage shows the deployment mechanism of the solar panel for XTE spacecraft. Other scenes feature technicians making adjustments to software for deployment of the solar panels.

CASI
Deployment: Solar Cells; Panels; Solar Collectors

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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 moving through the high-energy winds of solar energy, neutron stars, and pulsars. This footage shows the XTE 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.

CASI
Clean Rooms: X Ray Timing Explorer

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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 propellants are aboard the vehicle, verifying the structural integrity of the Atlas first stage and Centaur upper stage tanks.

CASI
Atlas Centaur Launch Vehicle; Prelaunch Tests; Structural Analysis; Spacecraft Structures

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20000058147 NASA Kennedy Space Center, Cocoa Beach, FL USA

Delta II/Geostationary 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/Geostationary Mission. For the first part of the press conference, see NONP-NASA–VT–2000078601.

CASI
Geophysical; Solar; Spacecraft Launching; Prelaunch Summaries; Delta Launch Vehicle

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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

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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

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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

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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 workcrews 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

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20000059214 NASA Kennedy Space Center, Cocoa Beach, FL USA

Delta II/Geostationary 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**

20000592219 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**

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**

20000660865 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**

20000662361 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 answering questions from various NASA Centers and Paris.

CASI

**SOHO Mission: ESA Satellites: Conferences**

20000067278 NASA Kennedy Space Center, Cocoa Beach, FL USA

**GEOS-I Satellite Applications Briefing**

Apr. 12, 1994; In English; Videotape: 53 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000081542; No Copyright; Avail: CASI; B03; Videotape-Beta; V03; Videotape-VHS

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**

20000064069 NASA Kennedy Space Center, Cocoa Beach, FL USA

**Dutch Viking TROS Actua Special**

Sep. 02, 1986; In English; Videotape: 1 hr. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000081534; No Copyright; Avail: CASI; B03; Videotape-Beta; V03; Videotape-VHS

Footage shows the night vertical takeoff of the Viking Hollon hot air balloon. The crew is shown participating in survival technique training, boarding the plane to depart to Canada, and preparing for the vertical takeoff in the hot air balloon across the Atlantic Ocean. Scenes also include the making of the capsule for the balloon, some flight activities, and the landing of the balloon.

CASI

**Vertical Takeoff; Balloon Flight; Vertical Flight; Climbing Flight; Vertical Landing; Crash Landing**

20000064717 NASA Marshall Space Flight Center, Huntsville, AL USA

**Starfire I/Consort III Launch**

May 16, 1990; In English; Videotape: 28 min. 11 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000081529; No Copyright; Avail: CASI; B02; Videotape-Beta; V02; Videotape-VHS

The Consort 3 is a commercial suborbital rocket that carried 12 microgravity experiments. It was launched on a Starfire rocket on May 16, 1990, from the Naval Ordnance Missile Test Station facilities at the U.S. Army’s White Sands Missile Range (WSMR), NM. The videotape opens with approximately 2 minutes of a man speaking into a microphone but there is no sound. This is followed by a brief summary of the payload, and the expected trajectory, a view of the launch vehicle, the countdown and the launch. The videotape then shows a film clip from the University of Alabama, with Dr. Francis Westling, project manager for the Consort 3 project, speaking about the mission goals in the materials science experimentation. The video shows footage of the payload being assembled. The next section is a discussion by Dr. Roy Hammstedt, of Pennsylvania State University, who reviews the Penn State Bio Module, and the goal of learning about the effects of gravity on physiology. This is followed by George Meyben, from McDonald Douglas, who spoke about the payload integration process while the video shows some of the construction. The last section of the videotape shows a press conference at the launch site. Ans Villarral answers questions from the press about the flight.

CASI

**Launching; Microgravity; Payloads; Low Gravity Manufacturing; Gravitational Physiology; Physiological Effects**

20000064889 NASA Kennedy Space Center, Cocoa Beach, FL USA

**AC–67/FLTSATCOM Launch with Isolated Cam Views/Freeze of Lightning/Press Conference**

Mar. 26, 1987; In English; Videotape: 34 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000081504; No Copyright; Avail: CASI; B03; Videotape-Beta; V03; Videotape-VHS

The FLTSATCOM system provides worldwide, high-priority UHF communications between naval aircraft, ships, submarines, and ground stations and between the Strategic Air Command and the national command authority network. This videotape 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 videotape shows three isolated views of the launch, and then a freeze shot of a lightning strike shortly after the launch. The tape then shows a press conference, with Mr. Wolmater, Mr. Gibbs, and Air Force Colonel Alsbrokeo. 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

**Fleet Satellite Communication System: Launching; Lightning; Failure; Liftoff (Launching); Launchers**

20000067665 NASA Kennedy Space Center, Cocoa Beach, FL USA

**TOPEX/POSEIDON Launch from Guiana Space Center Aboard an Ariane 42P**

Aug. 10, 1992; In English; Videotape: 22 min. 23 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000081530; No Copyright; Avail: CASI; B02; Videotape-Beta; V02; Videotape-VHS

Footage shows the Launch Control Center (LCC) as they prepare for launch. During preparation Charles Bigot, Chairman and C.E.O. of Arianespace, and Jean-Daniel Levy, 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 launching of the TOPEX/POSEIDON satellite.

CASI

**Poseidon Satellite: TOPEX; Spacecraft Launching; Ariane Launch Vehicle**

20000067668 NASA Kennedy Space Center, Cocoa Beach, FL USA

**Pegasus Departs from KSC**

Feb. 09, 1993; In English; Videotape: 2 min. 32 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000081532; No Copyright; Avail: CASI; B01; Videotape-Beta; V01; Videotape-VHS

Footage shows the departure of the Pegasus launch vehicle from Kennedy Space Center (KSC).

CASI

**Pegasus Air-Launched Booster; Air Launching; B-52 Aircraft**

20000068517 NASA Kennedy Space Center, Cocoa Beach, FL USA

**Atlas—Uncrating of SOHO satellite at the SAEF 2**

Aug. 05, 1995; In English; Videotape: 6 min. 58 sec. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–2000081537; No Copyright; Avail: CASI; B01; Videotape-Beta; V01; Videotape-VHS

Footage shows the removal of the SOHO satellite from its packaging at the Spacecraft Assembly and Encapsulation Facility (SAEF) 2.

CASI

**SOHO Mission: Scientific Satellites**

20000068916 NASA Kennedy Space Center, Cocoa Beach, FL USA

**TOPEX Press Conference (2 of 2)**

Feb. 26, 1993; In English; Videotape: 21 min. 23 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000081532; No Copyright; Avail: CASI; B02; Videotape-Beta; V02; Videotape-VHS

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. Answers address 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
the World Ocean. The video also shows stills of the Central Pacific Ocean from Nov. 1992 to Jan. 1993 and observations of the El Nino events.

CASI
Conferences: Topography; Kelvin Waves

20000070492 NASA Kennedy Space Center, Cocoa Beach, FL USA
AC-67 Press Conference
Mar. 26, 1987; In English; Videotape: 29 min., .05 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000078699; 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. This videotape is a press conference held to review the incident. Mr. John Gibb, the Atlas-Centaur Program Manager at Lewis Research Center, opens the press conference with a statement that reviews the situation, and what is known about the accident. He reviews the constraints to launch and explains that to the best of his knowledge there was no violation of these constraints. He further states that a review panel will investigate the circumstances and make recommendations. The press conference is then opened up to questions. Most of the questions concern the weather conditions and the existence of lightning in the area. The Air Force representative, Colonel John Albrook, is asked if the loss of the satellite would pose any problems. He answers that there were several satellites performing the role for which this satellite was slated, and that these were still healthy, and capable of continuing for a considerable length of time.

CASI
Lightning; Weather; Flight Hazards; Meteorological Parameters; Liftoff (Launching)

20000088526 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta XTE Solar Panel Deployment and Stowing
Jun. 13, 1995; In English; Videotape: 6 min. 17 sec. playing time, in color, without sound
Report No.(s): NONP--NASA--VT--2000085919; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This NASA Kennedy Space Center video presents live footage of the Delta XTE Solar Panel Deployment and Stowing.

CASI
Deployment: Stowage (Onboard Equipment); Delta Launch Vehicle; X Ray Timing Explorer; Solar Energy

20000118254 NASA Kennedy Space Center, Cocoa Beach, FL USA
TDRS and the TDRS System
Jul. 19, 1991; In English; Videotape: 10 min. 19 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000148096; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
An overview of the Tracking and Data Relay Satellite (TDRS) system is given, including a brief history, the purpose of the TDRS, and who controls the satellite. The S-band and KU-band antenna are described. Footage of the TDRS-E (the fifth TDRS) deployment and images of various spacecraft from space are shown, along with computer simulations of the TDRS's operation.

CASI
Deployment: TDR Satellites; Satellite Antennas

20010029210 NASA Johnson Space Center, Houston, TX USA
International Space Station Overview
Jun. 07, 1997; In English; Videotape: 11 min. 7 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001041435; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
An overview of the construction of the International Space Station (ISS) is given through computerized animations of the assembly of the various modules. The importance of the experiments to take place on board the ISS are described. The experiments focus on the fields of medicine, liquids, 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

20010029211 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--2001041438; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, 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 (PMA-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 Module; (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

20010029212 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--2001041443; 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-106, 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 Rafaello 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

20010029215 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--2001041440; 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 life jackets and tethers, are described. Astronaut training in the Neutral Buoyancy Laboratory (NBL) and shuttle simulators are also seen.

CASI
International Space Station; Astronaut Training; Safety Devices; Tethers
The construction and assembly of the International Space Station (ISS) is seen through various clips. Live footage shows the following: (1) the Zarya Module under construction and during launch preparations; (2) the Unity Module during construction, during launch preparations, and being lowered into the payload canister; (3) STS-88 Mission Specialists Jerry Ross and Jim Newman during training for their spacewalks, including activities in the Neutral Buoyancy Laboratory (NBL); (4) Zarya and Unity docking to the Service Module; (5) the Soyuz spacecraft as it docks with ISS; and (6) a Transhab animation played by the orchestra. The music of '2001: A Space Odyssey' is played during the prelaunch press conference. Each crewmember gives a brief statement about his expectations for the upcoming mission and they answer questions from the press.

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) launch preparations (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.

The computerized animations show the solar arrays deploying on Zarya 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: Construction; Spacecraft Docking; Discovery (Orbiter)
crew performs experiments (solar effects, Earth observation), monitors their health, and goes 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 lift-off 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 on 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-man crews are seen as they perform experiments (solar effects, Earth observations), exercise, and play in zero gravity.

**CASI**

**Skylab Program: Spacecrews**

**20010117931 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—2001181398; 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 scientific 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; for space instruments not integral to the vehicle itself see 35 Instrumentation and Photography; for spaceborne tele- scopes and other astronomical instruments see 89 Astronomy, Instrumentation and Photography; for spacecraft instruments and other astronomic instruments see 89 Astronomy.

**19940014483 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 observers 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 (STS); Ground Stations; Loading Operations: Spaceborne Astronomy:**

**Spaceborne Telescopes**

**19950004165 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.

**LeRC**

**Acceleration (Physics); Accelerometers; Microgravity; Onboard Equipment; Space Shuttles; Spacecraft Instruments**

**20010018497 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 Endurance and Atlantis Orbiters and are shown to the music of the American National Anthem.

**CASI**

**Spacecraft Launching:**

**Spacecraft Landing:**

**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; 26 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—185302; 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
Advanced Solid Rocket Motor (ASRM) program at NASA Lewis Research Center, Cleveland, OH, USA.

This video tape describes the redesign and construction of the Advanced Solid Rocket Motor.

**Advanced Solid Rocket Motor (ST5): Solid Propellant Rocket Engines**

19940410878 NASA Lewis Research Center, Cleveland, OH, USA

**NASA images 10**

Mar 1, 1988; In English; 29 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190216; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Electric propulsion engine research from the 1960’s is looked at.

**Electric Propulsion: Engines**

19940411030 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.

**Photovoltaic Conversion: Solar Dynamic Power Systems: Space Station Power Supplies: Turboprop Aircraft**

19940427312 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–94–19961; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video explains the Work package 4, an electrical propulsion 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.

**Space Station Freedom: Space Station Power Supplies**

19940429081 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.

**Advanced Solid Rocket Motor (ST5): Environment Effects: Environment Protection: Rocket Test Facilities; Test Firing**

19940429076 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.


24

**COMPOSITE MATERIALS**

Includes physical, chemical, and mechanical properties of laminates and other composite materials.

19940410872 NASA Lewis Research Center, Cleveland, OH, USA

**Low thrust propulsion no. CV-110**

May 1, 1990; In English; 19 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**

2000058851 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 Pods: Solid Propellant Rocket Engines**

20000118239 NASA Kennedy Space Center, Cocoa Beach, FL, USA

**OV–105 Endeavour Main Engine Press Showing at VAB**

Nov. 30, 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**

200101019014 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–2001023116; 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**

186


19940009143 NASA Marshall Space Flight Center, Huntsville, AL, USA
Mid-deck experiments, STS–26
Sep 1, 1988; In English; 3 min. 37 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–185326; No Copyright; Available: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Phase partitioning, ISO electric focusing, automated directional solidification furnace, mesoscale experiment, and others are explained.

Author (revised)
Space Shuttle Payloads: Spaceborne Experiments

26

METALS AND METALLIC MATERIALS

Includes physical, chemical, and mechanical properties of metals and metallic materials; and metallurgy.

19940009143 NASA Marshall Space Flight Center, Huntsville, AL, USA
Mid-deck experiments, STS–26
Sep 1, 1988; In English; 3 min. 37 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–185326; No Copyright; Available: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Phase partitioning, ISO electric focusing, automated directional solidification furnace, mesoscale experiment, and others are explained.

Author (revised)
Space Shuttle Payloads: Spaceborne Experiments

25

INORGANIC, ORGANIC AND PHYSICAL CHEMISTRY

Includes the analysis, synthesis, and use of 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.

19940027377 NASA Lewis Research Center, Cleveland, OH, USA
Solid surface
Dec 1, 1992; In English; 7 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–9946; No Copyright; Available: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video tape describes the development of the Solid Surface Combustion Experiment (SSCE) by researchers at NASA LeRC. The experiment studies fire behavior over a small solid fuel sample subjected to microgravity conditions in Earth orbit. Buoyant convection, which determines heat transfer in fires on Earth, disappears in microgravity; hence, this experiment will help researchers understand how fires act on Earth.

CASI
Combustion Physics: Fires; Flame Propagation; Heat Transfer; Microgravity; Solid Surfaces

19950002784 National Inst. of Standards and Technology, Gaithersburg, MD, USA
Chemical engineering: Measurements for a competitive age
Jan 1, 1986; In English; 19 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–49993; No Copyright; Available: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The NIST (National Institute of Standards and Technology) activities supporting chemical research, environmental research, combustion and fuel research, and related industries are described in this video. Highlights include private sector involvement in the research and associated guest scientist programs, the calibration of customers’ instruments, and the direct funding for the NIST research projects by outside industries.

CASI
Chemical Engineering: Combustion Chemistry; Combustion Physics: Environmental Chemistry; Research Projects; Technology Assessment; Units of Measurement

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
Apr 1, 1985; In English; 4 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190403; No Copyright; Available: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This videotape shows how a NASA inorganic coating for metal was used on the Statue of Liberty during its recent refurbishment.

CASI
Inorganic Coatings: Metal Coatings: Protective Coatings: Restoration

29

SPACE PROCESSING

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.

199400016887 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–26 SSP briefing
Jan 1, 1988; In English; 6 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190354; No Copyright; Available: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Lloyd Bruce, student experimenter, explains the Titanium Grain Formation Experiment. Dr. Charles Scaife demonstrates Richard Cavoli’s Crystal Membrane Experiment.

CASI
Crystal Structure; Grain Boundaries; Space Shuttle Missions; Spaceborne Experiments; Titanium

19940027378 NASA Lewis Research Center, Cleveland, OH, USA
Defying gravity
Jan 1, 1993; In English; 7 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–99447; No Copyright; Available: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video tape examines microgravity research that is ongoing at LeRC. The video details the development of the Multiple Axis Space Test and its use in training the Mercury 7 astronauts. The LeRC drop tower is discussed, and a comparison is made between research being done at LeRC and rides anyone can experience at the nearby Cedar Point Amusement Park.

CASI
Astronauts; Education; Gravitation; Microgravity

19950004106 NASA Lewis Research Center, Cleveland, OH, USA
In-situ monitoring of crystal growth using MEPHISTO
Feb 1, 1994; In English; 8 min. 30 sec. playing time, in sound
Report No.(s): NONP–NASA–VT–94–23164; No Copyright; Available: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This experiment flew on STS-62 and is the continuation of a collaborative US-French study of the process of crystal formation. Knowledge from this exper-
iment will support the development of techniques to grow higher quality semiconductor crystals on Earth.

LeRC

Crystal Growth; In Situ Measurement; Semiconductors (Materials); Space Shuttle Payloads: Spaceborne Experiments

19950040113 NASA Lewis Research Center, Cleveland, OH, USA

TES (Thermal Energy Storage) video news release

Feb 1, 1995; In English; 5 min. 30 sec. playing time, with sound
Report No.(s): NONP-NASA–VT–94–23161; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

TES is an in-space technology experiment that flew on STS–62. Its intent is to investigate the behavior of different thermal energy storage materials as they undergo repeated melting and freezing in the microgravity environment.

LeRC

Heat Storage; Spaceborne Experiments

19950040151 NASA Lewis Research Center, Cleveland, OH, USA

IDGE (Isothermal Dendritic Growth Experiment)

Feb 1, 1994; In English; 10 min. 55 sec. playing time, with sound
Report No.(s): NON–NASA–VT–94–23166; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The Isothermal Dendritic Growth Experiment (IDGE) flew on STS–62 to study the microscopic, tree-like structures (dendrites) that form within metals as they solidify from molten materials. The size, shape, and orientation of these dendrites affect the strength and usefulness of metals. Data from this experiment will be used to test and improve the mathematical models that support the industrial production of metals.

LeRC

Crystal Growth; Dendritic Crystals; Isothermal Processes; Mathematical Models; Metals; Space Shuttle Payloads

19970005097 NASA Johnson Space Center, Houston, TX USA

Tank Pressure Control Experiment: Thermal Phenomena in Microgravity. Tape 2 of 4

Feb. 20, 1996; In English; Videotape: 40 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–97–1997005938; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, 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 low 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 (TPC 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 2 of 4.

CASI

Tanks (Containers); Bubbles; Flow Distribution; Fluid Jets; Freon; Jet Mixing Flow; Microgravity; Pressure Reduction; Heat Flux

19970005051 NASA Johnson Space Center, Houston, TX USA

Tank Pressure Control Experiment: Thermal Phenomena in Microgravity. Tape 3 of 4

Feb. 20, 1996; In English; Videotape: 32 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–97–1997005940; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, 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 low 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 (TPC 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.

CASI

Tanks (Containers); Bubbles; Flow Distribution; Fluid Jets; Freon; Jet Mixing Flow; Microgravity; Pressure Reduction; Heat Flux

19970005057 NASA Johnson Space Center, Houston, TX USA

Tank Pressure Control Experiment: Thermal Phenomena in Microgravity. Tape 4 of 4

Feb 20, 1996; In English; Videotape: 32 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–97–1997005942; No Copyright; Avail: CASI; 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 (TPC 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.

CASI

Tanks (Containers); Bubbles; Flow Distribution; Fluid Jets; Freon; Jet Mixing Flow; Microgravity; Pressure Reduction; Heat Flux
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 Fron 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 predicted by an axial jet and the mixing time can be predicted by the Weber number. This is video tape 3 of 4.

CASI

**Tanks (Containers); Bubbles; Flow Distribution; Fluid Jets; Fron; Jet Mixing Flow; Microgravity; Pressure Reduction; Heat Flux**

### 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.

**19940418846 NASA, Washington, DC, USA**

**Building a lunar base**

Jun 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**

**19950227753 NASA, Washington, DC, 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-95-490977; 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 for 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**

**19940225077 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 LRC. 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**
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.

199402007733 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 start flight problems, F-18 flows, artificial heart, and rotorator with more complex blades.

CASI

Computational Fluid Dynamics: Numerical Flow Visualization; Scientific Visualization

19940200779 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

19940200799 NASA Ames Research Center, Moffett Field, CA, USA

The 1988 computational fluid dynamics highlights

Jan 1, 1988; In English; 15 min. 30 sec. 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, stator 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

19940202780 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-94-0058; 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 flow on the STS-62, it is designed to verify intriguing, but previously untreated, 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.

LGR

Critical Temperature; Fluids; Light Scattering; Liquid Phases; Physics; Spaceborne Experiments; Vapor Phases

19950000484 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

Contract(s)/Grant(s): RTOP 763-23-35-08
Report No.(s): NONP NASA SUPPL-VT-94-32020; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

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 20-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 34 Earth Resources and Remote Sensing For related information see also 06 Avionics and Aircraft Instrumentation; and 19 Spacecraft Instrumentation.

19940200774 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-94-10434; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video presents great model photography along with astronaut activity as practiced in mockup.

CASI

Astronaut Training; Space Station Freedom; Spacecraft Models

19950000683 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.

CASI Astronaut Training: Photographic Equipment; Space Shuttle Orbits; Space
borne Photography

This video shows astronauts Durante and Parisi being trained with photography equipment.

CASI Astronaut Training: Photographs; Space Flight Training; Shuttle Missions; Space Transportation System Flights

19940110843 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 CTF.

CASI Astronaut Training: Cameras; Space Shuttle Missions

19940110901 NASA Lyndon B. Johnson Space Center, Houston, TX, USA STS-29 IMAX camera audio class FT
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.

CASI Astronaut Training: Astronauts; Audio Equipment; Cameras; Space Shuttle Missions

19940110907 NASA Lyndon B. Johnson Space Center, Houston, TX, USA STS-29 crew IMAX camera training
Jan 1, 1989; 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.

CASI Astronaut Training: Cameras; Education; Onboard Equipment; Space Shuttles; Spacecrafts

19940110932 NASA Lyndon B. Johnson Space Center, Houston, TX, USA STS-34 Arriflex and IMAX camera training
Aug 1, 1989; In English; 19 min. 17 sec. 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 STS-34 crew is shown being taught how to use the 16-mm Arriflex camera.

CASI Cameras; Spaceborne Photography; Spacecrafts

19940110990 NASA Lyndon B. Johnson Space Center, Houston, TX, USA STS-35 payload specialists Durante and Parisi: 76mm photo training and cabin familiarity
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 Durante and Parisi being trained with photography equipment.

CASI Astronaut Training: Astronauts; Photographic Equipment; Space Flight Training; Space Shuttle Missions; Space Transportation System Flights

19940110995 NASA Lyndon B. Johnson Space Center, Houston, TX, USA Johnson Space Center and downtown Houston, Texas aerials
Aug 1, 1988; In English; 7 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--93--190319; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This videotape shows aerial shots of the NASA JSC. Views of downtown Houston, TX are also provided.

CASI Aerial Photography: Houston (TX); Research Facilities

19970835833 NASA Lewis Research Center, Cleveland, OH USA Improved Optical Techniques for Studying Sonic and Supersonic Injection into Mach 3 Flow
Bugele, Alvin E., NASA Lewis Research Center, USA; Seasholtz, Richard G., NASA Lewis Research Center, USA; Sep. 1997; 22p; In English; 42nd; International Conference on the Aeronautical and Astronautical Sciences, San Diego, CA, USA; Sponsored by International Society for Optical Engineering, USA; Original contains color illustrations

Contract(s)/Grant(s): RTP 955-74-40
Report No.(s): NONP-NASA-VT--1997067113; No Copyright; Avail: CASI;
A03, Hardcopy; A01, Microfiche; V01, Videotape-VHS

Filtered 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 transverse section of the injection 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 injection 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 0.12 inch diameter holes on 0.177 inch spacing, and a 7 deg. half angle wedge. High speed shadowgraph flow visualization images were obtained with several video camera systems. Roof and floor static pressure data were 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.

Author Rayleigh Scattering: Shadowgraph Photography; Flow Visualization: Fluid Injection; Helium: Injectors; Fuel Injection; Supersonic Flow; Wind Tunnel Tests; Water Vapor: Continuum Flow; Pulsed Lasers

1997, 32p; In English
Contract(s)/Grant(s): NCCI-196
Report No.(s): NONP-NASA-VT--1997057110; No Copyright; Avail: CASI;
A03, Hardcopy; A01, Microfiche; V01, Videotape-VHS

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 (Phase 1) was to
Robotics; CASI may, someday, be a part of Space Station Freedom.

Videotape-Beta; VHS

Report No. (s): NONP NASA VT 94 91881 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

Report No. (s): NONP NASA VT 94 106847 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

CASI

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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 Main 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 Program; Robot Control; Robotics: Tests

19940107990 NASA Goddard Space Flight Center, Greenbelt, MD, USA
Robots for Space Station tape 2
Sep 1, 1989; In English; 16 min. 18 sec. playing time, in color, with sound
Report No. (s): NONP-NASA-VT-93-190375; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

This video shows robots for the Space Station.
CASI
Robotics: Space Stations

19940107975 NASA Goddard Space Flight Center, Greenbelt, MD, USA
Robots 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 telerobotics in the exploration of space.
CASI
Robotics: Space Exploration

1994010799 NASA Goddard Space Flight Center, Greenbelt, MD, USA
Robots for Space Station, tape 1
Aug 1, 1989; In English; 30 min. playing time, in color, with sound
Report No. (s): NONP-NASA-VT-93-190385; 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

19940108181 NASA, Washington, DC, 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)

19940129080 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

CASI

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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

19940029611 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): NONP–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

19940031006 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): NONP–NASA–VT–94–15920; No Copyright; Avail: CASI;
B01, Videotape-Beta: V01, Videotape-VHS

This video presents scenes demonstrating current telerobotic technology, specifically teleoperation with the aid of a computer.
CASI

Teleoperators: Telerobotics

20000032743 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): NONP–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; Turbine Pumps; Space Shuttle Orbiters

20000034895 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): NONP–NASA–VT–2000043339; No Copyright; Avail: CASI;
B01, Videotape-Beta: V01, Videotape-VHS

Live footage shows workers preparing for the removal of the hydrogen pump turbo.
CASI

Hydrogen: Turbine Pumps: Fuel Pumps: Removal

38 QUALITY ASSURANCE AND RELIABILITY

Includes approaches to, and methods for reliability analysis and control, inspection, maintainability, and standardization.

19940010847 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): NONP–NASA–VT–93–190450; No Copyright; Avail: CASI;
B01, Videotape-Beta: V01, Videotape-VHS

This video supports and explains the importance of Quality and Assurance Testing.
CASI

NASA Programs: Quality Control

19940029215 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): NONP–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 15 Aircraft Design, Testing and Performance and 16 Spacecraft Design, Testing and Performance.

19940027313 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): NONP–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 roll. 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 18 Instrumentation and Photography.

19940016772 NASA, Washington, DC, USA

Views from space

Feb 1, 1996; In English; 3 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–190432; 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 Orbiters

19940016824 NASA, Washington, DC, USA

Combating malaria

Nov 1, 1989; In English; 3 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190407; No Copyright; Avail: CASI;
B01, Videotape-Beta: V01, Videotape-VHS
Earth Observations from Space; Remote Sensing; Satellite Imagery

This videotape shows the use of remote sensing to better target mosquito larvae for more effective control.

CASI
Insects; Parasitic Diseases; Remote Sensing

1994/09/0837 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
Fishes; 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, 1990; 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

1994/02/029/92 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, 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 Uranus moon, Miranda. The last movie is 'Monterey Bay'.

CASI
Earth Observations (From Space); Remote Sensing; Satellite Imagery

1994/02/029/242 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

1994/01/0967 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 Shuttles' Earth views various geographical areas are shown, including both land and water masses. The views covered the Middle East (Saudi Arabia, Sinai, Jordan, Egypt, Iran, Iraq, Kuwait, Bahrin, 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

1994/01/0968 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 Shuttles' 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

1994/01/0969 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 Shuttles’ 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

194
1995@04112 NASA Lewis Research Center, Cleveland, OH, USA

SAMPLE (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; V01, Videotape-VHS

SAMPLE 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

45
ENVIRONMENT POLLUTION

Includes atmospheric, water, soil, noise, and thermal pollution.

1994@010765 NASA, Washington, DC, USA

Mars look-alike
Oct 1, 1987; In English; 4 min. 7 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--93-190465; No Copyright; Avail: CASI; V01, Videotape-VHS

This video presentation describes a research trek to western Antarctica to study its ecosystem as a first step in the future exploration of Mars. CASI

Antarctic Regions: Mars Environment

1994@010816 NASA, Washington, DC, USA

Saving Yellowstone
Nov 1, 1988; In English; 3 min. 46 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--93-190394; No Copyright; Avail: CASI; V01, Videotape-VHS

This videotape explains how NASA participated in controlling the devastating forest fires that consumed parts of Yellowstone National Park.

CASI
Forest Fires: Technology Utilization; Yellowstone National Park (ID-MT-WY)

1994@010817 NASA, Washington, DC, USA

TOMS computer graphics
Nov 1, 1988; In English; 3 min. 46 sec. playing, in color, with sound
Report No.(s): NONP-NASA--VT--93-190395; No Copyright; Avail: CASI; V01, Videotape-VHS
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)

The impact of natural fires on our environment is examined, especially regarding greenhouse gases.
CASI
Environment Effects; Forest Fires; Greenhouse Effect

1994/01/0856 NASA Goddard Space Flight Center, Greenbelt, MD, USA

This video covers 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; Ozonehole; Total Ozone Mapping Spectrometer

1994/01/0877 NASA, Washington, DC, USA

What’s killing the trees?

Oct 1, 1987; In English; 7 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190449; 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; 11 min. 28 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

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

1995/02/0467 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–93–23639; 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.

**DFRC**

**Endangered Species: Environment Protection; Mojave Desert (CA): Turtles**

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**1995#0116033 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.

**CASI**

**Annual Variations; Atmospheric Circulation; Computer Graphics; Earth Atmosphere; Ozone Depletion; Southern Hemisphere; Total Ozone Mapping Spectrometer**

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**46 GEOPHYSICS**

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 53 Space Radiation.

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**1994#009147 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–93-185320; 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.

**Author (revised)**

**CIRS (Satellite): Radiation Protection; Spacecraft Shielding**

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**1994#010809 NASA Goddard Space Flight Center, Greenbelt, MD, USA**

**Southern and Northern Hemisphere total ozone as seen by TOMS**

Mar 1, 1989; In English; 24 min. playing time, in color, with sound

Report No.(s): NONP-NASA-VT–93-190389; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

This videotape contains raw footage of this planet's upper atmosphere for use in the preparation of environmental and Earth monitoring presentation.

**CASI**

**Northern Hemisphere; Ozone; Southern Hemisphere; Total Ozone Mapping Spectrometer; Upper Atmosphere**

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**1994#010800 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**

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**1995#004148 NASA, Washington, DC, USA**

**SPRITE video news release**

Jul 1, 1994; In English; 2 min. 46 sec. playing time, no sound

Report No.(s): NONP-NASA-VT–94-23136; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video presentation provides the initial observations of high altitude atmospheric flashes above thunderstorms from the SPRITE upper atmosphere optical emissions campaign.

**CASI**

**Atmospheric Radiation; Thunderstorms; Upper Atmosphere**

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**1995#004572 NASA, Washington, DC, USA**

**Dante's volcano**

Sep 1, 1994; In English; 14 min. 40 sec. playing time

Report No.(s): NONP-NASA-VT–94-25775; 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**

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**1995#010656 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 Doneslan, 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**

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**1995#017243 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 Leestma, Charlie Bolden, and Dirk Frimont) 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 oxygen; (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 Warming; Nitrogen Compounds; Ozone; Ozone Depletion; Ozoneosphere**

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**1995#020174 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
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 Special' 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.

CASI

Antarctic Regions: Biology; Botany; History; Meteorology; Research Facilities

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-VHS

This video tape addresses ongoing lightning research and how data is valuable to upcoming projects.

CASI

Lightning: Mesoscale Phenomena

19940106853 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; Rain; Rainstorms; Wind Shear

47

METEOROLOGY AND CLIMATOLOGY

Includes weather observation forecasting and modification

1994010250562 NASA Langley Research Center, Hampton, VA, USA

Inertial oscillation of a vertical rotating draft with application to a supercell storms Video supplement to NASA Technical Paper 3236
Cotton, 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): RTP 506-41-41-01
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 spanning up a single supercell storm. The oscillation consists of a long quiescent phase when the draft is large in diameter and rotates anticyclonically 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). 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 effect 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; Mathematical Models; Oscillations; Rotation; Thunderstorms; Vertical Air Currents

199401010753 NASA Langley Research Center, Hampton, VA, USA

Meteorology and climate
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-VHS

This video tape addresses ongoing lightning research and how data is valuable to upcoming projects.

CASI

Lightning: Mesoscale Phenomena

19940106853 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; Rain; Rainstorms; Wind Shear

1994010757 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
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.

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.

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 Stennis 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

19930929058 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

19920929264 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--93--190388; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, 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, butterflies, and plants as they react to shuttle launches and other activities emanating from KSC.

CASI
Cape Kennedy; Launch Complex; Environment Effects; Habitats; Spacecraft Launching; Wildlife

199305023871 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; B01, Videotape-Beta; V01, Videotape-VHS

This Life Science Program video examines the variety of projects that study both the physiological and psychological impacts on astronauts due to prolonged space missions. The hazards of space radiation and microgravity effects on the human body are described, along with the effects on plant growth, and the performance of medical procedures in space. One research technique, which is hoped to provide help for future space travel, is the study of aquatic organisms 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

20010028790 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, Palaeontological Society, USA; 1994; 512p; In English; 24-26 Mar. 1994, Indianapolis, IN, USA; Sponsored by Palaeontological Society, USA; Videotape; 2 hours playing time, in color, with sound
Contract(s)/Grant(s): NAG3-11657; End Date: 09-2879-07
Report No.(s): NONP--NASA--VT--99708749; No Copyright; Avail: CASI; A22, Hardcopy; A04, Microfiche; V04, Videotape-VHS

This document and videotape represent the proceedings of the first Dino Fest conference, which was unprecedented in bringing together exhibits of dinosaurs and other fossils and attracting many of the world’s leading palaeontologists and science educators, students and the public. This first Dino Fest consisted of scores of exhibits that included live and fossil plants, invertebrates and vertebrates. 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
52 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.

19940101777 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; Suits; Sweat; Temperature Control

19940101780 NASA, Washington, DC, USA
New insulin pump
Feb 1, 1988; In English; 5 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

19940101798 NASA Goddard Space Flight Center, Greenbelt, MD, USA
GSFC Fun Run
Oct 1, 1988; In English; 10 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93–190385; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video shows Goddard’s commitment to its employees physical well-being by highlighting the Spring 1988 Goddard Fun Run.
CASI
Physical Exercise: Recreation

19940101836 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 videotape 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

19940101839 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

19940101895 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

19940101896 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-93–190335; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video describes the Exercise Countermeasure Facility (ECF). The ECF 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 Immunomorphologic and Biomechanical Laboratory, and the Artificial Intelligence Laboratory.
CASI
Aerospace Medicine: Astronauts; Biodynamics; Countermeasures; Exercise Physiology; Exobiology; Gravitational Physiology; Physical Exercise; Physical Fitness; Physiological Effects

19940101897 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Living well in space: Clinical care challenge
Jul 1, 1989; In English; 9 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93–190336; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
The development of the Space Station 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

19940101898 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. Experiments on Dunbar are conducted while other crew members and technicians record data.
CASI
Astronaut Training: Astronauts; Echocardiography; Lower Body Negative Pressure; Physiological Tests; Spacesuits; Weightlessness Simulation

19940101894 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
The development of the Space Station Health Maintenance Facility (HMF) is featured. The HMF will provide necessary inflight medical care, including prevention, diagnosis, treatment, and care during transport if the patient must be evacuated from Space Station.
CASI
Aerospace Medicine; Health; Space Stations; Spacesuits

19950104138 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-94–23142; 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. Space lab is another precursor to long-term science aboard the space station.

CASI

Bioastronautics: Space Adaptation Syndrome; Spaceborne Experiments; Spacelab

19950004430 NASA, Washington, DC, USA

Aircraft to medicine
Dec 1, 1991; In English; 3 min. 5 sec. playing time, with sound
Report No.: NONP--NASA--VT--94--23143; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video discusses how the technology of computer modeling can improve the design and durability of artificial joints for human joint replacement surgery. Also, ultrasound, originally used to detect structural flaws in aircraft, can also be used to quickly assess the severity of a burn patient's injuries, thus aiding the healing process.

CASI

Aerospace Technology Transfer; Computer Aided Design; Medical Science; Ultrasound Tests

19950004450 NASA Lewis Research Center, Cleveland, OH, USA

Telemedicine Spacebridge
May 1, 1994; In English; 6 min. 44 sec. playing time, with sound
Report No.: NONP--NASA--VT--94--23165; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

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.

CASI

Clinical Medicine; International Cooperation; Medical Electronics; Medical Equipment; Medical Services; Teleconferencing; Video Communication; Video Equipment

19990000701 NASA Johnson Space Center, Houston, TX, USA

Evolution of Life Support Systems (ELS), A Focus on Space Station Freedom
Aug. 4, 1999; In English; 1 min. 23 sec. playing time, with sound
Report No.: NONP--NASA--VT--199912091; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video provides a comprehensive overview of the evolution of life support systems and the current status of the Space Station Freedom project.

CASI

Space Station Freedom; Astronaut Training; Life Support Systems; Evolution of Life Support Systems

54 MAN/SYSTEM TECHNOLOGY AND LIFE SUPPORT

Includes human factors engineering, bionics, man–machine interface, life support, space suits and protective clothing. For related information see also 18 Space Transportation and 62 Aerospace Medicine.

19940009128 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-30 Magellan IUS/EVA training in WETF
Apr 1, 1989; In English; 11 min. playing time, in color, with sound
Report No.: NONP--NASA--VT--93--185393; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Astronauts Thagard and Lee suit up and enter the WETF to practice working the Magellan mockup in a zero-g environment.

Author


19940009138 NASA, Washington, DC, USA

New prosthetic devices
May 1, 1991; In English; 3 min. 36 sec. playing time, in color, with sound
Report No.: NONP--NASA--VT--93--185322; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

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

1994009142 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 (revised)

Closed Ecological Systems; Environmental Engineering; Long Duration Space Flight; Recycling

1994010317 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 Hoffmann donning EVA suits while astronauts Durante watches is presented. The footage also shows Lounge and Hoffmann working on an ASTRO-1 mockup in the WETF.

Author (revised)

Astronaut Training; Extravehicular Activity; Payloads; Spacecrews; Weightlessness Simulation

1994010721 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.

CASI

Astronaut Training; Extravehicular Activity; Extravehicular Mobility Units

1994010722 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-35 crew training: Bailout in CCT, firefighting, 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.

CASI

Astronaut Training: Bailout; Egress; Weightlessness Simulation

1994010751 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

Brown, Mark

Jul 1, 1990; 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.

CASI

Astronaut Training: Astronauts

1994010812 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 (CELS).

CASI

Consumables (Spacecrew Supplies); Food Production (In Space); Long Duration Space Flight

19940106813 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 video shows Navajo Indians are involved in making the spacesuits of the future.

CASI

American Indians; Space Suits

19940106830 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-30 pre-launch and post-landing egress

Mar 1, 1989; In English; 18 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.

CASI

Astronaut Training: Crew Procedures (Inflight); Crew Procedures (Preflight); Egress; Space Shuttles

19940106857 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 Aide (CETA) equipment.

CASI

Astronaut Locomotion; Astronaut Maneuvering Equipment; Extravehicular Activity; Orbital Servicing; Space Station Structures; Space Technology Experiments; Space Tools

19940106886 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.

CASI

Space Shuttle Orbiters; Spacecrews

19940106887 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.

* Astronaut Training: Bailout; Space Shuttle Missions

19940110888 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

19940110889 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

19940110898 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

19940110902 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-29 EVA prep in FFT
Jan 1, 1989; 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

19940110904 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-32 EVA 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

19940110909 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

19940110910 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

19940110912 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 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

19940110914 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

19940110915 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

19940110917 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

19940110918 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

CASI
Astronaut Training: Egress; Parasailing
This video tape shows astronaut candidates practicing ground egress and parachute landing procedures.

CASI
Astronaut Training: Egress: Parachute Descent

19940100919 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

19940100928 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; Spacesuits

19940100929 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; Spacesuits; Weightlessness Simulation

19940100931 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; Spacesuits

19940100933 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
Astronaut Training; Casting; Fire Fighting; Fires; Gloves; Space Suits; Spacesuits

19940100962 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 (Spacesuit Supplies); Food; Preparation

19940100968 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 adn Sullivan are shown suiting up for training with
a telescope mockup in the Weightless Environment Training Facility (WETF).
CASI
Astronaut Training; Space Suits; Weightlessness Simulation

19940100981 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 liferaft training, and classroom instruction.
CASI
Parachutes; T-38 Aircraft

19940100987 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-37 astronauts Ross and Apt during CET-A 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 Aide (CEA) equipment.
CASI
Astronaut Maneuvering Equipment: Checkout; Extravehicular Activity; Space Station Structures; Space Technology Experiments; Space Tools

19940100989 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 was 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
Air Locks; Astronaut Training; Extravehicular Activity; Space Flight Training; Space Shuttle Missions; Space Suits; Space Transportation System Flights; Spacecraft Equipment; Spacesuits

19940100997 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 hygienic articles for use onboard the Shuttle.

CASI

Space Suits; Space Transportation System Flights; Spacecraft

19940011834 NASA, Washington, DC, USA

Space suit design
Jun 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

19940011841 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–93–190301; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Astronaut Jerry Ross tests the new Mark 111 space suit in the WETF. The Mark 111 could be used as the main spacesuit on the Space Station Freedom.

CASI

Design Analysis: Space Suits

19940016854 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-56 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

19940022759 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 space 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

20010259212 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

2001029214 NASA Johnson Space Center, Houston, TX USA

ASCAN Training: Egress and Parachute 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 parachute training, performing such activities as practicing seat ejection procedures, power line landing, and parachute landing and release.

CASI

Astronaut Training: Egress; Parachute Descent

20010659253 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.

19940027883 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–94–9978; 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 1966 '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

205
60 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.

19940309136 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-93-185322; 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.

Author (revised)
Cray Computers; Research Facilities

19940310775 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.

CASI
Computers; Education; Information Systems

19940311982 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Freedom system Text and Graphics Systems (TAGS)
Apr 1, 1989; In English; 1 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-190306; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The Text and Graphics Systems (TAGS) is a high-resolution facsimile system that scans test or graphics material and converts the analog SCAN data into digital data. This video shows the TAGS in operation.

CASI
Analog Data; Character Recognition; Computer Graphics; Digital Data

19940314488 NASA, Washington, DC, USA
The world's most powerful computer
Oct 1, 1986; In English; 2 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-198216; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The use of the Cray 2 supercomputer, the fastest computer in the world, at ARC is detailed. The Cray 2 can perform 250 million calculations per second and has 10 times the memory of any other computer. Ames researchers are shown creating computer simulations of aircraft airflow, waterflow around a submarine, and fuel flow inside of the Space Shuttle's engines. The video also details the Cray 2's use in calculating airflow around the Shuttle and its external rockets during liftoff for the first time and in the development of the National Aero Space Plane.

CASI
Computerized Simulation; Cray Computers; Research Facilities; Supercomputers

19940327310 NASA Lewis Research Center, Cleveland, OH, USA
The vision machines
Apr 1, 1993; In English; 22 min. playing time, in color with sound
Report No.(s): NONP-NASA-VT-94-9957; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

The thoughts of computer scientists at LeRC on the direction that computer development is taking and future implications are explored. Experts discuss the coming information superhighway and technologies such as fiber optics and neural networks. The impact of future computers on education, laboratory research, telecommunications, and science visualization. CASI
Communication Networks; Computer Networks; Fiber Optics; Multimedia; Neural Nets

61 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.

19940609163 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 'lockoff' with Space Station Freedom.

Author (revised)
Computerized Simulation; Degrees of Freedom; Space Shuttle Orbiters; Spacecraft Docking

19940612811 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
Horn, K., NASA Langley Research Center, USA; May 1, 1994; 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.

Author (revised)
Animation; Applications Programs (Computers); Computer Graphics; Computerized Simulation; Electromagnetic Fields; Electromagnetic Scattering; Near Fields; Scientific Visualization; Surface Properties

19950304143 NASA, Washington, DC, USA
Virtual reality
Dec 1, 1991; In English; 3 min. 32 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-23148; No Copyright; Avail: CASI;
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.

CASI
Computerized Simulation; Virtual Reality

19950323827 NASA Ames Research Center, Moffett Field, CA, USA
Telepresence media resource tape
Jan 31, 1992; In English; Sponsored by NASA, Washington; 9 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-95-57872; No Copyright; Avail: CASI;
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 airflow 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
Computerized Simulation: Man Machine Systems; Motion Simulation; Teleoperators; Virtual Reality: Wind Tunnels

19960128547 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; Computerized 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.

19940111042 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-93-1903095; 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.

19960101010 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-95-68010; 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; Histories

1996001866 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, 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: Ptolemy’s theorem concerned with quadrilaterals; the difference between a central angle and an inscribed angle; sines and chord lengths; special angles; substitution 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

1996001865 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

1996001864 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, 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 similarities, 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

1996001867 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
In 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

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; 29 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–67475; 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 coordinate systems for quadratic, cubic, intersecting, and higher degree of polynomials are discussed.

Author

Cartesian Coordinates; Computer Animation; Linear Systems; Polynomials

1996/01/0169 California Inst. of Tech., Irvine, CA, USA

Discovering the Theorem of Pythagoras

Luttnanzo, 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–NASA–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

1996/01/0170 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–NASA–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 aqueduct 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 aqueduct tunnel was built are explained.

Author

Applications of Mathematics; Geological Surveys; Greece; Histories; Hydrology; Islands; Waterways

66 SYSTEMS ANALYSIS AND OPERATIONS RESEARCH

Includes mathematical modeling of systems; network analysis; mathematical programming; decision theory; and game theory.

1994/01/3787 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–NASA–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, kinetics, magnetism, and electrostatics. For specific areas of physics see categories 71 through 77.

1994/01/0176 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–NASA–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

1995/01/0185 California Institute of Technology, Pasadena, CA, 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–NASA–VT–95–43938; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

In this 'Liftoff to Learning' series video, astronauts (Charles Veach, Gregory Harbaugh, Donald McMonagle, Michael Coats, L. Blaine Hammond, Guion Bluford, Richard Hieb) from the STS-39 Mission use physical experiments and computer animation to explain how weightlessness and gravity affects 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

Computer Animation; Earth Gravitation; Gravitational Effects; Microgravity; Newton; Space Shuttle Missions; Space Transportation System Flights; Spaceborne Experiments; Weightlessness

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.

1994/01/2983 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–NASA–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

### OPTICS

Includes light phenomena and the theory of optical devices. For lasers see 36 Lasers and Masers.

**1994029214** 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--93--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 for 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

### SOCIAL AND INFORMATION SCIENCES (GENERAL)

Includes general research topics related to sociology; educational programs and curricula.

**1994009146** NASA John C. Stennis Space Center, Bay Saint Louis, MS, USA

**Taeannanetics: 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**

**1994010757** 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 Research Program to participating students.

**CASI**

Education; NASA Programs

**1994010759** NASA Marshall Space Flight Center, Huntsville, AL, USA

**Space classroom**

Nov 1, 1996; 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

**1994010775** 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

**1994001687** 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

**1994001689** 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

**1994001694** NASA Lewis Research Center, Cleveland, OH, USA

**CORE/TRC**

Feb 1, 1990; 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

**1994001697** 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
Astronauts; NASA Programs; Students

19940827300 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

19940827301 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 the effect of 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

19940827309 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

19940827311 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 in Space Station Freedom, experience in T-34, tour of tower at the Federal Aviation Administration 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 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
Version 1 explains the Summer High School Apprenticeship (SHARP) Program. Version 2 is a tool to interest students in applying for the program. LoRC

19950823802 NASA Marshall Space Flight Center, Huntsville, AL, USA

International Space University

Kasler, Maggie, editor, NASA Marshall Space Flight Center, USA; Aug 9, 1993; In English; 16 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–57868; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The International Space University (ISU) is described in this video, hosted by Marma Sirtis from the 'Star Trek' television show’s Starship Enterprise. A complete explanation of what ISU is, how the university functions, and the benefits that the university provides are described. Included are brief comments from former ISU graduates.

CASI

Space Programs; Universities; University Program

1996001486 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

Shaping tomorrow

Jan 1, 1970; In English; 18 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–65627; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The development, history, and opportunities for employment available at the Johnson Space Center (JSC) in Houston, Texas are presented in this video, with special emphasis placed on minorities in the aeronautical engineering fields and at JSC. There are several interviews with black, Hispanic and female engineering and aeronautics professionals and the various projects they work on.

Author Houston (TX); Minorities; NASA Space Programs: Research Projects

19980404284 NASA Lewis Research Center, Cleveland, OH USA

Fastener Design Course

Barrett, Richard T., NASA Lewis Research Center, USA; Jun, 1997; 284p; In English; Set of 9 Videotapes: 7 hrs. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998118421; No Copyright; Avail: CASI; A11, Hardcopy; A03, Microfiche; B07, Videotape-Beta; V07, Videotape-VHS; Accompanying hardcopy; Accompanying hardcopy; Accompanying hardcopy; Accompanying hardcopy

Richard T. Barrett, Senior Aerospace Engineer of NASA Lewis Research Center presents a comprehensive course on fastener design. A recognized expert in the field of fastener technology Mr. Barrett combines lecture, charts, illustrations with real-world experiences. Topics covered include: materials, plantings and coatings, locking methods threads, joint stiffness, rivets, inserts, nut plates, thread lubricants, design criteria, etc. A workbook accompanies the videotape.

Author Lectures: Fasteners: Design Analysis

81 ADMINISTRATION AND MANAGEMENT

Includes management planning and research.

199400409156 NASA Goddard Space Flight Center, Greenbelt, MD, USA

NASA experiences in the Goddard MMS

Jan 1, 1989; In English; 33 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–185350; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The GSFC connection in the multi-mission spacecraft management field is explored.

Author (revised)

Multimission Modular Spacecraft: NASA Programs

199408010761 NASA Marshall Space Flight Center, Huntsville, AL, USA

Return to flight 1

Sep 1, 1987; In English; 17 min. 21 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190461; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video tape presents a dynamic overview of the hard work and tireless efforts of NASA employees and contractors.

CASI

NASA Programs: Research and Development

199408010828 NASA Goddard Space Flight Center, Greenbelt, MD, USA

PET team

Mar 1, 1989; In English; 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190397; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video tape presents a dynamic overview of the hard work and tireless efforts of NASA employees and contractors.

CASI

NASA Programs: Personnel

19940010846 NASA Marshall Space Flight Center, Huntsville, AL, USA

Return to flight 3, the journey continues

Feb 1, 1989; In English; 15 min. 17 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190449; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video tape presents a dynamic overview of the hard work and tireless efforts of NASA employees and contractors.

CASI

NASA Programs: Personnel

19940010894 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

Cohen program management briefing

Dec 1, 1989; In English; 55 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190333; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Dr. Aaron Cohen, Director of NASA Johnson Space Center, discusses management issues as they have appeared in the manned space flight programs.

CASI

Manned Space Flight: NASA Programs: Project Management

19940029075 NASA Lewis Research Center, Cleveland, OH USA

The second giant leap

Jan 1, 1991; In English; 15 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12955; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video describes the purpose and activities of the Office of Space Commercialization at LoRC. The Office promotes interactions between industry and NASA researchers, and promotes the benefits of microgravity research. Examples of knowledge transfer in the production of airplanes and farm equipment are shown.

CASI

Government/Industry Relations: Microgravity: Space Commercialization

199508020782 National Inst. of Standards and Technology, Gaithersburg, MD, USA

Standards for excellence

Jan 1, 1992; In English; 28 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–40096; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

A history of the development of standard units and regulations of measurement are discussed in this educational video. John Aston narrates the historical background, from colonial times to the present, of the need for measurement standardization and discusses the conception of the National Bureau of Stan
Concurrent Engineering; Data Processing; Data Transfer (Computer); Government/Industry Relations; Process Control (Industry); Quality Control

19950022749 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; and the 1990 Hubble Space Telescope.
CASI
Histories; NASA Programs; Research Projects; Technology Assessment

19950022750 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

20000066583 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 Busse chaired the Accident Investigation Board that was convened to investigate the incident. This videotape is a press conference with Mr. Busse, 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

82 DOCUMENTATION AND INFORMATION SCIENCE

Includes information management; information storage and retrieval technology; technical writing; graphic arts; and microcopy. For computer documentation see 61 Computer Programming and Software.

19940016758 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.

CASI

**NASA Programs:** University Program

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**1994010778** 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; Aval: 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

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**1994010827** 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-93-190368; No Copyright; Aval: 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

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**1994011047** 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; Aval: 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

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**19940111050** 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; Aval: 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

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**19950826788** National Inst. of Standards and Technology, Gaithersburg, MD, 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-95-49120; No Copyright; Aval: 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**

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**19980956678** Commerce Energy NASA NLM Defense Information Cataloging 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-199800466; No Copyright; Aval: CASI; V06, Videotape-VHS; B06, Videotape-Beta; V06, Videotape-VHS

- The main mission of the CENDI Cataloging 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; 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**

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**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.

**1994010776** NASA; Washington, DC, USA

**From space to Earth**

Jun 1, 1987; In English; 3 min. 30 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-93-190436; No Copyright; Aval: CASI; B01, Videotape-Beta; V01, Videotape-VHS

- This video presents a few NASA spinoffs, including Statue of Liberty paint, Unistick, an ocular screening device, and running shoes.

CASI

**Aerospace Technology Transfer; Industries; NASA Programs; Technology Transfer; Technology Utilization**

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213
Aerospace Technology

Aerospace Engineering: A description of NASA Technology Transfer: \( \text{NASA Programs; Technology Utilization} \)

19940108664 NASA Lewis Research Center, Cleveland, OH, USA
NASA images 7
May 1, 1988; In English; 27 min. 49 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190235; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This videotape shows how space derived technology is being used to benefit people on Earth.

CASI
Aerospace Engineering: Aerospace Technology Transfer: NASA Programs; Technology Utilization

1994010866 NASA Lewis Research Center, Cleveland, OH, USA
NASA images 16
May 1, 1988; In English; 28 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190237; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The videotape describes NASA technology that is in everyday use.

CASI
NASA Programs; Technology Utilization

19940129063 NASA, Washington, DC, USA
Mars technology
May 1, 1994; In English; 7 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12961; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

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; Ultrasounds

19950104149 NASA, Washington, DC, USA
Advanced microsensors
Aug 1, 1991; In English; 2 min. 59 sec. playing time, with sound
Report No.(s): NONP–NASA–VT–94–23145; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

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

19998116996  Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA
Theodore von Karman Lecture Series: "Technologies of the Future—Today"
May 20, 1999; In English; Videotape: 1 hr. 1 min. 56 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–199920698; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

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 Photo-detector) 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
Technology Utilization; NASA Programs: Research and Development

Space Sciences (General)

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

19950107776 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Space basic
Herbert, Dexter, editor, NASA Lyndon B. Johnson Space Center, USA; Jan 2, 1991; In English; Its Liftoff to Learning Series; 20 min. 55 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–43943; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

In this education video series, 'Liftoff to Learning,' astronauts (Bruce Melnick, Thomas Akers, William Shepherd, Robert Cabana, and Richard Richards) describe the historical beginnings of space exploration from the time of Robert H. Goddard (considered the Father of Rocketry), who, in 1929, invented the first propellant rocket, the prototype of modern liquid propellant rockets, up to the modern Space Shuttles. The questions - where is space, what is space, and how do astronauts get to stay in space and come back from space are answered through historical footage, computer graphics, and animation. The space environment effects, temperature effects, and gravitational effects on the launching, orbiting, and descent of the Shuttles are discussed. Included is historical still photos and film footage of past space programs and space vehicles.

CASI
Aerospace Environments; Descent; Histories: Photographic Film, Prototypes: Space Exploration; Space Programs; Spacecraft; Spacecraft Launching; Spacecraft Orbits; Uncontrolled Reentry (Spacecraft)

Astronomy

Inclu-des observations of celestial bodies, astronomical instruments and techniques; radio, gamma-ray, x-ray, ultraviolet, and infrared astronomy; and astrometry.

19940109132 NASA, Washington, DC, USA
The four great observatories
Dec 1, 1986; In English; 5 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–185318; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video presentation introduces the Hubble Space Telescope, Gamma Ray Observatory, Advanced X-ray Astrophysics Facility (AXAF), and the Shuttle Infrared Telescope Facility (SITF).

Author
Astronomical Observatories: Gamma Ray Observatory: Hubble Space Telescope; Space Infrared Telescope Facility; Spaceborne Telescopes: X-Ray Astrophysics Facility

19940010838 NASA, Washington, DC, USA
Lunar ranging
Aug 1, 1985; In English; 4 min. 38 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190401; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This videotape describes the work at the Lure observatory (Hawaii) in the area of Lunar ranging. This work uses laser technology to range the moon with an accuracy of one inch.

CASI
Laser Applications; Laser Range Finders; Lunar Rangefinding; Observatories
Hubble Space Telescope: NASA Programs

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; Avail: CASI;
B02, Videotape-Beta; V01, Videotape-VHS

This video presentation touches on the truly fast complexity of the first of NASA's great observatories, the Hubble Space Telescope.

Hubble Space Telescope: NASA Programs

Hubble Space Telescope: Space Observations (From Earth)

BBXRT 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; Avail: 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.

Broadband: Space Shuttle Missions: X Ray Telescopes

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; Avail: 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 Astronautical Science of Japan. Images of the Sun rotation were obtained with the SXT.

International Cooperation: Japanese Space Program; NASA Space Programs; Universities: X Ray Astronomy; X Ray Telescopes

NASA Goddard Space Flight Center, Greenbelt, MD, 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; Avail: 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 astronomical features that were viewed by the HST.

Astronomical Photography; Celestial Bodies; Hubble Space Telescope; Spaceborne Astronomy; Star Formation; Ultraviolet Astronomy; Ultraviolet Spectra

NASA Johnson Space Center, Houston, TX USA

Hubble's First Images
Jan. 28, 1997; In English; Videotape: 14 min. 33 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--99206998; No Copyright; Avail: 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 polar regions of the Sun. The moderator of this lecture is Dr. Steve Maram, NASA/Goddard Space Flight Center, and panel members include Dr. Richard Mandan, ESA (European Space Agency) Project Scientist, Dr. Edward J. Smith, JPL/NASA Project Scientist, Dr. Antoinette Galvin, University of Maryand 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.

International Cooperation: Japanese Space Program; NASA Space Programs; Universities: X Ray Astronomy; X Ray Telescopes

Interface, Inc., Fort Collins, CO, USA

NASA Space astronomy update
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; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Professor Stan 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.

NASA Space Programs: Spaceborne Astronomy; Ultraviolet Astronomy; Ultraviolet Telescopes

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--1997077165; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

This video presents a chronological account of the Hubble Space Telescope. 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 Clusters, Black Holes, Jupiter animation, and Nebulas.

Hubble Space Telescope: Galactic Clusters: Nebulae; Jupiter (Planet); Star Clusters; Spaceborne Astronomy

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--1999206989; No Copyright; Avail: 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 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 Mandan, 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.

Ulysses Mission: Solar Probes; Cosmic Rays; Magnetic Fields; Solar Wind

NASA Kennedy Space Center, Cocoa Beach, FL USA

20000004507 NASA Space Programs: Spaceborne Astronomy; Ultraviolet Astronomy; Ultraviolet Telescopes

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--1999206993; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Hubble Space Telescope upgrades are discussed during this overview.

NASA Space Programs: Spaceborne Astronomy; Ultraviolet Astronomy; Ultraviolet Telescopes
Planetary Evolution; Planetary Mass; Stellar Evolution; Galactic Bodies; Extrasolar Planets; Gas Giant Planets; Planetary Systems; Hypothetical Planets; Stellar Orbits

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.

**Hubble Space Telescope: Infrared Instruments; Imaging Techniques; Charge Coupled Devices; Cameras**

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 NASA 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 Randy Exler (News Chief, GSFC) and includes presentations by Ken Lodbetter (HST Program Manager, NASA Headquarters), Frank Cepollina (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.

**Hubble Space Telescope: Space Maintenance**

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 Trager (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 Macherio (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 centers 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.

**Hubble Space Telescope: Aberration; Spaceborne Telescopes; Spaceborne Astronomy; Satellite-Borne Photography**

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 that are so 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.

**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–2001030025; 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.

**Crushes: Galaxies; Star Clusters; Time Measurement**

**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 light bulb 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 supernovas are useful as standard candles. Dr. Adam Riess describes how astronomers used supernovae to discover that the universe is expanding and why it might be expanding.

**Luminous Intensity; Supernovae; Expansion; Cosmology**

[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 suspected brown star, passes in front of a star in the galactic bulge, bending its light gravitationally. This bending, or lensing, causes a momentarily brightening of the background star. Another sequence begins with a ground-based view of the center of our galaxy in the upper right. We zoom in to reveal a ground-based view of the region surrounding the cluster and continue zooming to reveal the Hubble Space Telescope view of M22. In an interview with Kinihash Sahu, Astronomer, he describes the Hubble results, explains why the objects in M22 can't be planets.
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–2001110130; 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

19940011823 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–93–190222; 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

19940029056 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–94–12938; 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

19999116393 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–1999202511; 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 Castalia Impact Simulation; Castalia, Toutatis and the Earth; Simulation Asteroid Encounter with Earth; Nanorover Technology Task; Near Earth Asteroid Tracking; Chandrayaan Anchor Tests; Early Views of Comets; Exploration of Small Bodies; Ulysses Resource Material from ESA; Ulysses Cometary Plasma Tail Animation; and various discussions on the Hale-Bopp Comet. An 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 Castalia 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; Orion Cloud; Comet Tails: Wild 2 Comet; Cometary Atmospheres

199400117114 NASA Ames Research Center, Moffett Field, 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–1999206858; 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

19990000443 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–1999206860; 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 Manovero 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 Gaspara; (7) live video of the anchor tests of the Champollion anchoring apparatus; (8) a second live video of the Champollon anchor tests showing anchoring spikes, and collision rings; (9) An animated scene with narration 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

19990000443 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–1999202511; 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 Castalia Impact Simulation; Castalia, Toutatis and the Earth; Simulation Asteroid Encounter with Earth; Nanorover Technology Task; Near Earth Asteroid Tracking; Chandrayaan Anchor Tests; Early Views of Comets; Exploration of Small Bodies; Ulysses Resource Material from ESA; Ulysses Cometary Plasma Tail Animation; and various discussions on the Hale-Bopp Comet. An 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 Castalia 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; Orion Cloud; Comet Tails: Wild 2 Comet; Cometary Atmospheres

19990000443 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–1999206858; 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

19990000443 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–1999206860; 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 Manovero 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 Gaspara; (7) live video of the anchor tests of the Champollion anchoring apparatus; (8) a second live video of the Champollon anchor tests showing anchoring spikes, and collision rings; (9) An animated scene with narration 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

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Black Holes: Their Significance in the Universe

2000001071 NASA Kennedy Space Center, Cocoa Beach, FL USA
Comet Shoemaker–Levy Impact: Briefing, Pt. 2
May 18, 1994; In English; Videotape: 56 min., 51 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000001071; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
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. CASI
Shoemaker-Levy 9 Comet: Cometary Collisions; Jupiter (Planet): Astronomical Observatories: Hypervelocity Impact

2000001072 NASA Kennedy Space Center, Cocoa Beach, FL USA
Comet Shoemaker–Levy Impact: Briefing, Pt. 1
May 18, 1994; In English; Videotape: 62 min., 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000001072; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
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 1 of (2), presents the panel discussion and part of the question and answer session. CASI

20010019529 Space Telescope Science Inst., USA
Hubble Identifies Source of Ultraviolet Light in an Old Galaxy
Feb. 01, 2000; In English; Videotape: 3 min. 47 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–20001026548; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This videotape is comprised of four segments: (1) a video zoom in on galaxy M32 using ground images, (2) Hubble images of galaxy M32, (3) Ground base color image of galaxies M31 and M32, and (4) black and white ground based images of galaxy M32. Author
Ultraviolet Radiation: Andromeda Galaxy: Elliptical Galaxies

20010019695 Space Telescope Science Inst., Baltimore, MD USA
Orion Nebula Movie
Feb. 01, 2000; In English; Videotape: 5 min. 11 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–20001026555; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Footage shows the following simulations derived from Hubble Space Telescope images: (1) the tiling of the Orion mosaic; (2) Orion mosaic fly-through; and (3) a close-up of the Orion mosaic. CASI
Orion Nebula: Simulation

20010019696 Space Telescope Science Inst., Baltimore, MD USA
The Secret Lives of Galaxies
Feb. 01, 2000; In English; Videotape: 3 min. 53 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–20001026546; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The ground-based image in visible light locates the hub imaged with the Hubble Space Telescope. This barred galaxy feeds material into its hub, igniting star birth. The Hubble NICMOS instrument penetrates beneath the dust to reveal clusters of young stars. Footage shows ground-based, WFPC2, and NICMOS images of NGS 1365; An animation of a large spiral galaxy zooms from the edge to the galactic bulge. CASI
Barred Galaxies: Galactic Bulge: Spiral Galaxies: Star Clusters

20010019697 Space Telescope Science Inst., Baltimore, MD USA
GIant Star Clusters Near Galactic Core
Feb. 01, 2000; In English; Videotape: 4 min. 11 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20001026545; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
A video sequence of still images goes deep into the Milky Way galaxy to the Arches Cluster. Hubble, penetrating through dust and clouds, peers into the core where two giant clusters shine more brightly than any other clusters in the galaxy. Footage shows the following still images: (1) wide view of Sagittarius constellation; (2) the Palomar Observatory’s 2 micron all-sky survey; and (3) an image of the Arches Cluster taken with the Hubble Space Telescope NICMOS instrument. Dr. Don Figer of the Space Telescope Science Institute discusses the significance of the observations and relates his first reaction to the images. CASI
Galactic Nuclei; Star Clusters; Giant Stars: Sagittarius Constellation
Galactic Clusters: Star Forming Regions

Planetary Disks

CASI

of the Trifid Nebula. Star formation in the nebula and the video concludes with a ground-based image ends with a Hubble Space Telescope (HST) image.

B01, Videotape-Beta; V01, Videotape-VHS

[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

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 18 Spacecraft Design, Testing and Performance.

2019/09/15 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–93–185524; 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

2019/09/153 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–93–185503; 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

1994/09/0766 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; stroboscopic 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 14, 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

2019/09/67456 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

2019/09/19896 Space Telescope Science Inst., USA

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–20001026553; 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 Gilliland 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 Gilliland of the Space Telescope Science Institute (STScI) discussing possible interpretations of his findings in the 47 Tucanae globular cluster, (6) Ron Gilliland examining the images of 47 Tucanae, and (7) images of 47 Tucanae watching for variations in brightness.

CASI

Galactic Clusters: Star Forming Regions; Extrasolar Planets: Gas Giant Planets

2001/03/3751 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, with sound

Report No.(s): NONP–NASA–VT–2001026556; 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 through 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)

2001/03/3752 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–2001026554; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

A computerized animation simulates the formation of a stellar disk and planet. 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


2001/03/3753 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–2001026552; 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

2019/09/19895 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

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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 18 Spacecraft Design, Testing and Performance.
Voyager encounters Uranus (Planet); Voyager 2 Spacecraft

Voyager encounters data are presented in computer animation (CA) and real (R) animation. The highlights include a view of 2 full rotations of Neptune. It shows spacecraft trajectory ‘diving’ over Neptune and intercepting Triton’s orbit, depicting radiation and occultation zones. Also shown are a retrograde 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 of Earth’s overlap experiment is shown as well as a recreation of Voyager’s flyby. 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 straboscopic view - colorization approximates what is seen by the human eye. Real time images recorded live from Voyager on 8/24/89 are presented. Photoclinoimetry produced the topography of Triton. Three images are used to create a sequence of Neptune’s rings. The globe of Neptune 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. Photoclinoimetry provides a 3-dimensional perspective using a color mosaic of Triton images. The globe is used to indicate the orientation of Neptune’s crescent. The cast and west plumes on Triton are shown.

CASI
Neptune (Planet); Planetary Rotation; Spacecraft Trajectories; Triton; Voyager 2 Spacecraft

199404010821 NASA, Washington, DC, USA
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; NsA Space Programs

199404010869 NASA, Washington, DC, USA
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 recovery, LANDSAT, satellite freeze warning, 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 Telescope; LANDSAT Satellites; Space Shuttles; XV-15 Aircraft

199404010875 NASA, Washington, DC, USA
Voyager encounters Uranus
Jun 1, 1986; In English; 5 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

199404010946 NASA Lewis Research Center, Cleveland, OH, USA
NASA report to education, volume 7
Dec 1, 1989; In English; 26 min. 14 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190232; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Segments of this video include the STS-34 Mission, Pegasus tests, and Voyager’s Neptune.

CASI
Education: Neptune (Planet); Pegasus Air-Launched Booster; Space Shuttle Missions; Voyager Project

199404011059 NASA Ames Research Center, Moffett Field, CA, USA
Galileo probe ready to go
Feb 1, 1989; In English; 4 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190446; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video presents close cloud views of Jupiter, probe deployment, descent, chute opening, trajectories, and views of assembly at Hughes.

CASI
Deployment; Descent Trajectories; Galileo Probe; Jupiter Atmosphere; Parachute Descent; Parachutes; Spacecraft Components

199404011159 NASA, Washington, DC, USA
Voyager 2: Neptune encounter
Aug 8, 1989; In English; 11 min. 31 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190220; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Voyager’s encounters with Jupiter, Saturn, Uranus, and pre-Neptune are reviewed.

CASI
Images: Saturn (Planet); Uranus (Planet); Voyager Project

199404011639 NASA Lewis Research Center, Cleveland, OH, USA
NASA images 12
Apr 1, 1988; In English; 28 min. 7 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190215; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Clips on Voyager 2 at Uranus and Venus are presented.

CASI
Images: Uranus (Planet); Venus (Planet)

199404011648 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA
Life and the solar system: The CRAFT and Cassini missions
Mar 21, 1993; In English; 9 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190219; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Animation and interviews describe the proposed missions to study comets and Saturn.

CASI
Cassini Mission; Comet Rendezvous Asteroid Flyby Mission; Comets: Saturn (Planet)

199404011597 NASA Ames Research Center, Moffett Field, CA, USA
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.
CAS
Checkout: Computer Animation: Galileo Probe; Galileo Project: Manufacturing; Prelaunch Summaries; Space Vehicle Checkout Program

1994014484 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.
CAS
Neptune (Planet); Neptune Atmosphere; Neptune Satellites; Planetary Rings; Voyager 2 Spacecraft

1994014485 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 1989, 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.
CAS
Galileo Project; Galileo Spacecraft; Magellan Project (NASA): Magellan Spacecraft (NASA); Planetary Geology; Space Exploration; Ulysses Mission

1994014486 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 exist 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.
CAS
Helium Isotopes: Lunar Excavation Equipment: Lunar Mining: Lunar Resources: Space Commercialization

1994014493 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.
CAS
Mars (Planet): Space Exploration

1994027299 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.
CAS
Extraterrestrial Life: General Overviews; Histories: Mars (Planet): Mars Probes; Mars Surface: Planetary Mapping

1994029298 NASA Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA
And then there was Voyager
Sep 25, 1990; In English; 3 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.
CAS
Grand Tours: Milky Way Galaxy: Voyager Project

1994029586 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

1994036998 NASA 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.
CAS
Galileo Project: Space Exploration

1994036999 NASA 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.)
CAS
Space Exploration. Voyager Project

1994031000 NASA Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA
Voyager last picture show
Sep 1, 1989; 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.
CAS
Neptune (Planet): Space Exploration: Voyager Project

221
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

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

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

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

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

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

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

Cometary Collisions: Jupiter (Planet): Shoemaker-Levy 9 Comet
Apollo 16: Nothing so hidden

Jan 1, 1972; In English; 28 min. 30 sec. playing time; Report No.(s): NONP--NASA--VT--95--33955; No Copyright; Available: 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 prize, discovery of the house-sized rock, 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 Crater's; Lunar Exploration; Lunar Landing; Lunar Launch: Lunar Photography; Lunar Rocks; Lunar Trajectories; Moon

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; Available: 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

New look at the old Moon

Jan 1, 1988; In English; 28 min. 30 sec. playing time, in color, with sound; Report No.(s): NONP--NASA--VT--95--33957; No Copyright; Available: 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

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; Available: 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 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

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; Available: 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 animation on the origin of the solar system. Dr. Bruce C. Murray, director of the Jet Propulsion Laboratory, comments on the mission.

JSC Mariner 10 Space Probe: Mercury (Planet); Solar System Evolution; Venus (Planet)

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; Available: 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 animation on the origin of the solar system. Dr. Bruce C. Murray, director of the Jet Propulsion Laboratory, comments on the mission.

JSC Mariner 10 Space Probe: Mercury (Planet); Solar System Evolution; Venus (Planet)

Mars Pathfinder B--roll

Jan 9, 1994; In English; 9 min. 6 sec. playing time; Report No.(s): NONP--NASA--VT--95--42244; No Copyright; Available: 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
outlines the Outreach Program, which offers the public the chance to suggest new ideas for space research and exploration.

Author

Mars Exploration; Mars Sample Return Missions; Mars Surface; Technological Forecasting

1995#023828 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

Lunar/Mars exploration for synthesis group

Aug 12, 1992; In English; 10 min. 21 sec. playing time, in color, with sound

Report No(s): NONP-NASA-VT-95-57873; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Computer animation of future expeditions, research projects, and equipment (satellites, telescopes, etc.) are contained on this video. President George Bush, in a Presidential Address, speaks on future plans for NASA emphasizing Space Station Freedom and a manned mission to Mars.

CASI

Lunar Exploration; Lunar Programs; Manned Mars Missions; Mars Exploration; Space Station Freedom

1995#023897 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

Apollo 14: Shepard hitting golf ball on Moon

Jan 1, 1970; In English; 3 min. playing time, in color, with sound

Report No(s): NONP–NASA–VT–95–56871; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage of astronaut Alan Shepard hitting a golf ball on the Moon is featured on this video.

Author

Apollo 14 Flight: Astronauts; Lunar Exploration; Lunar Surface; Moon; Weightlessness

1995#03227 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

Apollo 14 mission to Fra Mauro

Beasley, Brian D., editor, NASA Lyndon B. Johnson Space Center, USA; Aug 11, 1991; In English; 28 min. 30 sec. playing time, in color, with sound

Report No(s): NONP–NASA–VT–1995005615; 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 rock and soil 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. Rossa. 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 to both the Moon and the Earth, Moon and Earth spacecraft launching and landing, in-orbit command 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

19990116267 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA

Voyager Outreach Compilation

Sep. 17, 1998; In English; Videotape: 1 hr., 11 min., 29 sec. playing time, in color, with sound

Report No(s): NONP–NASA–VT–1999020577; 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 lunar 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 as 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

19990116548 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA

Mars Pathfinder and Mars Global Surveyor Outreach Compilation

Sep. 17, 1999; In English; Videotape: 51 min. 25 sec. playing time, in color, with sound

Report No(s): NONP–NASA–VT–19990206757; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This NASA JPL (Jet Propulsion Laboratory) video compilation 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. Activities at spacecraft control during significant mission events are also included at the end. The spacecraft camera 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 injection, 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 Vehicless; Computer Animation

1999011671 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA

Galileo Science Summary October, 1997

Oct. 29, 1997; In English; Videotape: 17 min. 34 sec. playing time, in color, with sound

Report No(s): NONP–NASA–VT–1999020661; No Copyright; Avail: CASI; B02, 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 announced with slides prior to the presentation. Orchestral 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. 1998; In English; Videotape: 9 min. playing time, in color, no sound Report No.(s): NONP--NASA--VT--1998067897; 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--1992067893; 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, 1992 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

19990100248 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--1994068079; 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 of 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) Renée 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 Mann of the Goddard Space Flight Center. Roger Yelle, who had been working on analyzing spectrographic 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 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

Auroras; Cometary Collisions; Fragments; Shoemaker-Levy 9 Comet; Sulfur; Jupiter (Planet); Jupiter Atmosphere

19990100254 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--1992078999; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video has five sections. The first is a 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 final 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 tour of a full-scale model of the spacecraft. The last 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

19990100644 Jet Propulsion Lab., Calif. 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--1989069900; 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 field, 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, Callisto, Aria, Ganymede, Ariel, Miranda, Io, Europa, Amalthea, Rhea, Dione, Tethys, Enceladus, Mimas, 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 Satellites; Saturn (Planet); Uranus Satellites; Uranus (Planet); Jupiter Satellites; Jupiter (Planet); Neptune Satellites; Neptune (Planet)

19990100642 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--1994069799; 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 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. Sphalaski (Galileo Project Manager) and Clayne M. Yeates (Acting Science Mission Design Manager). Mr. Sphalaski’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 Space Center, Cocoa Beach, FL USA Voyager Briefing: Expectations of the Neptune Encounter Aug. 04, 1989; In English; Videotape: 52 min., 25 sec., running time, in color, with sound Report No.(s): NONP-NASA-VT-1999206981; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This NASA KSC video release presents a news briefing held Aug. 4, 1989 at NASA Headquarters three weeks after Voyager 2’s official “encounter” with Neptune began. The video is comprised of two slide presentations followed by a short question and answer period. The press conference is moderated by Charles Redmond, (NASA Public Affairs), includes an introduction by Dr. Geoffrey A. Briggs (Dir., Solar System Exploration Div.), and features Norman R. Haynes (Voyager Project Manager, JPL) and Dr. Edward C. Stone (Voyager Project Scientist, Cal Tech). Dr. Haynes’ presentation centers on Voyager’s history, engineering changes, and spacecraft trajectories while Dr. Stone presents the scientific aspects of Voyager, including the 11 scientific investigations planned for the mission, instruments used, and imaging techniques.

CASI

Voyager Project: Neptune (Planet); Voyager 2 spacecraft; Flyby Missions

This NASA Kennedy Space Center, Cocoa Beach, FL USA Shoemaker-Levy 9 Comet Impact on Jupiter Briefing From JPL Jul. 17, 1999; In English; Videotape: 1 hr., 62 min., 22 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT-1999206995; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

A panel discussion held on July 17, 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. The panelists were Dr. Eugene and Carolyn Shoemaker (from Lowell Observatory and US Geological Survey), the Shoemaker-Levy comet co-discoverers; David Levy, also a co-discoverer of the Shoemaker-Levy comet; and Dr. Heidi Hammel (from Massachusetts Institute of Technology). On this second day of impact, the discussion was focused on the impact of the fragments A, B, C, and D. Dr. Hammel, who is also a Principal Investigator for the Hubble Imaging Team at MIT, presents preliminary results of the study of images taken by the Hubble Space Telescope (HST). A summary of the observations from different observatories was also given. Included in these observations were reports from the W.M. Keck Observatory, and Infrared Telescope Facility (IRTF) at Mauna Kea Observatory.

CASI

Cometary Collisions; Shoemaker-Levy 9 Comet; Hypervelocity Impact; Jupiter (Planet); Astronomical Observatories

This NASA Kennedy Space Center video production presents Part 1 of a press conference held at the Jet Propulsion Laboratory on Dec. 1, 1992, 7 days prior to the Galileo Earth-2 flyby. The video begins following presentations given by William J. O’Neil (Galileo Project Manager), Torrence Johnson (Galileo Project Scientist), Dr. Joseph Veverka (Galileo Imaging Team,
Galileo Mission Science Briefing
Jul. 21, 1989; In English; Videotape: 1 hr. 1 min. 32 sec. playing time, in color, with sound
Report No.(s): NONP- NASA - VT-1999206978; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
This is the first of two tapes of the Galileo Mission Science press briefing presented in the panel moderated by George Diller from the Kennedy Space Center (KSC) Public Affairs Office. The participants are John Conway, the director of Payload and operations at Kennedy; Donald E. Williams, Commander of STS-43, the shuttle mission which will launch the Galileo mission; John Cassini, the Deputy Assistant Director of Flight Projects at the Jet Propulsion Lab (JPL); Dick Sphelshik, Galileo Project Manager at JPL; and Terrence Johnson, Galileo Project Scientist at JPL. The briefing begins with an announcement of the arrival of the Galileo Orbiter at KSC. The required steps prior to the launch are discussed. The mission trajectory and gravity assists from planetary and solar flybys are reviewed. Detailed designs of the orbiter are shown. The distance that Galileo will travel from the sun is reviewed, as is the use of solar energy. Therefore, the projection of the spacecraft at KSC and final tests and preparations is shown. Some of the science goals of the mission are reviewed. Another video showing an overview of the Galileo mission is presented. During the question and answer period, the issue of the use of plutonium on the mission is broached, which engenders a review of testing methods used to ensure the safety of the capsule containing the hazardous substance. This video has actual shots of the orbiter, as it is undergoing the final preparations and tests for the mission.
CASI
Galileo Project: Galileo Probe; Jupiter Atmosphere

Galileo 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 atmospheric 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 volcanism on Io are presented. The individual presentations are followed by a question and answer period with questions posed by scientific journalists 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

First Galileo Mission Science Press Conference, Part 1
Feb. 22, 1996; In English; Videotape: 1 hr. 40 min. 27 sec. playing time, in color, with sound
Report No.(s): NONP- NASA- VT-2000001142; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This NASA Kennedy Space Center (KSC) video release presents a press conference from Ames Research Center (ARC) 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. The press conference question and answer period continues from Part 2. Atmospheric thermal structure, water abundances, wind profiles, radiation, cloud structure, chemical composition, and electricity are among the topics discussed. The question and answer period is followed by a presentation in which all of the visuals that are shown during the press conference are reviewed. The video ends with several animations depicting the entry of the probe, descent, and the first measurements of the jovian atmosphere, historical footage of the building of the probe, and a short interview with Dr. Richard Young (Galileo Probe Scientist, ARC). Parts 1 and 2 of the press conference can be found in document numbers NONP- NASA-VT-2000001073, and NONP- NASA- VT-2000001074.
CASI
Galileo Spacecraft: Jupiter Probe; Jupiter Atmosphere

First Galileo Mission Science Press Conference, Part 2
Feb. 22, 1996; In English; Videotape: 1 hr. 40 min. 27 sec. playing time, in color, with sound
Report No.(s): NONP- NASA- VT-2000001142; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, 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 atmospheric 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 volcanism on Io are presented. The individual presentations are followed by a question and answer period with questions posed by scientific journalists 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

First Galileo Mission Science Press Conference, Part 3
May 29, 1996; In English; Videotape: 1 hr. 22 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP- NASA- VT-2000001074; No Copyright; Avail: CASI; B03, Videotape-Beta; V04, Videotape-VHS
This NASA Kennedy Space Center (KSC) video release presents Part 3 of a press conference from Ames Research Center (ARC) 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. The press conference question and answer period continues from Part 2. Atmospheric thermal structure, water abundances, wind profiles, radiation, cloud structure, chemical composition, and electricity are among the topics discussed. The question and answer period is followed by a presentation in which all of the visuals that are shown during the press conference are reviewed. The video ends with several animations depicting the entry of the probe, descent, and the first measurements of the jovian atmosphere, historical footage of the building of the probe, and a short interview with Dr. Richard Young (Galileo Probe Scientist, ARC). Parts 1 and 2 of the press conference can be found in document numbers NONP- NASA-VT-2000001073, and NONP- NASA- VT-2000001074.
CASI
Galileo Spacecraft: Jupiter Probe; Jupiter Atmosphere
Galileo Project: Galileo Probe; Jupiter Atmosphere

2000015388 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; Aval: 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 prin-
cipal investigators and project scientists that oversee the Galileo mission. Among
these panelists, William J. O’Neil (Jet Propulsion Lab.) begins the video prasing
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 atmo-
sphere 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. Atmo-
spheric 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 indi-
vidual 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

2000012095 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; Aval: 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

2000012195 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; Aval: 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
dmembers 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 Burchbaum 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 Gravitiy
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)

2000027767 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA

MGS Images of Mars

Jun. 29, 1999; In English; Videotape: 4 min. 21 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT-2000033901; No Copyright; Aval: 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 kilo-
meters (1.4 miles) wide. It is located on the east flank of the Alba Patera volcano
in northern Tharsis.

CASI

Mars Global Surveyor; Mars Photographs; Mars Surface; Troughs

2000027771 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA

Mars Global Surveyor Images

Jun. 29, 1999; In English; Videotape: 3 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT-2000033902; No Copyright; Aval: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Images of several dust devils were captured by the Mars Orbiter Camera
(MOC) during its global geodesy 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

2000027712 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA

Mars Images MOC2-186 through 189

Apr. 07, 1999; In English; Videotape: 3 min. 12 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT-2000033898; No Copyright; Aval: 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; and East Tithonium chaasma
wall, Valles Marineris.

CASI

Mars Global Surveyor; Images: Mars Surface; Craters; Mars (Planet)
This videotape presents the last part of that meeting, which culminates in the meeting of the Sol_ system's largest satellite, the project scientist and engineers gather VT-2000036029. When the Galileo spacecraft flew by Ganymede, Jupiter's and B04, Videotape-VHS 02, Videotape-VHS Live footage shows the speakers participating in the Magellan Press Conference 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 Artemus. 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 Project (NASA); Topography; Venus (Planet); Space Exploration; Venus Surface

Titan III Mars Explorer Transfer Orbital Stage Delivery to the PHSF Jan. 10, 1992; In English; videotape: 6 min. 25 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT-2000081541; No Copyright; Avail: CASI; B01, Videotape-VHS Video of 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 Artemus. 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 Magellan Project (NASA); Magellan Spacecraft (NASA); Venus Orbiting Imaging Radar (Spacecraft); Space Exploration; Venus (Planet)

Galileo -- Ga yme de Family Nigh Jun. 26, 1996; In English; Videotape: 1 hr. 30 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT-2000036029; No Copyright; Avail: CASI; B04, Videotape-VHS; 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-2000036566. CASI Conferences; Magellan Project (NASA); Galileo Spacecraft; Ga yme de; Jupiter (Planet); Galilean Satellites; Jupiter Red Spot; Jupiter Satellites

Galileo -- G anyme de Family Night Jun. 26, 1996; In English; Videotape: 27 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT-2000036029; No Copyright; Avail: CASI; B02, Videotape-VHS; V02, Videotape-VHS This videotape is a continuation of tape number NONP-NASA-VT-2000036028. When the Galileo spacecraft flew by Ganymede, Jupiter's and the solar system's largest satellite, the project scientist and engineers gather together with their friends and family to view the photos as they are received. This videotape presents the last part of that meeting, which culminates in the announcement of the confirmation of the fly-by, and a review of the current trajectory status. CASI Galileo Spacecraft; Ganymede; Jupiter (Planet)
Orbital Insertion; Spacecraft Orbits; Orbit Maneuvers; Planet Probes; Missions

The Mars Observer mission spacecraft was primarily designed for exploring Mars and the Martian environment. The spacecraft was launched on September 25, 1992. The spacecraft was lost in the vicinity of Mars on August 21, 1993 when the spacecraft began its maneuver 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 system was still non-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. Mr. McMillan introduces William Piotrowski, acting director of solar system exploration, who reiterates that there is indeed no communication with the Observer spacecraft. He is followed by Glenn 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 L. Albee, chief scientist for the Mars Observer Mission, joins the other panel members to answer questions. At the end of the press briefing the animation of the Mars orbital insertion is shown again.

Orbit Insertion; Spacecraft Orbits; Mars Probes; Mars Missions

The Mars Observer mission spacecraft was primarily designed for exploring Mars and the Martian environment. The spacecraft was launched on September 25, 1992. The spacecraft was lost in the vicinity of Mars on August 21, 1993 when the spacecraft began its maneuver sequence for Martian orbital insertion. This videotape shows a lecture by Suzanne R. Dodd, the Mission Manager of the Mars Observer Project. Ms. Dodd begins with a brief overview of the mission and the timeline from the launch to orbital insertion. Ms. Dodd then reviews slides showing the trajectory of the spacecraft on its trip to Mars. Slides of the spacecraft being constructed are also shown. She then discusses the Mars orbit insertion and the events that will occur to move the spacecraft from the capture orbit into a mapping orbit. During the trip to Mars, scientists at JPL had devised a new strategy, called Power In that would allow for an earlier insertion into the mapping orbit. The talk summarizes this strategy, showing on a slide the planned transition orbits. There are shots of the Martian moon, Phobos, taken from the Viking spacecraft, as Ms. Dodd explains that the trajectory will allow the orbiter to make new observations of that moon. She also explains the required steps to prepare for mapping after the spacecraft has achieved the mapping orbit around Mars. The lecture ends with a picture of Mars from the Observer on its approach to the planet.

Failure; Orbit Insertion; Mars Probes; Mars Missions

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Orbit Insertion; Spacecraft Orbits; Mars Probes; Earth-Mars Trajectories; Transfer Orbits; Spacecraft Maneuvers; Orbital Maneuvers

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Orbit Insertion; Spacecraft Orbits; Mars Probes; Earth-Mars Trajectories; Transfer Orbits; Spacecraft Maneuvers; Orbital Maneuvers

Live footage of the Titan 3 Mars Observer is shown at the Payload Hazardous Servicing Facility (PHSF). The Mars Observer is a NASA mission to study the surface, atmosphere, interior and magnetic field of Mars from Martian orbit.

Titan III Mars Observer Press Showing at the PHSF Aug. 13, 1992; In English; Videotape: 2 min. 30 sec. playing time, in color, no sound
Report No.(s): NONP--NASA--VT--2000081554; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Mars Observer Press Conference Aug. 25, 1993; In English; Videotape: 18 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000081551; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Footage shows Bob MacMillan, NASA's Public Information Office, as he introduces the Mars Observer Project Manager, Glenn Cunningham. Glen is shown addressing the current status of the Mars Observer communication system, the inability of NASA to establish contact, and the action that is currently being taken to establish contact with the spacecraft. Glen is also shown answering questions from both the audience as well as other NASA Centers.

Titan 3 Launch Vehicle; Mars Observer

NASAToday -- Mars Observer Segment (Part 4 of 6) Aug. 20, 1993; In English; Videotape: 16 min. 20 sec. playing time, in color with sound
Report No.(s): NONP--NASA--VT--2000066900; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This videotape consists of eight segments from the NASA Today News program. The first segment is an announcement that there was no date set for the launch of STS-51, which had been postponed due to mechanical problems. The second segment describes the Middeck Dynamic Experiment Facility. The third segment is about the scheduled arrival of the Mars Observer at Mars, it shows an image of Mars as seen from the approaching Observer spacecraft, and features an animation of the approach to Mars, including the maneuvers that are planned to put the spacecraft in the desired orbit. The fourth segment describes a discovery from an infrared spectrometer that there is nitrogen ice on Pluto. The fifth segment discusses the Aerospace for Kids (ASK) program at the Goddard Space Flight Center (GSFC). The sixth segment is about the high school and college summer internship programs at GSFC. The seventh segment announces a science symposium being held at Johnson Space Center. The last segment describes the National Air and Space Museum and NASA's cooperation with the Smithsonian Institution.

Mars Observer; Museums; Pluto Atmosphere; Pluto (Planet); Mars Missions

NASAToday -- Mars Observer Segment Aug. 20, 1993; In English; Videotape: 16 min. 20 sec. playing time, in color with sound
Report No.(s): NONP--NASA--VT--2000066906; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Livio describes the shapes of rise planetary nebulae, gives three reasons to study 3568, NGC 3918, NGC 5307, NGC 6826, NGC 7009, and Hubble 5. An artist's images display various planetary nebulae, such as M2-9 Twiight Nebula, NGC animation simulates a giant star as it swallows its smaller companion. HST Space Telescope Science Institute Theorist Dr. Mat'io Livio. A computerized animation, images from the Hubble Space Telescope (HST), and interviews with B01, Videotape-Beta; V01, Videotape-VHS

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

This video presents the C 141 Kuiper Airborne Observatory Solar Eclipse Mission.

CASI

Kuiper Airborne Observatory; Solar Eclipses

2001021609 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 extraplanet; (2) star and planet motion; and (3) young stellar disk and planet formation. Footage shows the outside of the Mauna Kea Observatory 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 Kinney, 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 extraplanets that are orbiting the stars HD46375 and 79 Sit, 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.

1999017814 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

1994011049 NASA Ames Research Center, Moffett Field, CA, USA

C 141 KAO solar eclipse mission

Apr 1, 1998; 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

2001026754 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 Twiight Nebula, NGC 3568, NGC 3918, NGC 5307, NGC 6826, NGC 7099, and Hubble 5. An artist's 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, 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 Sorrie.

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 75 Nuclear Physics.

2000028578 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

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

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

Gamma Ray Observatory; Gamma Ray Telescopes; Gamma Ray Astronomy; Spaceborne Astronomy; Air Locks

2000030668 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

2000003777 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
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 (revised)

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.

1994/00/09/139 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, Keurper Airborne Observatory, High Altitude Earth Survey, LANDSAT, aerodynamic research, electric cars, wind energy, XV-15, Quiet Short Takeoff Aircraft, X-14 BVTOL, 40 x 80 Wind Tunnel, and turboprop research.

Author (revised)

Aerospace Engineering; NASA Programs; NASA Space Programs; Research and Development

1994/00/09/160 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

1994/00/01/0768 NASA, Washington, DC, USA

**The 1960 highlights**

Dec 1, 1960: 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; V/STOL; jet noise abatement; and Apollo 9, 10, 11, and 12 missions.

CASI

Aerospace Engineering; NASA Programs; NASA Space Programs; Research and Development; Space Missions

1994/00/01/0769 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, aeronautics, 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

1994/00/01/0770 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

1994/00/01/0842 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

1994/00/01/849 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

1994/00/01/878 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 aeronautical montage, Surveyor lands on the Moon, Lunar Orbiter, weather satellites, Orbiting Geophysical Observatory, Pegasus, Pioneer, sounding rockets, solar eclipse, X-15, lifting bodies, solid rockets, nuclear powered engines, Project Gemini ends, and Apollo-Saturn.

CASI

Apollo Program; Lifting Bodies; Lunar Exploration; Lunar Orbiter; OGO; X-15 Aircraft

1994/00/01/877 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, Bionautsatellite, 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
233

19940418979 NASA, Washington, DC, USA
NAS A: 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

19940418983 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

19940419021 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. Kenne- 
dy'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

19940419026 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
620 Astronauts/Colombo авт to RSC and Walt Disney World; CL 739 ASTP
Joint Crew Activities; CL 747 ASTP Astronauts/Colombo Horseshoe Ranch
Visit; CL 758 E-F ASTP Training - US/SSR; and CL 743 ASTP Joint Crew
Training in the Soviet Union.
CASI
Apollo Soyuz Test Project: Astronaut Training; Astronauts: Cosmonauts: Space-
crews

19940419037 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 aerona-
tics.
CASI
Earth Resources: Kohoutek Comet: Mariner-Mercury 1973: Sounding Rockets

19940419038 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

19940419039 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, Spacelab, HEAO-1, and energy research.
CASI
Energy Technology: HEAO 1: LANDSAT Satellites: Space Shuttles: Spacelab

19940419040 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 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

19940419044 NASA, Washington, DC, USA
The 1971 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,
1971
CASI
Earthquakes; Galileo spacecraft; Intelsat Satellites; Marine Resources; Solar 
Eclipses; Turbulent Wakes

19940419051 NASA, Washington, DC, USA
The 1979 highlights
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
Accident Prevention: Imp: Jet Aircraft Noise; Mariner Spacecraft; Noise Reduc-
tion: OGO: Runways: Small Scientific Satellites: Sounding Rockets

19940419056 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
STTS-26 mission, in the NASA Fine Arts Program.
CASI
Music: Space Shuttle Mission 51-F

19940419061 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-11 in the 11 ft, an Apollo in the
8x7, Dymosor 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

1994011835 NASA, Washington, DC, USA

The 1982 highlights
Dec 1, 1982; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190469; 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, proppan research, aircraft icing studies, and Oschishok Sirshow.
CASI


1994011836 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 Scissors Wing, and automated pilot advisory system.
CASI


1994011586 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 Marsha Ivins 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

19940114507 NASA, Washington, DC, USA

Langley’s 50th year
Oct 1, 1967; In English; 14 min. 30 sec. playing time, in color, with sound
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 overwater combat ditching, diving, and braking, the X series aircraft experiments with supersonic flight, helicopter and vertical Take Off and Landing (VTOL) aircraft, airports landing studies, and early prototypes for the Space Shuttle.
CASI

Histories: Hydrodynamics: Research Projects: Space Shuttles: Wind Tunnels

19940129667 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–94–12346; 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

19940929283 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

Apollo Project: Astronauts

1995004300 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

1995004338 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

19950026963 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

Twenty-five years of progress. Part 1: Birth of NASA. Part 2: The Moon—a goal
Jan 1, 1984; In English; Sponsored by NASA, Washington; 60 min. playing time, in color, with sound
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

Aeronautical Engineering: Research and Development: Research Projects
with Eanus the Monkey, President Kennedy’s speech in Washington about the Space Program, Project Gemini - the 2-manned space flight, and the near disas-
trous recovery of Virgil Grissom from splash down.

CASI

Astronauts; Communication Satellites; Histories; Meteorological Satellites; 
NASA Space Programs; Space Flight

200100118719 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 tech-
niques.

CASI

Imaging Techniques: Rivers; River Basins; Earth Observations (From Space)
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