The NASA STI Program Office . . . in Profile

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

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

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

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

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

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

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

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

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

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

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- E-mail your question via the Internet to help@sti.nasa.gov

- Fax your question to the NASA STI Help Desk at (301) 621-0134

- Telephone the NASA STI Help Desk at (301) 621-0390

- Write to:
  NASA STI Help Desk
  NASA Center for AeroSpace Information
  7121 Standard Drive
  Hanover, MD 21076-1320
Introduction

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

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

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

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

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

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 34 Fluid Mechanics and Heat Transfer.

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

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

05  Aircraft Design, Testing and Performance  
Includes all stages of design of aircraft and aircraft structures and systems. Also includes aircraft testing, performance, and evaluation, and aircraft and flight simulation technology. For related information, see also 18 Spacecraft Design, Testing and Performance and 39 Structural Mechanics. For land transportation vehicles, see 85 Technology Utilization and Surface Transportation.

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

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.
Research and Support Facilities (Air) 6
Includes airports, runways, hangars, and aircraft repair and overhaul facilities; wind tunnels, water tunnels, and shock tubes; flight simulators; and aircraft engine test stands. Also includes airport ground equipment and systems. For airport ground operations see 03 Air Transportation and Safety. For astronautical facilities see 14 Ground Support Systems and Facilities (Space).

Astronautics (General) 7
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.

Astrodynamics 15
Includes powered and free-flight trajectories; and orbital and launching dynamics.

Ground Support Systems and Facilities (Space) 16
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).

Launch Vehicles and Launch Operations 19
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.

Space Transportation and Safety 22
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.

Spacecraft Design, Testing and Performance 174
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.

Spacecraft Instrumentation and Astrionics 185
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**
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**
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*.

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*.

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

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

70 **Physics (General)**
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**
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**
Includes light phenomena and the theory of optical devices. For lasers see 36 *Lasers and Masers*.

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

81 **Administration and Management**
Includes management planning and research.

82 **Documentation and Information Science**
Includes information management; information storage and retrieval technology; technical writing; graphic arts; and micrography. For computer documentation see 61 *Computer Programming and Software*. 
85 Technology Utilization and Surface Transportation 213
Includes aerospace technology transfer; urban technology; surface and mass transportation. For related information see 03 Air Transportation and Safety, 16 Space Transportation and Safety, and 44 Energy Production and Conversion. For specific technology transfer applications see also the category where the subject is treated.

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

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

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

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

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

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

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

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

*Prices are subject to change without notice*

### Video Prices (Betacam SP) NTSC

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### NASA Prices:

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### U.S. Prices:

For users within the U.S.

### International Prices:

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

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(most orders are processed within three (3) business days, then shipped)

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  - (delivered within 2-3 business days)

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Federal Express

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GUIDELINES

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Please Read These Instructions Carefully Before Completing Form

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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.

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

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

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

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

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

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

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

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

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

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

- **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.** ____________________________

**Exp. Date** ____________________________ *(mm/dd/yy)*

**Signature** ____________________________ *(Required to validate credit card order)*

**Processing:**

- **Standard**
  - (most orders are processed within three (3) business days, then shipped)
  - $______

- **Rush** $10.00 per item
  - (orders are processed within one (1) business day, then shipped)
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  - $13.00, 1-day delivery service to most destinations
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- **Fax** up to 30 pages
  - (U.S. $16.50; International $24.00)
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  - $______

**Total Charges** $______

**Video Total** $______
ORDERING INSTRUCTIONS

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

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

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

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

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

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

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

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

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  (most orders are processed within three (3) business days, then shipped)
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  (orders are processed within one (1) business day, then shipped)

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- 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)

Video Total $__________

**Video Total** $__________

Total Charges $__________
Typical Report Citation and Abstract

1. 19960001070 California Inst. of Tech., Irvine, CA, USA
2. The tunnels of Samos
3. 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
4. Avail: CASI; A02, Videotape-VHS; A22, Videotape-BETA
5. 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.
6. Author
7. Applications of Mathematics; Geological Surveys; Greece; Histories; Hydrology; Islands; Waterways

Key

1. Doc ID Number; Corporate Source
2. Title
3. Author(s) and Affiliation(s)
   - Publication Date
   - Notes
   - Playing Time
4. Availability and Price Codes
5. Abstract
6. Abstract Author
7. Subject Terms
NASA VIDEO CATALOG

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.

199300929666 NASA Lewis Research Center, Cleveland, OH, USA

NACA fire crash research
Jan 1, 1992; In English; 30 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

19950004297 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

F-8 Aircraft: Fly by Wire Control; Research; Supercritical Wings; Transonic Flow

19950004337 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

NACA/NASA: X-1 through X-31
Apr 4, 1994; In English; 28 min. playing time, in color, no sound Report No.(s): NONP--NASA--VT--94--23646; 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

The accomplishments of LeRC in the field of computational fluid dynamics are presented.

Author (revised)

Airframe Design: Computational Fluid Dynamics; Research Facilities

1994009159 NASA Langley Research Center, Hampton, VA, USA

III-20 personnel launch system
Sep 1, 1990; In English; 5 min. 25 sec. playing time, in color, with sound Report No.(s): NONP--NASA--VT--93--185307; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

An overview of lifting body research to include LeRC's full scale engineering research model is presented.

Author (revised)

Launchers; Lifting Bodies; Lifting Reentry Vehicles; Spacecraft Launching; Spacecraft Models

19940014491 NASA Langley Research Center, Hampton, VA, 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--198249; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This is an overview of research being done in laminar flow at Ames Dryden Flight Research Center and Langley Research Center. Airflow research at Ames Dryden has resulted in a special wing covering that will artificially induce laminar flow on the wing surface; this specially adapted wing is shown being tested in different flying conditions. This video also features research done at Langley in producing a chemical covering for wings that will make visible 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

19940022658 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; Brandon, Jay, NASA Langley Research Center, USA; Stacy, Kathryn, 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 505-59-36-03
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

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 34 Fluid Mechanics and Heat Transfer.

19940009148 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

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

APRIL 2002
03 AIR TRANSPORTATION AND SAFETY

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

1994001953 NASA, Washington, DC, USA
Life saving satellites
Jan 1, 1993; In English; 6 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190414; No Copyright; Aval: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Details of COSPAS/SARSAT, the international search and rescue project, are covered.
CASI COSPAS; Rescue Operations; SARSAT

19940027297 NASA Lewis Research Center, Cleveland, OH, USA
WHIPICE
Jan 1, 1992; In English; 8 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–94–9949; No Copyright; Aval: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video documents efforts by NASA Lewis Research Center researchers to improve ice protection for aircraft. A new system of deicing aircraft by allowing a thin sheet of ice to develop, then breaking it up into particles, is being examined, particularly to determine the extent of shed ice ingestion by jet engines that results. The process is documented by a high speed imaging system that scans the breakup and flow of the ice particles at 1000 frames per second. This data is then digitized and analyzed using a computer program called WHIPICE, which analyzes grey scale images of the ice particles. Detailed description of the operation of this computer program is provided.
CASI Aircraft Hazards; Aircraft icing: Applications Programs (Computers); Deicing; Ice Prevention

19970005033 NASA Johnson Space Center, Houston, TX USA
Wind Tunnel Tests of an Inflatable Airplane
Oct. 09, 1996; In English; Videotape; 32 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–97–1997005936; No Copyright; Aval: CASI; V03, Videotape-VHS
In this video a wind tunnel investigation of aerodynamic and structural deflection characteristics of an inflatable airplane is shown. The film includes scenarios during wind tunnel tests of an inflatable airplane in the Langley Full Scale Tunnel with the main objective of obtaining load factors prior to wing buckle of 4.5 to 5.0 g. The inflation pressure during the test was indicated to be 7.0 psi.
CASI Inflatable Structures; Wings; Buckling; Deflection; Aerodynamic Stability; Aerodynamic Loads; Aerodynamic Characteristics

19940029657 NASA, Washington, DC, USA
Airline safety and economy
Jan 1, 1993; In English; 6 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–94–12939; No Copyright; Aval: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video documents efforts at NASA Langley Research Center to improve safety and economy in aircraft. Featured are the cockpit weather information needs computer system, which relays real time weather information to the pilot, and efforts to improve techniques to detect structural flaws and corrosion, such as the thermal bond inspection system.
CASI Aircraft Maintenance; Aircraft Safety; Aviation Meteorology; Flight Management Systems; Flight Safety; Inspection

19940029243 NASA Lewis Research Center, Cleveland, OH, USA
Crash impact survival in light planes
Jan 1, 1994; In English; 7 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–94–12927; No Copyright; Aval: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video explains the effects on aircraft and passengers of light plane crashes. The explanation is provided through the use of simulated light planes and dummies.
CASI Aircraft Accidents; Civil Aviation; Crash; General Aviation Aircraft; Light Aircraft; Passengers

19950004136 NASA, Washington, DC, USA
The High Speed Research Program
Jan 1, 1993; In English; 1 min. 11 sec. playing time, with sound
Report No.(s): NONP-NASA-VT–93–23140; No Copyright; Aval: CASI; B03, Videotape-Beta; V03, Videotape-VHS
This video highlights the endeavors of NASA and the USA manufacturers to provide technology that will make air travel to Pacific countries more efficient. This video was shown at the 1993 Paris Airshow.
CASI Air Transportation; High Speed; Supersonic Transports

19950013580 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA
F-16XL interview with Marta Bohn-Meyer
Jul 27, 1992; In English; 30 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–92–41117; No Copyright; Aval: CASE B02, Videotape-Beta; V02, Videotape-VHS
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 airfoil design, chord optimization, introduction of a suction feature 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.
CASI Aircraft Design; Airfoils; F-16 Aircraft

1995004144 NASA, Washington, DC, USA
Scientific balloons
Dec. 1, 1991; In English; 3 min. 38 sec. playing time
Report No.(s): NONP-NASA-VT–94–23140; No Copyright; Aval: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video discusses how NASA uses large helium-filled balloons to take payload up 25 miles to the edge of space to gather data. Balloons provide a cost effective approach to reach these heights.
CASI Balloon Landing; High Altitude Balloons

19970011535 NASA Lewis Research Center, Cleveland, OH, USA
Balloon SoundN; II_,_h Altitude Balloons
Aug 1, 1985; In English; 6 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190414; No Copyright; Aval: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video was shown at the 1993 Paris Airshow. It explains the effects on aircraft and passengers of light plane crashes. The explanation is provided through the use of simulated light planes and dummies.
CASI Aircraft Safety; NASA; Programs; Research and Development; Research Facilities

19940008763 NASA Lewis Research Center, Cleveland, OH, USA
NASA images 6
Jan 1, 1988; In English; 28 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190234; No Copyright; Aval: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The videotape is comprised of clips regarding aircraft safety and development through NASA research at its various centers.
CASI Aircraft Safety; NASA Programs; Research and Development; Research Facilities

19940029945 NASA, Washington, DC, USA
Life saving satellites
Jan 1, 1993; In English; 6 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190414; No Copyright; Aval: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Details of COSPAS/SARSAT, the international search and rescue project, are covered.
CASI COSPAS; Rescue Operations; SARSAT
04 AIRCRAFT COMMUNICATIONS AND NAVIGATION

Includes all modes of communication within 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.

19950119322 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 V/STOL (Vertical/Short Takeoff and Landing) Systems research Aircraft (VSRA), which is a modified version of the U.S. Marine Corps’ 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 help 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; V/STOL 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; 39 Structural Mechanics. For land transportation vehicles, see 85 Technology Utilization and Surface Transportation.

19940109133 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

199401010488 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

199401010850 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 updated model photography of the 1991 NASP design.

CASI
Aircraft Models; National Aerospace Plane Program; Photography

199401010854 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–93–190251; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This document examines the goals and accomplishments of the forward sweep-winged X-29.

CASI
Flight Tests; Swept Forward Wings; X-29 Aircraft

199401010855 NASA, Washington, DC, USA
XV–15: Tiltrotor
Jan 1, 1991; In English; 2 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190252; 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

199401010923 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

199401014489 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–93–198217; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

A preliminary look at the Ame 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.

CASI

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

19940429265 NASA, Washington, DC, USA

Presentation: 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

19940429284 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

19950404299 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

F-18 HARV presentation for industry
May 1, 1993; In English; 20 min. 57 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--94--23631; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

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

DFRC

Angle of Attack: F-18 Aircraft; Research Aircraft

19950404303 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

19950404304 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

19950404328 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

19950404329 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

19950404330 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

F-15 B35 (HIDEC) resource tape
Feb 1, 1993; In English; 1 hr. 29 min. 59 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--94--23642; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, 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

19950404331 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

19950404332 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

19950404333 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

19950404339 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.

**DERC**  
**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: General Aviation Technology Utilization**

### 19950103578 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA  
**F-15 resource tape**  
Jan 1, 1994; In English; 9 min. 25 sec. playing time, in color, with sound  
Report No.(s): NONP–NASA–VT–95–41114; No Copyright; Avail: CASE; 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


### 19950103739 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: CASE; 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


### 2000043803448 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–2000043976; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the Hyper-X program modeling at NASA Langley Research Center. The Hyper-X craft is shown on top of a Pegasus booster in a 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


### 19980609135 NASA Ames Research Center, Moffett Field, CA, USA  
**Rotor stator CGI**  
Apr 1, 1988; In English; 5 min. playing time, in color, with sound  
Report No.(s): NONP–NASA–VT–93–185320; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

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


### 199900006150 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–93–190236; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video 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**

### 19990016865 NASA Lewis Research Center, Cleveland, OH, USA  
**Futurepath 1**  
Apr 1, 1988; In English; 8 min. 30 sec. playing time, in color, with sound  
Report No.(s): NONP–NASA–VT–93–190242; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The video 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

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

### 19990010871 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 video shows the unique propfan design. The propfan is designed to achieve the speeds and altitudes of jets while only using half the normal amount of fuel.

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

### 07 AIRCRAFT PROPULSION AND POWER

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

### 19940009135 NASA Ames Research Center, Moffett Field, CA, USA  
**Rotor stator CGI**  
Apr 1, 1988; In English; 5 min. playing time, in color, with sound  
Report No.(s): NONP–NASA–VT–93–185320; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

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


### 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–93–190236; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video 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**

### 19990010871 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 video shows the unique propfan design. The propfan is designed to achieve the speeds and altitudes of jets while only using half the normal amount of fuel.

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

### 08 AIRCRAFT STABILITY AND CONTROL

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

### 19940010886 NASA Lyndon B. Johnson Space Center, Houston, TX, USA  
**STS–26 STA training (Hauek)**  
May 1, 1988; In English; 3 min. 50 sec. playing time, in color, with sound  
Report No.(s): NONP–NASA–VT–93–190353; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video 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)

This video shows astronaut Rick Hauck at the Shuttle Training Aircraft (STA), CU's of the head's-up display, and air-to-air exercises.

Astronaut Training: Head-Up Displays: Training Aircraft

1995004305 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

Radio controlled for research
Jul 1, 1994; In English; 3 min. 43 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23637; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video presents how Dryden engineers use radio-controlled aircraft such as the 1/8-scale model F-18 High Alpha Research Vehicle (HARV) featured to conduct flight research.

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

1995004336 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

F–15 Propulsion Controlled Aircraft (PCA)
Jul 1, 1993; In English; 2 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23648; 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 tube; 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).

19940010852 NASA, Washington, DC, USA

Rotorcraft research
Jun 1, 1986; In English; 2 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190249; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This document describes wind tunnel testing and computer modeling done on the rotorcraft prior to building the final aircraft.

CASI Computerized Simulation; Rotary Wing Aircraft; Wind Tunnel Tests

19940014489 NASA Marshall Space Flight Center, Huntsville, AL, USA

Technology test bed
Aug 1, 1988; In English; 1 min. 30 sec. playing time, in color, with sound
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

19940014490 NASA, Washington, DC, USA

The world’s largest wind tunnel
Oct 1, 1987; In English; 2 min. 47 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–198218; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

NASA’s National Full Scale Aerodynamics Complex, which houses two of the world’s largest wind tunnels and has been used for testing experimental aircraft since 1944, is presented. This video highlights the structure and instrumentation of the 40 x 80 foot and 80 x 120 foot wind tunnels and documents their use in testing full scale aircraft, NASA’s Space Shuttle and the XV-15 Tiltrotor aircraft.

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

19940029264 NASA John C. Stennis Space Center, Bay Saint Louis, MS, USA

High Heat Flux Facility
Jan 1, 1993; In English; 4 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12962; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video gives an overview of the High Heat Flux Facility being built at Stennis Space Center in conjunction with Wright-Patterson Air Force Base. This facility will simulate flight heat conditions and will be used to test engine and materials for the National Aerospace Plane.

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

19940029225 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–94–13554; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video gives the history of the Icing Research Tunnel at LrRC and how it is used today to understand and protect against icing.

CASI Aircraft Icing; Ice Prevention; Wind Tunnels

19950004135 NASA Langley Research Center, Hampton, VA, USA

Langley overview
Feb 16, 1993; In English; 6 min. 31 sec. playing time
Report No.(s): NONP–NASA–VT–94–23130; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video presents a brief history of the Langley Research Center.

LaRC Histories; NASA Programs; Research Facilities

19950004140 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**

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

**Dryden overview for schools**

Feb 28, 1992; In English; 6 min. 22 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–94–23638; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video provides educators an overview of Dryden for students from late elementary through high school.

**DFRC**

**Education; General Overviews; NASA Programs: Research Facilities**

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

**Dryden tour tape, 1994**

Feb 1, 1994; In English; 19 min. 3 sec. playing time, in color, with sound

B02, Videotape-Beta; V02, Videotape-VHS

This video provides an overview of NASA’s Dryden Flight Research Center. This is the program shown to visitors during the tour at Dryden.

**DFRC**

**General Overviews; NASA Programs: Research Facilities**

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

**Building the Integrated Test Facility: A foundation for the future**

Oct 1, 1992; In English; 14 min. 7 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–94–23628; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

A look at the construction and resources of Dryden’s Integrated Test Facility is given.

**DFRC**

**NASA Programs; Test Facilities**

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

**The Western Aeronautical Test Range**

Aug 1, 1988; In English; 32 min. 15 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–94–23646; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

An overview of the Western Aeronautical Test Range (WATR) and its connection to NASA Dryden is presented.

**DFRC**

**Test Facilities; Test Ranges**

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

**Dryden overview for schools**

Feb 3, 1994; In English; 6 min. 15 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–94–23647; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video presentation gives a narrated, quick look at the Dryden Flight Research Center and the Center’s various projects. The presentation is directed toward a 6th-grade audience and emphasizes staying in school to learn the vital skills needed to succeed today.

**DFRC**

**Education; Research Facilities**

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**12 ASTRONAUTICS (GENERAL)**

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

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

**STS–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**

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

**STS–28 crew presentation clip**

Sep 1, 1989; In English; 23 min. 58 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–93–185313; 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 otolith Tilt Translation Reinterpretation Experiment, various views of the Earth, the crew during mealtime, and preparations for reentry.

**Author (revised)**

**Defense Program; Space Transportation System Flights; Spacecraft Launching**

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**19940010035** NASA Goddard Space Flight Center, Greenbelt, MD, USA

**GAS highlights, 1988**

Feb 1, 1989; In English; 30 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–93–190398; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

The videotape shows highlights of GSFC’s involvement in the Get Away Special program during the 1988 calendar year.

**CASI**

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

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**19940010096** 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**

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**19940001090** 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**
Astronauts: Friends, ship, Mercury Mission 6 flight

July 23, 1990; In English; 3 mm. 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 Finch 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
Ulysses: A solar odyssey

Apollo 11: The Goddard connection

May 10, 1988; In English; 29 min. 44 sec. 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

Apollo 11 highlights

May 13, 1988; In English; 27 min. 27 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 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 splashedown, and the parade given in honor of the astronauts.

CASI
Apollo 11 Flight; Lunar Exploration; Lunar Landing; Moon

Ulysses: A solar odyssey

July 23, 1990; In English; 29 min. 54 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 Finch 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

Astronauts: Friendship 7; Mercury Ma-6 Flight

July 20, 1969 is recomputed. 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; Friendship 7; Mercury Ma-6 Flight

Astronauts number 3

May 13, 1988; In English; 27 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 splashedown, and the parade given in honor of the astronauts.

CASI
Apollo 11 Flight; Lunar Exploration; Lunar Landing; Moon

Apollo 11: The Goddard connection

May 10, 1988; In English; 29 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 Apennine Mountains.

CASI
Apollo Project: Apollo 16 Flight; Lunar Exploration
This video presents cell animation of the Magellan approach to Venus, orbit insertion, and mapping sequence.

Magellan Spacecraft (NASA): Space Exploration; Venus (Planet)

1994043105  Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA
Planetary Rover Program
Jul 1, 1990; In English; 10 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–94–15919; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video presentation explains the Planetary Rover Program and shows testing in the Arroyo near JPL.

CASI
NASA Space Programs; Roving Vehicles

19950404107  NASA Lewis Research Center, Cleveland, OH, USA
NASA images 9 no. 3065
Feb 1, 1988; In English; 27 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–94–23170; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

This video presentation gives a historic look at the Pioneer, Mariner, and Voyager missions.

LeRC
Mariner Program; NASA Space Programs; Pioneer Project; Space Exploration; Voyager Project

19950404108  NASA Lewis Research Center, Cleveland, OH, USA
Challenger Center: Rendezvous with Comet Halley no. 3072
Dec 1, 1990; In English; 12 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–94–23171; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This presentation introduces the Challenger Center and the rendezvous with Comet Halley in the 2061 scenario.

LeRC
Education; Halley’S Comet

19950404109  NASA Lewis Research Center, Cleveland, OH, USA
Challenger Center: Return to the Moon no. 4005
Dec 1, 1989; In English; 8 min. 49 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–94–23172; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This presentation introduces the Challenger Center and the ‘return to Moon’ scenario.

LeRC
Education; Lunar Programs

19950404306  NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA
MLRV/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 (MLRV) program.

DFRC
Apollo 11 Flight: General Overviews; Lunar Landing; Lunar Landing Modules

19950404317  NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–60 post flight press conference
Jan 1, 1994; In English; 18 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–94–23617; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

This video contains footage selected by the astronauts, as well as their comments on their respective flights. It also contains launch, onboard crew activities, and landing.

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

19950404318  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 Shuttle Mission Flights; Spaceborne Experiments

19950404319  NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–61 post flight presentation
Jan 1, 1994; In English; 26 min. 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

19950404320  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

19950404321  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

19950404322  NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–68 mission highlights resource tape
Dec 22, 1994; In English; 55 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–95–38127; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

This video contains important visual events including Space Radar Laboratory, 2: Get Away Special canisters, Commercial Protein Crystal Growth, Biological Research in Canisters, Cosmic Radiation Effects and Activation Monitor, Military Applications of Ship Tracks, other onboard activities, earth views, and landing. Also includes Air-to-ground transmission between the crew and Mission control.

Author
Cosmic Rays; Earth Observations (From Space); Ground-Air-Ground Commu-
nunciation: Payloads; Protein Crystal Growth; Radiation Effects; Ships; Tracking Radar

1995012625 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Apollo: The first 40 days
Jan 1, 1975; In English; 22 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--95--39136; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video records the launch of unmanned Skylab-1 on May 14, 1973 and the major problems resulting from the loss of the meteoroid heat shield. Also shown is the fabrication of materials and the equipment used in the repair operation, followed by the installation of the paraskil 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

1995012643 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Legacy of Gemini
Jan 1, 1967; In English; 28 min. running time, in color, with sound
Report No.(s): NONP--NASA--VT--95--39131; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
In the perspective of a single composite mission, this documentary 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

1995012644 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Skylab: The second manned mission. A scientific harvest
Jan 1, 1974; In English; 36 min. 30 sec. playing time, in black and white, no sound
Report No.(s): NONP--NASA--VT--95--39132; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
This black and white video presentation covers the Skylab launch activities and docking with unmanned SL-1 workshop. Included are observations of student experiments (the Mischmang marrows 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

1995012645 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
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; dust particles.

CASI
Mars (Planet); Mars Atmosphere; Mars Environment; Mars Sample Return Missions; 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--1999035375; 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 Missions; 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--19990202512; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, 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
Flight Center (GSFC); Dr. Keith W. Ogilvie, Principle Investigator, Solar Wind
preseNted by George Dille. NASA public affairs; Dr. Robert L. Cas'ovillano, used in heliospheric lafitudes from ULYSSES. The WIND science briefing is
near-Epa'th solar wind; and 4) Provide baseline ecliptic plane observations to be
in the up-stream region; 3) Investigate basic plasma processes occurring in the
spheric sludies; 2) Determine lhe magnetospheric oulput to inlerplanetary space
B04, Videolape-Beta; V04, Videotape-VHS

October 31, 1994; In English; Videotape: 62 min. 41 sec. playing time, in color, with
Report No.(s): NONP NASA VT _000078325; No Copyright; Avail: CASI;
2111i,1111i649,13 NASA Kennedy Space Center, Cocoa Beach, FL USA
XTE. Science Briefing from KSCNF

The X-ray Timing Explorer (XTE), launched on Dec, 30, 1994, is a Satellite
that observes the fast-moving, high-energy worlds of black holes, neutron stars,
x-ray pulsars and bursts of X-rays that light up the sky and then disappear forever.
This videotape presents a pre-launch science briefing to the press by a few of the
scientist and managers associated with the XTE satellite. The moderator for the
press briefing is Jim Salihi, from the Public Affairs Office at Goddard Space
Flight Center (GSFC). He introduces Alan Bunner, of the High Energy Astro-
physics at NASA Headquarters; Fred Lamb, from the University of Illinois; Richard
Mashezky, X Ray Scientist at GSFC; Rick Rothschild, Principal Investi-
gator from the University of California at San Diego; and Dale Schultz, the XTE
project manager at GSFC. Dr. Bunner explains the electromagnetic spectrum, the
placement of x-rays and the importance of the XTE observations to a better
understanding of the Universe. Dr. Lamb explains the difference between white
dwarfs, neutron stars and black holes, and the type of observations that the XTE
will give to a further understanding of these phenomena. Dr. 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. Roth-
schild 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
Army (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

200001064903 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta WIND Mission Science Briefing

October 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)

200001064904 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta WIND Mission Science Briefing

October 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 teso-
npheric studies; 2) Determine the magnetospheric output to interplanetary space in
the up-stream region; 3) Investigate basic plasma processes occurring in the
near-Earth solar wind; and 4) Provide baseline ecliptic plane observations to be
used in heliospheric latitudes from ULYSSES. The Wind science briefing is
presented by George Diller, NASA public affairs; Dr. Robert L. Carovillano,
Project Scientist for the Global Geospace Science Initiative, NASA Headquar-
ters; 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. Iouan Louis Bouveret, Principle Investigator, Radio/
Plasma Wave Experiment, Paris; and Dr. Eugene Mazets, Co-Principle Investi-
gator, 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 instru-
ments will be used to study the contributions and characteristics of plasma and
plasma waves that occur in the solar wind. Dr. Bouveret 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

20010565851 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 sou
Report No.(s): NONP–NASA–VT–2001083803; No Copyright; Avail: CASI;
V04, Videotape-VHS

This video shows footage from the symposium ‘Looking Back, Looking Forward: Forty Years of US Human Spaceflight’ held at the George Washington
University on May 8, 2001. John Logsdon, Director of the GWU Space Policy
Institute, introduces Daniel Goldin, NASA Administrator, who briefly discusses
‘what it has meant to be a spacefaring nation’. A short video gives an overview of
the history of spaceflight, including details on the Cold War space race between the
US and the Soviet Union, and the first flights in space and to the moon by the
US. Charles Murray presents ‘Human Space Flight and American Society: The
Record So Far’ as the keynote speaker. Session 1, ‘The Experience of Space Flight’, consists of the astronauts Bob Crippen, Charles Walker, Mary
Ellen Weber, and T.J. Creamer, who discuss their personal experiences with
space flight. Session 2 (‘Perspectives on the Past Forty Years of Human Space
Flight’), Session 3 (‘Perspectives on the Next Forty Years of US Human Space-
flight’), 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 RAmbidge; (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 If9 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 Readdy, Deputy Associate Administrator for
Space Flight, NASA, and William Shepherd, Commander of Expedition 1, Inter-
national Space Station.

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

20010575799 NASA Langley Research Center, Hampton, VA USA
Apollo 10 – II

2001; In English; Videotape: 57 min. 43 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001089735; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

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

CASI


2001016050 NASA Johnson Space Center, Houston, TX USA Apollo 11 Facts Project [Moon/Orbit Activities]

Jun. 20, 1994; In English; Videotape: 1 hr. 30 min. playing time, in color, with sound
Report No.(s): NONP NASA VT-200117304; 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. A scene shows the entire Earth as seen from Apollo.

CASI

Apollo 11 Flight: Crew Procedures (Inflight): Spacecrews

2001016060 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

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

20010160604 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 some 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

200101606101 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. 13 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

200101606104 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)

200101606107 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

200101606111 NASA Johnson Space Center, Houston, TX USA Apollo 11 Facts Project [Pre-Launch 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

200101606142 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

200101606143 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-200116971; 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.
CASI

Ground Support Systems: Apollo 11 Flight

200101155233 NASA Johnson Space Center, Houston, TX USA
Apollo 11 Facts Project: Earth Views and Crew Activities
Jun. 17, 1994; In English; Videotape: 1 hr. 32 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20011185555; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

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

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

20010116556 NASA Johnson Space Center, Houston, TX USA
Apollo 11 Facts [Post Flight Press Conference, Part 1 of 2
Jun. 28, 1994; In English; Videotape: 1 hr. 14 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20011181405; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

A continuation of ‘Apollo 11 Facts: Post Flight Press Conference, Part 1 of 2’ (internal ID 20011181396), this video shows Apollo 11 Commander Neil Armstrong, Lunar Module Pilot Edwin Aldrin, Jr., and Command Module Pilot Michael Collins during a post-flight press conference, where they describe their experiences on the mission. The astronauts then answer questions from the audience.
CASI

Apollo 11 Flight: Postflight Press Conference, Part 1 of 2

20010116557 NASA Johnson Space Center, Houston, TX USA
Apollo 11 Facts [Post Flight Press Conference, Part 2 of 2
Jul. 07, 1994; In English; Videotape: 1 hr. 4 min. long, in color, with sound
Report No.(s): NONP–NASA–VT–20011181396; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This video shows Apollo 11 Commander Neil Armstrong, Lunar Module Pilot Edwin Aldrin, Jr., and Command Module Pilot Michael Collins during a post flight press conference, where they describe their experiences on the mission. The astronauts then answer questions from the audience.
CASI

Apollo 11 Flight: Postflight Press Conference, Part 2 of 2

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–20011181397; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

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

Astronauts: Apollo 11 Flight

20010117032 NASA Johnson Space Center, Houston, TX USA
Apollo 13 Facts: Recovery
Jun. 01, 2001; In English; Videotape: 1 hr. 3 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20011181399; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This video shows footage from the construction of the International Space Station’s Node 1 at Marshall Space Flight Center. The Expedition 1 crew, William Shepherd, Yuri Gidzenko, and Sergei Krikalev, inspect the Node.
CASI

Construction: Connectors

20010117035 NASA Johnson Space Center, Houston, TX USA
Expedition 1 Crew Resource Red
Aug. 94, 1998; In English; Videotape: 55 min. 52 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20011181404; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

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

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

20010117037 NASA Johnson Space Center, Houston, TX USA
Apollo 11 Facts [Lunar EVAs
Jun. 23, 1994; In English; Videotape: 1 hr. 7 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20011181406; 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**

20010117039 NASA Johnson Space Center, Houston, TX USA

Apollo 11 Facts [Post Mission Honorary Ceremony]

Jan. 01, 2001; In English; Videotape: 1 hr. 5 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–20011181409; 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 mission honorary ceremony, led by President Richard Nixon. Lovell is shown during an interview, answering questions about the mission.

**CASI**

**Astronauts: Apollo 13 Flight**

20010117040 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–20011181410; 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**

20010117041 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–20011181430; 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 Thorson. 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**

20010117042 NASA Johnson Space Center, Houston, TX USA

Apollo 13 Facts [On–Orbit Activities]

Jan. 01, 2001; In English; Videotape: 1 hr. 1 min. 30 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–20011174283; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Footage shows the on-orbit Apollo 13 Command Module checkout and tour of the Lunar Module.

**CASI**

**Checkout: Command Modules: Lunar Module: Apollo 13 Flight**

20010117043 NASA Johnson Space Center, Houston, TX USA

ISS Node 1 and 2 Resource Reel

Sep. 01, 1995; In English; Videotape: 1 hr. 14 min. 24 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–20011181408; 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: Retifing: Space Station Structures**

20010117047 NASA Johnson Space Center, Houston, TX USA

Apollo 11 Facts: First Moonwalks

Jun. 22, 1994; In English; Videotape: 1 hr. 20 min. 15 sec. playing time, black and white, with sound

Report No.(s): NONP–NASA–VT–20011181432; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This video shows footage from the surface of the Moon as the astronauts Neil Armstrong and Edwin Aldrin, Jr. walk on the Moon for the first time. They are seen descending from the Lunar Module and collecting soil samples.

**CASI**

**Moon: Soil Sampling: Crew Procedures (Inflight): Lunar Surface: Apollo 11 Flight**

20010117049 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–20011181443; 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 represurization, and S4-B separation are also seen.

**CASI**

**Apollo 13 Flight: Spacecrews: Crew Procedures (Inflight): Earth Observations (From Space)**

**13 ASTRODYNAMICS**

Includes powered and free-flight trajectories, and orbital and launching dynamics.

19990911020 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

15
Mars Missions; Mars Observer; Orbit Insertion; Spacecraft

describe this process.

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.

Marin Traxler, Manager of Tracking and Data Acquisition, describes how Mars is studied to get more data to confirm their hypotheses.

George Chen, Lead Engineer Attitude and Articulation Subsystem spacecraft, explains the importance of the attitude control engines on the spacecraft.

Marin Traxler, Manager of Tracking and Data Acquisition, describes how signals coming back from Mars are detected. Dr. Arden Albee, Project Scientist Mars Observer Project, Cal Tech, says that Mars is studied to get more data to confirm their hypotheses derived from previous Mars Missions such as the Viking Mars Program and the Mariner Program. Dr. Albee also describes instrumentation on the Mars Observer such as the Ultra Stable Oscillator, Mars Orbiter Laser Altimeter, and Magnetometer. The camera on the spacecraft is similar to a fax machine because it scans one line at a time as the spacecraft orbits Mars. Dr. Michael Malin, Principle Investigator Mars Observer Camera, Malin Space Science Systems, Inc., describe this process.

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

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

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

Asteroids; Astronaut Training; Space Shuttle Missions

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

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

Orbital Mechanics; Space Navigation

20000080177 NASA Kennedy Space Center, Cocoa Beach, FL, USA

Mars Observer Orbit Insertion Briefing

Aug. 24, 1993; In English; Videotape: 62 min. 24 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT--2000081555; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

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

Glenn Cunningham, Mars Observer Project Manager, gives background information on the Mars Observer and describes the organizations behind the Mars Observer spacecraft, such as the Deep Space Network, the Mission Operations Support Office, Science Investigators, the Flight Engineering Office, Operations Office, and the Ground Data System Office. Dr. William Pietrowski, 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 Beerer, Manager of the Engineering Office. The thrust for the Mars Orbit Insertion is described by Ronald Klemuster, 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.

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

CASI

Mars Observer; Orbit Insertion; Spacecraft Maneuvers; Spacecraft Launching

20000080367 NASA Kennedy Space Center, Cocoa Beach, FL, USA

Mars Observer Orbit Insertion Briefing

Aug. 24, 1993; In English; Videotape: 56 min. 8 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT--2000081555; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

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

CASI

Mars Missions; Mars Observer; Orbit Insertion; Spacecraft Orbits

1994010278 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS--35 crew trash compactor briefing

May 1, 1990; In English; 7 min. 50 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT--93--190288; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

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

Author

Garbage; Spacecrews; Waste Disposal

19940101520 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS--35 integrated sim in SMS and MOCR

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

Report No.(s): NONP-NASA-VT--93--190288; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

A clip that 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--190379; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

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

CASI

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

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

STS--30 suited ascent training in fixed base SMS

Apr 1, 1989; In English; 10 min. 59 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT--93--190379; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

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

CASI

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

19940103079 NASA Goddard Space Flight Center, Greenbelt, MD, USA

GFSC--TV demo tape

Jan 1, 1989; In English; 8 min. 20 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT--93--190384; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

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

CASI

Research Facilities: Test Facilities

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

Stock footage of Goddard Space Flight Center and Headquarters

Jun 1, 1999; 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

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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).
camera master showing various views, with natural sound, of the space flight center during the late spring. This finished footage is used in an interactive laser disc presentation that is used at Kennedy Space Center Visitor Center.

**NASA Space Programs: Research Facilities**

19940101826 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**

19940101828 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--190369; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

  The video also shows the FCR during the sim.

  **CASI**

  **Astronaut Training: Magellan Spacecraft (NASA): Space Shuttle Missions**

19940101845 NASA Ames Research Center, Moffett Field, CA, USA

**Manned vehicle systems research facility**

- **Mar 1, 1990:** In English; 8 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

  This video presents a guided tour of the Manned Vehicle Systems Research Facility (MVSRF) at ARC.

  **CASI**

  **Flight Simulation: Man-Machine Systems: Research Facilities**

19940101858 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**STS--26 IUS and latch contingency training**

- **Mar 1, 1990:** In English; 16 min. 53 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**

19940101859 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**STS--26 generic integrated IUS deployment simulation**

- **Feb 1, 1988:** 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. It includes intercuts of the MOCR.

  **CASI**


19940101860 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**STS--26 EVA rescue training**

- **Jul 1, 1988:** 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 instructors Covey, Hilmers, and Heuck 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 grappling with the arm.

  **CASI**

  **Astronaut Training: Computerized Simulation: Extravehicular Activity: Remote Manipulator System: Rescue Operations: Space Shuttle Missions**

19940101913 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**

19940101920 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--19028; 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**

19940101969 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**STS--31 Hubble space telescope deployment: 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--190278; 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**

19940101976 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--190279; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, 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**

19940101977 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--190280; 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**


19940101978 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
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 CCT middeck and airlock.

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

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**19940900** NASA Lyndon B. Johnson Space Center, Houston, TX, USA  
STS-91 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

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**19940901** 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.

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

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**19940902** 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

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**19940903** 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

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**19940904** NASA Lyndon B. Johnson Space Center, Houston, TX, USA  
STS-41 crew bailout in CCL, 16mm camera class EVA prep, habitation 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

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**19940905** 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 worlds 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 CRRES into orbit; it will also be used to test space nuclear electric power generation systems. The Spacecraft Propulsion Research Facility allows rocket vehicles to be hot fired in a simulated space environment. In the Cryogenic Propellant Tank Facility, researchers are developing technology for storing and transferring liquid hydrogen in space. There is also a Hypersonic Wind Tunnel which can perform flow tests with winds up to Mach 7.

**CASI**  
Aerospace Engineering: Cryogenic Fluid Storage; Environmental Tests; NASA Programs; Nuclear Electric Power Generation; Research and Development; Research Facilities; Research Projects; Space Environment Simulation; Spacecraft Propulsion: Test Facilities

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**19940906** 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

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**19940907** 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 statute 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

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**19940908** 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

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**19940909** 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

1995004142 NASA, Washington, DC, USA

Goldstone

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

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

CASI

Ground Stations; Space Communication; Tracking Stations

2000011228 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-103 Payload Removal From Shipping Canister PHSF: Discovery

Aug 16, 1999; In English; Videotape: 3 min., 30 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000008207; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Live footage of the STS-103 payload, Orbital Replacement Unit Carrier, removal from a shipping canister is shown. The carrier is a modified 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

2000058142 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--2000078626; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

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

CASI

Launching Pads; Preflight Operations; Flight Operations; Aircraft Maintenance

15 LAUNCH VEHICLES AND LAUNCH OPERATIONS

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

19940010868 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

19950006716 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

1995007287 NASA Goddard Space Flight Center, Greenbelt, MD, USA

Delta, America’s space ambassador

Oct 1, 1994; In English; 24 min. playing time
Report No.(s): NONP--NASA--VT--94--29868; 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

19990032573 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

19990032574 NASA Johnson Space Center, Houston, TX USA

Delta II Stardust Mission Briefing

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

An overview of the Stardust Mission is shown. NASA personnel is seen discussing and explaining the path of the probe. An animated chip 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 cornet from the on board camera. The dust samples and the photographs will be analyzed in order to learn more about interstellar materials.

CASI

Conferences; Stardust Mission; Space Probes; Cosmic Dust; Space Debris
This NASA Kennedy Space Center video presents launch activities of the Delta XTE (X-Ray Timing Explorer) on December 11, 1995. The launch was rescheduled for next weekend due to out-of-limit upper level wind conditions.

CASI

X-Ray Timing Explorer; Delta Launch Vehicle

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; Interstellar Matter; Cosmic Dust; NASA Space Programs; Mars Sample Return Missions; Wild 2 Comet; Stardust Mission

Delta II/Geotail Launch with Pre-Launch Activities

Jul. 24, 1992; In English; Videotape: 61 min, 23 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-2000078319; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The Geotail satellite payload is part of the International Solar Terrestrial Physics Program. Its primary objective is to gather information on Sun/Earth interactions and explore the tail of the Earth’s Magnetosphere. The launch by the Delta II launch vehicle has a 5 minute window with fueling completed on time and the weather was acceptable.

CASI

Delta Launch Vehicle; Geomagnetic Tail; Launching

Atlas-SOHO Propulsion Unit and Electrical Module Uncrating

Feb. 07, 1998; In English; Videotape: 6 min. playing time, in color, with 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 December 11, 1995. The launch was postponed due to unfavorable wind conditions aloft.

CASI

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

Stardust Launch Activities

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 December 11, 1995. The launch was rescheduled for next weekend due to out-of-limit upper level wind conditions.

CASI

X-Ray Timing Explorer; Delta Launch Vehicle

Delta II/Geotail Launch with Pre-Launch Activities

Jul. 24, 1992; In English; Videotape: 30 min. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-2000078321; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The Geotail satellite payload is a joint effort between the U.S. and Japan to explore the tail of the Earth’s Magnetosphere and study Sun/Earth interactions. The launch by the Delta II launch vehicle proceeded without incident after on-time fuelling and routine checks on all pertinent systems. The footage alternates between scenes from the control room to the launch pad itself.

CASI

Delta Launch Vehicle; Geomagnetic Tail; Launching; Payloads

RADARSAT Launch VAFB

Nov. 01, 1995; In English; Videotape: 22 min. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-2000078327; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Reply of the launch of Delta II is shown and it proceeded without any technical problems. The launch was perfect and the first stage separated exactly as it should. The launch window was 22 seconds and the weather was perfect with the temperature at 40 degrees. The second stage took 10 seconds longer than anticipated while Delta II went into a nearly circular orbit.

CASI

Launching; Radarsat; Delta Launch Vehicle

Delta XTE Launch Activities and Scrub (Anomaly) at Cape Canaveral Air Station Complex 17

Dec. 17, 1995; In English; Videotape: 4 min. playing time, in color, without sound

Report No.(s): NONP-NASA-VT-2000078620; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This NASA Kennedy Space Center video presents launch activities of the Delta X-ray Timing Explorer and scrub aboard a McDonnell Douglas Delta II rocket from Complex 17. The primary objective of the Delta XTE is to study time 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

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

SOHO Launch Mission

Aug. 08, 1995; In English; Videotape: 6 min. playing time, in color, with 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) mechanical and propulsion units in the Spacecraft Assembly and Encapsulation Facility (SAEF-2) is shown.

CASI

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

Atlas Centaur 77 GOES-J Mated to Centaur at Cape Canaveral Air Station Complex 36B

May 06, 1995; In English; Videotape: 4 min. playing time, in color, no sound

Report No.(s): NONP-NASA-VT-2000078565; 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 36B gantry and mated to the Atlas Centaur 77 (AC-77) rocket.

CASI

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

Atlas SOHO Wet Dress Rehearsal

Oct. 30, 1995; In English; Videotape: 7 min. playing time, in color, no sound

Report No.(s): NONP-NASA-VT-2000078649; 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

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
Asteroid Missions; Spacecraft

The core payload of ATLAS-2 is an integral part of the Spacelab contribution to ozone depletion in our atmosphere, in particular. Seven instruments comprise the sun in general and how man-made chemicals and pollution are contributing to ozone depletion 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.

Mission Scientist), and Teresa Vardlooser (Mission Manager) explain that the 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.

ATLAS-1 Video News Release

Mar. 06, 1992; In English; Videotape: 2 min. playing time, in color, with sound

Report No.(s): NONP-.NASA-VT-20000081543; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Allen Kennitzer, 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
Spacecraft; Spacelab Payloads; Earth Atmosphere; Solar Activity

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.

Footage shows the erection of the Atlas GEOS I on the launch pad. CASI
Construction: GEOS Satellites (ESA); Atlas Launch Vehicles

Footage shows the erection of the Atlas GEOS I on the launch pad. CASI

Construction: GEOS Satellites (ESA); Atlas Launch Vehicles

2000068481 NASA Kennedy Space Center, Cocoa Beach, FL USA
ATLAS-1 Video News Release

Mar. 06, 1992; In English; Videotape: 2 min. playing time, in color, with sound

Report No.(s): NONP-.NASA-VT-20000081543; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Allen Kennitzer, 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
Spacecraft; Spacelab Payloads; Earth Atmosphere; Solar Activity

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.

Footage shows the erection of the Atlas GEOS I on the launch pad. CASI
Construction: GEOS Satellites (ESA); Atlas Launch Vehicles

Footage shows the erection of the Atlas GEOS I on the launch pad. CASI

Construction: GEOS Satellites (ESA); Atlas Launch Vehicles

20000858191 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-2000008447; 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

Footage shows the erection of the Atlas GEOS I on the launch pad. CASI
Construction: GEOS Satellites (ESA); Atlas Launch Vehicles

Footage shows the erection of the Atlas GEOS I on the launch pad. CASI
Construction: GEOS Satellites (ESA); Atlas Launch Vehicles

20000858202 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; B01, 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

20000858206 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-2000078327; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of the live presentation of the Delta/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

20000858440 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

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; Lift Off (Launching)

AC 67 Launch Video
Mar. 26, 1987; In English; Videotape: 2 min. 4 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2000078612; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Live footage of the unmanned Atlas Centaur (AC) 67 launch is presented on March 26, 1987 at the WESH television station in Florida. Lighting is shown after 49 seconds into the flight. The vehicle is totally destroyed due to a cloud-to-ground lightning flash.
CASI

Atlas/Centaur Launch Vehicle: Lift Off (Launching)

INTELSAT V-A (F-10) Launch
Mar. 22, 1985; In English; Videotape: 38 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2000078610; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Footage shows panoramic views of the Atlas launch vehicle on the launch complex. Also shown are ignition, lift-off, several different launch replays from different cameras, and views of the complex after launch.
CASI

Piloted Aircraft: Atlas/Centaur Launch Vehicle: Lift Off (Launching)

Mars Observer
Jul. 31, 1991; In English; Videotape: 56 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2000096692; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
The Mars Observer is shown arriving at the Payload Hazardous Servicing Facility (PHSF) and being moved into the hangar. Close-up shots are also shown of the Observer.
CASI

Mars Observer: PreLaunch Tests: Mars Missions: Mars Satellites

SPACE TRANSPORTATION AND SAFETY

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

Atlantic Centaur–SOHO Pre-Launch News Conference
Nov. 22, 1995; In English; Videotape: 20 min. 55 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2000081546; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Live coverage of the pre-launch news conference on the Atlas/Centaur SOHO mission is presented. George Diller, NASA Public Affairs, introduces the panel. Floyd Cunningham, NASA Launch Manager, Kennedy Space Center, presents countdown activities. Pat Symons, Launch Vehicle Manager, NASA Lewis Research Center, analyzes the time duration from liftoff to spacecraft separation. Fabrizio Felici, SOHO Mission Director European Space Agency (ESA), explains the important features of SOHO, which includes a payload of 650 kilos and 12 major instruments with multisensors. Ken Szymore, International Solar Terrestrial Physics (ISTP) Project Manager Goddard Space Flight Center (GSFC), talks about the successful international collaboration between the ESA and NASA. Joel Tumboli, Launch Weather Officer USA Air Force (USAF), presented the weather forecast. SOHO was launched aboard an Atlas II rocket on November 23, 1995.
The news conference ends with a brief question and answer period.
CASI


CASI

Titan Launch Vehicle; Mars Observer; Conferences

CASI

TITAN III/Mars Observer Post-Launch Press Conference
Sep. 25, 1992; In English; Videotape: 26 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2000061548; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Footage shows George Diller, NASA's Public Affairs Officer, as he introduces the panel members. Speakers include: William Pirotrowski, Program Manager from NASA Headquarters; James Womack, NASA Launch Manager from Kennedy Space Center; John Gibb, TITAN Launch Vehicle Manager from Langley Research Center; Sid Sancier, 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 are also seen answering questions from both the audience as well as other NASA Centers.
CASI

Titan Launch Vehicles; Mars Observer; Conferences

CASI

Space Shuttle Missions; Spacecraft Landing; Spacecraft Launching; Spacecraft Recovery
19940809168 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
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

199408010261 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
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

199408010263 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
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)
Conferences; Space Transportation System; Space Transportation System Flights

199408010752 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Astro smile
Mar 1, 1989; In English; 20 min. 3 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93–190303; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

This is a humorous look at life aboard the Space Shuttle.
CASI
Human Behavior; Laughing; Spacecrews

199408010788 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-26 Post-Flight Press Conference
Oct 1, 1988; 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

199408010789 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-26 onboard 16mm photography quick release
Oct 1, 1988; In English; 23 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93–190355; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

This video tape features scenes shot by the crew of onboard activities
including the TDRS (Tracking and Data Relay Satellite) deploy; Earth views, and
middeck experiments.
CASI
Deployment: Space Shuttle Missions; TDR Satellites

199408010791 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–30 Post-Flight Press Conference
May 1, 1989; In English; 16 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93–190378; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

This video contains footage selected and narrated by the Commander and
Space Shuttle crew including launch, Magellan/IUS deployment, onboard crew
activities, and landing.
CASI
Crew Procedures (Inflight); Space Shuttle Missions; Space Shuttle Orbiters

199408010793 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–30 mission tape
May 1, 1989; In English; 59 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93–190380; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

This video contains important visual events including launch, Magellan/
IUS Highlights Resource onboard crew activities, and landing. Air-to-ground
transmission between the crew and Mission control is also included.
CASI
Crew Procedures (Inflight); Space Shuttle Missions

199408010833 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–29 Post-Flight Press Conference
Apr 1, 1989; In English; 22 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93–190373; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

This video contains footage selected and narrated by the Commander and
the Space Shuttle crew including launch, TDRS-D/IUS deployment, onboard
crew activities, and landing.
CASI
Crew Procedures (Inflight); Space Shuttle Missions; Space Shuttle Orbiters; Spacecrews

199408010834 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–29 onboard 16mm photography quick release
Mar 1, 1989; In English; 24 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93–190374; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

This video features scenes shot by the crew of onboard activities including
Earth shots, middeck experiments, TDRS deploy, and other mission objectives.
CASI
Crew Procedures (Inflight); Space Shuttle Missions

199408010841 NASA, Washington, DC, USA
Space Shuttle highlights
Jan 1, 1985; In English; 3 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93–190380; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video recapitulates 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

199408010844 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
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
Airborne/Spaceborne Computers; Space Shuttle Mission 51-F: Spacecraft Reliability

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.

Astronaut Training: Crew Procedures (Inflight): Space Shuttles; Spacecrafts

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

The Space Shuttle crew practices Galileo deploy from the SM. Interacts of the MOCR are included.

Crew Procedures (Inflight): Galileo Spacecraft: Space Shuttle Missions

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.

Astronaut Training: Crew Procedures (Inflight): Space Shuttles; Spacecrafts

The Space Shuttle crew practices Galileo deploy from the SM. Interacts of the MOCR are included.

Crew Procedures (Inflight): Galileo Spacecraft: Space Shuttle Missions

The Space Shuttle crew practices Galileo deploy from the SM. Interacts of the MOCR are included.

Crew Procedures (Inflight): Galileo Spacecraft: Space Shuttle Missions

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

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

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

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

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

Biostations: Microgravity; Weightlessness

19940607025 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-33 EVAP 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-VE-93–190266; No Copyright; Avail: CASI;
B01: Videotape-Beta; V01, Videotape-VHS

This video tape shows the crew in the airlock of the FFT, talking with technicians about the extravehicular activity (EVA) equipment. Thornton and Carter put on EVA suits and enter the airlock as the other crew members help with checklists.

CASI

Extravehicular Activity; Spacecraft

19940607027 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-VE-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; Spacecraft

19940607030 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-VE-93–190349; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, 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

19940607034 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-VE-93–190357; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

This video contains important visual events including launch, TDRS-C/US onboard crew activities and landing. Also includes air-to-ground transmission between ground and Mission Control.

CASI

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

19940607050 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-VE-93–190377; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, 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

19940607065 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-31 onboard 16mm photography quick release
May 1, 1990; In English; 30 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VE-93–190275; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

This video features scenes shot by the crew of onboard activities including Hubble Space Telescope deployment, remote manipulator system (RMS) checkout, flight deck and middeck experiments, and Earth and payload bay views.

CASI

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

19940607067 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-31 mission highlights resource tape
Jun 1, 1990; In English; 56 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VE-93–190276; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

This video contains important visual events including launch, Hubble Space Telescope deployment, onboard crew activities, and landing. Air-to-ground transmission between crew and Mission Control is also included.

CASI

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

19940607068 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-36 crew presentation clip
Jul 1, 1991; In English; 20 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VE-93–190294; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

This video features scenes from this Department of Defense Shuttle mission showing crew onboard activities.

CASI

Astronauts; Defense Program; Space Shuttle Missions; Space Transportation System Flights; Spacecraft

19940607091 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-35 onboard photography quick release
Dec 1, 1990; In English; 25 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VE-93–190297; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

This video features scenes shot by the crew of onboard activities including ASTRO-1 operation, middeck experiments, flight deck views, and Earth and payload bay views.

CASI

Astronauts; Space Shuttle Missions; Space Shuttle Payloads; Spaceborne Photography

19940607092 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-35 mission highlights resource tape
Feb 1, 1991; In English; 59 min. 27 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VE-93–190298; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

This document contains video on launch, ASTRO-1 operations, onboard operations, crew activities, and landing. It also includes air-to-ground transmission between crew and Mission Control.

CASI

Astronauts (STS); Astronauts; Intra vehicular Activity; Space Shuttle Missions; Space Transportation System Flights; Spacecraft Communication; Spacecraft Landing

19940607093 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Science operation in space: Lessons
Jan 1, 1988; In English; 32 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VE-93–190299; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

This program (conceived by a group of veteran Shuttle astronauts) shows prospective experimenters how they can better design their experiments for
Astronaut Training: Experiment Design; Intravehicular Activity; Space Shuttle Payloads; Space Transportation System Flights; Spaceborne Experiments

1994/01/10
995 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; Spacecrews

26

1994/01/11
43 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–41 post-flight press presentation
Nov 1, 1990; In English; 21 min. 36 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190312; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
This videotape contains footage selected and narrated by the crew. The footage covers the launch, the deployment of Ulysses, onboard crew activities, and the landing.
CASI Deployment: Space Transportation System Flights; Ulysses Mission

1994/01/11
445 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–41 on-board 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 footage 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

1994/01/11
448 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

1994/01/14
447 NASA, Washington, DC, USA
Robotic
Aug 1, 1985; In English; 2 min. 51 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–94–198198; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
An overview of research being done into the use of robotic devices in space by MSFC is discussed. The video includes footage and explanations of robots being used to blast layers of thermal coating from the Space Shuttle’s external tanks, the Shuttle’s Remote Manipulator Arm, and animations of an Orbiting Maneuvering Vehicle to retrieve and repair satellites.
CASI External Tanks; Remote Manipulator System; Robotics; Robots; Space Shuttles; Spacecraft Maintenance; Thermal Control Coatings

1994/01/14
481 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 preassembled components of a Space Station and delivering planetary probes and lunar exploration materials to orbit.
CASI Computer Animation; Heavy Lift Launch Vehiccles; Orbital Assembly; Orbital Maneuvering Vehiccles; Space Station; Spacecraft Design

1994/01/14
482 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 sidestep 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

1994/01/14
598 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 Exhibits; Space Shuttle Orbits

1994/02/9665 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

1994/02/9693 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–57 post flight press conference
Jan 1, 1994; In English; 21 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–94–129666; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
This video contains footage selected and narrated by crew members.

**CASl**

*Space Shuttle Missions: Space Transportation System*

199501041940 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**Shuttle 51-L: Challenger**

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

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

**CASl**

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

199501041940 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**STS--69 mission highlights resource tape**

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*

199501041940 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**STS--68 post flight presentation**

Jan 1, 1994; In English; 47 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--94-28239; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

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

**JSC**

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

199501041940 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**STS--61 mission highlights resource tape**

Jan 1, 1994; In English; 40 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--94-28240; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This contains important visual events including launch, onboard activities, 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*

199501041940 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**STS--59 mission highlights resource tape**

Jan 1, 1994; In English; 50 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--94-23625; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video contains mission footage selected by the STS-59 crew of pre-launch, launch, onboard activities and experiments, ATLAS-3, CRISTA/SPAS, CRISTA/SPAS, CRISTA/SPAS, CRISTA/SPAS.
NASA Lyndon B. Johnson Space Center, Houston, TX, USA

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

This video contains the mission highlights of the STS-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, SSJU/ESA/EVA, PAIR-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 cameras), 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.
CAS

Advanced Technology Laboratory: Descent; Earth Orbits; Extravehicular Activity; Microgravity; Space Shuttle Missions; Space Shuttles; Space Transportation System Flights; Spaceborne Experiments; Spacecraft Launching; Spacecraft Orbits

STS-67 post flight presentation
Apr 3, 1995; In English; 41 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–45307; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video is the post-flight presentation by the astronauts of the STS-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 (Hubble UV telescope, Wisconsin UV polarimeter, and Astrotar 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 Environments: Equipment Specifications; Extravehicular Mobility Units; Space Exploration; Space Shuttle Payloads; Spaceborne Experiments; Spacecraft Maintenance; Structural Design; Umbilical Connectors; Weightlessness

STS-13: Houston, we've got a problem
Apr 10, 1991; In English; 25 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–44678; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video contains historical footage of the flight of Apollo-13, the fifth Lunar Mission and the third spacecraft that was to land on the Moon. Apollo-13’s launch was on April 11, 1970. On the 13th of April, after docking with the Lunar Module, the astronauts, Jim Lovell, Fred Haise, and Jack Swigert, discovered that their oxygen tanks had ruptured and ended up entering and returning to Earth in the Lunar Module instead of the Command Module. There is footage of inside module and Mission Control shots, personal commentary by the astronauts concerning the problems as they developed, national news footage and commentary, and a post-flight Presidential Address by President Richard Nixon. Film footage of the approach to the Moon and departing from Earth, and air-to-ground communication with Mission Control is included.
CASI

Apollo 13 Flight: Command Modules; Ground Support Systems: Histories; Lunar Exploration: Lunar Flight: Lunar Module; Mission Planning; Space Missions

STS-66 mission highlights resource tape
Jan 1, 1995; In English; 1 hr. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–44697; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video (JSC1472) contains important visual events including launch, SPARANT 204, SPACEHAB-03, CGP/DERACS, and the rendezvous with the MIR Space Station, along with onboard activities, and landing. Also included are air-to-ground transmission between the crew and Mission, and various earthviews. JSC

Space Shuttles: Space Transportation System Flights; Spacecraft Environments; Spacecraft Launching

STS-67 mission highlights resource tape
Welch, Chuck, editor, NASA Lyndon B. Johnson Space Center, USA; May 10, 1995; In English; 57 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–50902; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The Space Shuttle Mission, STS-67, is highlighted in this video. Flight crew (Stephen S. Oswald (Commander), William G. Gregory (Pilot), Tamara E. Jernigan, Wendy B. Lawrence, John M. Grunsfeld (Mission Specialist), Samuel T. Durrance, and Ronald A. Parise (Payload Specialists)) pre-launch and launch activities, EVA activities with payload deployment and retrieval (ASTRO-2 and WUPPE (Wisconsin Ultraviolet Photo Polariometer Experiment)), spaceborne experiments (astronomical observation and data collection, protein crystal growth, and human physiological processes), and pre-reentry activities are shown. There are astronomical telescope observation from the two telescopes in the payload, the Hopkins Ultraviolet Telescope and the Ultraviolet Imaging Telescope, of Io and of globular clusters, and their emission spectra is collected via a spectrometer. Earth view film and photography is shown, which includes lightning on terrestrial surfaces, cyclone activity, and cloud cover.
CASI

Astronomical Polariometry: Astronomical Spectroscopy: Earth Observations (From Space); Globular Clusters; Imaging Techniques: Io: Space Shuttle Missions; Space Shuttle Payloads; Space Transportation System Flights; Spaceborne Astronomy; Spaceborne Experiments; Ultraviolet Telescopes.
The first day of the STS-71 mission is featured in this video. During this segment of the mission the Space Station is docked with the Mir Space Station and they are orbiting the earth together.

**STS-71 Shuttle/Mir flight: Day 8**

Jul 3, 1995; In English; 17 min. 45 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–95–56574; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Day 8 of the STS-71 mission are featured in this video, a continuation from days 1-7, this video includes live footage onboard the STS-71 Space Shuttle Atlantis and the Mir Space Station. Astronaut, Dr. Norman Thagard, after living in space for 3 months onboard the Mir Space Station, joins the crew of Atlantis for his trip back to earth. Live interviews are conducted with the crew of Atlantis. Views are shown of the Mir Space Station from various angles.

**Author**

Earth Observations (From Space); Ground-Air-Ground Communication; Mir Space Station; Space Shuttle Missions; Space Shuttle Flights; Spacecraft Communication; Spacecraft Docking

19950823538 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-71 Shuttle/Mir flight: Day 6

Jun 30, 1995; In English; 22 min. 30 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–95–56572; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

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

**Author**

Earth Observations (From Space); Space Shuttle Missions; Space Shuttle Flights; Spacecraft Docking

19950823539 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-71 Shuttle/Mir flight: Day 7

Jul 3, 1995; In English; 29 min. 30 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–95–56573; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

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

**Author**

Earth Observations (From Space); Ground-Air-Ground Communication; Mir Space Station; Space Shuttle Missions; Space Shuttle Flights; Spacecraft Docking; Spacecraft Communication; Spacecraft Docking

19950823540 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-71 Shuttle/Mir flight: Day 9

Jul 3, 1995; In English; 16 min. 45 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–95–56575; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

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

**Author**

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

19950823541 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-71 Shuttle/Mir flight: Day 10

Jul 6, 1995; In English; 22 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–95–56623; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

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

**Author**

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

19950823542 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
The fifth day of the STS-70 Space Shuttle Discovery mission is contained on this video. The crew continues working on experiments, such as the Space Tissue Loss Analysis and the Bioreactor Development System. CNN reporter John Holliman interviewed the flight crew and the crew also answered questions posed by internet users while on NASA's Shuttle Web. There are brief views of Earth's surface included.

CASI

Discovery (Orbiter): Flight Crews; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System Flights; Spaceborne Experiments

19950724456 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-70 flight: Day 4
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

Discovery (Orbiter); Satellite Communication; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System Flights; Spaceborne Experiments

19950724457 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-70 flight: Day 3
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 Claudsen, and ABC's Mike and Maty Show and the Toledo Blade newspaper (Toledo, Ohio) interviewed the astronauts via satellite link.

CASI

Discovery (Orbiter); Earth Observations (From Space); Satellite Communications; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System Flights; Spaceborne Experiments

19950724458 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-70 flight: Day 2
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 onboard the 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

Discovery (Orbiter); Earth Observations (From Space); Satellite Communications; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System Flights; Spaceborne Experiments

19950724459 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-70 flight: Day 1
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 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

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; and 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 Kennen oil fires; cloud cover; and B/W lightning footage.

CASI

In this post-flight overview, the flight crew of the STS-70 mission, Tom Hendricks (Cmd.), Kevin Kregal (Pilot), Majon Nancy Currie (MS), Dr. Mary Ellen Weber (MS), and Dr. Dan 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 development in microgravity; Shuttle Amateur Radio Experiment (SAREX); terrain surface imagery using the HERCULES camera; and a range of other physiological tests, including an eye and vision test. Views of Earth include: tropical storm Chantal; the Nile River and Red Sea; lightning over Brazil. A three planet view (Earth, Mars, 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

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CASI

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CASI

The mission of STS-42, the first International Microgravity Laboratory (ML-I-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) space shuttle was 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 investigations, 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 ranges); and orbiter activities are also included.

CASI

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

The Space Shuttle: America's team reaching for the future.

CASI

in this educational video (part of the STS-42 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

Aerospace Medicine; Experimentation: Life Sciences; Microgravity; Space Transportation System; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttle Training Flights; Spacecraft Launching

The crew of the STS-58 Space Shuttle Columbia -- Commander John Blaha, 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

The Space Shuttle: America's team reaching for the future.

CASI

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CASI

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CASI

Astronauts; Columbia (Orbiter); Education; Space Shuttles; Students
Astronauts: Discuss; Space Shuttle Missions; Space Shuttles; Space Transportation System Flights; Spaceborne Experiments

19960001168 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' Gernar
(Mission Specialist); James 'Jim' Buchli (MS); and Mark Brown (MS). Step-by-
step pre-launch and sunset launch sequences are shown with accompanying
shots inside the Mission Control Center. The primary goal of this mission was the
deployment of Upper Atmosphere Research Satellite (UARS). Other (secondary)
payloads included: the Mid-Deck Zero Gravity Experiment (MODE); the
Sam/Cream device; the Shuttle Activation Monitor/Compass Ray Effects
and Activation Monitor Experiment; and the Physiology and Anatomy 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);
Launchings; Space Shuttle Missions; Space Shuttle Payloads; Space Transportation
System Flights; Spaceborne Experiments; Spacecraft; Upper Atmosphere
Research Satellite (UARS)

19960001169 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 Gernar, 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-in-orbit conditions respond to different
influences (dynamics and harmonic analysis) and the Extended Duration Orbiter
phsyiological tests of astronaut heat and lung functions. Through these experi-
ments, 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; Discovery (Orbiter); Earth Observations (From Space);
Launchings; Space Shuttle Missions; Space Shuttle Payloads; Space Transportation
System Flights; Spaceborne Experiments; Spacecraft; Upper Atmosphere
Research Satellite (UARS); Vibrations Tests

19960001248 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--VJ--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 Special-
ists Jay Apt and May Jemison. The primary goal of this mission was the set-up
and carrying out of experiments in the accompanying Japanese Spacecraft (SL-3)
in cooperation with the Japanese Space Program. Dr. Mohri is the first profes-
sional 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 physio-
logical 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; Interna-
tional Cooperation; Physiological Tests; Protein Crystal Growth; Space Shuttle
Missions; Space Shuttle Payloads; Space Transportation System Flights; Space-
borne Experiments; Spacecraft; Space Shuttle Endeavour

19960001487 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
Mungarve, Mario Runco, Jr., James S. Voss, and Thomas J. Hennan, filmed
various crew activities inside the shuttle, the deployment of the Defense Support
Program Satellite (DSP), and several Earth view-footsfoot of arid land masses and
cLOUD covers.
Author
Artificial Satellites; Cameras; Deployment; Space Shuttle Payloads; Space
Shuttles; Spaceborne Photography

19960001778 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS--48 post flight press conference
Jan 1, 1991; In English; 26 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 Gernar, 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-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 experi-
ments, 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; Spacecraft; Upper Atmosphere
Research Satellite (UARS); Vibrations Tests
The STS-69 mission is highlighted in this first part of a two part video set. The flight crew consisted of: Cmdr. Dave Gregory; Pilot Tom Hendrick; Payload Specialist Tom Hennan; and Mission Specialists Story Musgrave, Jim Voss, and Mario Runco. The primary space shuttle mission objective was the deployment of the Defense Support Program (DSP) satellite. Secondary payload and spaceborne experiments consisted of a microbial air sampler, the Terra Scout PADVOS system, an MSS-1 camera 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.

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

19960002577 NASA Lyndon B. Johnson Space Center, Houston, TX, USA STS-69 flight day 1 highlights Sep 7, 1995; In English; 24 min. 30 sec. playing time, in color, with sound Report No.(s): NONP--NASA--VT--95--72065; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The first day of the STS-69 flight is highlighted in this video. Shown are the prelaunch and launch activities and the in-orbit 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 Gemhardt. Earth views of cloud cover are included.

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

19960002578 NASA Lyndon B. Johnson Space Center, Houston, TX, USA STS-69 flight day 2 highlights Sep 8, 1995; In English; 19 min. 30 sec. playing time, in color, with sound Report No.(s): NONP--NASA--VT--95--72067; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

In this second day of the STS-69 mission, the SPARTAN-201 satellite is deployed. The SPARTAN satellite is being used for the study of solar physics. An in-orbit interview is conducted with crew member, Mission Specialist Jim Newman, by KABC 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 Gemhardt.

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

19960002579 NASA Lyndon B. Johnson Space Center, Houston, TX, USA STS-69 flight day 11 highlights Sep 17, 1995; In English; 24 min. 35 sec. playing time, in color, with sound Report No.(s): NONP--NASA--VT--95--72079; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

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

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

19960002580 NASA Lyndon B. Johnson Space Center, Houston, TX, USA STS-69 flight day 4 highlights Sep 19, 1995; In English; 18 min. 45 sec. playing time, in color, with sound Report No.(s): NONP--NASA--VT--95--72080; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

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

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

19960002581 NASA Lyndon B. Johnson Space Center, Houston, TX, USA STS-69 flight day 5 highlights Sep 21, 1995; In English; 14 min. 50 sec. playing time, in color, with sound Report No.(s): NONP--NASA--VT--95--72081; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

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

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

19960002582 NASA Lyndon B. Johnson Space Center, Houston, TX, USA STS-69 flight day 6 highlights Sep 12, 1995; In English; 45 min. 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 Gemhardt, 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 viewed a video of themselves performing daily routines (eating, shaving, exercising), as well as some of the physiological experiments, and shuttle equipment maintenance and checkout. One of the secondary experiments included the Commercial Generic Bioprocessing Apparatus-7 (CGBA-7), which served as an incubator and experiment station for a variety of tests (agricultural, pharmaceutical, biomedical, and envi-
Environmental. Earth views included some cloud cover, the Gulf of Mexico, Texas, and the Atlantic Ocean.

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

**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 'Pattie.' Voss and Gernhardt performed a pre-EVA (Extravehicular Activity) checkout of the new thermal spacecrafts 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.

**Payload Retrieval (STS): Scientific Satellites; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Suits; Space Transportation System; Space Transportation System Flights; Spacescrapes**

**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.

**Payload Retrieval (STS): Scientific Satellites; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Suits; Space Transportation System; Space Transportation System Flights; Spacescrapes**

**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.

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

**STS-70 mission highlights**

Sep 5, 1995; In English; 39 min. playing time, in color, with sound  
Report No.(s): NONP-NASA-VT–95–199505639; 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/ National Institutes of Health-Rodents (PARE/NIH-R), the Bioreactor Demonstration System (BDS), the Commercial Protein Crystal Growth (CPCG) studies, the Space Tissue Low/National Institutes of Health-Cells (STL/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.

**Payload Deployment & Retrieval System; Space Transportation System; Space Transportation System Flights; Spacescrapes; TDRS Satellites**

**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–95–199505602; 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 flightcrew consists of Cmdr. Robert Hoot Gibson, Pilot Charles Precourt, and Mission Specialists Ellen Baker, Bonnie Dunbar, and Gregory Harbaugh. The Mir 18 flightcrew consisted of Cmdr. Vladimir Dezhurov, Flight Engineer Gennady Strekalov, and Cosmonaut-Research 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.

**CASl**

**Earth Orbits: Mir Space Station; Orbital Rendezvous; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecraft**

19960007441 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-69 postflight presentation

Oct 3, 1995; In English; 35 min. playing time, in color, with sound

Report No.(s): NONP-NASA-VT–95–1995006235; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A postflight conference of the STS-69 mission is presented. The flightcrew (The Dog Team) consisted of Cmdr. David Walker, Pilot Kenneth Cockrell, Payload Cmdr. James Voss, and Mission Specialists James Newman and Michael Gernhardt. The mission’s primary objective was the deployment and retrieval of the SPARTAN-201 satellite, which investigated the interaction between the Sun and it’s solar wind. Other secondary experiments and shuttle payloads included the Wake Shield Facility (WSF), which grew several layers of semiconductor films, the International Extreme Ultraviolet Hitchhiker (IEH-1), the Capillary Pumped Loop-2 Gas Bridge Assembly (CPL-2/GBA), several Get Away Specials (GAS) experiments, the Electrolysis Performance Improvement Concept Study (EPICS), the Thermal Energy Storage (TES-2) experiment, the Commercial Generic Bioprocessing Apparatus-7 (CGBA-7), the National Institutes of Health-Cells 4 (NIH-C4) experiment, and the Biological Research in Spaceflight (BRICS) experiment. Earth views consisted of Saudi Arabia, the Amazon River, the Bahamas, Somalia, a sunset over the Earth’s horizon, and two hurricanes, Luis and Marilyn.

**CASl**

**Earth Observations (From Space); Get Away Specials (STS); Payload Deployment & Retrieval System; Scientific Satellites; Space Shuttle Missions; Space Transportation System; Space Transportation System Flights; Spaceborne Astronomy; Spaceborne Experiments; Spacecraft; Ultraviolet Astronomy**

19960008023 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-73 flight day 1

Oct 20, 1995; In English; 23 min. 45 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT–95–1995006227; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine "Cady" Colman, and Michael Lopez-Alegria are shown performing several of the spaceborne experiments on the USA Microgravity Lab-2 (USML-2). These experiments shown include the Advanced Protein Crystallization Facility (APCF), the Astroculture (tmASC) 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 Zoelites 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. Earth views include some cloud cover and various Earth land masses.

**CASl**

**Earth Observations (From Space); Microgravity; Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecraft; Spacecraft**

19960008024 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-73 flight day 2

Oct 21, 1995; In English; 18 min. 10 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT–95–1995006228; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this second day of the STS-73 sixteen day mission, the crew Cmbr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine "Cady" Colman, and Michael Lopez-Alegria are shown performing several of the spaceborne experiments onboard the USA Microgravity Lab-2 (USML-2). These experiments included the Astroculture (tmASC) experiment, the Protein Crystal Growth (PCG) experiment using liquid-liquid diffusion methods, and the Drop Physics Module (DPM) experiment. A High-Packed Digital Television (HI-PAC) system is used to downlink video images of the various experiments from the Shuttle to Mission Control. Video from Mission Control is uplinked to the shuttle using a Ground-Air Television (GATV) system.

**CASl**

**Space Communication; Space Shuttle Missions; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecraft; Spacecraft**

19960008025 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-73 flight day 3

Oct 22, 1995; In English; 19 min. 15 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT–95–1995006229; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this third day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine "Cady" Colman, and Michael Lopez-Alegria are shown performing several of the spaceborne experiments onboard the USA Microgravity Lab-2 (USML-2). The experiments shown include the Surface Tension Driven Convection Experiment (STDCE), the Drop Physics Module (DPM) experiment, and the High-Packed Digital Television (HI-PAC) demonstration. The HI-PAC allows the digitization of up to six video downlink signals from the SpaceLab experiments and other cameras onboard the Shuttle, where previously only one downlink was allowed.

**CASl**

**Space Communication; Space Shuttle Missions; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecraft; Spacecraft**

19960008043 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-73 flight day 4

Oct 23, 1995; In English; 23 min. 20 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT–95–1995006230; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fourth day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine "Cady" Colman, and Michael Lopez-Alegria are shown performing several of the spaceborne experiments onboard the USA Microgravity Lab-2 (USML-2). The experiments shown include the High-Packed Digital Television (HI-PAC) demonstration, the Surface Tension Driven Convection Experiment (STDCE), and the Drop Physics Module (DPM) experiment. Video footage is shown of the crew working in the SpaceLab along with a split screen Shuttle downlink/Ground-Air Television (GATV) uplink from Mission Control. Several of the astronauts are interviewed by Mission Control regarding the status of the experiments.

**CASl**

**Ground-Air-Ground Communication; Space Communication; Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecraft; Spacecraft**

19960008044 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-73 flight day 5

Oct 24, 1995; In English; 16 min. 15 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT–95–1995006231; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fifth day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine "Cady" Colman, and Michael Lopez-Alegria are shown performing several of the spaceborne experiments onboard the USA Microgravity Lab-2 (USML-2). These experiments are downlinked to Mission Control from the SpaceLab using the High-Packed Digital Television (HI-PAC) system onboard the Shuttle. The experiments shown include the Drop Physics Module (DPM) experiment, the
Report No.(s): NONP NASA V'I-95 1995006232; No Copyright; Avail: Oct 25, 1995; In English; 22 min. 55 sec. playing time, in color, with sound

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

199609080846 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-V'I-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 Protein Crystal Growth (PCG) experiment, the Astroculture(tm)(ASC) experiment, the Drop Physics Module (DPM) experiment, and the Surface Tension Driven Convection Experiment (STDCE). All experiment imagery was downlinked to Mission Control with the High-Packed Digital Television (HI-PAC) system. The imagery of the experiments inside the Spacelab were downlinked to Mission Control using the High-Packed Digital Television (HI-PAC) system.

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

199609080849 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-73 flight day 10
Oct 29, 1995; In English; 7 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-V'I-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 Fluid-Flow Cell Experiment (GFCE). 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

199609080850 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-V'I-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 Fluid-Flow Cell Experiment (GFCE). 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

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

199609080848 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-V'I-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
Ground-Air-Ground Communication; News Media; Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecrews; Spacelab

199609080845 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-V'I-95–1995060232; 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 Surface Tension Driven Convection Experiment (STDCE), the Drop Physics Module (DPM) experiment, and the Surface Tension Driven Convection Experiment (STDCE). The High-Packed Digital Television (HI-PAC) system is further tested and an in-orbit interview with Lopez-Alegria by NBC Nightline is conducted. The entire flight crew salutes the 5th game of the World Series between the Atlanta Braves and Cleveland Indians by pretending to throw out the first ball of the game through a downlink to the stadium. Earth views taken from the payload bay cameras include some cloud cover, oceans, land masses, and the Nile River and the Red Sea.

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

199609080847 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-V'I-95–1995060234; 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, 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

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
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 ‘Cad’ Collman, and Michael Lopez-Alegria are shown performing several of the space- borne experiments onboard the USA Microgravity Lab-2 (USML-2). The experiments shown included the Drop Physics Module (DPM) experiment, the Surface Tension Driven Convection Experiment (STDCE), and the Astrobot (m)ASC demonstration. Rominger was interviewed by a Colorado radio news show and asked questions about the mission and living in space. Earth views included cloud cover.

CASI

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 ‘Cad’ 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

On this last day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine ‘Cad’ Collman, and Michael Lopez-Alegria are shown performing several of the space- borne experiments onboard the USA Microgravity Lab-2 (USML-2). The experiments shown included the Drop Physics Module (DPM) experiment, human physiological experiments, and a Crystal Gel experiment.

CASI

On this eighth day of the STS-73 mission, the flight crew Cmdr. Kenneth Cameron, Pilot James Halusell, and Mission Specialists William McArthur, Jerry Ross, and Chris Hatfield, using the remote manipulator system (RMS), took exterior views of the shuttle in space. Additionally, the crew answered several questions posted on one of NASA’s websites on the internet.

CASI
Space Transportation System: Space Transportation System Flights

At a post flight press conference, the flight crew of the STS-46 mission (Cmdr. Loren Shriver, Pilot Andrew Allen, Mission Specialists Claude Nicollier (European Space Agency (ESA)), Marsha Ivins (Flight Engineer), Jeff Hoffman (Payload Commander), Franklin Chang-Diaz, and Payload Specialist Franco Malerba (Italian Space Agency (ASI))) discussed their roles in and presented video footage, slides and still photographs of the different aspects of their mission. The primary objectives of the mission were the deployment of ESA’s European Retrievable Carrier (EURECA) satellite and the joint NASA/ISA deployment and testing of the Tethered Satellite System (TSS). Secondary objectives included the IMAX Camera, the Limited Duration Space Environment Candidate Materials Exposure (LDE), and the Pituitary Growth Hormone Cell Function (PHCF) experiments. Video footage of the EURECA and TSS deployment procedures are shown. Earth views were extensive and included Javanese volcanoes, Amazon basin forest ground fires, southern Mexico, southern Bolivian volcanoes, south-west Sardinia and the Sahara Desert, and Melville Island, Australia. Questions from reporters and journalists from Johnson Space Center and Kennedy Space Center were discussed.

CASI
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 Hadfield, 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).

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

1996081206 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-74 flight day 1
Nov 12, 1995; In English, 17 min, 46 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-V1–96–1996007177; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

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 Hadfield, 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).

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

1996081207 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-74 flight day 2
Nov 13, 1995; In English; 26 min, 56 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-V1–96–1996007178; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

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 Hadfield, 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 a near blind state.

**Flight Crews; Mir Space Station; Space Communication; Space Shuttle Missions; Space Shuttle Payloads; Space Transportation System; Space Transportation System Flights; Spacecraft Docking; Spacecraft Maneuvers**

1996081208 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-74 flight day 3
Nov 14, 1995; In English; 30 min, 33 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-V1–96–1996007179; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

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 Hadfield 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.

**Flight Crews; Mir Space Station; Modules; Space Communication; Space Shuttle Payloads; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spacecraft Docking**

1996081209 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-74 flight day 4
Nov 15, 1995; In English; 36 min, 16 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-V1–96–1996007180; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

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 Hadfield, 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 Serguei 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 is conducted in both English and Russian.

**Flight Crews; Mir Space Station; Orbital Maneuvers; Space Communication; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transport System; Space Transportation System Flights; Spacecraft Docking**

1996081210 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-74 flight day 5
Nov 16, 1995; In English, 38 min. playing time, in color, with sound
Report No.(s): NONP-NASA-V1–96–1996007181; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On this fifth day of the STS-74 mission, the flight crew, Cmdr. Kenneth Cameron, Pilot James Halsell, and Mission Specialists William McArthur, Jerry Ross, and Chris Hadfield, were awakened to the theme from the movie 2001: A Space Odyssey. The Mir 20 cosmonauts, Cmdr. Yuri Gidzenko, Flight Engineer Serguei 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.

**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**

1996081211 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-74 flight day 6
Nov 17, 1995; In English; 31 min, 8 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-V1–96–1996007182; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On this sixth day of the STS-74 mission, the flight crew, Cmdr. Kenneth Cameron, Pilot James Halsell, and Mission Specialists William McArthur, Jerry Ross, and Chris Hadfield and the Mir 20 cosmonauts. Cmdr. Yuri Gidzenko, Flight Engineer Serguei Avdeyev, and Cosmonaut-Researcher (ESA) Thomas Reiter, were greeted and briefly interviewed by the Secretary General of the United Nations, Boutros Boutros-Ghali, on the 50th anniversary of the United Nations via a radio satellite hookup. An additional interview with other journalists from different areas of the USA and Canada was also presented.

**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**

1996081212 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-74 flight day 7
Nov 18, 1995; In English; 22 min. playing time, in color, with sound
Report No.(s): NONP-NASA-V1–96–1996007183; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this seventh day of the STS-74 mission, the flight crew Cmdr. Kenneth Cameron, Pilot James Halsell, and Mission Specialists William McArthur, Jerry Ross, and Chris Hadfield, filmed the Mir-shuttle separation maneuver. After separation, the shuttle performed a fly-around of the Mir space station, during which, a variety of views of the Mir station were taken. Earth views included cloud cover.

**Flight Crews; Mir Space Station; Space Rendezvous; Space Transportation System; Space Transportation System Flights; Spacecraft Docking**

1996082555 NASA Johnson Space Center, Houston, TX USA

STS-76 Flight Day 2
Mar. 23, 1996; In English; Videotape: 19 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-V1–96–1996039093; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this second 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, Michel R. Clifford, and Ronald M. Sega, are shown checking out 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, 'Nightline'. The construction of the SPACEHAB unit also was started.

CASI
Space Transportation System: Space Shuttles; Hydraulic Equipment

1996025955 NASA Johnson Space Center, Houston, TX USA
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; B00, 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. Pre-launch 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, Clad, the Himalayas and Mount Everest, and China. A unique moonset is also shown.

CASI
Space Transportation System: Tethered Satellites; Postflight Analyses; Space Shuttles; Gravitational Effects; Deployment

1996025957 NASA Johnson Space Center, Houston, TX USA
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), show tracking the free-rotating 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; Spacecrews; Spaceborne Experiments; Microgravity: Space Shuttle Payloads; Space Shuttle Missions; Columbia (Orbiter); Earth Observations (From Space); Space Communication; Tethered Satellites

1996025958 NASA Johnson Space Center, Houston, TX USA
STS-75 Flight Day 8
Feb. 29, 1996; In English; Videotape: 17 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–96–1996037043; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this eighth day of the STS-75 mission, the flight crew, Cmdr. Andrew Allen, Pilot Scott Horowitz, Payload Cmdr. Franklin Chang-Diaz, Payload Specialist Umberto Guidoni (Italy), and Mission Specialists Jeffrey Hoffman, Maurizio Cheli (ESA) and Claude Nicollier (ESA), are shown performing the Advanced Automated Directional Solidification Furnace (AADSF) experiment which is one part of the USA Microgravity Payload-3 (USMP-3) experiments. Earth views include cloud cover.

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

1996025959 NASA Johnson Space Center, Houston, TX USA
STS-75 Flight Day 7
Feb. 28, 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 shown 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; Spacecrews; Microgravity; Space Shuttle Missions; Space Shuttle Payloads; Spaceborne Experiments; Columbia (Orbiter)

1996025960 NASA Johnson Space Center, Houston, TX USA
STS-75 Flight Day 5
Feb. 26, 1996; In English; Videotape: 18 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; Spacecrews; Tethered Satellites; Columbia (Orbiter); Spaceborne Experiments; Space Communication; Space Shuttle Missions; Space Shuttle Payloads

1996025961 NASA Johnson Space Center, Houston, TX USA
STS-75 Flight Day 4
Feb. 25, 1996; In English; Videotape: 22 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–96–1996037039; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this fourth 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 unlatching and deploying the Tethered Satellite System Reflight (TSS-1R) and activating several of the middeck experiments from the USA Microgravity Payload-3 (USMP-3). There is more imaging of the Space Shuttle’s exhaust system using vented water vapor and Earth views, which include horizon shots.

CASI
Space Transportation System: Space Transportation System Flights; Spacecrews; Tethered Satellites; Microgravity; Spaceborne Experiments; Space Shuttle Missions; Space Shuttle Payloads; Payload Delivery (STDs); Columbia (Orbiter)

1996025962 NASA Johnson Space Center, Houston, TX USA
STS-75 Flight Day 3
Feb. 24, 1996; In English; Videotape: 15 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–96–1996037038; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this third 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, with Mission
Control's help, still trying to correct the problems with the 'Smart Flex' computer system which is delaying the deployment of the Tethered Satellite System Reflight (TSS-1R). There is imaging shown of the shuttle's exhaust system using water vapor.

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

19960825963 NASA Johnson Space Center, Houston, TX USA STS---75 Flight Day 1
Feb. 22, 1996; 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

On this first day of the STS-75 mission, the flight crew, Cmdr. Andrew Allen, Pilot Scott Horowitz, Payload Cmbr. 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 (TEMAG); Shuttle Electrodynamic 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 missions's secondary objectives were those experiments found in the USA Microgravity Payload-3 (USMP-3), which include: Advanced Automated Directional Solidification Furnace (AADS); Material for the Etude des Phénomènes Intermittants 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)

19960825964 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 (NAZDA), 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 (SFLU) 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)

19960825965 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

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 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

19960825966 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 Flights; Flight Crews; Aerial Explosions; Spacecraft Launching; Astronauts; Space Transportation System

19960825998 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), were 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
Space Transportation System; Space Transportation System Flights; Spacecrews; Spaceborne Experiments; Space Shuttle Missions; Space Shuttle Payloads; Columbus (Orbiter); Earth Observations (From Space); Space Communication; Microgravity
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 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)

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: Space Transportation System Flights; Spacecraft Docking: Mir Space Station; Spacecraft Maneuvers

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 astronauts on board and those who have contributed to the mission's success. The flight crew is interviewed by reporters from USA and Europe via a satellite hookup. Earth views include clouds and storm systems. A view of the lost, free-flying tethered satellite is shown.

CASI

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

News Media

1996

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. Scarfoss, and Mission Specialists Shannon W. Lucid, Linda M. Godwin, Michael R. Clifford, and Ronald M. Sega are shown preparing for Godwin and Clifford's extra vascular activity (EVA). The two astronauts are shown egressing from the Shuttle and performing activities during the EVA with the Earth in the background. Godwin and Clifford spent six hours spacewalking in Atlantis' cargo bay and on the exterior of the Mir's docking module. They are shown completing all of the objectives planned for the spacewalk, the most important of which was to install on the exterior of Mir four experiments to monitor the space environment for the next year and a half. This marks the first time that a spacewalk was conducted from a docked Space Shuttle. A variety of new tools capable of being used on both US and Russian spacecraft were evaluated during the spacewalk.

CASI

Space Transportation System: Space Transportation System Flights: Space Shuttles; Extravehicular Activity

1996

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–96–19960339806; 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. Scarfoss, and Mission Specialists Linda M. Godwin, Michael R. Clifford, and Ronald M. Sega are shown bidding the Mir crew and Shannon W. Lucid an emotional farewell. Chilton calling it 'a bittersweet moment.' The Atlantis and Mir commanders, Chilton and Oumfrenko, 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 Kaliningrad for their efforts. The post flight presentation of the STS-75 Space Shuttle's USA Shuttle Solar Backscatter Ultraviolet (SSBUV-8), the Shuttle Laser Altimeter Satellite Systems (SLA-01/GAS(5)), the National Institutes of Health-3 (NIH-3), and the Space Transportation System: Space Transportation System Flights; Space Shuttles; Extravehicular Activity

1996

NASA Johnson Space Center, Houston, TX USA

STS-77 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–96–19960313404; 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' Collins, and Michael Lopez-Alegria, using color video and slides. Film footage includes the prelaunch and launch activities, the USML and Middelberg experiments (Advanced Protein Crystallization Facility (APCF), the Astroculture(tm) (ASC) hardware and experiment, the Commercial Generic Bioprocessing Apparatus (CGBA), the Crystal Growth Furnace (CGF), the Drop Physics Module (DPM), the Geophysical Fluid Flow Cell (GFFC), the Glovebox (GBX), the Zeolite Crystal Growth (ZCG) experiment, the Surface Tension Driven Convexion 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, entry, and space shuttle landing. The USML experiments were monitored via the HI-PAC system downlink. Earth views included mostly geographical locations (Mediterranean Sea; Turkey; Lake Powell, Arizona/Utah area; San Francisco Bay; Baltimore, Maryland; Washington, DC; India; Tibet; China; Bhutan; Philadelphia; and the Himalayas).

CASI

Space Shuttle Orbiters: Space Transportation System Flights; Flight Crews; Space Shuttle Missions; Spacelab; Microgravity; Spaceborne Experiments; Earth Observations (From Space); Digital Television; Downlinking; Television Systems; Space Transportation System

1996

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–96–1996030737; 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-downtlinking, online with Dan Golden, the Director of NASA, discussing the mission and performing system set-ups. A problem with the 'Smart Flex' computer system develops and the crew spends most of the day trying to fix the problem with the help of Mission Control. Earth views include cloud cover, various land and water masses, and Earth's Arctic regions.

CASI

Space Transportation System: Space Transportation System Flights; Columbia (Orbiter); Spacecraft; International Cooperation; Spaceborne Experiments; Space Shuttle Missions; Spacecraft Electric Equipment

1996

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 Kenichi 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. Secondaries objectives included the Shuttle Solar Backscatter Ultraviolet (SBBU-8), the Shuttle Laser Altimeter GAS(5)/(SLA-01/GAS(5)), the National Institutes of Health-R3 (NIH-R3), the Space Tissue Loss (STL/NII-C), and Thermal Energy Storage (TES-2) experiments. Get-Away-Specials (GAS) included the USAF Academy G-342 Flexible Flyer (OAS'-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 (SBBU-8), the Shuttle Laser Altimeter GAS(5)/(SLA-01/GAS(5)), the National Institutes of Health-R3 (NIH-R3), the Space Tissue Loss (STL/NII-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 Retum Experiment. This flight launch was shown at various angles and distances from the launching pad.

CASI

Get Away Specials (STS); Endeavour (Orbiter); Space Transportation System; Flight Crews; Space Transportation System Flights; Spaceborne Experiments; Spacecraft Launching; Payload Retrieval (STS); Japanese Spacecraft; Scientific Satellites
Japanese song, 'Sea in Springtime'. Wakata, using the shuttle’s robot arm, successfully retrieved the Japanese Space Flyer Unit (SFU) satellite and berthed it in the shuttle’s cargo bay. Duffy and Wakata were interviewed, via satellite, by Japanese journalists and reporters in Houston, Texas. Earth views include cloud cover, storm systems, Africa and several other land masses.

CASI
Space Transportation System: Space Transportation System Flights: Endeavour (Orbiter); Space Shuttle Missions; Payload Retrieval (STS); Remote Manipulator System; Earth Observations (From Space); Space Communication: Flight Crews

19960826035 NASA Johnson Space Center, Houston, TX USA
STS-76 Flight Day 1
Mar. 22, 1996; In English; Videotape: 22 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–96–1996039905; 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. Scarnato, and Mission Specialists Shannon W. Lucid, Linda M. Godwin, Michael R. Clifford, and Ronald M. Sega, are shown preparing 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 SPACELAB 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, Quebec University Experiment in Liquid Diffusion (QUELD), Optizone 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 KISat, 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: Spacecraft Payloads: Mir Space Station

19960826036 NASA Johnson Space Center, Houston, TX USA
STS–75 Flight Day 14
Mar. 9, 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, Brazil coast line, and the Pacific Ocean.
CASI
Space Transportation System: Space Transportation System Flights: Spacecrews; Physiological 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–96–1996037045; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this tenth day of the STS–75 mission, the flight crew, Cmdr. Andrew Allen, Pilot Scott Horowitz, Payload 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 Material Pour 1 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: Spacecrews; Space Transportation System: Microgravity; Space Shuttle Missions: Space Shuttle Payloads; Columbia (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: Spacecrews; Tethered Satellites: Microgravity; Space Communication: Space Shuttle Missions: Space Shuttle Payloads: Columbia (Orbiter); Spaceborne Experiments

19960826039 NASA Johnson Space Center, Houston, TX USA
STS–75 Flight Day 4
Mar. 25, 1996; In English; Videotape: 30 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–96–1996037089; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this fourth day of the STS–75 mission, the flight crew, Cmdr. Kevin P. Chilton, Pilot Richard A. Scarnato, and Mission Specialists Shannon W. Lucid, Linda M. Godwin, Michael R. Clifford, and Ronald M. Sega, are shown performing various experiments on the Middeck and transferring supplies to the Mir Space Station. Godwin explains the European Space Agency (ESA) Biorack investigations. Chilton, Lucid and Mir Cmdr. Yuri Onufenko talk with NASA Administrator Dan Goldin via satellite link. Lucid will be joining the cosmonauts, Onufenko and Flight Engineer Yuri Uraschev, for a 140-day mission on the Mir.
CASI
Space Transportation System: Space Transportation System Flights: Mid–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. Scarnato, 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, Scarnato 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-around 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
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., 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

1996/02/28549 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–96–199606598; 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

1996/02/28576 NASA Johnson Space Center, Houston, TX USA
STS-77 Flight Day 7
May 25, 1996; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–96–199606506; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this seventh day of the STS-77 mission, the flight crew, Cmdr. John H. Casper, Pilot Curtis L. Brown, Jr., and Mission Specialists Andrew S.W. Thomas, Ph.D., Daniel W. Bursch, Mario Runco, Jr., and Marc Garneau, Ph.D., return to the small, cylindrical PAMS-STU satellite and begin eight hours of station-keeping about 1,800 feet away. The second rendezvous with the Passive Aerodynamically Stabilized Magnetically Damped Satellite (PAMS) begins shortly after the crew is awakened by the song ‘Down Under’ performed by Men At Work, in honor of Australian-born Mission Specialist Andy Thomas. For several hours Commander John Casper and Pilot Curt Brown perform a series of thruster firings which allow Endeavour to close in on the 2 foot by 3 foot satellite. The rendezvous takes place as other crewmembers monitor ongoing science experiments in the Spacehab module and on the middeck of the orbiter.

CASI
Space Transportation System Flights: Stationkeeping

1996/02/28571 NASA Johnson Space Center, Houston, TX USA
STS-77 Flight Day 3
May 20, 1996; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–96–199606592; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this third day of the STS-77 mission, the flight crew, Cmdr. John H. Casper, Pilot Curtis L. Brown, Jr., and Mission Specialists Andrew S.W. Thomas, Ph.D., Daniel W. Bursch, Mario Runco, Jr., and Marc Garneau, Ph.D., can be seen focusing their attention on retrieving the Spartan satellite and returning it to the Shuttle’s payload bay. Commander John Casper, Pilot Curt Brown and Mission Specialist Dan Bursch prepared for the rendezvous while Mission Specialists Andy Thomas, Mario Runco and Marc Garneau continued work on the orbiter’s middeck and in the Spacehab module. The Inflatable Antenna Experiment (I.A.E.) was jettisoned later in the morning and is expected to enter the Earth’s atmosphere. This morning’s rendezvous is the first of four planned during the mission. Following a series of firings, Endeavour approaches within a distance of about 30 feet from Spartan, where Garneau can be seen extending
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–96–199606590; 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 Runco, Jr., and Marc Garneau, Ph.D., can be seen preforming pre-launch activities such as eating the traditional breakfast, crew suit-up, and being shown to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being reached in the 'white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Following an on-time launch, the crew of Endeavor are shown setting up a variety of experiments that will operate for much of the mission.

CASI
Space Transportation System Flights: Spacecrafts: 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–96–199604773; No Copyright; Avail: CASI; B04, 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: prelaunch and launch activities; shuttle launch; in-orbit rendezvous; installation of the Russian-made docking module; in-orbit docking between Mir and the orbiter; general crew activities; transfer of supplies, equipment, and a crystal growth experiment to Mir; data collection from Mir thruster firings; undocking maneuvers and a Mir flyaround; 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–96–199606597; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this eighth day of the STS-77 mission, the flight crew, Cmdr. John H. Casper, Pilot Curtis L. Brown, Jr., and Mission Specialists Andrew S.W. Thomas, Ph.D., Daniel W. Bursch, Mario Runco, Jr., and Marc Garneau, Ph.D., 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 Runco 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–96–199606595; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this sixth day of the STS-77 mission, the flight crew, Cmdr. John H. Casper, Pilot Curtis L. Brown, Jr., and Mission Specialists Andrew S.W. Thomas, Ph.D., Daniel W. Bursch, Mario Runco, Jr., and Marc Garneau, Ph.D., 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 Endeavor's system. Mission Specialist Mario Runco 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

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–96–199606594; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fifth day of the STS-77 mission, the flight crew, Cmdr. John H. Casper, Pilot Curtis L. Brown, Jr., and Mission Specialists Andrew S.W. Thomas, Ph.D., Daniel W. Bursch, Mario Runco, Jr., and Marc Garneau, Ph.D., 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. Endeavor 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–96–199606593; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fourth day of the STS-77 mission, the flight crew, Cmdr. John H. Casper, Pilot Curtis L. Brown, Jr., and Mission Specialists Andrew S.W. Thomas, Ph.D., Daniel W. Bursch, Mario Runco, Jr., and Marc Garneau, Ph.D., 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 Runco deploys the satellite from a canister in the rear of Endeavor's payload bay, it drifts away from the orbiter in a rotating, unstable attitude by design to evaluate how quickly and effectively the spacecraft can stabilize itself using the aerodynamic stabilization method rather than by thrusters. Later in the day the crew is seen being interviewed by Canadian Television.

CASI
Space Transportation System Flights: Deployment: Payloads: Attitude (Inclination): Attitude Control
On this second 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., are seen deploying the Spartan satellite for its 24 hour free flight away from Endeavour to test new inflatable antenna technology. The inflation procedure begins as the shuttle and antenna pass over New Mexico, Southern California, the Grand Canyon, Appalachian Mountains, and coast of Virginia. The inflation takes about 5 minutes, bringing the antenna to its full size of 90 feet by 50 feet. After an hour and a half, the antenna was to be jettisoned from the Spartan.

CASI

Space Transportation System Flights: Deployment; Inflatable Structures; Inflatable Spacecraft

On this third 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, P.D.D. and Robert B. Thirsk, M.D., are seen participating in a special event surrounding the celebration of the Olympics, including a conversation with Billy Payne, a member of the Atlanta Olympic Organizing Committee. Payne congratulated the crews of Mir and Columbia.

CASI

Space Transportation System Flights: Communication Networks; Communicating: Space Flight; Space Missions; Spacelab

On this fourth day of the STS-72 mission, the flight crew, Cmdr. Brian Duffy, Pilot Brent W. Jett, and Mission Specialists Leroy Chiao, Daniel T. Berry, Winston E. Scott, and Koichi Wakata (NASA), deployed the OAST-Flyer satellite which will perform two days of scientific investigations, checked out the space tools that they will be testing during their two planned spacewalks, and conducted the secondary middeck experiments. The host, Tom Miller, from NBC’s Nightly News show, interviewed the astronauts from Charlotte, NC via satellite link. Views include the Japanese Space Flyer Unit (SFU) satellite in its berth in the shuttle’s cargo bay with the Earth in the background, Earth cloud cover, and various shots of the shuttle’s cargo bay.

CASI

Space Transportation System: Space Transportation System Flights; Space Shuttle Missions; Endeavour (Orbiter); Flight Crews; Scientific Satellites; Deployment; Spaceborne Experiments; Checkout; Earth Observations (From Space)
expenditure and pulmonary function continue throughout the day, as well as the processing of advanced semiconductor materials and alloys in the Advanced Gradient Heating Facility. In an interview with the NBC News, Mission Commander Tom Henricks is shown discussing Columbia’s flight and the varied experiments that are being conducted on board. Crew members are shown participating in tests that measure their performance.

CASI
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 shown conducting a news conference to discuss the progress of the international mission with media from the USA, Canada, and Europe. During the press conference, the crew explained the relevance of the experiments conducted aboard the Life Sciences and Microgravity mission, and praised support crews and researchers on Earth who are involved in the mission. Payload Specialist Dr. Robert Thirsk told Canadian journalists of how the research will not only benefit astronauts as they conduct long-term space missions, but also people on Earth. Some of the research will aid studies on osteoporosis and the effects steroids have on bones, and also may help doctors on Earth develop treatments for muscle diseases like muscular dystrophy. Thirsk told reporters in Toronto.

CASI
Space Transportation System Flights: Microgravity; Muscles; Diseases; Biosimulation; Pulmonary Functions; Human Body; Human Behavior; Bones

STS-78 Flight Day 7
Jun. 26, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP NASA–VT–96–1996085861; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this seventh day of the STS-78 mission, the flight crew, Cmdr. Terence T. Henricks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Linnehan, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, Ph.D. and Robert B. Thirsk, M.D., continue as test subjects for a host of human health and microgravity investigations. Some focus 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: Space Missions; Musculoskeletal System; Microgravity; Life Sciences; Gravitational Effects

STS-78 Flight Day 6
Jun. 25, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP NASA–VT–96–1996085862; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this sixth day of the STS-78 mission, the flight crew, Cmdr. Terence T. Henricks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Linnehan, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, Ph.D. and Robert B. Thirsk, M.D., are shown performing status checks on the life and microgravity experiments and conducting a brief maintenance procedure to correct an electrical circuit problem in the Bubble Drop Particle Unit. On this day, the crew is given four hours off to relax after five days of work with the life and microgravity science investigation being conducted on board.

CASI
Space Transportation System Flights: Microgravity; Gravitational Effects

STS-78 Flight Day 10
Jun. 29, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP NASA–VT–96–1996085858; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this tenth day of the STS-78 mission, the flight crew, Cmdr. Terence T. Henricks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Linnehan, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, Ph.D. and Robert B. Thirsk, M.D., continue to perform in a nearly flawless fashion. The crew is shown completing another of four tests focusing on the effects of microgravity on the vestibular system in the inner ear. In space, the vestibular system sometimes becomes confused as to which way is up and down, leading to nausea and disorientation. Using specially designed head gear to monitor head movement and eye coordination, Linnehan, Brady, Favier, Thirsk and Helms performed tests throughout their shifts to determine how the head and eyes track visual and motion targets in microgravity. The study is providing scientists with important information about the crew’s ability to adapt to microgravity.

CASI
Space Transportation System Flights: Human Anatomy; Coordination; Disorientation; Head Movement; Microgravity; Nausea; SpaceLab
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.

**Space Transportation System Flights:** Spacecraft; Microgravity; Lungs

19960850109 NASA Johnson Space Center, Houston, TX USA
STS-78 Post Flight Presentation
Jul. 23, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP--NASA--VT--96--1996085850; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The flight crew of the STS-78 mission, Cmdr. Terence T. 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, Pd.D., and Robert B. Thirsk, M.D., back from their seventeen day mission, offer a video and still photo presentation of their journey. Included in the presentation are pre-launch, launch, and post-launch activities; experiments performed in the Spacelab; and re-entry; and the landing at KSC. Each of the STS-78 crew members discuss particular aspects of the mission including the 22 LMS life science and microgravity experiments. The experiments address human physiology, metallic alloys and protein crystal growth, and the study of the behavior of fluids and materials processing in the near-weightless environment of space.

**Space Transportation System:** Spacecraft; Protein Crystal Growth; Microgravity; Gravitational Effects: Life Sciences; Space Flight; Space Missions

19960850106 NASA Johnson Space Center, Houston, TX USA
STS-78 Flight Day 17
Jul. 06, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP--NASA--VT--96--1996085851; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this seventeenth day of the STS-78 mission, the flight crew, Cmdr. Terence T. 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, Pd.D. and Robert B. Thirsk, M.D., are shown conducting routine firings of the orbiter's reaction control system jets and checking out its flight control systems and aero surfaces in anticipation of the planned landing at the Kennedy Space Center. Commander Tom Henricks and Pilot Kevin Kregel successfully fire Columbia's S-4A reaction control system jets and then test the aero surfaces that will be used during Columbia's high speed re-entry. This firings procedure is part of a test to prove a concept that may be used on Space Shuttle Discovery's next mission -- STS-82 -- to service the Hubble Space Telescope. The vernier jet firings should raise the orbit without disturbing any payloads on board, or in the case of the Hubble Space Telescope, without placing any force on the telescope's fragile solar arrays.

**Space Transportation System Flights:** Space Missions; Space Shuttles; Jet Control; Flight Control

19960850107 NASA Johnson Space Center, Houston, TX USA
STS-78 Flight Day 1
Jun. 21, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP--NASA--VT--96--1996085867; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this first day of the STS-78 mission, the flight crew, Cmdr. Terence T. 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, Pd.D. and Robert B. Thirsk, M.D., will continue to conduct orbit with flight controllers from a small camera that was mounted on the flight deck. The video follows Columbia's flight from just before main engine start through engine cutoff, showing the force of main engines and solid booster ignition as experienced by the astronauts.

**CASI**

**Space Transportation System Flights: Launching; Flight Control; Countdown; Climbing Flight; Astronauts**

19960850108 NASA Johnson Space Center, Houston, TX USA
STS-78 Flight Day 2
Jun. 21, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP--NASA--VT--96--1996085866; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this second day of the STS-78 flight, mission controllers wake the flight crew, Cmdrs. 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, Pd.D. and Robert B. Thirsk, M.D., with 'Free Falling' a song by Tom Petty. Crew members are then shown working with various neurological and cardiovascular experiments inside the Spacelab.

**CASI**

**Space Transportation System Flights: Cardiovascular System; Flight Control; Neurology; Spacelab**

19960850102 NASA Johnson Space Center, Houston, TX USA
STS-78 Flight Day 5
Jun. 24, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP--NASA--VT--96--1996085865; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fifth day of the STS-78 mission, the flight crew, Cmdrs. 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, Pd.D. and Robert B. Thirsk, M.D., are shown in the Spacelab conducting microgravity research. They concentrate on the use of the gradient furnace and the Bubble Drop Particle Unit to study process of manufacturing materials in microgravity, and on studies of human muscles and balance mechanisms. Also, Brady, Thirsk, Linnehan, and Favier conduct musculoskeletal tests that measure arm and hand-grip strength.

**CASI**

**Space Transportation System Flights:** Spacelab; Musculoskeletal System; Muscles; Microgravity; Manufacturing; Furnaces

19960850104 NASA Johnson Space Center, Houston, TX USA
STS-78 Flight Day 16
Jul. 05, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP--NASA--VT--96--1996085852; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this sixteenth day of the STS-78 mission, the flight crew, Cmdr. Terence T. 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, Pd.D. and Robert B. Thirsk, M.D., are shown continuing their scientific investigations in the Spacelab module. Today's work focuses on how the astronauts' bodies are responding to the microgravity environment after more than two weeks in orbit. The payload crew will continue studies in the adaptation of the neurovestibular system and the musculoskeletal system during spaceflight.

**CASI**

**Space Transportation System Flights:** Spacelab; Space Flight; Musculoskeletal System; Microgravity

19960850105 NASA Johnson Space Center, Houston, TX USA
STS-78 Flight Day 8
Jun. 27, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP--NASA--VT--96--1996085860; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this eighth day of the STS-78 mission, the flight crew, Cmdrs. 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, Pd.D. and Robert B. Thirsk, M.D., continue to conduct...
The astronauts used a large IMAX camera to conduct a photo-fire small maneuvering jets on their spacecraft to test the ability of ARIS to damp With that complete, Apt monitors the ARIS experiment as Readdy and Kolzun hardware can be seen proceeding smoothly. Apt mad Walz once again worked Readdy, Pilot Terence W. Wilcutt, Mission Specialists, Thomas D. Akers, and logistical supplies will be transferred to the Mir before Atlantis undocks from the space station.

On his sixth day of the STS-79 mission, the flight crew, Cmrd. William F. Readdy, Pilot Terrence W. Wilcutt, Mission Specialists, Thomas D. Akers, Shannon Lucid, Jay Apt, and Carl E. Walz once again worked with the Active Rack Isolation System experiment to replace a broken pushrod. With that complete, Apt monitors the ARIS experiment as Readdy and Kolzun fire small maneuvering jets on their spacecraft to test the ability of ARIS to damp out any disturbances created by the thrusters. 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 photographic survey of Mir from the Shuttle's flight deck windows while Akers shot IMAX movie scenes of Readdy, Wilcutt, and Korzan in the Spectr module.

Space Transportation System Flights; Space Shuttle Missions; Space Shuttle; Space Station; 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, are 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 vestibule between Atlantis and Mir was depressurized and leak checks were performed in readiness for undocking.

CAS1

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

STS-79 Flight Day 7
Sep. 22, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP--NASA--VT--19960693679; 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 has occupied the astronauts’ time during three days of docked operations. Readyly 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 stored on both spacecraft. Readyly, 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

STS-79 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 Cmdr. Susan J. Helms, Mission Specialists Richard M. Limneman, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, P.D.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.
tion, launch, and the separation of the Solid Rocket Boosters. Following an on-time launch, the crew of Endeavour are shown setting up a variety of experiments that will operate for much of the mission.

**CAS1**

*Space Transportation System Flights; Space Shuttle Orbiters; Spacecrews*

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199708050809 NASA Johnson Space Center, Houston, TX USA

**STS-75 Mission Highlight Resource Tape**

Oct. 09, 1996; In English; Videotape: 56 min. 57 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT–97–1997005930; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of the STS-75 mission, Cmdr. Andrew M. Allen, Pilot Scott J. Horowitz, Payload Cmdr. Franklin R. Chang-Diaz, Mission Specialists Maurizio Cheli, Jeffrey A. Hoffman, and Claude Nicollier, and Payload Specialist Umberto Guidoni, present a video over-view 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.

**CAS1**

*Space Transportation System; Spacecrews; Flight Crews; Countdown; Video Tapes*

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199708050532 NASA Johnson Space Center, Houston, TX USA

**STS-79 Post Flight Presentation**

Oct. 09, 1996; In English; Videotape: 43 min. 27 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT–97–1997005935; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of the STS-79 mission, Cmdr. William F. Readdy, Pilot Terrence W. Wilcutt, and Mission Specialists, Thomas D. Akers, John E. Blaha, Jay Apt, and Carl E. Walz, present a video mission over-view 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 Endeavour are shown setting up a variety of experiments that will operate for much of the mission.

**CAS1**

*Space Transportation System; Spacecrews; Space Flight; Space Missions; Space Shuttle Missions; Space Transportation System Flights*

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199708050542 NASA Johnson Space Center, Houston, TX USA

**STS-76 Mission Highlights Resource Tape**

Oct. 09, 1996; In English; Videotape: 1 hr. 1 min. 5 sec. playing time, in color, with sound

Report No.(s): NONP–NASA-VT–97–1997005931; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of the STS-76 mission, Cmdr. Kevin P. Chilton, Pilot Richard A. Scourfield, and Mission Specialists Shannon W. Lucid, Linda M. Godwin, Michael R. Clifford, and Ronald M. Sega, present a video mission over-view of their space flight. Images include: pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the white room’ for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Once in orbit, various views of the Mir Space Station can be seen as the shuttle begins its approach and docking. There are several views of Godwin and Clifford as they spent six hours spacewalking in Atlantis’s cargo bay and on the exterior of the Mir’s docking module. The mission ending re-entry and landing can also be seen.

**CAS1**

*Space Transportation System; Spacecrews; Spacecraft Docking; Mir Space Station; Flight Crews; Video Tapes*

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199709080543 NASA Johnson Space Center, Houston, TX USA

**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 over-view 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 Endeavour 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 Spacehab module, thruster firing to stabilized the shuttle, and the mission ending re-entry and landing of the shuttle Endeavour. The crew answers questions from the press.

**CAS1**

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

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199709080544 NASA Johnson Space Center, Houston, TX USA

**STS-77 Mission Highlights Resource Tape**

Oct. 09, 1996; In English; Videotape: 37 min. 45 sec. playing time, in color, with sound

Report No.(s): NONP–NASA-VT–97–1997005933; 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 over-view 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 Endeavour 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 Spacehab module, thruster firing to stabilize the shuttle, and the mission ending re-entry and landing of the shuttle Endeavour.

**CAS1**

*Space Transportation System Flights; Spacecrews; Space Missions; Flight Crews*

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199709120538 National Aeronautics and Space Administration. Lyndon B. Johnson Space Center, Houston, TX USA

**STS-81 Flight Day 7**

Jan. 18, 1997; In English; Videotape: 10 min. playing time, in color, with sound

Report No.(s): NONP–NASA-VT–97–1997021179; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this seventh first day of the STS-81 mission, the flight crew, Cmdr. Michael A. Baker, Pilot Brent W. Jett, Mission Specialists, John M. Grunsfeld, 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 Mir’s docking module. The mission ending re-entry and landing can also be seen.

**CAS1**

*Space Transportation System; Spacecrews; Spacecraft Docking; Mir Space Station; Flight Crews; Video Tapes*
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

19970120403 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 Mir cosmonauts including astronaut Jerry M. Linenger continue with the transfer of food, water and supplies between the two spacecrafts for a second day of joint operations. With both spacecraft in excellent shape, the nine crewmembers float back and forth between Atlantis and the Mir, hauling bags of water, samples of logistical supplies and equipment hardware. The supplies and hardware will be used by cosmonauts and Linenger during his four months of scientific research aboard the Mir. Linenger, who officially became a Mir crewmember earlier, spends time with his predecessor, John Blaha to get familiar with his new home.

CASI

Space Transportation System Flights; Spacecrews; Supplying; Mir Space Station

1997012041 National Aeronautics and Space Administration. Lyndon B. Johnson Space 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 the fourteenth day of the STS-80 mission, the flight crew, Cmdr. Kenneth D. Cockrell, Pilot Kent M 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

1997012044 National Aeronautics and Space Administration. Lyndon B. Johnson Space Center, Houston, TX USA
STS–81 Mission Highlight 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

1997012045 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 hatches 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

1997012046 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
Justice is to risk unnecessary damage to the hatch or seals. Conclusively identify the problem that was causing the hatch to jam, and decide

Jemigan, 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.

CAS

Space Transportation System Flights: Shuttle Pallet Satellites: Spacecrews; Deployment

1997012051 National Aeronautics and Space Administration. Lyndon B. Johnson Space Center, Houston, TX USA
STS-80 Flight Day 3
Nov. 22, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT–97–1997021168; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this third day of the STS-80 mission, the flight crew, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave, are seen preparing for two spacewalks which are to be performed by Jernigan and Jones. Jernigan, Jones and Musgrave inspect the suits, finding everything in excellent condition for the upcoming spacewalks, which will test techniques and equipment that may be used for future construction of the International Space Station.

CAS

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.

CAS

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.

CAS

Space Transportation System Flights: Hatches; Air Locks; Risk; Space Flight; Space Missions

1997012054 S National Aeronautics and Space Administration. Lyndon B. Johnson Space Center, Houston, TX USA
STS-81 Flight Day 10
Jan. 29, 1997; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT–97–1997021175; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this tenth day of the STS-81 mission, the flight crew, Cmdr. Michael A. Baker, Pilot Brent W. Jett, Mission Specialists, John M. Grunsfeld, Marsh A. Ivins, Peter J.K. Wisoff, and John Blaha, prepare for the return back to earth. The shuttle’s key flight control systems are checked for entry and landing phase of the mission. Commander Mike Baker and Pilot Brent Jett activate one of Atlantis’ three hydraulic power units to test the shuttle’s aerosurfaces. Baker and Jett fire Atlantis’ steering jets in a routine prelanding checkout. The astronauts also test a medical restraint system in the Spacelab module, placing two crewmembers in the device. Crewmembers then begin to stow items away in the crew cabin, initiate the scheduled deactivation of Spacelab systems and associated hardware.

CAS

Space Transportation System Flights: Spacecrews: Landing

1997012093 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.

CAS

Europa: Plates (Tectonics); Volcanology; Exobiology; Ice Formation; Surface Water; Space Exploration

1997012094 National Aeronautics and Space Administration. Lyndon B. Johnson Space Center, Houston, TX USA
STS-80 Flight Day 9
Nov. 24, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT–97–1997021162; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this ninth day of the STS-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, 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.

CAS

Space Transportation System Flights: International Space Station: Pressure Reduction

1997012095 National Aeronautics and Space Administration. Lyndon B. Johnson Space Center, Houston, TX USA
STS-80 Flight Day 15
Dec. 04, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT–97–1997021156; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fifteenth day of the STS-80 mission, the flight crew, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave, are seen performing routine mission operations including monitoring experiments and discussing their mission
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, Marshall S. Ivins, Peter J.K. Wisoff, and Jerry M. Linenger, prepare for the fifth linkage of the Space Shuttle and the Mir Space Station. The Atlantis docks with Mir at a point 210 nautical miles above the Earth southeast of Moscow, culminating a three-day rendezvous. Two hours after docking, the hatches between Atlantis and Mir are opened and Baker and Mir 22 Commander Valery Korzun share a hug to mark the start of five days of joint operations between the two crews. After an informal welcoming ceremony in the Mir’s core module, the STS-81 crewmembers receive a station safety briefing. Linenger becomes the fourth American to occupy a position on the Russian Space Station following the docking of Atlantis to the outpost. During the docked phase of the mission, the two crews transfer nearly three tons of food, water and supplies to Mir.

**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, 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**

1997012110 National Aeronautics and Space Administration. Lyndon B. Johnson Space Center, Houston, TX USA

**STS–80 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–97–1997021178; 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, Marshall 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, Marshall 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: 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: 15 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 first 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: Air Locks; 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–97–1997021163; 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 imberths 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; Space crew; 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–97–1997021166; 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; Space crew; 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, Marnie S. Ivins, Peter J.K. Wisoff, and Jerry M. Linenger, performing pre-launch activities such as eating the traditional breakfast, being suited-up, and riding out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is readied in the ‘white room’ for their mission. After the closing of the hatch and arm retraction, launch activities are shown including the countdown, engine ignition, and launch. The film ends with the separation of the Solid Rocket Boosters (SRB) from the shuttle.

CASI

Space Transportation System Flights; Countdown; Launching; Ignition; Space Missions

1997012111 National Aeronautics and Space Administration. Lyndon B. Johnson Space Center, Houston, TX USA

STS-81 Flight Day 2

Jan. 13, 1997; In English; Videotape: 15 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–97–1997021177; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this second day of the STS-81 mission, the flight crew, Cmdr. Michael A. Baker, Pilot Brent W. Jett, Mission Specialists, John M. Grunsfeld, Marshe 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 Hierarc multipurpose facility which is designed to investigate the effects of microgravity and radiation on plant tissue, cell and fungal 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; Space crew; Exobiology

1997012159 National Aeronautics and Space Administration. Lyndon B. Johnson Space Center, Houston, TX USA

STS-81 Flight Day 9

Jan. 20, 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 two-revolution fly-around 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; Space crew; Space Flight; Space Missions

1997012168 National Aeronautics and Space Administration. Lyndon B. Johnson Space Center, Houston, TX USA

STS–80 Flight Day 1

Nov. 20, 1996; In English; Videotape: 15 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–97–1997021173; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This first day of the STS-80 mission begins with the flight crew, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave, performing pre-launch activities such as eating the traditional breakfast, being suited-up, and riding out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is readied in the ‘white room’ for their mission. After the closing of the hatch and arm retraction, launch activities are shown including the countdown, engine ignition, and launch. The film ends with the separation of the Solid Rocket Boosters (SRB) from the shuttle.

CASI

Space Transportation System Flights; Launching; Space Flight

1997017658 NASA Johnson Space Center, Houston, TX USA

STS–80 Mission Highlights Resource Tape

Feb. 27, 1997; In English; Videotape: 50 min. 52 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–1997026055; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of STS-80, 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 readied in the ‘white room’ for their mission. After the closing of the hatch and
arm retraction, launch activities are shown including the countdown, engine igni-
tion, launch, and the separation of the Solid Rocket Boosters (SRB) from the
shuttle. The crew completes the first major objective of the mission with the
deployment of the Orbiting Retrievable Free and Extreme Ultraviolet Spectrom-
er (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 Jergmenn 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 deployment position. The failure of the hatch
properly causes the cancellation of all EVA’s planned for this mission by
Jergmenn and Jones. The mission ends with the shuttle landing at the Kennedy
Space Center.

CASI
Space Transportation System Flights; Space Shuttle Orbits; Space Shuttle
Payloads; Spacecrews; Flight Crews; Far Ultraviolet Radiation; Extravehic-
ular Activity; Deployment

19970117656 NASA Johnson Space Center, Houston, TX USA
STS–82 Day 05 Highlights
Feb. 15, 1997; In English; Videotape: 19 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997026063; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
The fifth day of the STS-82 mission begins with the crew, Commander
Kenneth D. Bowersox, Pilot Scott J. Horowitz, Payload Commander Mark C. Lee,
and Mission Specialists Gregory J. Harbaugh, Steven L. Smith, Joseph R. Tanner,
and Steven A. Hawley completing the checkout of spacecrafts well ahead of
schedule, allowing them to start the second spacewalk of the flight. Harbaugh
and Tanner went right to work, replacing a degraded Fine Guidance Sensor and a failed
Engineering and Science Tape Recorder with new spares. The astronauts also
installed a new unit known as the Optical Control Electronics Enhancement Kit,
which will further increase the capability of the new Fine Guidance Sensor. During
the spacewalk, the astronauts and flight controllers took note of cracking and wear
incurred by thermal insulation which protects several areas of the telescope.

CASI
Space Transportation System; Space Transportation System Flights; Space
Shuttle Missions; Flight Control; Guidance Sensors; Spacecrews; Thermal
Insulation

19970117657 NASA Johnson Space Center, Houston, TX USA
STS–82 Day 07 Highlights
Feb. 17, 1997; In English; Videotape: 16 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997026061; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
The seventh day of the STS-82 mission begins with the crew, Commander
Kenneth D. Bowersox, Pilot Scott J. Horowitz, Payload Commander Mark C. Lee,
and Mission Specialists Gregory J. Harbaugh, Steven L. Smith, Joseph R. Tanner,
and Steven A. Hawley performing their third spacewalk of the mission by
emerging from Discovery’s airlock. Their first task is the replacement of a Solar
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 replace covers over Hubble’s magnetometers, which are used to sense
the telescope’s position in relation to the Earth through data acquired from the
Earth’s magnetic field. The spacewalking astronauts then place thermal blankets
of multi-layer material over two areas of degraded insulation around the light shield
portion of the telescope just below the top of the astronomical observatory.

CASI
Space Transportation System; Astronomical Observatories; Geomagnetism;
Magnetometers; Solar Arrays; Thermal Insulation; Spacecrews; Hubble Space
Telescope

19970117658 NASA Johnson Space Center, Houston, TX USA
STS–82 Day 08 Highlights
Feb. 18, 1997; In English; Videotape: 17 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997026060; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
The eighth day of the STS-82 mission begins with the crew, Commander
Kenneth D. Bowersox, Pilot Scott J. Horowitz, Payload Commander Mark C.
Lee, and Mission Specialists Gregory J. Harbaugh, Steven L. Smith, Joseph R.
Tanner, and Steven A. Hawley performing the final spacewalk of the mission.
Lee and Smith attach several thermal insulation blankets to three equipment
compartments at the top of the Support Systems Module section of Hubble which
contain key data processing, electronics and scientific instrument telemetry
packages. Following the completion of that work, Lee and Smith briefly return
to the airlock while flight controllers evaluated a possible glitch with one of four
Reaction Wheel Assembly units in Hubble used to maneuver the telescope for
its scientific observations. A space Reaction Wheel Assembly was available
aboard Discovery for a swap out during an additional spacewalk but it had been
necessary, but a few hours later, after further analysis, payload controllers
reported that the Reaction Wheel Assembly was in excellent shape and operating
at the proper speed.

CASI
Space Transportation System; Air Locks; Spacecrews; Thermal Insulation;
Hubble Space Telescope; Space Shuttle Missions; Space Shuttle Payloads;
Space Transportation System Flights

19970117659 NASA Johnson Space Center, Houston, TX USA
STS–82 Day 09 Highlights
Feb. 19, 1997; In English; Videotape: 18 min. 13 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997026059; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
The ninth day of the STS-82 mission begins with the crew, Commander
Kenneth D. Bowersox, Pilot Scott J. Horowitz, Payload Commander Mark C. Lee,
and Mission Specialists Gregory J. Harbaugh, Steven L. Smith, Joseph R. Tanner,
and Steven A. Hawley placing the Hubble Space Telescope back into its own orbit
to continue its investigation of the far reaches of the universe. At the time of deploy-
ment, the Shuttle was at an altitude of 334 nautical miles over the southwest coast
of Africa. Hubble is now operating at the highest altitude it has ever flown, a 335
by 321 nautical mile orbit. A few hours after Hubble’s deployment, the crew
receives a congratulatory phone call from NASA Administrator Daniel Goldin.
The four spacewalking crew members also answered questions from several news
networks regarding their work over the past week to upgrade the telescope.

CASI
Space Transportation System; Hubble Space Telescope; Deployment; Space-
crews; Space Exploration; Space Shuttle Missions; Space Transportation
System Flights

19970117660 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 Engi-
neering 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; Spacecrews; Reaction Wheels

19970117661 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. Bowerson, 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 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--1997026060; 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. Bowerson, 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 released 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; Space Crews; 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. Bowerson, 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 its 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; Space Crews; 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. Bowerson, 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; Space Crews; Space Flight

1997017683 NASA Johnson Space Center, Houston, TX USA

STS-82 Post Flight Presentation
Mar. 11, 1997; In English; Videotape: 33 min. 56 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1997026056; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The STS-82 crew, Commander Kenneth D. Bowerson, Pilot Scott J. Horowitz, Payload Commander Mark C Lee, and Mission Specialists Gregory J. Harbaugh, Steven L. Smith, Joseph R. Tanner, and Steven A. Hawley present a video and still picture overview of their mission. Included in the presentation are the following: the pre-launch activities such as eating the traditional breakfast, being suited up, and riding out to the launch pad, various panoramic views of the shuttle on the pad, the countdown, engine ignition, launch, shuttle roll maneuver, separation of the Solid Rocket Boosters (SRB) from the shuttle, survey of the payload bay with the Shuttle's 50-foot remote manipulator system (RMS), the successful retrieval of the Hubble Space Telescope (HST), EVA's to repair HST, release of HST, and the shuttle's landing.

CASI
Space Shuttle Payloads; Space Transportation System Flights; Space Shuttle Missions; Space Crews; Flight Crews; Hubble Space Telescope; Extravehicular Activity

STS-82 Day 04 Highlights
Feb. 14, 1997; In English; Videotape: 18 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1997026064; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The fourth day of the STS-82 mission begins with the crew, Commander Kenneth D. Bowerson, Pilot Scott J. Horowitz, Payload Commander Mark C Lee, and Mission Specialists Gregory J. Harbaugh, Steven L. Smith, Joseph R. Tanner, and Steven A. Hawley in preparations for conducting the second servicing mission of the Hubble Space Telescope. The first spacewalk was slightly delayed to enable ground controllers to assess the unexpected movement of one of Hubble's solar arrays, which slwed down from horizontal to vertical as the spaceship passed the sun. The astronauts are suited up and then leave the shuttle to repair HST.

CASI
Space Transportation System Flights; Space Transportation System; Space Missions; Space Crews; Astronauts

1997021175 NASA Johnson Space Center, Houston, TX USA

STS-83 Postflight Presentation
Jun. 09, 1997; In English; Videotape: 21 min. 51 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1997033261; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The flight crew of the STS-83 mission, Cmdr James D. Halsell, Pilot Susan S. Stull, Payload Cmdr. Janice E. Voss, Mission Specialists Donald Thomas and Michael Gernhardt, and Payload Specialists Roger Crouch and Greg Linteris, 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-control narrated by Crouch, and Space Shuttle's flight deck, pilot's view, mission control, navigation, 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, India River of India, and Galulake Island.

CASI
Space Transportation System Flights; Spacelab; Space Crews; Photographs; Launching; Comets
Payloads; Experiments to the International Space Station (EXPRESS) Rack while Linteris working a 12-hour shift, to allow round-the-clock operations in fire pressurized the properties of combustion and the behavior of metals, materials, and fluids in TISneris and Roger K. Crouch can be seen setting up experiments for studying Halsell, Jr. Pilot Susan I. Still, Payload Cmdr, Janice E. Voss, Mission Specialists, Mark C. Lee, Steven A. Hawley, Gregory J. Harbaugh, Steven L. Smith, and Joseph R. Tanner can be seen performing pre-launch activities preparing for the night launch. The crew meets the press for pre-launch photos before being transported to the launch pad. Several views can be seen of the final inspection team on the O level and the crew being seated in the white room. Launch activities such as the oxygen vent hood retention, liftoff, SRB separation, and personnel activities in the Houston Integrated Mission Control room are viewed. Subsequent footage is provided of the crew’s activities during the IST rendezvous and docking. Extravehicular Activities (EVA)’s preparation and EVA numbers 1, 2 and 3. During the first EVA the earth can be seen clearly in a reflection of the ISS offshorizon during its 60th orbit crossing the equator. The IST deployment and views of the Hale-Bopp comet are clearly seen before Discovery’s reentry and landing. After reentry a beautiful view of Discovery moving at 10,400 mph can be seen looking east from Mission Control. The usual twin sonic boom precedes Discovery’s touchdown on runway 15 at Kennedy Space Center. This second IST service mission orbited Earth 150 times and traveled 1.4 million miles.

CASI Extravehicular Activity: Hubble Space Telescope: Launching; Space Transportation System Flights; Space Maintenance

STS-81 Mission Highlights Resources Tape

Sep. 25, 1997; In English; Videotape: 53 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1997047950; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of the STS-81 Space Shuttle Orbiter Atlantis Commander Michael A. Baker, Pilot Brent W. Jett Jr., and Mission Specialists, John M. Grunsfeld, Marshia S. Ivans, Peter J.K. Wisoff, and John M. Linenger present an overview of their mission. Video footage includes the following: prelaunch and launch activities; the crew eating breakfast; shuttle launch; on orbit activities; rendezvous with Mir; Shuttle/Mir joint activities; undocking; and the shuttle landing.

CASI Space Transportation System Flights; Space Shuttle Orbiters; Mir Space Station; Flight Crews; Spacecraft Docking

STS-83 Mission Highlights Resources Tape

Jun. 02, 1997; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1997047945; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this second day of the STS-83 mission, the flight crew, Cmdr. James D. Halsell, Jr. Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists Michael L. Gernhardt and Donald A. Thomas, and Payload Specialists Gregory T. Linteris and Roger K. Crouch can be seen setting up experiments for studying the properties of combustion and the behavior of metals, materials, and fluids in the absence of gravity. The astronauts are split into red and blue teams, each working a 12-hour shift, to allow around-the-clock operations in the pressurized spacecraft module in Columbus’s cargo bay. Thomas is seen activating the Large Isothermal Furnace (LIF) experiment and the Expedit the Processing of Experiments to the International Space Station (EXPRESS) Rack while Linteris continues the activation of Protein Crystal Growth experiments.

CASI Space Transportation System Flights; Spacelab; Space Processing; Spacelab Payloads; Spaceborne Experiments; Low Gravity Manufacturing

Pressure Wave Propagation in a Screech Cycle

Sep. 25, 1997; In English; Videotape: 6 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1997047951; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The screech noise generation process from supersonic under expanded jets, issuing from a sonic nozzle pressure ratio of 2.4 and 3.3 (expanded Mach number, M(sub)j — 1.19 and 1.42), is investigated experimentally. Spark Schlieren visualization at different phases of the screech cycle are clearly shown. The pressure fluctuation at the screech frequency is measured in the near field region by a traversing microphone.

CASI Supersonic Jet Flow; Sonic Nozzles; Nozzle Flow; Noise Generators: Wave Propagation: Elastic Waves; Gas Jets; Sound Waves; Sound Pressure; Oscillating Flow; Jet Aircraft Noise; Noise Reduction

STS-71 Mission Highlights Resources Tape

Aug. 25, 1997; In English; Videotape: 1 hour 13 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1997047948; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of the STS-71 Space Shuttle Orbiter Atlantis Commander Robert L. Gibson, Pilot Charles J. Precourt, Mission Specialists, Ellen S. Baker, Bonnie J. Dunbar, Gregory J. Harbaugh, and Payload Specialists, Norman E. Thagard, Vladimir Dezhurov, and Gennadiy Strekalov present an overview of their mission. It’s primary objective is the first Mir docking with a space shuttle and crew transfer. Video footage includes the following: prelaunch and launch activities; the crew eating breakfast; shuttle launch; on orbit activities; rendezvous with Mir; Shuttle/Mir joint activities; undocking; and the shuttle landing.

CASI Space Transportation System Flights; Spacecraft Docking; Space Shuttle Orbiters; Mir Space Station

STS-82 Mission Highlights Resources Tape

Sep. 25, 1997; In English; Videotape: 1 hour 13 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1997047949; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of the STS-82 Space Shuttle Orbiter Atlantis Commander Michael A. Baker, Pilot Brent W. Jett Jr., and Mission Specialists, John M. Grunsfeld, Marshia S. Ivans, Peter J.K. Wisoff, and John M. Linenger present an overview of their mission. Its primary objective is the first Mir docking with a space shuttle and crew transfer. Video footage includes the following: prelaunch and launch activities; the crew eating breakfast; shuttle launch; on orbit activities; rendezvous with Mir; Shuttle/Mir joint activities; undocking; and the shuttle landing.

CASI Space Transportation System Flights; Spacecraft Docking; Space Shuttle Orbiters; Mir Space Station

Space Transportation System Flights: Space Shuttle Orbiters: Mir Space Station: Flight Crews: Spacecraft Docking

Pressure Wave Propagation in a Screech Cycle

Sep. 25, 1997; In English; Videotape: 6 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1997047951; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The screech noise generation process from supersonic under expanded jets, issuing from a sonic nozzle pressure ratio of 2.4 and 3.3 (expanded Mach number, M(sub)j — 1.19 and 1.42), is investigated experimentally. Spark Schlieren visualization at different phases of the screech cycle are clearly shown. The pressure fluctuation at the screech frequency is measured in the near field region by a traversing microphone.

CASI Supersonic Jet Flow; Sonic Nozzles; Nozzle Flow; Noise Generators: Wave Propagation: Elastic Waves; Gas Jets; Sound Waves; Sound Pressure; Oscillating Flow; Jet Aircraft Noise; Noise Reduction

STS-83 Mission Highlights Resources Tape

Jul. 04, 1997; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1997047947; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this third day of the STS-83 mission, the flight crew, Cmdr. James D. Halsell, Jr. Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists Michael L. Gernhardt and Donald A. Thomas, and Payload Specialist Gregory T. Linteris and Roger K. Crouch can be seen setting up experiments for studying the properties of combustion and the behavior of metals, materials, and fluids in the absence of gravity. The astronauts are split into red and blue teams, each working a 12-hour shift, to allow around-the-clock operations in the pressurized spacecraft module in Columbus’s cargo bay. Thomas is seen activating the Large Isothermal Furnace (LIF) experiment and the Expedit the Processing of Experiments to the International Space Station (EXPRESS) Rack while Linteris continues the activation of Protein Crystal Growth experiments.

CASI Space Transportation System Flights; Spacelab; Space Processing; Spacelab Payloads; Spaceborne Experiments; Low Gravity Manufacturing
On this third day of the STS-83 mission, the flight crew, Cmdr. James D. Halsell Jr., Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists Michael L. Gernhardt and Donald A. Thomas, and Payload Specialist Gregory T. Linters and Roger K. Crouch continue to conduct experiments. The crew of the Microgravity Science Laboratory mission has successfully activated all Spacelab facilities with help from the science teams on the ground.

CASI

Space Transportation System Flights: Spacelab: Spaceborne Experiments; Astronauts; Space Processing: Preflight Operations

On this sixth day of the STS-84 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Eileen M. Collins, Payload Cmdr., Jean-Francois Clervoy (ESA), Mission Specialists Edward T. Lu, Carlos I. Noriega, Elena V. Kondakova, Jerry M. Linenger (download), and C. Michael Foale (upload) continue their work through the overnight hours, transferring water, hardware and logistical supplies to and from each other’s spacecraft. It is the third day of joint operations between the Shuttle and the Russian Space Station crewmembers. As planned, the newest member of the Mir 23 crew, Mike Foale, and astronaut Jerry Linenger continue their handover activities to prepare Foale for his 4 month stay on Mir. Foale will serve aboard the Russian outpost until he is replaced by astronaut Wendy Lawrence during Atlantis’ next visit to Mir in September.

CASI

Space Transportation System Flights: Spacecraft; Space Stations; Payloads: Astronauts

On this seventh day of the STS-84 mission, the flight crew, Cmdrs. 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: Spacelab: Spaceflight: Postflight Operations: Astronauts

On this fifth day of the STS-84 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Eileen M. Collins, Payload Cmdr., Jean-Francois Clervoy (ESA), Mission Specialists Edward T. Lu, Carlos I. Noriega, Elena V. Kondakova, Jerry M. Linenger (download) and C. Michael Foale (upload) continue their work through the overnight hours, transferring water, hardware and logistical supplies to and from each other’s spacecraft. It is the third day of joint operations between the Shuttle and the Russian Space Station crewmembers. As planned, the newest member of the Mir 23 crew, Mike Foale, and astronaut Jerry Linenger continue their handover activities to prepare Foale for his 4 month stay on Mir. Foale will serve aboard the Russian outpost until he is replaced by astronaut Wendy Lawrence during Atlantis’ next visit to Mir in September.

CASI

Space Transportation System Flights: Spacecraft; Space Stations; Payloads: Astronauts

On this fifth day of the STS-84 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Eileen M. Collins, Payload Cmdr., Jean-Francois Clervoy (ESA), Mission Specialists Edward T. Lu, Carlos I. Noriega, Elena V. Kondakova, Jerry M. Linenger (download) and C. Michael Foale (upload) continue their work through the overnight hours, transferring water, hardware and logistical supplies to and from each other’s spacecraft. It is the third day of joint operations between the Shuttle and the Russian Space Station crewmembers. As planned, the newest member of the Mir 23 crew, Mike Foale, and astronaut Jerry Linenger continue their handover activities to prepare Foale for his 4 month stay on Mir. Foale will serve aboard the Russian outpost until he is replaced by astronaut Wendy Lawrence during Atlantis’ next visit to Mir in September.

CASI

Space Transportation System Flights: Spacecraft; Space Stations; Payloads: Astronauts
astronaut Mike Foale, who swapped places with Jerry Linenger for the start of a four-month research mission on the Russian outpost. The final handshakes by Commanders Charles Precourt and Valery Tsibliev came moments before the hatches between Atlantis and Mir swung shut.

CASI
Space Transportation System Flights; Spacecraft Docking; Spacecrews; Cosmonauts; Astronauts

1997/9/27/701 NASA Johnson Space Center, Houston, TX USA
STS-84 Day 06 Highlights
May 22, 1995; In English; Video tape: 15 min. playing time, in color, with sound
Report No(s): NONP-NASA--VT--19970553792; No Copyright; Avail: CASI;
B01, Videotape-beta; V01, Videotape-VHS

On this eighth day of the STS-84 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Eileen M. Collins, Payload Cmdr. Jean-Francois Clervoy (ESA), Mission Specialists Edward T. Lu, Carlos I. Noriega, Elena V. Kondakova, Jerry M. Linenger (download), and C. Michael Foale (upload) sang the Cosmonauts' Song to Mir-23 crew members Vasily Tsibliev, Alexander Lazutkin and astronaut Mike Foale, who is beginning his four-month research mission on Mir. Foale and his new crewmates played music as Atlantis departed following the joint phase of the flight. Atlantis' undocking from Mir was modified from previous joint missions in that a flyaround of the station for photographic purposes was not conducted. Instead, Pilot Eileen Collins guided Atlantis below the Mir after the two spacecraft completed their physical separation, stopping three times at distances of 90, 300 and 1,500 feet to collect data from a European sensor device designed to assess future rendezvous of a proposed European Space Agency resupply vehicle with the International Space Station. Once the data collection was completed, the shuttle took advantage of microgravity to drift beneath and out in front of Mir.

CASI
Space Transportation System Flights; Spacecrews; Orbital Mechanics: International Space Station; Astronauts; Cosmonauts

1997/9/27/702 NASA Johnson Space Center, Houston, TX USA
STS-84 Day 06 Highlights
May 18, 1995; In English; Video tape: 15 min. playing time, in color, with sound
Report No(s): NONP-NASA--VT--19970553788; No Copyright; Avail: CASI;
B01, Videotape-beta; V01, Videotape-VHS

On this forth day of the STS-84 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Eileen M. Collins, Payload Cmdr. Jean-Francois Clervoy (ESA), Mission Specialists Edward T. Lu, Carlos I. Noriega, Elena V. Kondakova, Jerry M. Linenger (download), and C. Michael Foale (upload) spent their first full day of work together conducting science investigations and transferring equipment from one spacecraft to the other. The Spacehab double module at the rear of Atlantis' payload bay was the focus of activity today as crew members conducted science experiments in the Biorep facility and transferred items to and from the Mir Space Station. In an interview with CBS News, Precourt and Tsibliev praised the sixth joint docking mission between the U.S. and Russia, indicating it is serving as a worldwide exercise to prepare for the assembly of the International Space Station. Precourt also said the Mir appears to be in good condition despite recent systems problems, and said Mir will be a perfectly safe home for Foale for his stay on orbit.

CASI
Space Transportation System Flights; Spacecraft Docking; Spacecrews; Spacehab Payloads; Mir Space Station

1997/9/27/716 NASA Johnson Space Center, Houston, TX USA
STS-84 Day 05 Highlights
May 17, 1995; In English; Video tape: 18 min. playing time, in color, with sound
Report No(s): NONP-NASA--VT--19970553787; No Copyright; Avail: CASI;
B02, Videotape-beta; V02, Videotape-VHS

On this third day of the STS-84 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Eileen M. Collins, Payload Cmdr. Jean-Francois Clervoy (ESA), Mission Specialists Edward T. Lu, Carlos I. Noriega, Elena V. Kondakova, Jerry M. Linenger (download), and C. Michael Foale (upload) guide Atlantis to its docking with the Mir to cap off a 42-hour chase. Precourt greeted Mir 23 Commander Vasily Tsibliev and, after embraces and handshakes, the crew members make their way into the Mir Core Module for a brief welcoming ceremony. During the ceremony, the Shuttle crew gave Tsibliev and Flight Engineer Alexander Lanutkin baseball caps emblazoned with the STS-84 crew insignia as well as the traditional Russian offering of bread, tea and salt. Then, the ten astronauts and cosmonauts get down to business, first conducting a joint safety briefing to familiarize themselves with each other's craft.

CASI
Space Transportation System Flights; Spacecraft Docking; Spacecrews; Cosmonauts; Astronauts

1997/9/27/717 NASA Johnson Space Center, Houston, TX USA
STS-84 Day 02 Highlights
May 16, 1995; In English; Video tape: 18 min. playing time, in color, with sound
Report No(s): NONP-NASA--VT--19970553786; No Copyright; Avail: CASI;
B02, Videotape-beta; V02, Videotape-VHS

On this second day of the STS-84 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Eileen M. Collins, Payload Cmdr. Jean-Francois Clervoy (ESA), Mission Specialists Edward T. Lu, Carlos I. Noriega, Elena V. Kondakova, Jerry M. Linenger (download), and C. Michael Foale (upload) continues to close on the Mir Space Station in anticipation of the sixth linkup between the Shuttle and the Russian space complex. Preparations for the docking are nearly complete as Atlantis' seven astronauts worked around the clock to check out the rendezvous tools that will be used during the final phase of the approach to Mir.

CASI
Space Transportation System Flights; Spacecraft Docking; Spacecrews; Mir Space Station; Astronauts

1997/9/28/33 NASA Johnson Space Center, Houston, TX USA
STS-84 Day 08 Highlights
Jul. 08, 1995; In English; Video tape: 14 min. playing time, in color, with sound
Report No(s): NONP-NASA--VT--19970551162; No Copyright; Avail: CASI;
B01, Videotape-beta; V01, Videotape-VHS

On this eighth day of the STS-94 mission, the flight crew, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists Michael L. Gernhardt and Donald A. Thomas, and Payload Specialists Gregory T. Linteris and Roger K. Crouch conduct status checks and perform video documentation of some of the Microgravity Science Laboratory's experiments and activities in the Spacelab. The first part of Pilot Susan Still's day involves monitoring orbiter systems and working an in-flight maintenance procedure with the Shuttle Attitude Control System (SAREX). Halsell Jr., Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists Michael L. Gernhardt and Donald A. Thomas, and Payload Specialists Gregory T. Linteris and Roger K. Crouch are seen continuing the payload activa-
tion process, as the research efforts of the Microgravity Science Laboratory (MSL) mission get into full swing.

CASI

Space Transportation System Flights: Spacecrews: Payloads

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 Cmdr. Janice E. Voss, Mission Specialists Micheal 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

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 Micheal 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: Spacecrews: Payloads: Space交通工具

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: Space Flight: Space Shuttles

STS-94 Day 06 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 Micheal L. Gemhardt and Donald A. Thomas, and Payload Specialists 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

STS-94 Day 07 Highlights
Jul. 07, 1995; In English; Videotape: 12 min. playing time, in color, with sound Report No. (s): NONP–NASA–VT–1997051161; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

CASI

Space Transportation System Flights: Spacecrews: Payloads: Space Flight: Space Shuttles

STS-94 Day 08 Highlights
Jul. 08, 1995; In English; Videotape: 12 min. playing time, in color, with sound Report No. (s): NONP–NASA–VT–1997051162; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this eighth day of the STS-94 mission, the flight crew, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists Micheal L. Gemhardt and Donald A. Thomas, and Payload Specialists Gregory T. Linteris and Roger K. Crouch continue their around-the-clock work with the Microgravity Science Laboratory experiments. During the morning period, Thomas conducts the Flows in a Free Drop Experiment (IFFD). The IFFD experiment involves containerless processing of materials using acoustic positioning techniques.

CASI

Space Transportation System Flights: Space Shuttles: Payloads: Protein Crystal Growth: Microgravity

STS-94 Day 09 Highlights
Jul. 09, 1995; In English; Videotape: 12 min. 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 Micheal L. Gemhardt and Donald A. Thomas, and Payload Specialists Gregory T. Linteris and Roger K. Crouch continue their on-orbit science efforts. The flight crew conducts the Large Isothermal Furnace (LIF), a vacuum-heating furnace designed to heat large samples uniformly; the M160 Glovebox (MGBX) unit; and the Internal Flows in a Free Drop Experiment (IFFD). The IFFD experiment involves containerless processing of materials using acoustic positioning techniques.

CASI

Space Transportation System Flights: Space Shuttles: Spacecrews: Payloads: Acoustic Levitation

STS-94 Day 10 Highlights
Jul. 10, 1995; In English; Videotape: 12 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, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists Micheal 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 Cursing in Solid-Liquid Mixtures experiment.

CASI

Space Transportation System Flights: Space Shuttles: Payloads: Protein Crystal Growth: Microgravity

STS-94 Day 11 Highlights
Jul. 11, 1995; In English; Videotape: 12 min. playing time, in color, with sound Report No. (s): NONP–NASA–VT–1997051165; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

CASI

Space Transportation System Flights: Space Shuttles: Payloads: Protein Crystal Growth: Microgravity

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 Micheal 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 - provides on-orbit assistance to
ground controllers throughout the mission conducting these, 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.

CASI

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, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmrdr. Janice E. Voss, Mission Specialists Micheal L. Gernhardt and Donald A. Thomas, and Payload Specialist Gregory T. Linteris and Roger K. Crouch conduct an interview with CBS’ Up to the Minute program during which they discuss the activities and progress that has been made so far on the flight.

CASI

Space Transportation System Flights: Spacecrews; 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, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmrdr. Janice E. Voss, Mission Specialists Micheal 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 materials and liquids change and behave in a microgravity environment.

CASI

Space Transportation System Flights: Spacecrews; Spacelab; Microgravity

19970128507 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, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmrdr. Janice E. Voss, Mission Specialists Micheal 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 platform for scientific activity, the seven-member crew has been able to devote its full attention to the more than 30 Microgravity Science Laboratory (MSL) experiments on board.

CASI

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, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmrdr. Janice E. Voss, Mission Specialists Micheal L. Gernhardt and Donald A. Thomas, and Payload Specialists Gregory T. Linteris and Roger K. Crouch express thanks to all those on the ground who prepared the shuttle, crew, and payload for an unprecedented repeat launch to complete work with the Microgravity Science Laboratory. The first flight of Columbia with the laboratory, then designated mission STS-83, was cut short due to a faulty fuel cell.

CASI

Space Transportation System Flights: Spacecrews; Space Shuttle Orbiters; Microgravity

19970128513 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 Cmrdr. Janice E. Voss, Mission Specialists Micheal L. Gernhardt and Donald A. Thomas, and Payload Specialists Gregory T. Linteris and Roger K. Crouch begin closing up shop in preparation for return to the Kennedy Space Center in Florida.

CASI

Space Transportation System Flights: Spacecrews; Astronauts; Microgravity; Space Flight

19970128526 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 Cmrdr. 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.

CASI

Space Transportation System Flights: Spacecrews; Countdown; Launching; Space Exploration; Space Flight

19970128546 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 Cmrdr. 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 platform and protect sensitive microgravity processing experiments from vibrations.

CASI

Space Transportation System Flights: Space Transportation System; Microgravity; Bioreactors

19970128547 NASA Johnson Space Center, Houston, TX USA

STS–85 Day 08 Highlights
Aug. 14, 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 eighth day of the STS-85 mission, the flight crew, Cmdr. Curtis L. Brown, Jr., Pilot Kent V. Rominger, Payload Cmrdr. 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 manipulator due to a faulty field cell.
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 was 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

199708135948 NASA Johnson Space Center, Houston, TX USA

STS–85 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 I. 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

199708135955 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 TPFLX (teepoe-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

199708135956 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-I (TAS-01) and International Extreme Ultraviolet Hitchhiker-2 (IUEH-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

199708350397 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 Vasily Tsibluev and Flight Engineer Alexander Lazutkin who are returning home after 185 days in space. The Scyryu 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

199708350398 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 used 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


199708350399 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

19970835992 NASA Johnson Space Center, Houston, TX USA
STS-94 Mission Highlights Resource Tape
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 Cmdr. Janice E. Voss, Mission Specialists Michael L. Gernhardt and Donald A. Thomas, and Payload Specialists Gregory T. Linternis 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 Engines; Space Shuttle Boosters; Space Shuttles; Microgravity; Launching; Ignition; Flight Crews; Countdown; Booster Rocket Engines

19970835993 NASA Johnson Space Center, Houston, TX USA
STS-94 Day 13 Highlights
July 13, 1997; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997049514; No Copyright; Avail: CASI; B01, Videotape-Beta: V01, Videotape-VHS
On this thirteenth day of the STS-94 mission, the flight crew, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists Michael L. Gernhardt and Donald A. Thomas, and Payload Specialists Gregory T. Linternis and Roger K. Crouch resume work on the Droplet Combustion Experiment, burning a drop of heptane fuel at one-quarter of the atmospheric pressure on Earth. The payload controllers collect volumes of data from experiments being conducted by the seven astronauts on the Microgravity Science Laboratory mission. Halsell, Still, Thomas and Linternis are seen being interviewed by the ABC Radio Network and discussing mission objectives.

CASI
Space Transportation System Flights; Microgravity; Drops (Liquids); Combustion; Astronauts

19970835994 NASA Johnson Space Center, Houston, TX USA
STS-85 Day 07 Highlights
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 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 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 while the crew is asleep or busy with other tasks.

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

19970835995 NASA Johnson Space Center, Houston, TX USA
STS-85 Day 02 Highlights
Aug. 8, 1997; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997047842; No Copyright; Avail: CASI; B01, Videotape-Beta: V01, Videotape-VHS
On this second day of the STS-85 mission, the flight crew, Cmdr. Curtis L. Brown, Jr., Pilot Kent V. Rominger, Payload Cmdr. N. Jan Davis (Ph.D.), Mission Specialists Robert L. Curbeam, Jr. and Stephen K. Robinson (Ph.D.), and Payload Specialist Bjarni V. Tryggvason activated instruments of the Technology Applications and Science (TAS), including the Shuttle Laser Altimeter, the Infrared Spectral Imaging Radiometer (ISIR), the Cryogenic On-Orbit Long Life Active Refrigerator (COOLAR), Two Phase Flow (TPF), Critical Viscosity of Xenon (CVX) and were initializing the Solar Constant Experiment (SOLCON) and preparing for its first observation. Work with the Japanese-built Manipulator Flight Demonstration (MFD) experiment 1 begins when Davis begins checkout of its Small Fine Arm, destined for use outside the International Space Station’s Japanese Experiment Module. Brown is seen being interviewed by WBT-TV, Charlotte, N.C., and WTV-D-TV, Raleigh-Durham, N.C.

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

19970835996 NASA Johnson Space Center, Houston, TX USA
STS-85 Day 04 Highlights
Aug. 10, 1997; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997047839; No Copyright; Avail: CASI; B01, Videotape-Beta: V01, Videotape-VHS
On this fourth day of the STS-85 mission, the flight crew, Cmdr. Curtis L. Brown, Jr., Pilot Kent V. Rominger, Payload Cmdr. N. Jan Davis (Ph.D.), Mission Specialists Robert L. Curbeam, Jr., and Stephen K. Robinson (Ph.D.), and Payload Specialist Bjarni V. Tryggvason focus their attention on testing a small, robotic arm serving as a prototype for use on the future International Space Station. They also conduct experiments on the Shuttle’s middeck.

CASI
Space Transportation System Flights: Space Transportation System; International Space Station; Robot Arms

19970836139 NASA Johnson Space Center, Houston, TX USA
STS-72 Flight Day 9
Jan. 19, 1996; In English; Videotape: 22 min. 50 sec. 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 Duffy, Pilot Brent W. Jett, and Mission Specialists Leroy Chiao, Daniel T. Berry, Winston E. Scott, and Koichi Wakata (NASA), awakened to music from the 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: Endeavour (Orbiter)

19970836148 NASA Johnson Space Center, Houston, TX USA
STS-72 Flight Day 6
Jan. 16, 1996; In English; Videotape: 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1996034082; No Copyright; Avail: CASI; B02, Videotape-Beta: V02, Videotape-VHS
On this sixth day of the STS-72 mission, the flight crew, Cmdr. Brian Duffy, Pilot Brent W. Jett, and Mission Specialists Leroy Chiao, Daniel T. Berry, Winston E. Scott, and Koichi Wakata (NASA), successfully retrieved the OAST-Flyer satellite and berthed it in the shuttle’s cargo bay with Wakata using the shuttle’s robot arm. Dr. Barry conducted an interview with a radio station in Houston via satellite link. He answered general questions concerning the spacecraft, the equipment, and the planned International Space Station. Earth views include cloud cover, water masses, and land masses.

CASI
Space Transportation System: Space Transportation System Flights; Space
Shuttle Missions; Endeavour (Orbiter); Payload Retrieval (STS); Scientific Satellites; Space Communication; Remote Manipulator System

1997036142 NASA Johnson Space Center, Houston, TX USA
STS-72 Flight Day 5
Jan. 15, 1996; In English; Videotape: 30 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–1996034083; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

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 Berry 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 spacesuits 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

1997036184 NASA Johnson Space Center, Houston, TX USA
STS-72 Flight Day 8
Jan. 18, 1996; In English; Videotape: 30 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–1996034080; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

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 Johannesburg, 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; Extravehicular Activity; Endeavour (Orbiter); Space Shuttle Missions; Flight Crews; Spaceborne Experiments; Communication Networks; Space Communication; Endeavour (Orbiter); Downlinking

1997036185 NASA Johnson Space Center, Houston, TX USA
STS-72 Mission Update Flight Day 9
Jan. 19, 1996; In English; Videotape: 9 min. 23 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–1996034077; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

In this video clip, the NASA Television show, Mission Update, hosted by Pat Ryan, provides a synopsis of the ninth day of the STS-72 Space Shuttle mission in this video clip. The scheduled activities, their times, and who will be conducting them are highlighted along with various film clips showing different aspects of the mission.

CASI
Space Transportation System; Space Transportation System Flights; Space Shuttle Missions; Endeavour (Orbiter); News Media; Television Systems

1997036251 NASA Johnson Space Center, Houston, TX USA
STS-72 Flight Day 7
Jan. 17, 1996; In English; Videotape: 26 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–1996034081; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

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 Walt Disney movie, ‘Snow White and the Seven Dwarfs’. Chiao and Scott performed the second spacewalk of the mission where they tested equipment and work platforms that will be used in building the planned International Space Station. This spacewalk was almost seven hours long. Wakata conducted an interview with and answered questions from six graders from a Japanese school in Houston, Texas.

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

1997036252 NASA Johnson Space Center, Houston, TX USA
STS-72 Mission Update Flight Day 8
Jan. 18, 1996; In English; Videotape: 7 min. 22 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–1996034078; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The NASA Television show, Mission Update, hosted by Pat Ryan, provides a synopsis of the eighth day of the STS-72 Space Shuttle mission in this video clip. The scheduled activities, their times, and who will be conducting them are highlighted along with various film clips from the beginning of the mission to date.

CASI
Space Transportation System; Space Transportation System Flights; Space Shuttle Missions; Endeavour (Orbiter); News Media; Television Systems

19998004688 NASA Johnson Space Center, Houston, TX USA
STS–86 Day 01 Highlights
Sep. 26, 1997; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–1997077152; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this first day of the STS-86 mission, the flight crew, Cmdr. James D. Wetherbee, Jr., Pilot Michael J. Bloomfield, Mission Specialist Scott E. Parazynski, Jean-Loup Chretien, Vladimir G. Titov, Wendy L. 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 Flights: Countdown; Launching; Space Shuttles; Liftoff (Liftoff); Spacecraft Launching; Launch Vessels; Ignition; Astronauts

199980046562 NASA Johnson Space Center, Houston, TX USA
STS–86 Day 02 Highlights
Sep. 27, 1997; In English; Videotape: 23 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–1997077153; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this second day of the STS-86 mission, the flight crew, Cmdr. James D. Wetherbee Jr., Pilot Michael J. Bloomfield, Mission Specialist Scott E. Parazynski, Jean-Loup Chretien, Vladimir G. Titov, Wendy L. Lawrence and David A. Wolf discuss the mission’s progress with reporters as part of the traditional crew news conference. Also included are various panoramic views of the earth as viewed from cameras mounted in the payload bay.

CASI
Space Transportation System; Space Transportation System Flights; Spacecrews: Space Shuttle Payloads; Space Shuttles: Space Shuttle Orbiters; Space Shuttle Missions

199980046563 NASA Johnson Space Center, Houston, TX USA
STS–86 Day 03 Highlights
Sep. 27, 1997; In English; Videotape: 19 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–1997077154; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this third day of the STS-86 mission, the flight crew, Cmdr. James D. Wetherbee Jr., Pilot Michael J. Bloomfield, Mission Specialist Scott E. Parazynski, Jean-Loup Chretien, Vladimir G. Titov, Wendy L. Lawrence and David A. Wolf conduct a series of engine firings that are designed to refine Atlantis’ approach to Mir. With his crewmates providing range rate and clouatre data obtained from a variety of tools on board, Wetherbee manually flies Atlantis up...
toward Mir. After docking, the hatches between the two vehicles are swung open allowing Wetherbee and Mir Commander Anatoly Solovyev a good look at 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

19980606564 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 Christien, 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

19980606565 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 Christien, 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)

19980606566 NASA Johnson Space Center, Houston, TX USA
STS–86 Day 06 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 Christien, 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

19980606567 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 Christien, 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

19980606568 NASA Johnson Space Center, Houston, TX USA
STS–86 Day 09 Highlights
Oct. 04, 1997; In English; Videotape: 23 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 Christien, 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

19980606569 NASA Johnson Space Center, Houston, TX USA
STS–86 Day 10 Highlights
Oct. 05, 1997; In English; Videotape: 18 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 Christien, 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

19980606570 NASA Johnson Space Center, Houston, TX USA
STS–86 Day 11 Highlights
Oct. 06, 1997; In English; Videotape: 24 min. 47 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997077162; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eleventh day of the STS-86 mission, the flight crew, Cmdr. James D. Wetherbee, Jr., Pilot Michael J. Bloomfield, Mission Specialists Scott E. Parazynski, Jean-Loup Christien, 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;
On this second day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk are seen conducting experiments involving the effect of weightlessness on materials and fluids. They also work with an experiment to study Earth's protective ozone layers.

The flight crew of the STS-86 mission, Cmdr. James D. Wetherbee, Jr., Pilot Michael J. Bloomfield, Mission Specialists Scott E. Parazynski, Jean-Loup Chretieu, 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: pre-launch and launch activities; shuttle launch; in-orbit rendezvous; docking between Mir and the orbiter; general crew activities; transfer of supplies; undocking maneuvers and a Mir fly-around; and the reentry and landing of the orbiter.

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.

On this first day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is seen 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.

On this eighth day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk take time out from their duties to be interviewed by CNN. As they reach the one week mark in their 16-day flight, the STS-87 crew shift their focus of their efforts towards the variety of science experiments flying on this mission.

Space Shuttle Boosters; Space Transportation System; Space Transportation System Flights; Spacecraft Docking; Spacecraft Launching; Spacescapes; Supplying; Mir Space Station

On this first day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk check out the spacesuits for the EVA planned for later during the mission. Mission Control developed plans that may allow Scott and Doi to recapture the Spartan satellite by hand during that EVA.

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

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

19980108910 NASA Johnson Space Center, Houston, TX USA
ST5-87 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; Avil: 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 Enrichment and Pushing by a Solid/Liquid Interface experiment. PEP is studying the formation of composite materials, attempting to continue work in the mini laboratory called the microgravity glovebox facility.

CASI

Microgravity: Space Transportation System; Space Transportation System Flights: Spacecrews; Vegetation Growth

19980108911 NASA Johnson Space Center, Houston, TX USA
ST5-87 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; Avil: 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 Enrichment and Pushing by a Solid/Liquid Interface experiment. PEP is studying the formation of composite materials, attempting to accurately map the roles of gravity-induced convection and sedimentation in the process by removing the gravity from the equation.

CASI

Microgravity: Space Transportation System; Space Transportation System Flights: Spacecrews; Vegetation Growth

19980108912 NASA Johnson Space Center, Houston, TX USA
ST5-87 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; Avil: 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 receive a call from Ukrainian President Leonid Kuchma and answer questions from media.

CASI

Microgravity: Space Transportation System; Space Transportation System Flights: Spacecrews; Space Shuttle Main Engine; Space Shuttles

19980108907 NASA Johnson Space Center, Houston, TX USA
ST5-87 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; Avil: 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 Orbieters; Space Shuttle Missions

19980108905 NASA Johnson Space Center, Houston, TX USA
ST5-87 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; Avil: 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 solidifies; and the study of plant growth in space.

CASI

Space Transportation System; Space Transportation System Flights; Spacecrews; Space Shuttles

19980108906 NASA Johnson Space Center, Houston, TX USA
ST5-87 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; Avil: 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 SPARAT 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 Shuttles

19980108907 NASA Johnson Space Center, Houston, TX USA
ST5-87 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; Avil: 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 on the samples.

CASI

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

19980108933 NASA Johnson Space Center, Houston, TX USA
ST5-89 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; Avil: CASI;
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, Salizhakh Shakirovich Sharipov, David A. Wolf and Andrew S.W. Thomas, can be seen preparing for a launch. During the 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 MIssions: Space Shuttles*

STS-89 Day 00 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, Salizhakh Shakirovich Sharipov, David A. Wolf and Andrew S.W. Thomas, prepare for the recovery 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: Spacecraft*
Endeavour mad reentry and landing of the orbitea

It's whose primary objective was the rendezvous and space docking with the Mir

Anderson, James E Reilly, Bolnie J. Dunbar, Salizhan Shakirovich Sharipov, David A. Wolf and Andrew S.W. Thomas, present an overview of their mission. 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 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 (SRBs). 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. Endeavour 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 Flights; Endeavour (Orbiter); Mir Space Station; Space Shuttle Orbiters; Spacecraft Docking; Spacecrew

STS-89 Day 07 Highlights
Jan. 26, 1998; In English; Videotape: 13 min. 49 sec. playing time, in color, with sound

On this fifth day of the STS-89 mission, the flight crew, Cmdr. Terrence W. Wilcutt, Pilot Frank Edwards, and Mission Specialists Michael P. Anderson, James F. Reilly, Bonnie J. Dunbar, Salizhan Shakirovich Sharipov, David A. Wolf and Andrew S.W. Thomas, are interviewed by an unnamed news agency. The main focus of the interview was on international cooperation in outer space.

CASI

Space Transportation System Flights; International Cooperation; Space Shuttles; Payload Retrieval (STS); Payload Transfer; Orbital Rendezvous; Crew Procedures (Inflight); Mir Space Station; Spacecraft Docking

STS-89 Day 06 Highlights
Jan. 27, 1998; In English; Videotape: 13 min. 49 sec. playing time, in color, with sound

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 Holom 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; Space crew

STS-89 Day 05 Highlights
Jan. 28, 1998; In English; Videotape: 13 min. 49 sec. playing time, in color, with sound

On this seventh day of the STS-89 mission, the flight crew, Cmdr. Terrence A. Wilcutt, Pilot Frank Edwards, and Mission Specialists Michael P. Anderson, Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Daifyed Rhys Williams and Kathy P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk once again take part in a variety of human autonomic experiments designed to examine blood pressure regulation in microgravity. Crew members repeat an experiment in which they use an innovative technique called microneurography. This involves placing a very fine needle in a nerve just below the knee, allowing nerve signals traveling from the brain to the blood vessels to be measured directly while the cardiovascular system is challenged using the Lower Body Negative Pressure device. LBNP is a 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; Space crew; Microgravity; Lower Body Negative Pressure; Cardiovascular System; Autonomic Nervous System

STS-89 Day 04 Highlights
Apr. 23, 1998; In English; Videotape: 17 min. 37 sec. playing time, in color, with sound

On this thirteenth day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Daifyed Rhys Williams and Kathy P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk once again take part in a variety of human autonomic experiments designed to examine blood pressure regulation in microgravity. Crew members repeat an experiment in which they use an innovative technique called microneurography. This involves placing a very fine needle in a nerve just below the knee, allowing nerve signals traveling from the brain to the blood vessels to be measured directly while the cardiovascular system is challenged using the Lower Body Negative Pressure device. LBNP is a 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; Space crew; Microgravity; Lower Body Negative Pressure; Cardiovascular System; Autonomic Nervous System
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

STS-91 Day 08 Highlights
Jun. 08, 1998; In English; Videotape: 21 min. 1 sec. playing time, in color, with sound
Report No.(s): NONP—NASA—VT—1998384056; No Copyright; Avail: CASI; B02, Videotape-Beta: V02, Videotape-VHS
On this eighth day of the STS-91 mission, the flight crew, Cm&. Richard A. Scarefofs, Pilot Scott D. Altman, and Mission Specialists Richard M. Linneham, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Paweleczyk continue to operate the 26 individual experiments designed to provide insight into the operation of the nervous system, the most complex and least well-known part of the human body. The STS-91 crew members have used themselves as test subjects in a variety of experiments associated with studying functions such as blood pressure regulation, balance, coordination and sleep patterns. They also have studied a variety of animals to gain additional insight into the effects of the weightless environment of space on the development and performance of the nervous system.

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

STS-91 Day 07 Highlights
Jun. 07, 1998; In English; Videotape: 30 min. 51 sec. playing time, in color, with sound
Report No.(s): NONP—NASA—VT—1998335187; No Copyright; Avail: CASI; B03, Videotape-Beta: V03, Videotape-VHS
On this seventh day of the STS-91 mission, the flight crew, Cm&. 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 were awakened to the sounds of ‘You Really Got Me’ by The Kinks. Discovery’s astronauts begin another day of transfer activities as they move into their second full day of docked operations. Working side-by-side, the astronauts and cosmonauts continue to move experiment hardware, logistical supplies and water between the two vehicles.

CASI Space Transportation System: Space Transportation System Flights; Space crews: Supplying

STS-91 Day 06 Highlights
Jun. 06, 1998; In English; Videotape: 23 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP—NASA—VT—1998358185; No Copyright; Avail: CASI; B02, Videotape-Beta: V02, Videotape-VHS
On this fifth day of the STS-91 mission, the flight crew, Cm&. 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 and cosmonauts continue to move experiment hardware, logistical supplies and water between the two vehicles. They transfer additional bags of water from Discovery to Mir, bringing the total amount of water transferred to 683 pounds. Just over half of the 317 items scheduled to be transferred have now been moved between the two craft. Mission Specialists Wendy Lawrence and Janet Kavandi spent some time today checking out the shuttle’s 50-foot long robotic arm. This checkout evaluates new electronics and software for use on upcoming assembly missions for the new International Space Station. Today’s checkout also tests the arm’s dexterity in maneuvering around components of an orbiting space station.

CASI Robot Arms: Space Stations; Space Transportation System: Space Transportation System Flights; Cosmonauts

STS-91 Day 05 Highlights
Jun. 05, 1998; In English; Videotape: 22 min. 1 sec. playing time, in color, with sound
Report No.(s): NONP—NASA—VT—1998385189; No Copyright; Avail: CASI; B02, Videotape-Beta: V02, Videotape-VHS
On this fourth day of the STS-91 mission, the flight crew, Cm&. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk present an overview of their mission. In the first part they can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is seen being readied in the ‘white room’ for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. In 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 Columbus’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; Spacecraft; Booster Rocket Engines; Flight Crews; Space Flight; Space Missions

19980218917 NASA Johnson Space Center, Houston, TX USA
STS-91 Day 04 Highlights
Jun. 05, 1998; In English; Videotape: 4 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--1998350505; 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. Pavlidis and Mission Specialists Wendy B. Lawrence, Franklin R. Chang-Diaz, Janet L. Kavandi, and Valery Vostokovitch 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 had transferred five bags of water to the Mir by the end of the day.

CASI

Space Transportation System; Space Transportation System Flights; Spacecraft; Cosmonauts; Astronauts

19980218918 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--1998350183; 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. Pavlidis and Mission Specialists Wendy B. Lawrence, Franklin R. Chang-Diaz, Janet L. Kavandi, and Valery Vostokovitch Ryumin prepare for docking with the Mir Space Station and a reunion with U.S. Astronaut Andy Thomas, who is about to conclude his more-than-four-month mission to the Russian outpost. After the docking, the two crews open the entry hatch and greet each other. The astronauts and cosmonauts transfer supplies from the shuttle to Mir.

CASI

Space Transportation System; Spacecraft Docking; Space Transportation System Flights; Mir Space Station

19980218920 NASA Johnson Space Center, Houston, TX USA
STS-91 Mission Highlights Resource Tape
Jun. 03, 1998; In English; Videotape: 1 hour 14 min. 46 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--1998350504; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The crew STS-91 mission, Cmdr. Charles J. Precourt, Pilot Dominic L. Pavlidis and Mission Specialists Wendy B. Lawrence, Franklin R. Chang-Diaz, Janet L. Kavandi, and Valery Vostokovitch Ryumin can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew are in the ‘white room’ for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Once in orbit, there are various views of the Mir Space Station as the shuttle begins its approach and docks. After the docking the two crews open the entry hatch and greet each other. The astronauts and cosmonauts transfer supplies from the shuttle to Mir. The astronauts prepare for the reentry phase of their mission. The Shuttle separates from the Russian Space Station with a gentle push from springs in the docking mechanism that attaches it to the Space Station. The final view shows the crews’ preparations for reentry and landing.

CASI

Space Transportation System; Spacecraft Docking; Space Stations; Space Shuttle Boosters; Solid Propellant Rocket Engines; Mir Space Station

Launching: Booster Rocket Engines

19980218921 NASA Johnson Space Center, Houston, TX USA
STS-90 Post Flight Presentation
Apr. 14, 1998; In English; Videotape: 17 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--1998350705; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The flight crew of the STS-90 mission, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawlewicz 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 are in the ‘white room’ for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. In the second part of the video the crew turns its attention to a variety of experiments inside the Shuttle’s cabin. These experiments include the processing of several samples of materials in the glovebox facility in Columbia’s middeck; the experiment called PEP, which involves heating samples as they resolidify; and the study of plant growth in space.

CASI

Solid Propellant Rocket Engines; Space Shuttle Boosters; Launching; Flight Crews; Booster Rocket Engines; Countdown

19980218925 NASA Johnson Space Center, Houston, TX USA
STS-90 Day 15 Highlights
Apr. 27, 1998; In English; Videotape: 17 min. 11 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--1998348939; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fifteenth day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawlewicz turn its attention to dexterity tests and dissections of rats’ testicles and the ball-catch experiment. Mission Specialists Rick Linnehan and Dave Williams and Payload Specialist Jim Pawlewicz 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 adapt and interpret new stimuli in space. The astronauts have performed this test at various points in the mission so scientists can compare their responses as their bodies adapt to weightlessness.

CASI

Space Transportation System; Space Transportation System Flights; Astronauts; Crews

19980218926 NASA Johnson Space Center, Houston, TX USA
STS-90 Day 14 Highlights
Apr. 26, 1998; In English; Videotape: 11 min. 26 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--1998348938; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fourteenth day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawlewicz focus on the efforts of Neurolab’s National Plasticity Team to better understand how the adult nervous system adapts to the new environment of space. Columbia’s science crew -- Mission Specialists Rick Linnehan and Dave Williams and Payload Specialists Jay C. Buckey and James A. Pawlewicz -- perform the second and final in-flight dissections of the adult male rats on board. The crew euthanizes and dissects nine rats and remove the vestibular or balance organs of the inner ear; the cerebellum, the part of the brain critical for maintaining balance and for processing information from the limbs so they can be moved smoothly; and the cerebrum, one part of which controls automatic functions such as body temperature regulation and the body’s
internal clock, and the cortical region that controls cognitive functions such as thinking. The first dissection, which was performed on the second day of the flight, went extremely well, according to Neemolab scientists.

CASI
Space Transportation System Flights; Space Transportation System; Neurophysiology; Nervous System

19980218927 NASA Johnson Space Center, Houston, TX USA
STS–90 Day 16 Highlights
Apr. 28, 1998; In English; Videotape: 10 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998348936; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this sixteenth day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. 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

19980218928 NASA Johnson Space Center, Houston, TX USA
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. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk continue their investigations into how the human nervous system adapts to the weightlessness of space. Buckey and Pawelczyk take part in a variety of autonomous 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

19980218929 NASA Johnson Space Center, Houston, TX USA
STS–90 Day 10 Highlights
Apr. 22, 1998; In English; Videotape: 20 min. 7 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–348934; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this tenth day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk have a relatively light day of scientific activity on board Columbia. The science crew of Mission Specialists Rick Linnehan and Dave Williams, along with Payload Specialists Jay Buckey and Jim Pawelczyk, continue investigations into how the human nervous system adapts to the weightlessness of space. All four serve as subjects in a vestibular experiment that uses an on-board rotating chair. The Visual and Vestibular Integration System (VVIS) correlates eye movements with balance. Developed by the European Space Agency, the chair stimulates the human balance system with both spinning and tilting sensations. Infrared video cameras observe and capture the eye movements that accompany the exercise.

CASI
Physical Exercise; Space Transportation System; Space Transportation System Flights; Spacecrews; Eye Movements
The flight crew of the STS-90 mission, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. 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 readiness; and the study of plant growth in space.

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

19980219027 NASA Johnson Space Center, Houston, TX USA
STS–90 Day 11 Highlights
Apr. 23, 1998; In English; Videotape: 19 min. 19 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998372739; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this eleventh day of the STS–90 mission, the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. 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 ValsaV 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 four science crew members conduct tests of their pulmonary systems as well as additional tests 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; Flight Operations; Space Shuttle Mission; Space Shuttle Orbiters; Space Shuttle Payloads

19980219028 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; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this sixth day of the STS–90 mission, the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. 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

19980219029 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; 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, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk perform tests associated with the STS–90 Neurolab Vestibular 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 Shuttle; Payload Delivery (STS)

19990808745 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–19990808700; No Copyright; 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; Space Transportation System Flights; Space Shuttle Mission; Space Shuttle Orbiters; Space Shuttle; Flight Control; Control Surfaces; Auxiliary Power Sources

19990808748 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–19990801600; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
On this seventh day of the STS–95 mission, the flight crew, Cmdr. Curtis L. Brown, Pilot Steven W. Lindsey, Mission Specialists Scott E. Parazynski, Stephen K. Robinson, and Pedro Duque, and Payload Specialists Chiaki Mukai and John H. Glenn, again test the Orbiter Space Vision System. OSVS uses special markings on Spartan and the shuttle cargo bay to provide an alignment aid for the arm's operator using shuttle television images. It will be used extensively on the next Space Shuttle flight in December as an aid in using the arm to join together the first two modules of the International Space Station. Specialist John Glenn will complete a daily back-pain questionnaire by as part of a study of how the muscle, intervertebral discs and bone marrow change after exposure to microgravity.

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

19990808749 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; 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, conduct a reaction control system hot fire, followed by a test of the communications system.

CASI
International Space Station; Space Transportation System; Space Transportation System Flights; Space Transportation System; Space Shuttle Orbiters; Space Shuttle; Shuttle; Auxiliary Power Sources; Auxiliary Power Units; Docking; Astronauts
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, 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.

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

STS-95 Day 08 Highlights
Nov. 06, 1998; In English; Videotape: 38 min. 56 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1998408702; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

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.

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

STS-95 Day 05 Highlights
Oct. 30, 1998; In English; Videotape: 27 min. 1 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1998397354; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this second 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.

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

STS-95 Day 04 Highlights
Oct. 29, 1998; In English; Videotape: 25 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1998397353; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

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, 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 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.

**Space Transportation System Flights; Space Shuttle Boosters; Launching; Countdown; Booster Rocket Engines; Spacecrews**

STS-95 Day 03 Highlights
Oct. 31, 1998; In English; Videotape: 25 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1998397355; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

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.

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

STS-95 Day 02 Highlights
Nov. 01, 1998; In English; Videotape: 30 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1998401596; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this forth 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.

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

STS-95 Day 01 Highlights
Nov. 03, 1998; In English; Videotape: 22 min. 1 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1998401596; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

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 performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is ready in the 'white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters.

**Space Transportation System Flights; Space Shuttle Boosters; Launching; Countdown; Booster Rocket Engines; Spacecrews**

STS-95 Highlights
Nov. 06, 1998; In English; Videotape: 38 min. 56 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1998408702; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On this eighth 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 enter the International Space Station where Krikalev and Currie install a new battery charging unit. Sturckow and Currie remove launch restraint bolts from some of the panels inside Zarya. Cabana, Ross, and Newman check the communications system’s videoconferencing capability. Then Ross, Newman, and Krikalev transfer equipment and supplies from Endeavour for future inhabitants of the Space Station. The crew then participates in an interview with KNX Radio in Los Angeles and KARE-TV in Minneapolis, Minnesota.

**Space Transportation System Flights; Zarya Control Module; Space Stations; International Space Station; Unity Connecting Module; International Cooperation**
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". 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 insulator 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 test fires the Simplified Aid for Extravehicular Activity (S-AF) jet backpacks they are wearing, a type of space "lifejacket," that would allow an astronaut to fly back to the station if they should ever become untethered.

**CASI**

Space Transportation System Flights: Extravehicular Activity; International Space Station: Unity Connecting Module; Manned Space Flight

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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 song "Jerry the Rigger," in honor of Mission Specialist Jerry Ross. Ross and Newman are then seen being readied for the first EVA. This space walk, which will last 6-1/2 hours, will focus on connecting computer and electrical cables between Unity, the two mating adapters attached to either end of Unity, and Zarya. In all, Ross and Newman will make about 40 connections during the spacewalk. This will enable power to flow to Unity for the first time in orbit and will permit Unity's avionics, computers and heaters to be activated.

**CASI**

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

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On this sixth 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 "Darling Days," requested by Commander Bob Cabana's daughter, Sarah. With the three-story-high Unity connecting module hatched upright in the shuttle's payload bay, Cabana takes manual control of the shuttle as it moves to within about a half-mile of Zarya. Cabana and Sturckow 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.

**CASI**

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

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On this tenth day of the STS-88 mission, the flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev are awakened by the sounds of Elvis Presley's "Hound Dog". Today's activities are devoted mostly to tasks that ready the station for future assembly work. The crew's first job is to release some cable ties on four cables connected on an earlier space walk, three located on Unity's upper mating adapter and one on its lower adapter, to relieve tension on the lines. The space walkers also will check an insulator 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 test fires the Simplified Aid for Extravehicular Activity Rescue (SAFER) jet backpacks they are wearing, a type of space "lifejacket," that would allow an astronaut to fly back to the station if they should ever become untethered.

**CASI**

Space Transportation System Flights: Extravehicular Activity; International Space Station: Unity Connecting Module; Large Space Structures
On this 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 are readied in the “white room” for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters.

CASI
Space Transportation System Flights: Space Shuttle Boosters: Launching: Ignition: Countdown

STS-88 Day 09 Highlights
Dec. 12, 1998; In English; Videotape: 24 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998435143; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

On this ninth day of the STS-88 mission, the flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev are awakened by “The Nutcracker” in honor of cosmonaut and Mission Specialist Sergei Krikalev. Currie and Krikalev continue their work removing access panels inside Unity and unstowing hardware that will be used by visiting astronauts on future assembly missions.

CASI

STS-88 Day 02 Highlights
Dec. 05, 1998; In English; Videotape: 21 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998435142; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

On this second day of the STS-88 mission, the flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev are awakened with the song “Get Ready” by the Temptations. Ross and Newman perform a checkout of the SAFER or Simplified Aid for EVA Rescue unit. SAFER is a mini maneuvering system that can provide self-rescue capability for a spacewalker if they inadvertently become separated from the spacecraft during a spacewalk. The crew then downlinks video taken inside the crew cabin during their ascent to orbit.

CASI

STS-88 Day 12 Highlights
Dec. 15, 1998; In English; Videotape: 15 min. 38 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998435141; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

On this twelfth day of the STS-88 mission, the flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev are awakened by the sounds of James Brown’s “I Got You (I Feel Good)”. Crew members focus their activities today on preparing for their scheduled return to the Kennedy Space Center. Cabana and Sturckow spend a good part of the day checking out spacecraft systems for entry and landing.

CASI

STS-80 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, Cmr. Richard A. Scare, Pilot Scott D. Altman, and Mission Specialists Richard L. Mitchell, Dudefy Rhys Williams and Katherine P. Hire, and Payload Specialists Hy C. Bodey and James A. Powelk, 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 are readied in the “white room” for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. The shuttle’s payload bay doors are then opened in anticipation of the 16-day scientific mission. The astronauts then are seen readying the Spacelab module for various experiments.

CASI
Space Transportation System Flights: Spacecrafts: Space Flight: Space Shuttles: Space Missions

STS-81 Post Flight Presentation
Feb. 16, 1997; In English; Videotape: 41 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999016919; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of the STS-81 mission, Commander Michael A. Baker, Pilot Brent W. Jett Jr, and Mission Specialists John M. Grunsfeld, Marsha S. Ivins, Peter J.K. Wisoff, and Jerry M. Linerger present a video mission over-view 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 crew is seen transferring water and supplies from one spacecraft to the other.

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also support advances in orbital drug prediction technology by increasing the understanding of the fundamental flow phenomena in the upper atmosphere.

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Space Transportation System Flights: Spacecraft Construction Materials; Payloads: Microgravity: Gravitational Effects; Free Molecular Flow; Extravehicular Activity: Bays (Structural Units); Cargo

1999025624 NASA Johnson Space Center, Houston, TX USA

STS–88 Post Flight Presentation
Dec. 16, 1998; In English; Videotape: 34 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999023680; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of the STS-88 mission, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, Jerry L. Ross, James H. Newman, and Sergei K. Krikalev, present a video mission overview of their space flight. Images include prelaunch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the "white room" for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. The primary objectives, which include the conducting of a variety of science experiments in the pressurized SPACEHAB module, the deployment and retrieval of the Spartan free-flyer payload, and operations with the HST Orbiting Systems Test (HOST) and the International Extreme Ultraviolet Hitchhiker (IEH) payloads are discussed in both the video and still photo presentation.

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Space Shuttle Missions; Spacecrafts: Flight Crews; Extravehicular Activity; Astronauts

1999025625 NASA Johnson Space Center, Houston, TX USA

STS–88 Crew Interview: Nancy Currie
Dec. 17, 1998; In English; Videotape: 30 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999023679; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Nancy Currie discusses the seven-day mission that will be highlighted by the mating of the U.S.-built Node 1 station element to the Functional Energy Block (FGB) which will already be in orbit, and two spacewalks to connect power and data cables between the Node and the 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.

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Space Shuttle Missions: Space Shuttles: International Space Station; Unity Connecting Module: Zarya Control Module: Large Space Structures: International Cooperation

1999025592 NASA Johnson Space Center, Houston, TX USA

STS–87 Mission Highlights Resources Tape
Dec. 15, 1998; In English; Videotape: 1 hour 28 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998062053; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The STS-87 mission the flight crew, Commander Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalmpana Chawda, and Taku 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-04. It is a highly sensitive instrument designed to acquire and record data of low-level aerodynamic acceleration along the orbiter's principal axes in the free-molecular flow regime at orbital altitudes and in the transition regime during re-entry. OARE data will support advances in space materials processing by providing measurements of the low-level, low frequency disturbance environment affecting various microgravity experiments. OARE data will also support advances in orbital drug prediction technology by increasing the understanding of the fundamental flow phenomena in the upper atmosphere.

CASI

Space Shuttle Missions: Space Shuttles: International Space Station; Unity Connecting Module: Zarya Control Module; International Cooperation: Extravehicular Mobility Units; Space Transportation System Flights
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

19990215628 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


19990215629 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


19990225630 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: Zarya Control Module: Unity Connecting Module: Space Station Modules: Large Space Structures

19990225761 NASA Johnson Space Center, Houston, TX USA
STS-95 Mission Highlights Resources Tape
Jan. 06, 1999; In English; Videotape: 1 hour 25 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1999032784; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The STS-95 flight crew, Commander Curtis L. Brown, Pilot Steven W. Lindsey, Mission Specialists Scott E. Parazynski, Stephen K. Robinson, and Pedro Duque, and Payload Specialists Chiaki Mukai and John H. Glenn present a video overview of their space flight. They are seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is ready in the ‘white room’ for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Once on-orbit the primary objectives include conducting a variety of science experiments in the pressurized SPACEHAB module, the deployment and retrieval of the Spartan free-flyer payload, and operations with the Hubble Space Telescope (HST) Orbiting Systems Test (HOST) and the International Extreme Ultraviolet Hitchhiker (EIH) payloads being carried in the payload bay. Throughout the presentation, the astronauts take turns narrating particular aspects of the mission with which they were involved.

CASI


1999032584 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

1999032585 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.

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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 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 Module to the ZARYA Control Module.

Endeavour (Orbiter); Space Flight; Space Shuttle Boosters; Space Transportation System Flights; Manned Space Flight

The STS-96 Discovery Shuttle is transferred to the International Space Station. A beautiful panoramic view of Mir above South America is seen. Scenes also depict the closing of Mir’s hatch, Atlantis’ separation from Mir, and the reentry of the Atlantis Space Shuttle into the Earth’s atmosphere.

Atlantis (Orbiter); Manned Space Flight; Spacecrafts; Mir Space Station; International Space Station

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 sharing meals, and exercising. The film ends with the reentry of the Atlantis Space Shuttle into the Earth’s atmosphere.

Discovery (Orbiter); Manned Space Flight; Spacecrafts; Mir Space Station; International Space Station

On this fifth 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 Tokarev perform 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 soil stowage racks. Husband and Barry troubleshoot and perform maintenance activities on the Early Communication 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.

Discovery (Orbiter); Spacecrafts; International Space Station; Zarya Control Module; Spacecraft Transfer
On this fourth day of the STS-96 Discovery mission, the flight crew, Commander Kent V. Rominger, Pilot Rick D. Husband, and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev are seen performing final preparations for their space walk. Views of the crew helping Barry and Jernigan suit up for their mission is also presented. Ochoa uses the robot arm to maneuver Jernigan up to the space station module. During the space walk Barry and Jernigan move two cranes, and three bags containing handrails and tools to the outside of the Unity module. They also install a thermal cover on a Unity trunnion pin, inspect peeling paint on Zarya and one of the two Early Communications System antennas on Unity.

CASI
Discovery (Orbiter); Spacecrews; International Space Station

On this third day of the STS-96 Discovery mission, the flight crew, Commander Kent V. Rominger, Pilot Rick D. Husband, and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev are seen executing the very first docking with the International Space Station. Also shown are views of the docking taken from both the Unity and Discovery. Final preparation for the mission’s space walk is also presented. Jernigan and Barry check the tools and the emergency rescue backpacks they will need for their space walk. Ochoa and Jernigan perform leak and pressurization checks and open the hatch to the Unity module. Ochoa and Tokarev store docking targets and lights and check the hatch seals in the narrow passageway. Rominger and Husband remove and store four electronic boxes around the Unity module.

CASI
Discovery (Orbiter); Spacecrews; International Space Station: Spacecraft Docking; Manned Space Flight; Unity Connecting Module

On this second day of the STS-96 Discovery mission, the flight crew, Commander Kent V. Rominger, Pilot Rick D. Husband, and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev are seen preparing for the docking with the International Space Station (Unity and Zarya modules). Ochoa and Payette open the tunnel and hatches leading to the SPACEHAB module in the payload bay. Payette and Tokarev place equipment in the module to create space in Discovery’s cabin. Jernigan, Barry, Payette and Husband test three spacesuits. Ochoa and Payette also test a 50-foot robot arm. And Jernigan and Ochoa extend the outer ring of Discovery’s Orbiter Docking System.

CASI
Discovery (Orbiter); Spacecrews; International Space Station: Unity Connecting Module; Zarya Control Module; Spacecraft Docking

On this first day of the STS-96 Discovery mission, the flight crew, Commander Kent V. Rominger, Pilot Rick D. Husband, and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev are seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is 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
Discovery (Orbiter); Manned Space Flight; Spacecrews

On this seventh day of the STS-96 Discovery mission, the flight crew, Commander Kent V. Rominger, Pilot Rick D. Husband, and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev are seen completing the transfer of material and equipment to the International Space Station. The astronauts install parts of a wireless strain gauge system, clean filters and check smoke detectors. The crew participates in a variety of news conferences with media representatives. Payette accepts a congratulatory call from Canadian Prime Minister Jean Chretien and answers questions from schoolchildren in Ottawa.

CASI
Discovery (Orbiter); International Space Station: Rendezvous Spacecraft Docking; Manned Space Flight; Conferences; Teleconferencing
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

19990853131 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-1999074605; 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); Spacecraft: Manned Space Flight; Crew Procedures (Inflight); Return to Earth Space Flight

19990853264 NASA Langley Research Center, Hampton, VA 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 navigates 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)

19990853904 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-1999068254; 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, microgravity, 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

19990854664 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-1999087306; 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 STRELA, which the astronauts mount to the exterior of the Russian station segment, the SPACEHAB Oceanic Space System Box (SHOSS), and a U.S. built crane called the ORU Transfer Device (OTD). Other payloads include the Student Tracked Atmospheric Research Satellite for Heuristic International Networking Equipment (STARSHINE), the Shuttle Vibration Forces Experiment (SVE), and the Orbiter Integrated Vehicle Health Monitoring - HEHS Technology Demonstration (IVHM HTD). The traditional pre-launch breakfast, being suited up, entry into the Shuttle, and views of the liftoff from several different vantage points are shown. In-flight footage includes views from the robot arm conducting a television survey of Discovery’s payload bay and the flawless docking of the Unity module with the International Space Station. During the docking, camera views from both the ISS and Discovery are presented. These activities make up the first three Flight Days of STS-96.

CASI

Discovery (Orbiter); Space Shuttle Missions; International Space Station; Spacecraft Docking; Spacecraf
Zarya’s power-producing batteries and all crew members’ involvement in logistics transfer activities from the SPACEHAB module to designated locations in the International Space Station. With the transfer work of FD 6 all but complete, the astronauts conduct some additional work, installing parts of a wireless strain gauge system that will help engineers track the effects of adding modules to the station throughout its assembly. Moving the few remaining items from Discovery to the ISS, then closing a series of hatches within the station’s modules leading back to the shuttle are the primary activities contained in FD 7. Final coverage features Discovery’s astronauts finishing their work inside the International Space Station, closing all of the hatches and readiness 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 (Orbit): 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 N. 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 readies to deploy a small, student-built payload called STARSHINE (Student Tracking Atmospheric Research Satellite for Heuristic International Networking Equipment). In and around landing preparations and the STARSHINE deploy, the crew stows all equipment used throughout the mission. The STARSHINE satellite ejects from a canister in Discovery’s payload bay on FD 10. FD 11 is completed as Discovery swoops out of the darkness as Commander Kent Rominger sets the shuttle and 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 (Orbit): Space Shuttle Missions: International Space Station; Spacecrews: Spacecraft Landing: Spacecraft Return

19990854914 NASA Johnson Space Center, Houston, TX USA
STS-93 Crew Interview
Jul. 23, 1999; In English; Videotape: 60 min. playing time, in color, with sound
Report No.(s): NONP NASA VT-1999089463; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This tape is an interview with Eileen M. Collins. In July 1999, she became the first female shuttle commander in NASA history. It was her third mission to space. She was the pilot of two previous space missions. In this interview she discussed the different telescopes that have been used in prior missions. She also talked about the functions of the new telescope “Chandra” that have been used in this mission.

Derived from text
Space Missions: Space Shuttle Missions; Spacecrews

19990856553 NASA Johnson Space Center, Houston, TX USA
STS-93 Flight Day 1 Highlights and Crew Activities
Jul. 23, 1999; In English; Videotape: 23 min. 6 sec. playing time, in color, with sound
Report No.(s): NONP NASA VT-1999088229; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-93 Columbia mission, the flight crew, Commander Eileen Collins, Pilot Jeff Ashby and Mission Specialists Cady 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 (Orbit): 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-1999089231; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Commander Eileen Collins, Pilot Jeff Ashby, and Mission Specialists Cady Coleman, Steve Hawley and Michael Tognini were awakened with the song “Brave New Girls” performed by Teresa, Steve Hawley, the resident astronomer, continued to work with the Southwest Ultraviolet Imaging System (SWUIS) and collected images of targets associated with Mercury, Venus, Jupiter and the Moon. Collins and Ashby maneuvered Columbia in support of various experiments including observations made with the SWUIS telescope or the Midcourse Space Experiment (MSX), which used sophisticated sensors to collect ultraviolet, infrared, and visible light data of firings of the shuttle’s orbital maneuvering system engines or primary reaction control system jets. Collins also conducted a conversation with students at the Harbor View Elementary School in Corona Del Mar, California using the Shuttle Amateur Radio Experiment (SAREX) system. She also checked experiments associated with the Cell Culture Module (CCM) and the Biological Research in Canister (BRIC) payloads.

CASI

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 Cady 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 Creeds; Space Transportation System; Space Transportation System Flights; Imaging Techniques; Payloads; Manned Spacecraft

199901056588 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-199906233; No Copyright; Aerial: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Columbia's crew began packing up experiments and preparing to return to Earth tomorrow with a touchdown planned for Kennedy Space Center at 10:20 p.m. CDT. Commander Eileen Collins and Pilot Jeff Ashby checked out the cockpit instruments, displays and flight control systems. They also test fired the 38 small steering jets. Everything was in good shape and ready for the trip back 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 Massachussets.

CASI
Space Transportation System; Spacecrafts; Space Transportation System Flights; Touchdown; Manned Spacecraft

199901056588 NASA Johnson Space Center, Houston, TX USA STS-93 Flight Day 4 Highlights and Crew Activities Jul. 25, 1999; In English; Videotape: 20 min. 48 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT-199908232; No Copyright; Aerial: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The five astronauts aboard the Space Shuttle Columbia began their fourth flight day preparing to make additional celestial observations through the shuttle's windows and continue work with a variety of instruments. Pilot Jeff Ashby and Mission Specialists Steve Hawley and Michael Tognini set up an exercise treadmill and the Treadmill Vibration Information System (TVIS) which measures vibrations and changes in microgravity levels caused by on-orbit workouts. Astronomer Hawley again made observations of Venus, Jupiter and the Moon with the Southwest Ultraviolet Imaging System (SWUIS) as Commander Eileen Collins and Pilot Jeff Ashby put the shuttle in the proper orientation for his observations. Tognini and Coleman checked the bioprocessing experiments, and harvested mouse-ear cress 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; Spacecrafts

199901095798 NASA Johnson Space Center, Houston, TX USA STS-96 Post Flight Presentation Sep. 08, 1999; In English; Videotape: 15 min. 31 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT-1999129646; No Copyright; Aerial: 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, Tamura E. Jernigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev, are shown narrating the mission highlights. Scenes include walk out to the transfer vehicle, and launch of the shuttle. Also presented are scenes of the start of the main engine, ignition of the solid rocket boosters, and the separation of the solid rocket boosters. Footage of Payette preparing the on-board camera equipment, while Barry and Jernigan perform routine checks of the equipment is seen. Also presented are various pictures of the shuttle in its orbit, the docking of the shuttle with the Mir International Space Station, and crewmembers during their space walk. Beautiful panoramic views of the Great Lake, Houston, and a combined view of Italy and Turkey are seen. The crew of Discovery is shown performing a space walk experiment, tumbling, unlocking, performing transfer operations, and deploying the STARSHINE educational satellite. The film ends with the reentry of the Discovery Space Shuttle into the Earth's atmosphere.

CASI
Discovery (Orbiter); Manned Space Flight; Mir Space Station; International Space Station; Spacecraft Docking; Unity Connecting Module; Zarya Control Module

19990116268 NASA Johnson Space Center, Houston, TX USA STS-93 Post Flight Presentation Nov. 08, 1999; In English; Videotape: 16 min. 18 sec. playing time, in color with sound Report No.(s): NONP-NASA-VT-1999022513; No Copyright; Aerial: 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 launching and a night landing at the Kennedy Space Center.

CASI
Space Transportation System; X Ray Astrophysics Facility; Space Shuttle Missions; Crew Procedures (Inflight)

19990116476 NASA Johnson Space Center, Houston, TX USA STS-103 Crew Training Nov. 08, 1999; In English; Videotape: 29 min. 17 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT-1999022514; No Copyright; Aerial: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The Hubble Space Telescope (HST) team is preparing for NASA's third scheduled service call to Hubble. This mission, STS-103, will launch from Kennedy Space Center aboard the Space Shuttle Discovery. The seven flight crew members are Commander Curtis L. Brown, Pilot Scott J. Kelly, European Space Agency (ESA) astronaut Jean-Francois Clervoy who will join space walkers Steven L. Smith, C. Michael Foale, John M. Grunsfeld, and ESA astronaut Claude Nicollier. The objectives of the HST Third Servicing Mission (SM3A) are to replace the telescope's six gyroscopes, a Fine-Guidance Sensor, an S-Band Single Access Transmitter, a spare solid-state recorder and a high-voltage/temperature kit for protecting the batteries from overheating. In addition, the crew plans to install an advanced computer that is 20 times faster and has six times the memory of the current Hubble Space Telescope computer, to prepare for these extravehicular activities (EVAs), the SM3A astronauts participated in Crew Familiarization sessions with the actual SM3A flight hardware. During these sessions the crew spent long hours rehearsing their space walks in the Guidance Navigation Simulator and 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 Shroud/Light Shield Simulator, and the Support Systems Module Dry Docks Simulator. They also trained and verified the flight Orbital Replacement Unit Carrier
Astronaut 7/ainine, Hubble Space l?lescope; Discovery ((2rbih_r); lift and mate of the external t_mks. The STS-26 flight crew inclnde: Frederick H. mad Data Relay Satellite (TDRS) at flae Orbiter Processing Facility (OPF) to the
footage covering STS-26 larmch preparations licom flae arrival of the Tracking
B04, Videolape-Beta; V04, Videompe-VHS
Report No.(s): NONP NASA VT 1999207925; No Copyright; Avail: CASI;
September 1988; In English; Videotape: 2 hr. playing tinae, in color, with sotmd
STS-26/Diseovery Preparations for Launch
19998116992 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-41G TCDT
Sep. 15, 1984; In English; Video tape: 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.
Football 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 LRFT 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 live shots covering the day
launch and landing of STS-51C/Discovery. The flight crew members were:
Thomas K. Mattingly II, Commander; Loren J. Shrimer, 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 counts the countdown from the launch pad, main engine ignition,
throttle, and solid rocket booster separation. The landing footage contains final
descent and approach, landing gear deployment, and touchdown, which was also
captured from different locations including a helicopter. STS-51C carried the
DoD 85-1 payload and was the first mission dedicated to the Department of
Defense.
CASI
Space Shuttle Mission 51-C: Discovery (Orbiter); Spacecraft Landing;
Spacecraft Launching
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.
(Pink) Nelson, mission specialist. The primary payload of STS-26 is the TDRS
while the secondary payloads include the Physical Vapor Transport of Organic
Solids (PVTOS); Protein Crystal Growth (PCG); Infrared Communications
Flight Experiment (IRCE); Aggregation of Red Blood Cells (ARC); Isodectric
Focusing Experiment (IFE); 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 unloading and installation, solid rocket boosters’ arrival
prop and stacking, and all skirt to jett 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: 50 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) prepare
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-VI is deployed on day three. Allan 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 door.
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, with 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 0-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-41-G: Mission Highlights
Oct. 31, 1984; In English; Video tape: 50 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–1999207904; 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 Radia-
tion 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 prove their expertise 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 seated in the
White Room for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. 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 Tognoni conduct a ham radio conversation with Jean-Pierre Hagueno on the Mir Space Station. Towards the end of the mission Ashley, Haysley and Tognoni 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

Challenger (Orbiter); Manned Space Flight; Space Transportation System; Space Transportation System Flights; X Ray Astrophysics Facility; Spaceborne Astronomy; X Ray Astronomy; Solar System

STS-51B Launch and Landing
May 6, 1985; In English; Videotape: 20 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999207907; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage of various isolated launch views is seen. Views of the Space Shuttle Challenger are shown from different camera sites such as the VAB (Vehicle Assembly Building) roof, Pad Perimeter, Helicopter, Convoy, and Midfield. Also shown from different camera sites is the re-entry and landing of the shuttle at Kennedy Space Center (KSC). Footage also includes the ground recovery crew as they travel to the spacecraft. Challengers crew, Commander Robert E. Overmyer, Pilot Frederick D. Gregory, Mission Specialists Don L. Lind, Norman E. Thagard, and William E. Thornton, and Payload Specialists Lodewijk van den Berg, and Taylor G. Wang are also seen leaving the craft.

CASI

Challenger (Orbiter); Space Shuttle Mission 51-B; Space Transportation System; Spacecraft Launching

STS-51G Mission Highlights Resource Tape
Jun. 24, 1985; In English; Videotape: 40 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999207983; No Copyright; Avail: CASI; B03, Videotape-Beta; 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 Salmi are shown 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 TELESTAR-3D, for AT&T. The crew also retrieve the SPARTAN-1 satellite. Scenes include the crew in the mess deck via video link with Mission Control Center in celebration of the 150th 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 Hababannah, 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–143 Flight Day Highlights and Crew Activity Report
Dec. 20, 1999; In English; Videotape: 19 min. 55 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999213426; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

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. 19, 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 including suit-up, walkout to the Astro Van, and strap-in into the shuttle. Also presented are beautiful panoramic views of the shuttle on the pad. During this night launch, footage of the main engine start, ignition of the boosters, liftoff of Discovery, and separation of the solid rocket boosters are seen.

CASI

Space Transportation System; Space Transportation System Flights; Discovery (Orbiter); Manned Space Flight

STS–103 Crew Interviews—Jean-Francois Clervoy
Sep. 09, 1999; In English; Videotape: 35 min. 52 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 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; Gyrosopes; Transistors; Computers; Discussion; Spacecrews; Crew Procedures (Inflight); Crew Procedures (Preflight)

STS–103 Crew Interviews—Curtis L. Brown
Sep. 09, 1999; In English; Videotape: 36 min. 58 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999213440; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Commander Curtis L. Brown 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 Brown's responsibility during any of the planned space walks scheduled for this mission.

**CASI Hubble Space Telescope: Maintenance, Replacing, Gyroscopes, Computers; Transistors**

2000004512 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–1999201347; No Copyright; Avail: CASI; B02; Videotape–Beta; V02, Videotape–VHS

Live footage of a preflight interview with Pilot Scott J. Kelly is seen. The interview addresses many different questions including why Kelly became an astronaut, the events that led to his interest, any role models that he had, and his inspiration. Other interesting information that this one-on-one interview discusses is an explanation of the why this required mission to service the Hubble Space Telescope must take place at such an early date, replacement of the gyroscopes, transistors, and computers. Also discussed are the Chandra X Ray Astrophysics Facility, and a brief touch on Kelly's responsibility during any of the given four space walks scheduled for this mission.

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

2000004517 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–1999201358; 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 why this required mission to service the Hubble Space Telescope must take place at such an early date, and a brief touch on Grunsfeld's responsibility during any of the four space walks scheduled for this mission.

**CASI Hubble Space Telescope: Space Maintenance, Crew Procedures (Inflight); Spacecrews; Discussion**

2000004522 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–1999207095; 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 booster arrival, props and stacking; (12) Modified SRB segments: Arrival via train at KSC RPFS; (13) AFT segment rotation to vertical in RPFS; (14) AFT skirt to AFT segment mating; (15) SRB grain inspection; (16) Lift AFT segment; and (17) Lift and mate external tank.

**CASI Space Transportation System: Launching; Solid Propellant Rocket Engines; Space Shuttle Boosters; Payloads; Inspection**

2000004523 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. Hartfield, 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; Spacecrews**

2000004924 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–2000001305; No Copyright; Avail: CASI; B04, Videotape–Beta; V04, Videotape–VHS

This two-tape Jet Propulsion Laboratory (JPL) video production presents a Dec. 8, 1992 press conference held at JPL to discuss the final Galileo spacecraft encounter with Earth before beginning its journey to Jupiter. The main theme of the conference was centered on the significance of the 2nd and final Earth/Moon flyby as being the spacecraft's last planetary encounter in the solar system before reaching Jupiter, as well as final flight preparations prior to its final journey. Each of the five members of the panel was introduced by Robert MacMillan (JPL Public Information Mgr.) before giving brief presentations including slides and viewgraphs covering their area of expertise regarding Galileo's current status and future plans. After the presentations, the media was given an opportunity to ask questions of the panel regarding the mission. Mr. Wesley Huntress (Director of Solar System Exploration (NASA)), William J. O'Neill (Galileo Project Manager), Neal E. Asman, Jr. (Galileo Mission Director), Dr. Torrence V. Johnson (Galileo Project Scientist) and Dr. Ronald Greeley (Member, Imaging Team, Colorado St. Univ.) made up the panel and discussed topics including: Galileo's interplanetary trajectory, project status and performance review, instrument calibration activities, mission timelines, lunar observation and imaging, and general solar 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**

20000018667 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–1999201344; No Copyright; Avail: CASI; B03, Videotape–Beta; V03, Videotape–VHS

Live footage of a preflight interview with Mission Specialist C. Michael Foale is seen. The interview addresses many different questions including why Foale became an astronaut, the events that led to his interest. Other interesting information that this one-on-one interview discusses is an explanation of the why this required mission to service the Hubble Space Telescope must take place at such an early date, and a brief touch on Foale's responsibility during any of the four space walks scheduled for this mission.

**CASI Hubble Space Telescope: Maintenance**

2000001868 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–1999201349; No Copyright; Avail: CASI; B02, Videotape–Beta; V02, Videotape–VHS

Live footage of a preflight interview with Mission Specialist Steven L. Smith is seen. The interview addresses many different questions including why Brown became an astronaut, the events that led to his interest, any role models that he had, and his inspiration. Other interesting information that this one-on-one interview discusses is an explanation of the why this required mission to service the Hubble Space Telescope must take place at such an early date, replacement of the gyroscopes, transistors, and computers. Also discussed is Smith's responsibility during any of the planned space walks scheduled for this mission.

**CASI Hubble Space Telescope: Maintenance, Replacing, Computers; Gyroscopes, Transistors**
STS-103 Flight Day 3 Highlights and Crew Activities Report

Dec. 22, 1999; In English; Videotape: 12 min. 45 sec. playing time, in color, with sound

Report No.(s): NONP-NASA–VT–1999213297; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Highlights of the third day of the STS-103 mission on board the space shuttle Discovery are shown in this videotape. The mission was led by Commander Curtis L. Brown, with Pilot Scott J. Kelly, and Mission Specialists Steven L. Smith, Jean-Francois Clervoy, John M. Grunsfeld, Michael Foale, and Claude Nicollier. The main purpose of the mission was to service the Hubble Space Telescope (HST). The primary objective of the mission was to replace six of the gyroscopes that make up the three Rate Sensor Units. In addition the astronauts installed a new computer. During the third day when Discovery reached a point about 35 feet from Hubble, astronaut Jean-Francois Clervoy used the robot arm to capture the telescope’s grapple fixture located midway up the HST structure. The approach to the HST is described and the actual maneuver aimed at retrieving the telescope is also described. The video includes actual live views of the HST in the shuttle’s service bay, the shuttle, and shots of Johnson mission control.

CASI
Discovery (Orbiter): Hubble Space Telescope: Space Transportation System; Orbital Servicing; Payload Retrieval (STS): Orbital Rendezvous

STS-103 Crew Interviews: Janet L. Kavandi

Aug. 09, 1999; In English; Videotape: 18 min., 43 sec., running time, in color, with sound

Report No.(s): NONP-NASA–VT–1999208099; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This NASA KSC video release is one in a series of space shuttle astronaut interviews and was recorded Aug. 9, 1999. Mission Specialist, Janet L. Kavandi, Ph.D. provides answers to questions regarding her role in the Shuttle Radar Topography Mission (SRTM), mission objectives, which center on the three-dimensional mapping of the entire Earth’s surface, shuttle imaging radar, payload mast deploy and retraction, data recording vs. downlinking, the fly cast maneuver, applications of recorded data, international participation (DLR), the National Imaging and Mapping Agency (NIMA), and EarthCam (educational middle school project). The interview is summed up by Dr. Kavandi explaining that the mission’s objective, if successful, will result in the the most complete high-resolution digital topographic database of the Earth.

CASI
Space Shuttle Missions: Astronauts; Shuttle Imaging Radar; Earth Observations (From Space)

STS-103 Payload Being Uncovered HST–Hubble Servicing

Sep. 12, 1994; In English; Videotape: 61 min. playing time, in color, with sound

Report No.(s): NONP-NASA–VT–1999207908; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The crew, Commander Henry W. Hartsfield, Jr, Pilot Michael L. Coats, Mission Specialists Judith A. Resnik, Steven A. Hawley, and Richard M. Mullane, and Payload Specialist Charles D. Walker are seen participating a panel discussion. Live footage of the Press Conference begins with a brief introduction of all the crew, followed by highlights of the flight, a selection of slides and still pictures, and ends with a question and answer segment. The highlights consist of the astronauts walk out to the Astro-Van, panoramic views of the Discovery on the launch pad, main engine start, ignition of the solid rocket boosters, liftoff, and separation of the boosters. Images of the opening of the sun shield and the deployment of the three communication satellites (Satellite Business System (SBS-D), SYNCOM IV.2, and TELSTAR) are also shown. 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 Headquarters, Kennedy Space Center, and Marshall Space Flight Center.

CASI
Conferences: Astronauts; Spaceviews: Deployment; Syncom 4 Satellite; Telstar Project

STS–103 VIP Site Saturn Center, Shuttle Liftoff

Dec. 19, 1999; In English; Videotape: 5 min. playing time, in color, with sound

Report No.(s): NONP-NASA–VT–2000008225; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This NASA KSC video release presents footage of the VIP gathering before and during the STS-103 night launch at the Saturn Center at Kennedy Space Center. Images of the Saturn Center, the playing of the national anthem and the crowd’s reactions during liftoff are included.

CASI
Space Shuttle Missions: Liftoff (Launching); Cape Kennedy Launch Complex

STS–103 Payload Being Uncovered HST–Hubble Servicing Mission

Aug. 17, 1999; In English; Videotape: 1 min. 45 sec. playing time, in color, with sound

Report No.(s): NONP-NASA–VT–2000008221; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage of Discovery’s construction crew removing the plastic covering from the Payload Bay is seen.

CASI
Space Shuttle Payloads: Hubble Space Telescope

STS–103 In VAB

Nov. 05, 1999; In English; Videotape: 3 min. playing time, in color, with sound

Report No.(s): NONP-NASA–VT–2000008220; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage of the fully constructed Discovery Orbiter mated to the external tank and solid rocket boosters in the VAB (Vehicle Assembly Building) high bay 1 is seen.

CASI
Discovery (Orbiter): Space Transportation System

STS–103 Flight Crew Departs from Shuttle Landing Facility in T–38 for Aerobatics Flight, Discovery

Dec. 15, 1999; In English; Videotape: 3 min. playing time, in color, with sound

Report No.(s): NONP-NASA–VT–2000008216; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This NASA KSC video release presents footage of two of the STS-103 crew members during flight crew training prior to a NASA T-38 aerobatics flight. The two crew members are shown inside the T-38 as it moves slowly across a runway.

CASI
Space Flight Training: T-38 Aircraft; Aerobatics
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

STS-103 Flight Day 6 Highlights and Crew Activities Report
Dec. 25, 1999; In English; Videotape: 25 min., 19 sec. running time, in color, with sound
Report No.(s): NONP–NASA–VT–2000001111; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage of a preflight interview with Mission Specialists Mamoru Mohri and Claude Nicollier is seen. The interview addresses many different questions including why Mohri became an astronaut, the events that led to his interest, his career path, and then finally, his selection by NASA as an astronaut. Other interesting information that this one-on-one interview discusses is the purpose for the Shuttle Radar Topography Mission (SRTM). Specific interest is on the importance of this SRTM flight, the knowledge that we will gain from the 3D topographic map of the Earth, and the reason why this 3D data is being recorded instead of downlinked. 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

STS-103 Hubble Telescope into Discovery Payload Bay
Nov. 16, 1999; In English; Videotape: 3 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008214; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage of the moving of some preliminary structure into Discovery’s Payload Bay is seen.

CASI

Space Shuttle Payloads: Bays (Structural Units): Hubble Space Telescope

STS-103 Flight Day 5 Highlights and Crew Activities Report
Dec. 24, 1999; In English; Videotape: 23 min., 17 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000001110; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Highlights of the fifth day of the STS-103 mission on board the space shuttle Discovery are shown in this videotape. The mission was led by Commander Curtis L. Brown, with Pilot Scott J. Kelly, and Mission Specialists Steven L. Smith, Jean-François Clervoy, John M. Grunsfeld, Michael Foale, and Claude Nicollier. The main purpose of the mission was to service the Hubble Space Telescope (HST). The primary objective of the mission was to replace all six of the gyroscopes that make up the three Rate Sensor Units. In addition the Astronauts installed a new computer. During the 5th day Michael Foale and Claude Nicollier performed the servicing of the HST in about an hour and 10 minutes Extravehicular Activity (EVA). The servicing included the repair of the old computer and the installation of a new, faster computer with more memory. They also installed a new outer thermal layer to protect the computer. After this was finished the astronauts replaced one of the Fine Guidance Sensors (FGS), an optical sensor which allows NASA to point the telescope in the desired direction. The video includes actual live views of the HST in the shuttle’s service bay, and footage of the repair and servicing EVA.

CASI

Extravehicular Activity: Hubble Space Telescope: Space Transportation System: Orbital Workers; Space Maintenance: Space Shuttle Missions: Orbital Servicing

STS-99 Crew Interviews: Kevin R. Kregel
Aug. 08, 1999; In English; Videotape: 20 min., 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999208098; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The interview addresses many different questions including why Kregel became an astronaut, the events that led to his interest, his career path through the Air Force and later the Navy, and 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), 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

STS-99 Crew Interviews: Mamoru Mohri
Aug. 05, 1999; In English; Videotape: 14 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999208098; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The interview addresses many different questions including why Mohri became an astronaut, the events that led to his interest, his career path, and then finally, his selection by NASA as an astronaut. Other interesting information that this one-on-one interview discusses is the purpose for the Shuttle Radar Topography Mission (SRTM). Specific interest is on the importance of this SRTM flight, the knowledge that we will gain from the 3D topographic map of the Earth, and the reason why this 3D data is being recorded instead of downlinked. 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

STS-103 Crew Activity Report/Flight Day 8 Highlights
Dec. 27, 1999; In English; Videotape: 18 min. 6 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000001110; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Discovery’s astronauts (Mission Commander, Curtis L. Brown; Pilot Scott J. Kelly; Mission Specialists, Steven L. Smith, C. Michael Foale, and John M. Grunsfeld; and (ESA) Mission Specialists, Claude Nicollier and Jean-François Clervoy) deliver a Christmas present to the world, putting the Hubble Space Telescope back into service after 24 hours and 33 minutes of repairs and upgrades that make the orbital observatory more capable than ever. European Space Agency Astronaut Jean-François Clervoy uses the shuttle’s robot arm to release the telescope at 5:03 p.m. CST, then places the arm into an upright salute as Commander Curt Brown fires Discovery’s steering jets to begin separating from the telescope. The telescope’s re-deployment takes place at an altitude of 370 statute miles as the two spacecraft fly over the South Pacific’s coral sea northeast of Australia. At 5:39 CST, Brown executes a second steering jet burn, lowering Discovery’s orbit slightly, so that it will begin orbiting faster than the telescope and move away at just under 6 statute miles per orbit. Afterward, each of the seven astronauts on board calls down holiday wishes from space in several languages.

CASI


STS-99 Crew Interviews: Mamoru Mohri
Aug. 05, 1999; In English; Videotape: 14 min. 18 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999208098; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage of a preflight interview with Mission Specialists Mamoru Mohri is seen. The interview addresses many different questions including why Mohri became an astronaut, the events that led to his interest, his career path, and then finally, his selection by NASA as an astronaut. Other interesting information that this one-on-one interview discusses is the purpose for the Shuttle Radar Topography Mission (SRTM). Specific interest is on the importance of this SRTM flight, the knowledge that we will gain from the 3D topographic map of the Earth, and the reason why this 3D data is being recorded instead of downlinked. 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; 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

2000011835 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

20000110037 NASA Johnson Space Center, Houston, TX USA
STS–9 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 discuses is the purpose for the Shuttle Radar Topography Mission (SRTM). The main interest is on the importance of this SRTM flight, the knowledge we will learn gain from the 3D topographic map of the Earth, and the possible similarity to the tethered Satellite System Flight. The two antennas that will be taking the pictures, the involvement of the National Imagery and Mapping Agency (NIMA), mass deployment and retraction, gravity gradient force, flight cast maneuvers, EARTHcam, a student-controlled camera on the Endeavour Orbiter, and Gore’s responsibility during this 24 hour mission.
CASI
Shuttle Imaging Radar; Infrared Radar; Radar Imagery; Topography; Relief Maps; Earth Surface

20000011212 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–103 Discovery Launch Scrub Press Conference
Dec. 16, 1999; In English; Videotape: 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008137; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
A press conference held on December 16, 1999, to explain the reason behind NASA’s decision to delay the Discovery’s launching by a period of 24 hrs is presented. According to Ron Dittmores, Space Shuttle Program Manager, the STS-103 team delayed the launch because they need extra time to check one vendor’s manufacturing processes, after an x-ray inspection revealed that an improper weld rod was used to weld one of the pressuring lines (called NPS lines) in the ET (external tank). Mr. Dittmores explained that since it is in the ET (not a major load carrying structure and rebuild after each flight), it did not pose any danger to the STS-103 flight. However, the same vendor also manufactured some parts of the orbiter and the team wanted to make sure that the quality of the vendor’s manufacturing processes is robust before launching the orbiter to space. He also answered some reporters’ questions.
CASI
Discovery (Orbiter); Spacecraft Launching; Spacecraft Maintenance; Spacecraft Structures

2000011225 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 white light technique is shown.
CASI
Discovery (Orbiter); Space Shuttle Payloads; Inspection

20000111226 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–103 Crew at Breakfast, Suiting, Departing O&C
Dec. 19, 1999; In English; Videotape: 5 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008205; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The Hubble Space Telescope (HST) team is preparing for NASA’s third scheduled service call to Hubble. This mission, STS-103, will launch from Kennedy Space Center aboard the Space Shuttle Discovery. The seven flight crew members for STS-103 are: Commander Curtis L. Brown (his sixth flight), Pilot Scott J. Kelly and European Space Agency (ESA) astronaut Jean-Francois Clervoy (his third flight) will join space walkers Steven L. Smith (his third flight), C. Michael Foale (his fifth flight), John M. Grunsfeld (his third flight) and ESA astronaut Claude Nicollier (his fourth flight). This current video presents a live footage of the seven STS-103 crewmembers eating breakfast, suiting, and departing the O&C (Operations and Checkout) before the 6:50 p.m. lift-off.
CASI
Discovery (Orbiter); Space Shuttle Payloads; Crew Procedures (Preflight); Preflight Operations

2000011227 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 Facility) is shown. Also included is Dr. John Complin, Associate Director of the Hubble Space Telescope, briefing on the Hubble servicing mission.
CASI
Space Shuttle Payloads; Discovery (Orbiter); Orbital Servicing; Ground Support Equipment

2000011229 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

2000011230 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–103 Payload Door Closure: Hubble Repair: Discovery
Nov. 24, 1999; In English; Videotape: 5 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008212; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Live footage of the Discovery’s cargo bay door closure is shown. Discovery’s payload include an Orbital Replacement Unit Carrier that contains the tools and replacement parts necessary to service the HST and Flight Support System that will hold the telescope during servicing.
CASI
Discovery (Orbiter); Space Shuttle Payloads; Doors
involvement of the International partners, mass deployment and retraction, the two antennas that will be taking the pictures, the 3D topographic map of the Earth, and the possibility to the Tethered SRTM mission. The interview addresses many different questions including why Rominger became an astronaut, the events that led to his interest, and his career path. Other interesting information that this one-on-one interview discusses is the logistics and outfitting mission, why it is important to send equipment to the International Space Station (ISS) before the astronauts, the Integrated Cargo Carrier. Rominger mentions Discovery’s anticipated docking with the ISS, 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 (Spacexcrew Supplies); Stowage (Onboard Equipment); Onboard Equipment; Portable Equipment; Materials Handling**

**2000011435** NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-93 Columbia, Chandra moved to Payload Canister in the VAB (Vehicle Assembly Building) to the Launching Pad is shown.

CASI

**Discovery (Orbiter); Shuttle Imaging Radar; Radar Imagery; Radar Maps; Topography; Relief Maps; Earth Surface**

**2000011414** NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS-93 Columbia, Chandra moved to Payload Canister in the VAB**

CASI

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

**20000111233** NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS-103 Rollover to VAB From OPF; Discovery Hubble Mission**

Nov. 04, 1999; In English; Videotape: 7 min. playing time, in color, with sound

Report No.(s): NONP-NASA–VT–2000008218; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage of the Discovery Orbiter transported from the OPF (Orbiter Processing Facility) to the VAB (Vehicle Assembly Building) is shown.

CASI

**Discovery (Orbiter); Ground Handling; Transportation**

**20000111232** NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS-103 Rollover to VAB From OPF**

Nov. 13, 1999; In English; Videotape: 5 min. playing time, in color, with sound

Report No.(s): NONP-NASA–VT–2000008219; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

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

CASI

**Discovery (Orbiter); Ground Handling; Transportation**

**2000011413** NASA Johnson Space Center, Houston, TX USA

**STS-99 Crew Interviews: Janice E. Voss**

Aug. 04, 1999; In English; Videotape: 29 min. 44 sec. playing time, in color, with sound

Report No.(s): NONP-NASA–VT–1999208100; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

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 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 deployment and retraction of the mass, the involvement of the International partners in processing the data (C-band and X-band), and Voss’ responsibility during this 24 hour mission are also discussed.

CASI

**Shuttle Imaging Radar; Radar Imagery; Radar Maps; Topography; Relief Maps; Earth Surface**

**2000011414** NASA Johnson Space Center, Houston, TX USA

**STS-99 Crew Interviews: Gerhard P.J. Thiele**

Aug. 04, 1999; In English; Videotape: 31 min. 3 sec. playing time, in color, with sound

Report No.(s): NONP-NASA–VT–1999208097; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Mission Specialist Gerhard P.J. Thiele is seen. The interview addresses many different questions including why Thiele became an astronaut, the events that led to his interest, and his career path. Other interesting information that this one-on-one interview discusses is the purpose for the Shuttle Radar Topography Mission (SRTM). The main interest is on the importance of this SRTM flight, the knowledge we will learn from the 3D topographic map of the Earth, and the possible similarity to the Tethered Satellite System Flight. The two antennas that will be taking the pictures, the involvement of the International partners, mass deployment and retraction, gravity gradient force, flight cast maneuvers, EARTHcam, a student-controlled camera on the Endeavour Orbiter, and Thiele’s responsibility during this 24 hour mission are also discussed.

CASI

**Shuttle Imaging Radar; Radar Imagery; Radar Maps; Topography; Relief Maps; Earth Surface**
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 docking with the ISS, her scheduled space walk with Daniel T. Barry, plans for the supply and equipment transfers, and a fly-around maneuver to take pictures of the ISS.

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

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; Zarya Control Module; Spacecraft Docking; Space Logistics; Stowage (Onboard Equipment); Transferring; Materials Handling

This NASA KSC video release presents a press conference that discusses the commercial development and NASA science Mid-deck payloads of Discovery STS-26. Larry DeLucas (Univ. Alabama-Birmingham, Center for Macromolecular Crystallography), Chris Podeszwa (3-M Co., Marshall Space Flight Center’s (MSFC) Rep. for Material Processing) and Ed Valentine (MSFC) present discussions of the science and commercial development that surround the Physical Vapor Transport of Organic Solids-2 (PVOTS-2) payload. Their presentations are followed by a question and answer period for journalists from scientific journals.

CASI
Space Shuttle Payloads: Proteins; Crystal Growth

Live footage of a preflight interview with Mission Specialist Daniel T. Barry is seen. The interview addresses many different questions including why Barry became an astronaut, the events that led to his interest, and his career path as a pilot. Other interesting information that this one-on-one interview discusses is the logistics and outfitting 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, the space walk with Mission Specialists Tamara E. Jernigan and Daniel T. Barry, plans for the supply and equipment transfers, and an experiment designed to evaluate the system that will transfer oxygen, nitrogen and water between the ISS and the spacecraft. A fly-around mission, and the deployment of the Student Tracked Atmospheric Research Satellite for Heuristic International Networking Equipment (STARSHINE) are also discussed.

CASI
International Space Station; Spacecraft Docking; Space Rendezvous; Space Logistics: Stowage (Onboard Equipment); Transferring; Materials Handling
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. Jemigam, 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 Tracking Atmospheric Research Satellite for Heuristic International Networking Equipment (STARSHINE) are also discussed.

**CASI**

*International Space Station: Spacecraft Docking; Space Logistics; Stowage (Onboard Equipment); Transferring; Materials Handling*

### 2000012101
NASA Johnson Space Center, Houston, TX USA

**STS-96 Crew Interview: Julie Payette**

Mar. 18, 1999; In English; Videotape: 28 min. 30 sec. playing time, in color, with sound

Report No.(s): NONP-NASA–VT–1999213301; No Copyright; Avail: CASI; B02, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with (French Canadian) Mission Specialist Julie Payette is seen. The interview addresses many different questions including why Payette wanted to be an astronaut, the events that led to her interest, and her career path. Other interesting information that this one-on-one interview discusses is this logistics and supply mission, why it is important to send equipment to the International Space Station (ISS) before the astronauts, and the Integrated Cargo Carrier. Payette mentions Discovery's anticipated docking with the ISS, the space walk with Mission Specialists Tamura E. Jemigan, and Daniel T. Barry and her responsibility as IV (intra-vehicular) crew member. She also mentions plans for the supply and equipment transfers, the change out of battery chargers, her involvement in the installation of mufflers, the Canadian Space Vision Systems, and the future automatic docking of the Service Module to the Zarya Module of the ISS. A fly-around mission, and the deployment of the Student Tracking Atmospheric Research Satellite for Heuristic International Networking Equipment (STARSHINE) are also discussed.

**CASI**

*International Space Station: Service Module (ISS): Zarya Control Module; Spacecraft Docking; Space Logistics; Stowage (Onboard Equipment); Transferring; Materials Handling*

### 2000012102
NASA Johnson Space Center, Houston, TX USA

**STS-96 Crew Interview: Valery Tokarev**

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; B02, Videotape-Beta; V02, Videotape-VHS

Live footage of a preflight interview with the Russian Cosmonaut Valery Ivanovich Tokarev is presented. The interview addresses many different questions including why Tokarev wanted to be a cosmonaut, and the events that led to his interest. Other interesting information that this one-on-one interview discusses is this logistics and supply mission, and why it is important to send equipment to the International Space Station (ISS) before the astronauts. Tokarev compares both the Russian and USA space programs, and space shuttles. He mentions the logistics and supply mission, plans for the supply, his involvement with the installation of mufflers, and the docking of Discovery. The future automatic docking of the Service Module to the Zarya Module of the ISS, and the role that the ISS will play in future space flight and exploration are also discussed.

**CASI**

*International Space Station: Service Module (ISS): Zarya Control Module: Unity Connecting Module; Spacecraft Docking; Space Logistics; Stowage (Onboard Equipment); Transferring; Materials Handling*

### 2000012124
NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS-96: Crew Arrival at the KSC Shuttle Landing Facility**

Apr. 26, 1999; In English; Videotape: 8 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000010552; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The crew (Commander Kent V. Rominger, Pilot Richard D. Husband, and Mission Specialists Ellen Ochoa, Tamara E. Jemigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev) arrive via fighter jets and assemble. A brief speech about the crew's duties during their mission is given by Commander Rominger.

**CASI**

*Spacecrafts: Space Transportation System: Space Missions*

### 2000012125
NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS–88: Flight Crew During Breakfast, Suiting, and Departure from the Operations and Checkout Building**

Dec. 3, 1998; In English; Videotape: 4 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000010554; 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 suiting room. After suit up, the astronauts board the bus in preparation for departure.

**CASI**

*Spacecrafts: Space Shuttle Missions: Space Transportation System Flights*

### 2000012142
NASA Kennedy Space Center, Cocoa Beach, FL USA

**ST s–26 Preflight Press Briefing: Shuttle System 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 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 hazardous 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*

### 2000012142
NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS–26 Preflight 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 the crew escape system followed by Steven Nagel's (Astronaut) presentation on crew equipment. Robert Rice (Crew Escape System Manager) describes the flight test program and the innovative pyrotechnics system test program. Tim Pelischek (Pole Design Team) gives an assessment of the critical design review and Ricardo Machin reviews aerodynamic flight tests performed at Texas A&M and California. The second part of the video includes Robert Crippen's (Deputy Dir. of Operations, Kennedy Space Center) overview of NASA Management, the organizational changes and actions taken to meet the Rogers' Commission recommendations.

**Author**

*Safety Devices: Spacecrafts: Space Transportation System Flights: Launch Escape Systems*

### 2000012143
NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS–26 Preflight Press Briefing: Shuttle Systems Changes (2), Part 3 of 9**

Aug. 22, 1998; In English; Videotape: 49 min., 15 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1999207913; 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 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

20000012424 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-26 Preflight Press Briefing: Flight Crew and TDRS, Part 7 of 9
Aug. 22, 1988; In English; Videotape: 47 min., 48 sec., playing time, in color,
with sound
Report No.(s): NONP--NASA--VT-1999207991; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

This NASA KSC video release presents part of a press conference held
prior to Discovery flight STS-26, the first shuttle mission flown following the
51-L Challenger accident. The first portion of the video presents the 5 member
flight crew, (Frederick H. Hauck, Commander, Richard O. Covey, Pilot, John M.
Lounge, Mission Specialist, George D. Nelson, Mission Specialist, and David C.
Hilmer, 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 portion of the video includes viewpoint presentations given by
Dr. Dale W. Harris (TDRS Project Manager, Goddard Space Flight Center(GSFC)) and Gary A. Morse (Network Director, GSFC) that discuss the
primary payload, the NASA Tracking and Data Relay Satellite-3 (TDRS-3) that is
attached to an Inertial Upper Stage (IUS), and is the second TDRS deployed.

Author
Space Transportation System Flights: TDR Satellites: Discovery (Orbiter):
Spacecrews

20000012426 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-91: Flight Crew Meets with Family and Friends at Launch Complex
39A
Jun. 01, 1998; In English; Videotape: 3 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT-2000010562; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The crew (Commander Charles J. Precourt, Pilot Dominic L. Padwell
Gorie, Mission Specialists Wendy B. Lawrence, Franklin R. Chang-Diaz, Janet
L. Kavradi and Valery Victorovich Ryumin) take time from their busy schedule to
discuss training activities. These include astronaut training, familiarization
with the space shuttle Columbia, and opportunities to talk with friends and family, at a distance. They also pose for group and single
pictures.

CASI
Spacecrews; Space Transportation System Flights: Space Shuttle Missions;
Conversation

20000012855 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-93 Columbia, Fit Check and Pre Pak in the O&C for Candra
Jun. 22, 1999; In English; Videotape: 10 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT-2000068276; 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 Observa-
tory in honor of the late Indian-American Nobel Laureate Subrahmanyan
Chandrasekhar. The mission was launched at 12:31 on July 23, 1999 on orbit
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
video tape shows the astronauts getting into spacesuits, and inspecting the equip-
ment.

CASI
Astronauts: Space Suits: Spacecrews

20000012859 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-2000000038; No Copyright; Avail: 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.
Martin Curington, 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 thrust, 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 avial clouds and thunderstorms,
and questions and answers session is presented. Immediately following this confer-
ence is the NOAA/GOES-J News Briefing. Live coverage of the presentation
with analysts Gary Davis, Director, Satellite Operations; Dr. James Pardom,
Chief Regional and Mesoscale Meteorology; Frederick Oxbury, 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. As the final speaker, Fred discusses GOES-8, Geostationary
Satellites, the Automatic Surface Observation System (ASOS), and the Doppler
Rain Radar Network. This Abstract describes the content of tape 1 of 2, tape 2 has a
Report number of NONP-NASA-VT-1999206992.

CASI
Atlas Centaur Launch Vehicle: GOES 9; GOES 8; GOES 7: Synchronous
Platforms; Geosynchronous Orbits; Conferences

20000012868 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; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Live footage of a preflight interview with Pilot Jeffrey S. Ashby
is presented. The interview addresses many different questions including why
Ashby wanted to be an astronaut, how he feels about being the rookie on this
launch, and what he expects to feel when he lifts off. Other interesting 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-
torys presently in orbit (Gamma Ray Observatory; Hubble Space Telescope)
are also discussed.

CASI
Deployment: X Ray Astrophysics Facility: Spaceborne Astronomy: X Ray
Astronomy: Gamma Ray Observatory: Hubble Space Telescope

20000012869 NASA Johnson Space Center, Houston, TX USA
STS-93 Crew Training
Jun. 28, 1999; In English; Videotape: 38 min. 6 sec. playing time, in color,
with sound
Report No.(s): NONP--NASA--VT-1999208162; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Live footage of the STS-93 crewmembers shows Commander Eileen M.
Collins, Pilot Jeffrey S. Ashby, Mission Specialists Steven A. Hawley, Catherine
G. Coleman, and Michel Tognini going through various training activities. These
activities include Bail Out Training NBL, Emergency Egress Training, Earth
Astronaut Training; Training Simulators; Training Devices; Flight Simulators; Ejection Training; Bailout; T-38 Aircraft

2000012870 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 failure scenarios associated with AXAF deployment. The STS-93 mission objective was to deploy the Advanced X-ray Astrophysics Facility (AXAF), later renamed the Chandra X-Ray Observatory in honor of the late Indian-American Nobel Laureate Subramanyan Chandrasekhar.
CASI
Space Shuttle Missions; Space Transportation System Flights; X Ray Astrophysics Facility; Deployment

2000012871 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–26 Prewflight Press Briefing; 5 Man Crew, Part 6 of 9
Aug. 22, 1988; In English; Videotape: 1 hr., 2 min., 29 sec., playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999207912; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
This NASA KSC video release presents part of a press conference held prior to Discovery flight STS-26, the first shuttle mission flown following the 51-L Challenger accident. The video opens with a statement from Commander Frederick H. Hauck, and the introductions of crew members, Richard O. Covey, Pilot, and mission specialists, John M. Lounge, George D. Nelson, and David C. Hilmer. 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; Astronaut Training; Ejection Training; Bailout; Training Simulators

2000012872 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–11/41–B Post Prewflight 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 unthethered. This video is followed by a slide presentation made-up of images taken from approximately 2000 still photographs taken during the mission. All of the slides are described by members of the space crew and include images of the Earth seen from Challenger. A question and answer period rounds out the video, which include problems encountered with the deployment of the satellites as well as the possibilities of sending civilians into space.
CASI
Space Transportation System Flights; Space Shuttle Mission 41-B; Spacecrafts

2000012947 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; Spacecrafts; Space Transportation System Flights

2000012948 NASA Kennedy 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 Gorie, Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri, and Gerhard P.J. Thiele going through various training exercises. These exercises include Post Landing Egress, 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
Spacecrafts; Astronaut Training; Ejection Training; Bailout; Training Simulators

2000012949 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–2000001026; 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: Spacecrafts; Solar Reflectors

2000013156 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 Subramanyan 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 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
Spacecrafts; Crew Procedures (Prelight); Astronauts; Prelight Operations
The STS-88 crew (Commander Robert D. Cabana, Pilot Frederick W. Astbury; 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不舒服 and walking out to the Astro-Van from the Operations and Checkout (O&C) Building.

CASI

STS-88: Discovery Flight Crew at SPACEHAB

July 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); Choshi 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
Microgravity CASI experiments in the payload ISMP-4). After shots of the STS-87 liftoff, the tape has not on the tape. The sixth segment shows views of the birth USA Microgravity Carolyn Griner, the Deputy Director of Marshall Space Flight Center, but this is scope to NASA. The fifth part was recorded on the tape as an interview of Technology Group, Donna Winter announcing the delivery of the Chandra Telescope Executive Vice President & General Manager, Systems & Information Chandra telescope from the shuttle payload bay and views of the elliptical orbit EROS. The second presents close-up shots of the Chandra telescope in the clean close-up shot from Near-Earth Asteroid Rendezvous (NEAR) of the asteroid Report No.(s): NONP NASA VT-200000558; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS Live footage shows the placing of the Fuse Lift onto the Adapter Ring. CASI Payloads; Adapters; Fixtures

20000013404 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–20000013404; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS Live footage of the STS-93 crew members shows Commander Eileen M. Collins, Pilot Jeffrey S. Ashby, Mission Specialists Steven A. Hawley, Catherine G. Coleman, and Michel Tognini observing and speaking with the engineers about some installations. Footage also shows the crew boarding the T-38 jet and departing from the Shuttle Landing Facility (SLF). CASI Landing Sites; Spacescapes; T-38 Aircraft

20000013407 NASA Kennedy Space Center, Cocoa Beach, FL USA STS-96: Expedition Crew #2 and 4 Work in Node #1 at the SSPF May 03, 1998; In English; Videotape: 3 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–20000013407; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS Live footage of the crew members of STS-96, Commander Kent V. Rominger, Pilot Rick D. Husband, Mission Specialists Ellen Ochoa, Tamara E. Jemison, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev, shows them in the node of the vehicle at the Space Station Processing Facility (SSPF). Scenes include the engineer explaining and the crew asking questions as to what certain labels mean. Footage also includes the crew observing the nose of the vehicle. CASI Flight Crews; Crew Procedures (Preflight); Astronaut Training

20000013491 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–20000013491; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS This videotape consists of six different segments. The first segment is a close-up shot from Near-Earth Asteroid Rendezvous (NEAR) of the asteroid EROS. The second presents close-up shots of the Chandra telescope in the clean room. The third segment is an animated film showing the deployment of the Chandra telescope from the shuttle payload bay, and views of the elliptical orbit patterns that the telescope is planned to take. The fourth segment shows TRW Executive Vice President & General Manager, Systems & Information Technology Group, Donald Winter announcing the delivery of the Chandra Telescope to NASA. The fifth part was recorded on the tape as an interview of Carolyn Griner, the Deputy Director of Marshall Space Flight Center, but this is not on the tape. The sixth segment shows views of the fourth USA Microgravity Payload (USMP-4) experiments. After shots of the STS-87 liftoff, the tape has views of the Isothermal Dendrite Growth Experiment (IDGE), views of the payload bay, and some further views of the astronauts working on one of the experiments in the payload. CASI Asteroid Missions; Space Shuttle Payloads; X Ray Astrophysics Facility; Microgravity

20000013499 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–20000013499; 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 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 Spacescapes: Clean Rooms; Crew Procedures (Preflight); Preflight Operations; Inspection

20000013501 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–20000013501; 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 Chinku Muraki 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; Spacescapes; Inspection

20000013502 NASA Kennedy Space Center, Cocoa Beach, FL USA NASA Administrator Dan Goldin Speaks to the Press at the Shuttle Landing Facility After the Landing of STS-95 Nov. 07, 1998; In English; Videotape: 5 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–20000013502; 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

20000013706 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–20000013706; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS Live footage shows the crew members of the STS-96 mission, Commander Kent V. Rominger, Pilot Rick D. Husband, Mission Specialists Julie Payette, Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, and Valery Ivanovich Tokarev, checking out equipment inside the SPACEHAB module. The crew members are also seen participating in a review as a part of the familiarization activities for their mission. CASI Spacescapes; Astronaut Training; Spacecraft Modules

20000013707 NASA Kennedy Space Center, Cocoa Beach, FL USA STS-96: SPACEHAB Double MOD/ICC Going into the Payload Bay Apr. 28, 1999; In English; Videotape: 3 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–20000013707; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
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

20000013275 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-95: Discovery Flight Crew Arrives at the Shuttle Landing Facility for TCDT
Oct. 06, 1998; In English; Videotape: 4 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000008266; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the night landing of the STS-96 crewmembers, Commander Curtis L. Brown, Pilot Steven W. Lindsey, Mission Specialists Scott E. Parazynski, Stephen K. Robinson and Pedro Duque, and Payload Specialists Chiaki Mukai (NASA) and John H. Glenn. Footage also includes Mission Commander Curtis L. Brown greeting the media at the Shuttle Landing Facility after the crew’s arrival aboard T-38 jets.

CASI

Night; Aircraft Landing; T-38; Aircraft; Flight Training

200000139338 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-93: Crew Arrival and PR Location
Feb. 08, 1999; In English; Videotape: 4 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000010555; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-93 mission was to deploy the Advanced X-ray Astrophysical Facility, which had been renamed the Chandra X-ray Observatory in honor of the late Indian-American Nobel Laureate Subrahmanyan Chandrasekhar. The mission was launched at 12:31 on July 23, 1999 onboard the space shuttle Columbia. The mission was led by Commander Eileen Collins. The crew was Pilot Jeff Ashby and Mission Specialists Cathy 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)

20000014070 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-93: Columbia / Chandra Mission Overview (from JSC)
Jul. 07, 1999; In English; Videotape: 1 hr. 34 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000008133; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

A press briefing held on July 7, 1999 reviews the progress of the Chandra X-ray Observatory project. The tape begins with an animated view of the launch of the Chandra X-ray Observatory from the shuttle, as it was planned. Next is a press briefing. Bryan Austin, the Lead Flight Director, discusses the five day mission, and the reason for the shortened length, due to the added weight from the Chandra Observatory. He also reviews the other payloads, and activities that will take place during the mission. Kenneth Ledbetter, Science Director Mission Development, discusses the four 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 Wojslik, who is the Chandra Program Manager. He reviews the Chandra’s components, and acknowledges a few of the many companies that contributed to its building. He also reviews the orbital activation and checkout sequences. Question that follows, center around contingency plans if some part of the planned sequence is not successful. The costs are reviewed, and concerns about the Initial Upper Stage, the propulsion unit required to take the Chandra to its high orbit are addressed. The Chandra is planned to take an elliptical orbit, which is higher than the other space telescopes, thus far launched due to the requirement to avoid Earth generated X rays.

CASI

Launch; Mission Planning; Spaceborne Telescope; X Ray Astrophysics Facility; Payload Integration; Pre-launch Summaries; Space Shuttle Payloads; X Ray Astronomy; Orbital Maneuvers; Orbit Insertion; Satellite Orbits; Orbital Mechanics; Payload Delivery (STS)

20000014123 StellarCom, Inc., Rosslyn, VA USA
STS--96: SPACEHAB Double MOD into PGHM at Launch Complex 39B
Apr. 27, 1999; In English; Videotape: 3 min., 10 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000010636; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This NASA Kennedy Space Center (KSC) video release presents the SPACEHAB double module moving into the Payload Ground Handling Mechanism (PGHM) which is located in the Payload Change-out Room of Launch Complex 39B at the Kennedy Space Center; PGHM is used to remove or insert the shuttle payload from the Orbiter.

CASI

Space Shuttle Payloads; Ground Handling; Payload Integration

20000014210 NASA Kennedy Space Center, Cocoa Beach, FL USA
Dateline Moon: 30 Years Later
Jul. 20, 1999; In English; Videotape: 44 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000008130; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

This NASA Kennedy Space Center video release presents a 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 spaceflight in general, anxieties or fears of the astronauts prior to the mission, and the overall effect that Apollo 11 had on the world.

CASI

Apollo 11 Flight; Lunar Landing; Lunar Flight; Astronauts

20000014222 NASA Kennedy Space Center, Cocoa Beach, FL USA
President Clinton’s Arrival at CCAS and Visit to KSC for Launch of STS-95
Oct. 29, 1998; In English; Videotape: 6 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000010634; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows President Bill Clinton and First Lady Hillary Rodham Clinton arriving in Air Force 1 on the Skid Strip, viewing the launch, and tracking the plume of Space Shuttle Discovery, on mission STS-95. The viewing takes place on the roof of the Launch Control Center (LCC). Also present on the roof to watch this event are Astronaut Robert Cabana and Eileen Collins (both in flight suit), and the NASA Administrator Daniel Goldin. The President is shown giving a speech to the Launch Team and shaking hands with employees in the LCC.

CASI

Viewing; Spacecraft Launching

20000014223 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS--96 Press Briefing and MODE-1 Egress Training for TCDT
Apr. 28, 1999; In English; Videotape: 8 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000010625; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the members of the STS-96 crew. Commander Kent V. Rominger, Pilot Rick D. Husband, and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, 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 Gino Tucker behind him. The TCDT activities include simulated countdown exercises and inspection of the mission payloads in the orbiter’s payload bay.

CASI
Astronaut Training: Egress; Conferences

2000014362 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 Vick 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–2000068135; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This NASA Kennedy Space Center (KSC) video release presents footage of the November 14, 1969 Apollo-12 space mission begun from launch complex pad 39-A at Kennedy Space Center, Florida. Charles Conrad, Jr., Richard F. Gordon, Jr., and Alan L. Bean make up the three-man spacecrew. The video includes the astronaut’s pre-launch breakfast, President Nixon, his wife, and daughter arriving at Cape Kennedy in time to see the launch, as well as countdown and liftoff. After the launch, President Nixon gives a brief congratulatory speech to the members of launch control at KSC. The video also presents views of the astronauts and spacecraft in space as well as splashdown of the command module on November 24, 1969. The video ends with the recovery, by helicopter and additional personnel, of the spacecrew from the command module floating in the waters of the Atlantic.

CASI
Apollo 12 Flight; Lunar Flight

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 Ellen 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 arrival at Kennedy Space Center a week before the launch. Each of the astronauts gives brief remarks, beginning with Ellen Collins, the first woman to command a space mission.

CASI
Astronauts; Spacecrafts; Crew Procedures (Preflight)

2000015363 NASA Johnson Space Center, Houston, TX USA
STS 163: Post Flight Crew Presentation
Feb. 09, 2006; In English; Videotape: 15 min., 24 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–2000015184; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The crew (Commander Curtis L. Brown, Pilot Scott J. Kelly, Mission Specialists Steven L. Smith, C. Michael Foale, John M. Grunsfeld, Claude Nicollier, and Jean-Francois Clervoy) narrate a video presentation of the STS-163 mission highlights. The mission’s primary objective is servicing the Hubble Space Telescope.

CASI
Space Transportation System Flights: Space Missions: Spacecrafts

2000015365 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-37 Post-flight Crew Press Conference, Part 2
Apr. 19, 1991; In English; Videotape: 14 min., 10 sec., playing time, in color, with sound
Report No.(s): NONP-NASA-VT–2000013420; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This NASA Kennedy Space Center video release presents a continuation of the April 19, 1991 STS-37 post-flight crew press conference from Johnson Space Center (JSC). Part 2 of the conference continues the question and answer period of Part 1 with Steven R. Nagel, Commander, Kenneth D. Cameron, Pilot, Jerry L. Ross, Mission Specialist 1, Jay Apt, Mission Specialist 2, and Linda M. Godwin, Mission Specialist 3 fielding questions posed by scientific journalists from JSC and other NASA centers. Topics discussed include: the necessary Extravehicular Activity (EVA) to free the Gamma Ray Observatory high gain antenna, communication between Atlantis and space station MIR, HAM radio contacts with Earth, and EVA contingency planning. Part 1 of the press conference can be found in Report Number NONP-NASA-VT-2000013419.

CASI
Space Transportation System Flights: Space Shuttle Missions: Astronauts; Spacecrafts

2000015366 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-37 Post-flight Crew Press Conference, Part 1
Apr. 19, 1991; In English; Videotape: 1 hr., 2 min., 11 sec., playing time, in color, with sound
Report No.(s): NONP-NASA-VT–2000013419; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This NASA Kennedy Space Center video release presents the April 19, 1991 STS-37 post-flight crew press conference from Johnson Space Center (JSC). The video begins with Steven R. Nagel, Commander applauding the efforts of everyone involved in the very smooth shuttle mission and introducing the rest of the crew seated to his right: Kenneth D. Cameron (1), Pilot, Jerry L. Ross, Mission Specialist 1, Jay Apt, Mission Specialist 2, and Linda M. Godwin, Mission Specialist 3. A video presenting mission highlights and on-board activities including liftoff footage, and the deployment of the primary payload, Gamma Ray Observatory (GRO), is shown. The GRO high-gain antenna failed to deploy on command and had to be manually freed and deployed by astronauts Ross and Apt during an unscheduled contingency space walk, the first since April 1985. After the mission summary video is shown, a slide show that includes pictures of Earth from Atlantis, and views of the GRO is presented and is followed by a question and answer period with questions posed by scientific journalists from JSC and other NASA centers. Part 2 of the press conference can be found in Report Number NONP-NASA-VT-2000013420.

CASI
Space Transportation System Flights: Space Shuttle Missions: Astronauts

2000017963 NASA Johnson Space Center, Houston, TX USA
STS–99 Flight Day Highlights and Crew Activities Report
Feb. 12, 2000; In English; Videotape: 16 min. 52 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–2000015187; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows the Blue Team (second of the dual shift crew), Dominic L. Padwill Gerie, Janice E. Voss and Mamoru Mohri, beginning the first mapping swath covering a 140-mile-wide path. While Mohri conducts mapping opera-
Astronauts are playing Simulators... Flight Simulation: Flight Procedures... to have prior to launch, particularly on board 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 pad, 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 shuttle separation from the solid rocket boosters. The launch is reshot from 17 different camera views. Some of the other camera views were in black and white.

**Space Transportation System; Spacecraft Launching; Launch Vehicles; Launchers**

STS-37 Rollout to Pad B
Mar. 15, 1991; In English; Videotape: 50 min. playing time, in color, no sound
Report No.(s): NONP-NASA—VT-2000013430; No Copyright; Avid: 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 pad, 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 shuttle separation from the solid rocket boosters. The launch is reshot from 17 different camera views. Some of the other camera views were in black and white.

**Space Transportation System; Spacecraft Launching; Launch Vehicles; Launchers**

STS-37 Rollout to Pad B
Mar. 15, 1991; In English; Videotape: 50 min. playing time, in color, no sound
Report No.(s): NONP-NASA—VT-2000013430; No Copyright; Avid: 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 R. Nagel. The crew was Pilot Kenneth D. Cameron and Mission Specialists Jerry
Astronaut training; simulation; tight simulation. The video ends with a summary of the key points of STS-37 and a question and answer period with questions posed from Johnson as well as other simulations. Certain day activities including the Gamma Ray Observatory (GRO), Extravehicular Activities (EVA), Development Flight Experiment (DFE), secondary payloads, Development Test Objectives (DTO’s), Detailed Supplementary Objectives (DSO’s), and flight day activities. Certain flight day activities including the Gamma Ray Observatory deployment and EVA movements and translations are presented as computerized simulations. The video ends with a summary of the key points of STS-37 and a question and answer period with questions posed from Johnson as well as other centers. Questions include topics involving EVA safety, emergency EVA’s, and what determines the day of primary payload deployment.

**Space Transportation System Flights: Gamma Ray Observatory; Extravehicular Activity**

STS-96 TCDT Crew Arrival

Apr. 28, 1999; In English; Videotape: 9 min. 15 sec. playing time, in color, with sound

Report No.(s): NONP. NASA–VT–2000010632; No Copyright; Aval: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the crewmembers of STS-96, Commander Kent V. Rominger, Pilot Rick D. Husband, Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette and Valery Ivanovich Tokarev, arriving at the Shuttle Landing Facility in T-38 aircraft for Terminal Countdown Demonstration Test (TCDT) activities. Rominger speaks briefly to introduce the other crewmembers and their designated responsibilities.

**Crew Procedures (Preflight); Astronaut Training; T-38 Aircraft; Arrivals; Landing**

STS-99 Crew Training, Mission Animation, Crew Interviews, STARSHINE, Discovery Rollout and Repair of Hail Damage

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

Report No.(s): NONP–NASA–VT–2000008128; No Copyright; Aval: 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 sanding, 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**

STS-37 Mission Overview: Lead Flight Director Briefing

Feb. 25, 1991; In English; Videotape: 1 hr. 2 min. 34 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000013428; No Copyright; Aval: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This NASA Kennedy Space Center (KSC) video release presents a Johnson Space Center (JSC) press conference featuring Chuck Shaw, Lead Flight Director discussing the STS-37 Atlantis shuttle mission. Topics presented include overall mission objectives, flight crew, flight directors, primary payload (Gamma Ray Observatory (GRO)), Extravehicular Activities (EVA) Development Flight Experiment (EDFE), secondary payloads, Development Test Objectives (DTO’s), Detailed Supplementary Objectives (DSO’s), and flight day activities. Certain flight day activities including the Gamma Ray Observatory deployment and EVA movements and translations are presented as computerized simulations. The video ends with a summary of the key points of STS-37 and a question and answer period with questions posed from Johnson as well as other flight directors.

**Endeavour (Orbiter); Rigid Structures; Shuttle Imaging Radar; Earth Observations (From Space); Topography; Folding Structures**

STS–99 Crew Activities Report / Flight Day 06 Highlights

Feb. 26, 2000; In English; Videotape: 19 min. 6 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000022261; No Copyright; Aval: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth’s surface using the Shuttle Radar Topography Mission (STRM), a specially modified radar system. This radar system produced unrivaled 5-D images of the Earth’s Surface. The mission was launched at 12:51 on February 11, 2000 onboard the space shuttle Endeavour. The mission was led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri, the National Space Development Agency (Japanese Space Agency) and Gerhard P. J. Thiele, from DARA (German Space Agency). The astronauts finished the mapping operations early on day 11, and then retracted the 200 foot long mast into its payload bay canister. The mast, the longest rigid structure ever deployed in space, supported the external antennas during the mapping operation. The videotape shows the mast folding into the canister. The final stowage was delayed when the three latches on the lid of the canister failed to engage as expected. After a few procedures were executed the mast canister was sealed, on the third attempt, as shown on the videotape. The video also contains several views from the STRM. They include a computerized animation of a flight from Pasadena to Palmdale, a still view of Fiji, a view of the San Francisco Bay Area, and another of Pasadena.

**Endeavour (Orbiter); Rigid Structures; Shuttle Imaging Radar; Earth Observations (From Space); Topography; Folding Structures**

STS–99 Crew Activities Report / Flight Day 08 Highlights

Feb. 16, 2000; In English; Videotape: 22 mm. 44 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000022120; No Copyright; Aval: CASI; B02, Videotape-Beta; V02, Videotape-VHS

**Crew Procedures (Preflight); Astronaut Training; T-38 Aircraft; Arrivals; Landing**

STS–99 Crew Activities Report / Flight Day 06 Highlights

Feb. 26, 2000; In English; Videotape: 19 min. 6 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000022261; No Copyright; Aval: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth’s surface using the Shuttle Radar Topography Mission (STRM), a specially modified radar system. This radar system produced unrivaled 5-D images of the Earth’s Surface. The mission was launched at 12:51 on February 11, 2000 onboard the space shuttle Endeavour. The mission was led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri, the National Space Development Agency (Japanese Space Agency) and Gerhard P. J. Thiele, from DARA (German Space Agency). The astronauts finished the mapping operations early on day 11, and then retracted the 200 foot long mast into its payload bay canister. The mast, the longest rigid structure ever deployed in space, supported the external antennas during the mapping operation. The videotape shows the mast folding into the canister. The final stowage was delayed when the three latches on the lid of the canister failed to engage as expected. After a few procedures were executed the mast canister was sealed, on the third attempt, as shown on the videotape. The video also contains several views from the STRM. They include a computerized animation of a flight from Pasadena to Palmdale, a still view of Fiji, a view of the San Francisco Bay Area, and another of Pasadena.

**Endeavour (Orbiter); Rigid Structures; Shuttle Imaging Radar; Earth Observations (From Space); Topography; Folding Structures**

STS–99 Crew Activities Report / Flight Day 08 Highlights

Feb. 16, 2000; In English; Videotape: 22 mm. 44 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000022120; No Copyright; Aval: CASI; B02, Videotape-Beta; V02, Videotape-VHS

**Crew Procedures (Preflight); Astronaut Training; T-38 Aircraft; Arrivals; Landing**
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 unraveled 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. Pudwill 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 day's activities included the building of the Node 1 station element of the Destiny module; an interview about fire attempts to conserve propellant, to allow for the completion of the planned mapping. There is discussion by Mamoru Mohri about the mission, and Gerhard Thiele answers questions from the German Press about the mission. New radar images from the SRTM of the Kamchatka Peninsula and northwestern Mongolia are shown. There are shots of Endeavour's 200-foot mast, which required troubleshooting due to a bulky small thruster.

CASI

Endeavour (Orbiter); Radar Imagery; Shuttle Imaging Radar; Topography; Earth Observations (From Space); Spacecraft News

2000021242 NASA Johnson Space Center, Houston, TX USA
STS-99 Crew Activities Report / Flight Day 07 Highlights
Feb. 17, 2000; In English; Videotape: 23 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–2000022121; No Copyright; Avail: CASI; B02, Videotape-Beta: V02, Videotape-VHS
Live footage shows the Blue Team of STS-99, Pilot Dominic L. Pudwill Gorie, and Mission Specialists Mamoru Mohri and Janet E. Voss, participating in a discussion with the Launch Control Center (LCC). Gorie and Mohri are also seen speaking with the Prime Minister of Japan. The Blue Team also answers questions from students. Footage also includes various shots of the mass hanging from the shuttle; the star tracker, the X- and C-band panels on the shuttle, and the dumping of water from the shuttle. Still shots of the (Shuttle Radar Topography Mission) SRTM Coverage Map are also presented. Places shown include the San Andreas Fault, San Gabriel Mountains, Simi Valley, Los Angeles, New Zealand, New Mexico, and Hokkaido Japan.

CASI
Shuttle Imaging Radar; Radar Imagery; Relief Maps; Topography; Earth Surface; Space Transportation System; Space Transportation System Flights; Endeavour (Orbiter)

2000021274 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-88 Endeavour: TCDF–Press Q & A at KSCNF Auditorium
Nov. 05, 1998; In English; Videotape: 45 min. 12 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008136; No Copyright; Avail: CASI; B03, Videotape-Beta: V03, Videotape-VHS
Live footage of the (Terminal Countdown Demonstration Test) TCDF shows the crew of STS-88, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Curry, Jerry L. Ross, James H. Newman, and Sergei K. Krilavoi, participating in a press conference. The moderator Bruce Buckingham is seen introducing Bob Cabana, who then introduces the rest of the crewmembers. Cabana explains the mission and addresses the flight day activities. He includes the building of the Node 1 station element to the Functional Energy Block (FGB) which will already be in orbit, and two space-walks to connect power and data transmission cables. The crewmembers took turn answering questions from both the audience and via radio communication with the Johnson Space Center.

CASI
Astronaut Training; International Space Station; Unity Connecting Module; Zarya Control Module; Space Station Structures; Construction; Data Transmission

2000021358 NASA Johnson Space Center, Houston, TX USA
STS–99 Crew Activities Report / Flight Day 08 Highlights
Feb. 18, 2000; In English; Videotape: 24 min. 23 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000022260; No Copyright; Avail: CASI; B02, Videotape-Beta: V02, Videotape-VHS
Live footage shows the Red Team of STS-99, Commander Kevin R. Kregel and Mission Specialists Janet L. Kavandi and Gerhard P. J. Thiele, participating in interviews with the Launch Control Center (LCC). Kregel discusses the mapping system, and Thiele speaks about the antenna. The Red Team completes the flight cast maneuver for the day. Footage also shows the Red Team, Pilot Dominic L. Pudwill 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
Spacecraft Maneuvers; Radar Antennas; Radar Maps; Relief Maps; Topography; Earth Surface

2000021367 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–93/ Chandra Science Briefing
Jul. 19, 1999; In English; Videotape: 36 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008138; 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

2000023223 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–37/Atlantis/GRO
Apr. 11, 1991; In English; Videotape: 55 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000013422; No Copyright; Avail: CASI; B03, Videotape-Beta: V03, Videotape-VHS
The primary objective of the STS-37 mission was to deploy the Gamma Ray Observatory. The mission was launched at 9:22:44 am on April 5, 1991, onboard the space shuttle Atlantis. The mission was led by Commander Steven Nagel. The crew was Pilot Kenneth Cameron and Mission Specialists Jerry Ross, Jay Apt, and Linda Godwin. This 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 reshown 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 the 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; Spacecrafts; Launching; Extravehicular Activity; Horizontal Spacecraft Landing

2000024783 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–99 Atlantis, Shuttle Radar Topography Mission (SRTM) in the MPPF with Technicians working
Mar. 22, 1999; In English; Videotape: 1 min. playing time, in color, no sound except background noise
Report No.(s): NONP–NASA–VT–2000027987; No Copyright; Avail: CASI;
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 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)

2000025183 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99 Crew departs SLF after TCDT
Jan. 17, 2000; In English; Videotape: 7 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000027984; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth's Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour and led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). This tape shows the astronauts boarding jet planes at the Shuttle Landing Facility after the Terminal Countdown Demonstration Test.

CASI

Astronauts: Spacecrews: Jet Aircraft: Preflight Operations

2000025184 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99 Rollover from OPF-2 to YAB
Dec. 02, 1999; In English; Videotape: 4 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000027983; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth's Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour and led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). This tape shows the Endeavour Space Shuttle being rolled over from the Orbiter Processing Facility to the Vertical Assembly building.

CASI

Endeavour (Orbiter): Space Shuttles: Space Transportation System: Preflight Operations

2000025185 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99 Rollout to SRTM 39A
Dec. 14, 1999; In English; Videotape: 5 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000027980; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth's Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour and led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). This videotape shows the shuttle with the solid rocket boosters being rolled out to launch pad 39A.

CASI

Endeavour (Orbiter): Launching: Space Transportation System

2000025186 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99 SRTM Lift and Insert into Canister
Jul. 19, 1999; In English; Videotape: 4 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000027776; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth's Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour, and led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). This 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

Astronaut Mamoru Mohri Leaves Patrick Air Base After the Scrub of STS-99 Due to Mechanical Failure
Feb. 02, 2000; In English; Videotape: 5 min. playing time, in color, with sound
Report No.(s): NONP-NASA–V3-2000025902; 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 the lowering of the SRTM into the canister.

CASI

Endeavour (Orbiter); Shuttle Imaging Radar; Space Transportation System; Spacecrews

2000025326 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99 Prelaunch Press Briefing
Jan. 30, 2000; In English; Videotape: 12 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT-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 the activities of the tenth day of the mission. During this day the mapping of the Earth continued. Some of the astronauts gives a brief statement about the mission or some other point of interest. Some of the equipment and supplies on board the shuttle are shown, including the medical supplies. The videotape ends showing some of the images released during the day. These images include views of Oahu, Hawaii; Miquelon Island and St. Pierre Island, Newfoundland; Kamchatka, and Balkal, Russia; Oberpfaffenhofen, Germany; Katmandu, Nepal; and Cotopaxi, Ecuador.

CASI

Astronauts; Shuttle Imaging Radar; Space Transportation System; Spacecrews; Endeavour (Orbiter); Crew Procedures (Inflight)

2000025327 NASA Kennedy Space Center, Cocoa Beach, FL USA

Astronaut Mamoru Mohri Leaves Patrick Air Base After the Scrub of STS-99 Due to Mechanical Failure
Feb. 02, 2000; In English; Videotape: 5 min. playing time, in color, with sound
Report No.(s): NONP-NASA–V3-2000027902; 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 Mamoru Mohri boarding a plane at Patrick Air Base after the scrub of the mission due to mechanical problems. Prior to his departure, he answers a few questions from members of the Japanese press who had gathered for his departure.

CASI

Astronauts; Endeavour (Orbiter); Space Transportation System; Spacecrews
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 89 Highlights
Feb. 20, 2000; In English; Videotape: 28 min. 52 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000022263; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth's Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour, and led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). This tape shows the activities of the ninth day of the mission. The announcement of the decision to extend the SRTM for 9 hours is made to the crew. This means that almost all (i.e., 99.9%) of the target area of the Earth will be imaged, at least once. Some shots of the 200 foot long mast where the outboard antennas are located are shown. Mamoru Mohri is shown changing a data tape, while he explains the rationale for recording rather than transmitting the data. Gerhard Thiele speaks to the German press. At the end of this tape are images generated from the SRTM. There are views of Oahu, Molokai, Lani and west Maui, Hawaii, Dallas, Texas; Sahelah, 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--20000227995; 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 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. There are views of Oahu, Molokai, Lani and west Maui, Hawaii, Dallas, Texas; Sahelah, Oman; and Tasmania, Australia. Animations showing the topography around Hokkaido, Japan and Brazil are also shown.

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 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. There are views of Oahu, Molokai, Lani and west Maui, Hawaii, Dallas, Texas; Sahelah, Oman; and Tasmania, Australia. Animations showing the topography around Hokkaido, Japan and Brazil are also shown.

CASI

Space Transportation System; Spacecrews; Astronauts; Crew Procedures (Preflight)
conditions for the launch. Discussion after the statements concerned a possible problem with a cable, and the possibility of a further delay to the launch.

CASI

Countdown: Endeavour (Orbiter); Launching: Prelaunch Summaries; Prelaunch Problems; Prelaunch Tests

20000026827 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-99 Countdown Status Briefing
Feb. 09, 2000; In English; Videotape: 19 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000027993; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows the participants in the Press Conference disclosing the status of the STS-99 flight. The panelists consists of NASA's test Director Steve Altmus, the STS-99 Payload Manager Scott Higgenbotham, and the Shuttle Weather Officer Ed Priselac. They discuss the problems with the left hand inflight cable, the potential change of the GPS receiver, and favorable weather conditions. The panel members also answered questions from members of the audience. Also shown are various shots of the Shuttle on the launch pad.

CASI

Conferences: Countdown; Spacecraft Launching; Checkout; Spacecraft Maintenance; Ignition; Cables (Ropes); Global Positioning System; Receivers; Rain

20000025058 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-99 Countdown Status Briefing
Feb. 08, 2000; In English; Videotape: 27 min., 27 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000025575; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth's Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour. This tape presents a pre-launch briefing for the press held on Jan. 28, 2000. Statements were given by Doug Lyons, Shuttle Test Director; Scott Higgenbotham, STS-99 Payload Director and Ed 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

20000027258 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-99 Countdown Status Briefing
Feb. 23, 2000; In English; Videotape: 10 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 P.J. Thiele, participating in a press conference. The crew answer questions from U.S. and Japanese reporters at various NASA Centers, and Headquarters. Discussions include the nitrogen gas line problem, the deployment of the mass, and what would happen if the mass had to be jettisoned. Thiele, Kregel, Kavandi and Voss also answer questions from German Research Minister Edelgard Bulhmann. The NASA Administrator Daniel Goldin along with Bulhmann 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

20000027587 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-99 CEIT 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 and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri, and Gerhard P.J. Thiele, participating in Crew Equipment Interface Test (CEIT) 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 (Prelight); Prelight Operations

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 P. J. Thiele, from the press conference held on January 24, 2000 at 5:22 CST. This tape shows a post landing press conference with the crew. Commander Kregel made a brief statement praising the crew for the mission's success and then introduced the crewmembers. The crew answered questions about the retraction of the mast. The retraction had been successful, but the latches to the canister had failed. The extreme cold may have caused the problem and a solution was proposed from

20000027588 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-99 Flight Crew Post–Landing Press Conference
Feb. 23, 2000; In English; Videotape: 35 min. 5 sec. 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 specially modified radar system that will produce 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 Pilots Dominic L. Pudwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri, and Gerhard P. J. Thiele, from the press conference held on January 24, 2000 at 5:22 CST. This tape shows a post landing press conference with the crew. Commander Kregel made a brief statement praising the crew for the mission's success and then introduced the crewmembers. The crew answered questions about the retraction of the mast. The retraction had been successful, but the latches to the canister had failed. The extreme cold may have caused the problem and a solution was proposed from
2000027606 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99 Pre-Launch Press Conference
Jan. 29, 2000; In English; Videotape: 49 min. 34 sec. playing time, color, with sound
Report No.(s): NONP–NASA–VT–2000025581; No Copyright; Avail: CASI; B03; Videotape–Beta; V03; Videotape–VHS
Live footage shows the participants in the Pre-Launch Press Conference disclosing the status of the STS-99 flight. The panelists consist of Ron Dittemore the Shuttle Program Manager from JSC (Johnson Space Center), Dave King Director of Shuttle Operations from KSC (Kennedy Space Center), Klaus Damin Head of ESA Astronaut Training Division, and Capt. Clif Starrett Meteorologist 45th Weather Squadron. George Diller, NASA's Public Affairs Office, introduces each panelist as they discuss the failure of a segment of the tip seal, the international contributions made to this mission, and the weather conditions. The panelists also answer questions from the audience about the rejected component of the tip seal, how this error was made, and the effects that this has on the flight plans. Also shown are various night shots of the Shuttle on the launch pad.
CASI

Prelaunch Summaries: Spacecraft Launching: Mission Planning: Prelaunch Problems; Spacecraft Reliability: Component Reliability; Quality Control; Spacecraft Maintenance; Prelaunch Tests

2000027607 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99 Post-Launch Press Conference
Feb. 11, 2000; In English; Videotape: 35 min. 5 sec. playing time, color, with sound
Report No.(s): NONP–NASA–VT–2000025578; No Copyright; Avail: CASI; B03; Videotape–Beta; V03; Videotape–VHS
Live footage shows the participants in the Post-Launch Press Conference disclosing the status of the STS-99 flight. The panelists consist of Bill Gerstenmaier, Acting Manager of Launch Integration and Dave King, Director of Shuttle Operations at KSC (Kennedy Space Center). Joel Wells, of NASA's Public Affairs Office, introduces each panelist as they discuss the mapping of the Earth, and improve safety of the Shuttle. The panelists also answer questions from the audience about the countdown. Also shown are various shots of the Shuttle on the launch pad.
CASI


2000027608 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99 Countdown Status Briefing
Jan. 29, 2000; In English; Videotape: 21 min. playing time, color, with sound
Report No.(s): NONP–NASA–VT–2000025576; No Copyright; Avail: CASI; B02; Videotape–Beta; V02; Videotape–VHS
The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth's Surface. This videotape shows the participants in the Pre Launch Press Conference disclosing the status of the STS-99 flight. The panelists consist of Ron Dittemore the Shuttle Program Manager from JSC (Johnson Space Center), Dave King Director of Shuttle Processing from KSC (Kennedy Space Center), Klaus Damin Head of ESA Astronaut Training Division, and Capt. Clif Starrett Meteorologist 45th Weather Squadron. George Diller, NASA's Public Affairs Office, introduces each panelist as they discuss the mission hardware. Ed Priselac reported favorable weather for tanking and launch, and at emergency landing sites.
CASI

Endeavour (Orbiter): Launching; Shuttle Imaging Radar: Space Transportation System

2000027609 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99 / Endeavour SRTM Science Briefing and Applications from JSC
Jan. 21, 2000; In English; Videotape: 1 hr. 24 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000025574; No Copyright; Avail: CASI; B04; Videotape–Beta; V04; Videotape–VHS
The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM). This radar system will produce unrivaled 3-D images of the Earth's Surface. This videotape presents a mission overview press...
briefing. The panel members are Dr. Ghassem Asrar, NASA Associate Administrator Earth Sciences; General James C. King, Director National Imagery and Mapping Agency (NIMA); Professor Achim Bachem, Member of the Executive Board, 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

20000227671 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99 Countdown Status Briefing
Jan. 30, 2000; In English; Videotape: 18 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000025579; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

After an introduction by Bruce Buckingham (NASA Public Affairs), participants Jeff Spaulding (NASA Test Director, Scott Higgombolm (STS-99 Payload Manager), and Ed Preece (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

20000227706 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--2000036500; 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 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 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--2000036501.

CASI

Space Transportation System: Space Transportation System Flights; Discovery (Orbiter); Maintenance: Hubble Space Telescope

20000228408 NASA Kennedy 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 downrange crew from Mir-18 Norman E. Thagard, Vladimir Dezhurov, and Gennady Stekalov; on board the Russian Space Station Mir and the Atlantis spacefreight complex. The ten-member crew is shown participating in an interview. An animation of the undocking and fly-around of the Atlantis spacecraft is presented. Also shown is the commander of the STS-79 mission, discussing the undocking of the Atlantis spacecraft.

CASI

Mir Space Station; Space Transportation System: Space Transportation System Flights: Atlantis (Orbiter); Space Laboratories; Space Station Modules: Spacecraft Docking

20000228449 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; Satellite: Spaceborne Astronomy: Liftoff (Launching)

20000229611 NASA Johnson Space Center, Houston, TX USA
STS–99 Crew News Conference
Jan. 21, 2000; In English; Videotape: 36 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000025582; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The Shuttle Crew (Mission Commander Kevin R. Kregel, Pilot Dominic L. Padwill Gorie, Mission Specialists Janet L. Kavadi, Janace E. Voss, Manoru Mohri, and Gerhard P. Thiele) are shown in a live news conference presenting the mission objectives of STS-99. The main objective is to obtain the most
complete high-resolution digital topographic database of Earth. This project is named the Shuttle Radar Topography Mission (SRTM).

CASI

Spacecraft; 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 touchdown of the main and nose gears, and Atlantis' rollout on the runway. The STS-37 crewmembers, Commander Steven R. Nagel, Pilot Kenneth D. Cameron, Mission Specialists Jerry L. Ross, Jay A. Alt, and Linda M. Godwin, are seen 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–2000056031; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The STS-103 flight crew, Commander Curtis L. Brown, Pilot Scott J. Kelly, Mission Specialists Steven L. Smith, C. Michael Foale, John M. Grunsfeld, Claude Nicollier, and Jean-Francois Clervoy, are seen passing over the Yucatan and Florida Peninsulas. Smith and Grunsfeld replace and change the S-band single transmission cables during the third and final space walk of this mission. Crewmembers are also seen taking video documentation of the solar arrays. Footage presented includes the release of the Hubble Space Telescope, thruster firing and orbit adjustment 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 tape is tape 2 of 2; tape 1 has a report number of NONP–NASA–VT–2000065030.

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 A. Alt, 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 attached 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 video-tape shows the crew breakfast on April 28, and the final preparations for launch. It also shows the crew boarding the shuttle. After the countdown is halted at T-31 seconds the crew leaves the orbiter.

CASI

Countdown; Launching; Space Transportation System; Spacecraft; Prelaunch Problems; Space Vehicle Checkout Program

STS–99 'Endeavour': Launch Postponement Press Conference
Jun. 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 disclosing 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–2000053978; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The launch April 10 of the STS-31 was scrubbed at T-4 minutes due to a faulty valve in auxiliary power unit (APU) number one. The auxiliary power unit is a hydrogen-fueled, turbine-driven power unit that generates mechanical shaft power to drive a hydraulic pump that produces pressure for the orbiter's hydraulic system. This video shows the removal of the STS-31's auxiliary power unit (APU).

CASI

Auxiliary Power Sources; Controllers; Spacecraft Power Supplies; Spacecraft Maintenance; Discovery (Orbiters); 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–2000053977; 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 (Orbiters)

STS–101 Crew Training
Mar. 27, 2000; In English; Videotape: 32 min. 4 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000039941; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows the crewmembers of STS-101, Commander James D. Halsell Jr., Pilot Scott J. Horowitz, and Mission Specialists Susan J. Helms, Yuri Vladimirovich Usachev, James S. Voss, Mary Ellen Weber, and Jeffrey N.
Williams, participating in various crew training. Footage includes the crew Photo Session, crew Compartment Bailout Training, SAFER EVA Virtual Reality Training, ISS Ingress Training, Shuttle Simulator Rendezvous Training, EVA Preparation, and ISS Stowage Training.

**CASI**

**Astronaut Training; Ejection Training; Bailout; Virtual Reality; Spacecraft Cabins; Training Simulators**

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**2000031892** NASA Johnson Space Center, Houston, TX USA

**STS–101 Crew Interview / Scott Horowitz**

Mar. 20, 2000; In English; Videotape: 38 min. 22 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000039860; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Pilot Scott J. Horowitz is seen. The interview addresses many different questions including why Horowitz became an astronaut, the events that led to his interest, any role models that he had, and his inspiration. Other interesting information that this one-on-one interview discusses is the reaction and reason for the splitting-up 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**

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**2000031946** NASA Johnson Space Center, Houston, TX USA

**STS–101 Crew Interview / Mary Ellen Weber**

Mar. 23, 2000; In English; Videotape: 28 min. 28 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000039851; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Live footage of a preflight interview with Mission Specialist Mary Ellen Weber is seen. The interview addresses many different questions including why Weber became an astronaut, the events that led to her interest in chemistry and sky diving. Other interesting information that this one-on-one interview discusses is the reaction and reasons for the change of the mission objectives. Weber also mentions the scheduled 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); Spacecrafts**

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**20000332635** NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS–34 Galileo PCR at Pad & Galileo in Atlantis**

Sep. 12, 1989; In English; Videotape: 7 min. 50 sec. playing time, in color, no sound except background noise

Report No.(s): NONP–NASA–VT–2000039781; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS–34 mission was the deployment of the Galileo spacecraft and the attached Inertial Upper Stage. This videotape shows the Galileo in the Payload Clean Room in preparation for the six year trip to Jupiter. There are also views of the spacecraft in the Atlantis Payload Bay. CASI

**Clean Rooms; Galileo Spacecraft; Space Transportation System**

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**20000332636** NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS–31 Mission Highlights Resource Tape, Part 1**

Jun. 01, 1999; In English; Videotape: 55 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000039772; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

The primary objective of mission STS–31 was to deploy the Hubble Space Telescope. The commander of the mission was Loren J. Shriver. The crew was pilot Charles F. Bolden, and Mission Specialists, Steven A. Hawley, Bruce McCandless II, and Kathryn D. Sullivan. The mission was launched on April 24, 1990. This videotape shows the astronauts at their pre-launch breakfast, their final preparations for launch and boarding the Shuttle Discovery. It shows the launch and the detachment of the rocket boosters. It shows the deployment of the Hubble Telescope and the unfurling of its Solar Arrays. Other payloads include the Protein Crystal Growth (PCG) experiment, and the Radiation Monitoring Equipment III, to measure gamma ray levels in the crew cabin. The videotape shows many shots of the Kennedy Mission Control room and the shuttle cockpit. The videotape finally shows the landing at Edwards Air Force Base, and the crew disembarking the shuttle. CASI

**Hubble Space Telescope; Spacecrafs; Space Transportation System; Payload Delivery (STS); Space Shuttle Payloads**

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**20000332447** NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS–31: Hubble IBST Science**

Apr. 08, 1990; In English; Videotape: 42 min. 45 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000039780; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

The primary objective of STS–31 was to deploy the Hubble Space Telescope (HST). This videotape presents a press briefing about the scientific goals of the HST program. The panel members were Dr. Weiler, HST program scientist; Dr. Boggs from NASA Goddard, the Center managing the HST Program; and Dr. 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 the other planets of our Solar System. Other areas in which he hopes to have some understanding are galaxies under quasars, black holes, and missing matter. After his remarks, Dr. Bahcall presented a plaque to Charles Pellerin, who helped initiate the series of astronomy telescopes. The HST is the first of those "Great Observatories." After the presentation, questions from the press were answered. CASI

**Universe; Hubble Space Telescope; Spaceborne Astronomy; Astrophysics**

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**20000332462** NASA Johnson Space Center, Houston, TX USA

**STS–101: Crew Interview / Jeffrey N. Williams**

Mar. 21, 2000; In English; Videotape: 36 min. 36 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000039942; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Mission Specialist Jeffrey N. Williams is seen. The interview addresses many different questions including why Williams became an astronaut, and the events that led to his interest. Other interesting information that this one-on-one interview discusses is his reaction to and the reasons for the change of the mission objectives. Williams also mentions the scheduled space-walk that he will perform, docking with the International Space Station (ISS), the repairs of equipment, and the change of the batteries. CASI

**Crew Procedures (Preflight); Spacecrafts; Astronauts; Space Transportation System; Space Transportation System Flights; Atlantis (Orbiter)**

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**20000332463** NASA Johnson Space Center, Houston, TX USA

**STS–101: Crew Interview / James S. Voss**

Mar. 21, 2000; In English; Videotape: 31 min. 41 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000039853; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Mission Specialist James S. Voss is seen. The interview addresses many different questions including why Voss became an astronaut, the individuals who influenced him, and the events that led to his interest. Other interesting information that this one-on-one interview discusses is his reaction to and the reasons for the change of the mission objectives. Voss also mentions the scheduled space-walk that he will perform with Jeffrey N. Williams, docking with the International Space Station (ISS), the
repaired equipment, and the change of the batteries. Voss explains why himself, Susan J. Helms, and Yuri Vladimirovich Usachev are the perfect choice for this mission because of their certification from Russia to work on the Zarya Control Module.

CASI
Space Transportation System; Space Transportation System Flights: Atlantis (Orbiter); Crew Procedures (Preflight); Spacesuits; Talking

20000032464 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, no sound
Report No.(s): NONP–NASA–VT–20000039853; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, 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 objective. 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); Spacesuits; Talking

20000032470 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–20000039784; 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

20000032471 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
Astronautics; X-Ray Telescopes: Clean Rooms

20000032479 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

20000032488 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 Durnance, 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; Spacesuits; Preflight Operations

20000032539 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

20000032577 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, no sound
Report No.(s): NONP–NASA–VT–2000043333; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows the question and answer session of the Post Launch News Conference. The Panelists address questions from NASA Centers such as Goddard Space Flight Center and Kennedy Space Center (KSC), and from various audience participants. The status of the launch of STS-35 is discussed. Also discussed are the liquid oxygen malfunctions, helium leakage, and photographic optical tracking during the daytime.

CASI
Conferences; Postlaunch Reports: Space Transportation System; Space Transportation System Flights: Columbia (Orbiter)
Jeffrey N. Williams, his feelings once he steps into the International Space Station crew. Usachev also mentions the scheduled space-walk of James S. Voss as one-on-one interview discusses his reaction and integration into the STS-101 including why Usachev became a cosmonaut, the individuals who influenced the Shuttle Imaging Radar; Topography: Earth Surface (ISS), the repairs of equipment, his handling of the hand held laser, and the change of the batteries.

CASI

Commodities: Russian Space Program; Spacecrafts; Talking: Crew Procedures (Preflight): Space Transportation System; Space Transportation System Flights: Atlantis (Orbiter)

STS-29: Pre-Launch Preparations/Launch and Landing
Mar. 19, 1999; In English; Videotape: 57 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20000036553; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows the crews of STS-29, Commander Michael L. Coats, Pilot John E. Blaha, and Mission Specialists James F. Buchli, and Robert C. Springer, participating in Terminal Countdown Demonstration Tests. The astronauts are seen on the launch pad, learning about the shuttle and its safety features. They are also shown putting on disposable masks and going into an emergency eye wash and emergency showers.

CASI

Crew Procedures (Preflight): Spacecrafts; Astronauts; Space Transportation System; Space Transportation System Flights: Discovery (Orbiter)

STS-29: TCST
Feb. 08, 1989; In English; Videotape: 37 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20000036551; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows the crews of STS-29, Commander Michael L. Coats, Pilot John E. Blaha, and Mission Specialists James F. Buchli, and Robert C. Springer, participating in Terminal Countdown Demonstration Tests. The astronauts are seen on the launch pad, learning about the shuttle and its safety features. They are also shown putting on disposable masks and going into an emergency eye wash and emergency showers.

CASI

Astronaut Training: Crew Procedures (Preflight): Preflight Operations

STS-29: PCST
Dec. 29, 1999; In English; Videotape: 5 min. 42 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20000036553; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows the crews of STS-29, Commander Michael L. Coats, Pilot John E. Blaha, and Mission Specialists James F. Buchli, and Robert C. Springer, participating in Terminal Countdown Demonstration Tests. The astronauts are seen on the launch pad, learning about the shuttle and its safety features. They are also shown putting on disposable masks and going into an emergency eye wash and emergency showers.

CASI

Astronaut Training: Crew Procedures (Preflight): Preflight Operations

X-34 Reusable Launch Vehicle: Air Launching; Pegasus Air-Lunched Booster; Research Vehicles; Research and Development

STS-101: Crew Interview / Yuri Vladimirovich Usachev
Mar. 20, 2000; In English; Videotape: 23 min. 2 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20000039856; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage of a preflight interview with Mission Specialist Yuri Vladimirovich Usachev is seen. The interview addresses many different questions including why Usachev became a cosmonaut, the individuals who influenced him, and the events that led to his interest. Other interesting information that this one-on-one interview discusses is his reaction and integration into the STS-101 crew. Usachev also mentions the scheduled space-walk of James S. Voss and Jeffrey N. Williams, his feeling once he steps into the International Space Station (ISS), the repairs of equipment, his handling of the hand held laser, and the change of the batteries.

CASI

Commodities: Russian Space Program; Spacecrafts; Talking: Crew Procedures (Preflight): Space Transportation System; Space Transportation System Flights: Atlantis (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 crewmen 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 Fight; Lunar Landing

2000033784 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 (I.E.A.) is shown. The STS-32 IEA removal in the Vehicle Assembly Building (VAB) High Bay 1 (HB1) 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

2000033785 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-33: Removal of the I.E.A. 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 (I.E.A.) from the STS-33 is presented. The I.E.A. is then inspected at United Space Boosters, Inc. (U.S.B.I).

CASI

Space Transportation System: Spacecraft Electronic Equipment

2000033819 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-35: ASTRO-1 Assembly at O&C

Apr. 03, 1989; In English; Videotape: 5 min. playing time, in color, with sound

Report No.(s): NONP-NASA–VT–2000043345; No Copyright; Avail: CASI;
B01, Videotape-Beta: V01, Videotape-VHS

Live footage shows the assembly of the ASTRO-1 payload for STS-35. The assembly occurred in the Operations and Checkout Building.

CASI

Astro Missions (STS): Spaceborne Astronomy; Spaceborne Telescopes; SpaceLab Payloads; Assembling

2000033833 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

2000033861 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 Officer June Malone introduced these panelists who went on to discuss the vehicle and its secondary payload. Manley mentions the X-37 capabilities, main propulsion system, its lithium 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

2000034043 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 Matt Helin, 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. Helin 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, Meioscale 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)

2000034044 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-31: Mission Highlights, Part 2

Jun. 21, 1999; In English; Videotape: 27 min. 25 sec. playing time, in color, with sound

Report No.(s): NONP-NASA–VT–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); Telecommencing; Telecommunication; Conferences

2000034072 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-35/ASTRO-1: Editors Work Tape

May 25, 1999; In English; Videotape: 53 min. playing time, in color, with sound

Report No.(s): NONP-NASA–VT–2000043337; 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, Rollover to the Vehicle Assembly Building (VAB) from OFP, 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 Guy S. Gardner, and Mission Specialists Jeffrey A. Hoffman, John M. Lounge, Robert A. Parker, Samuel T. Durance, and Ronald A. Parise, are shown participating in various training activities. Activities include driving the M113...
vehicle, participating in emergency training, and addressing the press upon arrival at Kennedy Space Center.

CASI
Crew Procedures (Preflight); Astronaut Training; Astro Missions (STS); Space Lab Payloads

2000034973 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-35/Artso-1: Launch T-20 Through Orbit with Repairs (Tape 2 of 2) Dec. 02, 1990; In English; Videotape: 35 min. 25 sec. playing time, in color, with some sound Report No.(s): NONP--NASA--VT--2000043335; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows the Launch Control Center (LCC) communicating with the STS-35 Space Shuttle. Scenes include various playback launch views of STS-35. Also shown are panoramic views of the Shuttle on the launch pad, main engine start, ignition, liftoff and booster separation and various Long Range Tracker views.

Author
Launching Bases: Communicating; Space Lab Payloads; Astro Missions (STS); Spaceborne Astronomy

2000034988 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. Parse, participating in the traditional breakfast prior to launch. The crew is seen suitting up, and walking out to the Astro-Van for their 1 a.m. launch. Also shown are some beautiful panoramic shots of the shuttle on the launch pad, main engine start, ignition, liftoff, and various shots of the Launch Control Center (LCC). The crew is also shown during flight performing some routine functions such as operating the trash compactor, eating, and getting into and out of their sleeping quarters. The crew is seen taking part in a conversation with the Secretary of State, and the Foreign Minister of the Soviet Union. Footage also includes the landing of Columbia, its rollout on the runway, and its crew as they depart from the vehicle.

CASI
Space Transportation System; Space Transportation System Flights; Columbia (Orbiter); Astro Missions (STS); Spaceborne Astronomy; SpaceLab Payloads

2000034909 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 the traditional 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.

CASI
Astronaut Training; T-38 Aircraft; Space Transportation System; Space Transportation System Flights; Atlantis (Orbiter)

2000034925 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-30: Mission Highlights Reel Mar. 22, 1990; In English; Videotape: 58 min. 42 sec. playing time, in color, with sound Report No.(s): NONP--NASA--VT--2000036555; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows the crewmember of STS-30, Commander David M. Walker, Pilot Ronald J. Grabe, and Mission Specialists Norman E. Thagard, Mary L. Cleave, and Mark C. Lee, participating in the traditional breakfast, suitting up and walking out to the Astro-Van. Scenes include the retrieval 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); SpaceLab Experiments; Maintenance

2000036516 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-34: Galileo Payload Canister Doors Closing in VPF Aug. 24, 1989; In English; Videotape: 9 min. 40 sec. playing time, in color, with sound Report No.(s): NONP--NASA--VT--2000043348; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the closing of the Payload Bay doors in the Vertical Processing Facility (VPF) at Kennedy Space Center.

CASI
Payloads; Bays (Structural Units); Doors; Aircraft Compartments; Closing

2000037715 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-36: Breakfast / Suit-Up / C-7 Ex / Launch and Landing at Edwards Mar. 05, 1990; In English; Videotape: 58 min. playing time, in color, with sound Report No.(s): NONP--NASA--VT--2000043344; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows the crew members of STS-36, Commander John O. Creighton, Pilot John H. Casper, and Mission Specialists Richard M. Mullane, David C. Hilmers, and Pierre J. Thuot, having the traditional breakfast, suitting up, and walking out to the Astro-Van. Scenes include panoramic views of the shuttle on the pad, main engine start, ignition, liftoff, and booster separation. The landing of Atlantis at Edwards Air Force Base is also seen. Several playback views from different cameras of both the launch and landing are also presented.

CASI
Space Transportation System; Space Transportation System Flights; Atlantis (Orbiter)

2000037771 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-36: Integrated Camera Breakfast Suit-up Walkout Feb. 28, 1990; In English; Videotape: 3 min. 45 sec. playing time, in color, with sound Report No.(s): NONP--NASA--VT--2000043343; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the crewmembers of STS-36, Commander John O. Creighton, Pilot John H. Casper, Mission Specialists Richard M. Mullane, David C. Hilmers, and Pierre J. Thuot, having a traditional breakfast. The crew is also shown suitting up, and walking out to the Astronaut-van from the Operations and Checkout Building.

CASI
Spacecraft: Crew Procedures (Preflight); Preflight Operations

2000037771 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-31: Hubble Space Telescope Post Launch Press Conference from Kennedy Space Center Apr. 24, 1990; In English; Videotape: 17 min. 34 sec. playing time, in color, with sound Report No.(s): NONP--NASA--VT--2000039779; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video presents a post-launch press conference on the STS-31 Hubble Space Telescope. Dick Young, Kennedy Space Center Public Affairs, introduces the panel. The panel consists of Robert Steck, Kennedy Space Center Launch Director, and George T. SAssen, Director Shuttle Engineer. The STS-31 launch was accomplished with very few problems. Terminal count was started 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. SAssen explains, in detail, how the problem was corrected.

CASI
Hubble Space Telescope; Space Transportation System; Spacecraft Launching
20000087772 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-30: Flight Summary
Mar. 27, 1989; In English; Videotape: 1 hr. 2 min. 24 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000036557; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
Live footage shows Flight Director Milt Heflin, and the Magellan Project Manager, John Gerpehde, participating in a panel discussion. They discuss the objectives of the Magellan Project, the way in which Magellan will gather images, the Venus Orbiting Imaging Radar, and STS-30. Gerpehde presents an animation of Venus and discusses its variation to that of the Earth. Both Heflin and Gerpehde took turns answering the questions from the audience as well as those from NASA Headquarters, and Kennedy Space Center.
CASI
Magellan Project (NASA): Magellan Spacecraft (NASA); Imaging Radar; Radar Imaging; Space Exploration; Venus Orbiting Imaging Radar (Spacecraft); Venus Probes

20000087773 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-30: TGS Isolated Video Playbacks
May 04, 1989; In English; Videotape: 15 min. 20 sec. playing time, in color, with partial sound
Report No.(s): NONP--NASA--VT--2000036556; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Live footage shows isolated playbacks of the launch of STS-36 from various tracking cameras.
CASI
Playbacks: Tracking (Position); Spacecraft Tracking; Cameras

200000838055 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-71/MIR/Spacelab: Lightning Strikes at Pad 39A
Jun. 24, 1995; In English; Videotape: 1 min 30 sec. playing time, in color, without sound
Report No.(s): NONP--NASA--VT--2000036558; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video presentation shows the STS-71 after lightning struck Pad 39A.
CASI
Lighting; Space Transportation System: Mir Space Station

200000838083 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-35/ASTRO-1: Breakfast/Suit-up /Depart O & C / Ingress / Launch with Isolated Views
Dec. 02, 1999; In English; Videotape: 34 min. 50 sec. running time, in color, with sound
Report No.(s): NONP--NASA--VT--2000043336; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
The primary objective of the STS-35 mission was the round-the-clock observations of the celestial sphere in ultraviolet and X-ray astronomy with ASTRO-1. The mission was commanded by Vance D. Brand. The crew consisted of the pilot Guy S. Gardner, mission Specialists Jeffery Hoffman, John Lounge, and Robert Parker, and payload specialists Samuel Durance, and Ronald Parisi. This videotape opens with a view of the shuttle on the pad at night in preparation for a night launch. The astronauts are introduced as they finish their pre-launch breakfast. The next shots are those of the astronauts getting into their spacesuits, and boarding the bus to be taken to the pad. The astronauts are next shown climbing into the shuttle. The launch of the shuttle is shown from 19 different camera angles.
CASI
Launching: Spacecraft: Columbia (Orbiter)

20000038348 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-35/ASTRO-1: Day--1 Down-links
Dec. 02, 1999; In English; Videotape: 1 hr. 9 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000043340; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Live footage shows views of the ASTRO-1 observatory telescopes, moving into position. These views are shown from the right rear camera in the payload area. The telescopes are the Hopkins Ultraviolet Telescope (HUT), Wisconsin Ultraviolet Photo-Polarimeter Experiment (WUPPE), Ultraviolet Imaging Telescope (UIT), and the Broad Band X-Ray Telescope (BBXRT).
CASI
Astro Missions (STS): Spaceborne Astronomy; Spaceborne Telescopes: Down-linking

200000838404 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-37: Downlights M. E. T.
Apr. 06, 1991; In English; Videotape: 34 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000013424; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Live footage shows the crewmembers of STS-37, Commander Steven R. Nagel, Pilot Kenneth D. Cameron, and Mission Specialists Jerry L. Ross, Jay Apt, and Linda M. Godwin, participating in a question and answer segment with students at the Launch Control Center (LCC). The crew is also seen working in the zero-gravity environment and taking photographs of the space environment. Also seen are some beautiful shots of the Atlantis orbiter with the Earth as its background.
CASI
Downlighting: Communication Satellites: Ground Stations; Space Transportation System: Space Transportation System Flights: Atlantis (Orbiter)

200000839290 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-34: Post Flight Press Conference (Tape 2 of 2)
May 09, 1990; In English; Videotape: 16 min. 4 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000039775; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Live footage shows panelists answering questions from various NASA Centers. The panelists takes turn fielding questions from NASA Headquarters, Goddard Space Flight Center, and Kennedy Space Center.
CASI
Conferences: Postflight Analysis

200000839239 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-34: Atlantis Stacking Activities in the VAB
Aug. 22, 1989; In English; Videotape: 9 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000039786; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The primary mission for STS-34 was the launch of the Galileo Probe to Jupiter. This videotape shows the shuttle Atlantis in the Vertical Assembly Building (VAB) being hoisted from the horizontal position to the vertical position. It also shows the shuttle being moved into position for mating with the solid rocket boosters.
CASI
Space Shuttle Boosters; Space Transportation System: Atlantis (Orbiter)

200000839239 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-37: TCDT Pad B Atlantis GRO (3 of 3)
Mar. 20, 1991; In English; Videotape: 40 min. 48 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000013418; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Live footage shows some beautiful panoramic views of STS-37 on the pad. Scenes include the narration of simulated auto sequence start, engine start, engine firing and cut-off. Also shown is the crew emergency egress procedure. This tape 3 of 3. Tape 1 has a report # of NONP--NASA--VT--2000013416, and tape 2 has a report # of NONP--NASA--VT--2000013417.
CASI
Crew Procedures (Preflight): Astronaut Training; Training Simulators; Flight Simulation: Prelaunch Tests; Preflight Operations; Test Firing; Preflight Tests; Preflight Analysis; Systems Analysis
The primary objective of STS-31 was the deployment of the Hubble Space Telescope (HST). The flight was commanded by Loren J. Shriver. The pilot was Charles F. Bolden, Jr., and the mission specialists were Steven A. Hawley, Bruce McCandless II, and Kathryn D. Sullivan. This videotape shows an inflight press conference that occurred after the deployment of the HST. The press gathered at the Goddard Space Flight Center and the Kennedy Space Center, asked questions mainly about the deployment of the HST.

**Hubble Space Telescope: Space Shuttle Payloads**

**STS-101: Crew Activity Report Flight Day 02 Highlights**

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, 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 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 Spacehab, 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.

**International Space Station: Robot Arms: Space Shuttle Orbiters: Space Transportation System**

**STS-101: CAR / Flight Day 03 Highlights**

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.
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.

_CASl International Space Station: Orbital Rendevous: Space Transportation System: Spacecraft Docking_

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Report No.(s): NONP-NASA–VT–2000068757; 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.

Author:

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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 Specialist 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 communication systems on the Unity Module, and install several handrails and a camera cable on the station’s exterior.

_CASl International Space Station: Spacecraft Docking: Extravehicular Activity: Unity Connecting Module_

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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.

_CASl Power Supplies: Space Station Power Supplies: Crew Procedures (Inflight)_

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Report No.(s): NONP-NASA–VT–2000068735; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows the speakers participating in the Magellan Press Conference question and answer session. Speakers include Huestess, 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 Arctima. This is tape 2 of 2; tape 1 has a report number NONP-NASA–VT–2000036552.

_CASl Conferences: Magellan Ultraviolet Astronomy Satellite: Spaceborne Astronomy: Magellan Project (NASA)_

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Report No.(s): NONP-NASA–VT–2000068735; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

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Report No.(s): NONP-NASA–VT–2000068740; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

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Report No.(s): NONP-NASA–VT–2000068746; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

The Atlantis Space Shuttle crew (Mission Commander James D. Halsell, Jr., Pilot Scott J. Horowitz, Mission Specialist Mary Ellen Weber, Jeffrey N. Williams, James S. Voss, Susan J. Helms, and Yuri Vladimirovich Usachev) completed several activities including: (1) installation of final battery in the International Space Station; (2) installation of new storage compartments behind panels in the Zarya module; (3) installation of a new Radio Telemetry System; (4) firing of Atlantis steering jets to perform the second part of three-day maneuver to raise the station’s altitude; and (5) transferring more than a ton of gear to the station to await use by the first resident crew.


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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: Spacecrafts; Supplying: Space Station Modules; Spacecraft Maintenance: Installing; Logistics; Space Parts: Handling Equipment

2000056609 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–101: Crew Activity Report/Flight Day 8 Highlights
May 26, 2000; In English; Videotape: 17 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000073122; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

On this eighth day of the STS–101 Atlantis mission, the flight crew, Commander James D. Halsell Jr., Pilot Scott J. Horowitz, and Mission Specialists Mary Ellen Weber, Jeffrey N. Williams, James S. Voss, Susan J. Helms, and Yuri Vladimirovich Usachev are seen closing up the hatches to the ISS. Halsell, Horowitz, and Weber are seen participating in a question and answer session with Launch Control Center (LCC). Weber explains the transfer of goods and supplies and Horowitz discusses the re-boost maneuver. Also shown is the crew gathered together on the mid-deck fielding questions from LCC. Scene shows Voss checking behind panels for evidence of smoke or odor.

CASI

Space Transportation System: Space Transportation System Flights; International Space Station: Spacecraft Docking: Hatches: Closing

2000056993 NASA Johnson Space Center, Houston, TX USA
STS–101: Crew Activity Report/Flight Day 9 Highlights
May 27, 2000; In English; Videotape: 14 min. 46 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000073124; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

On this ninth day of the STS–101 Atlantis mission, the flight crew, Commander James D. Halsell Jr., Pilot Scott J. Horowitz, and Mission Specialists Mary Ellen Weber, Jeffrey N. Williams, James S. Voss, Susan J. Helms, and Yuri Vladimirovich Usachev prepares to undock Atlantis from the International Space Station (ISS). Atlantis is seen as it undocks from the ISS over Kazakhstan. Halsell, Usachev, and Weber are seen participating in a communication link with Russia.

CASI

Space Transportation System: Space Transportation System Flights

2000056994 NASA Johnson Space Center, Houston, TX USA
STS–101: Crew Activity Report/Flight Day 10 Highlights
May 28, 2000; In English; Videotape: 18 min. 42 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000073123; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

This video presents a report from the Space Shuttle Atlantis Crew. The crew consists of James D. Halsell Jr., Mission Commander; Scott Horowitz, Pilot; and Mission Specialists Mary Ellen Weber, Jeffrey N. Williams, James S. Voss, Susan J. Helms, and Yuri Vladimirovich Usachev. The crew made preparations for the Space Shuttle Atlantis 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 thousand pounds of new hardware supplied to ISS, and a supply of personal hygiene products. Also live animation of the Spacehab Module is given where supplies bound for the Space Station are stored.

CASI

International Space Station: Spacecrafts; Space Transportation System: Spacecraft Maintenance

2000057368 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–101 / Atlantis EVA briefing
Mar. 27, 2000; In English; Videotape: 26 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000076143; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

The primary mission objective for STS–101 was to deliver supplies to the International Space Station, perform a space walk, and reboost the station from 230 statute miles to 250 statute miles. The commander of this mission was James D. Halsell. The crew was Scott J. Horowitz, the pilot, and mission specialists Mary Ellen Weber, Jeffrey N. Williams, James S. Voss, Susan J. Helms, and Yuri Vladimirovich Usachev. This videotape is a press briefing by Scott Horowitz, STS–101 Lead EVA Officer, about the planned Extravehicular Activity planned for the fourth day of the mission. The work that this EVA is to accomplish is the repair of a crane and the installation of a beam on Unity. The astronauts will also replace antennae and install hand rails and cables. The astronauts who are scheduled to perform the EVA activities are Williams and Voss. They will be assisted by Weber, who will operate the Shuttle’s robotic arm, and Scott Horowitz. The spacewalk is scheduled to take 6 hours. The videotape includes some views of the astronauts training in an underwater environment. Mr. Bicenath answered questions from the press after he completed the briefing.

CASI

Extravehicular Activity; International Space Station: Space Transportation System: Spacecrafts: Space Maintenance

2000057498 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 disclosing the status of the Delta/Wind flight. The panelists consists of Jim Worack 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 Tromboli 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

2000057499 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

effects of solar energy on the Earth's magnetic field. Wind will provide continuous measurement of the solar wind, particularly charged particles and magnetic field data. The specific objectives of Wind are to: (1) provide complete plasma, energetic particle, and magnetic field input for magnetospheric and ionospheric studies; (2) determine the magnetospheric output to interplanetary space in the upstream region; (3) investigate basic plasma processes occurring in the near-Earth solar wind; and (4) provide baseline ecliptic plane observations to be used in heliospheric studies. This videotape shows the pre-launch launch 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

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--2000076412; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows panelists, Manager of the Space Shuttle Program Development, Elric McHenry, and the Associate Program Manager for Space Shuttle Upgrades, Andy Allen, giving an overview of the new upgrades on the STS-101 Orbiter. McHenry and Allen speak about the changes and modernization of Atlantis. The panelists' mentions all the new capabilities of the new glass cockpit. They emphasize the redesign of the engine, specifically, the ability to shut down automatically. They also discuss future implementation of a smart cockpit.

CASI

Revisions: Upgrading; Improvement; Cockpits; Pilot Support Systems; Engine Design

20000060867 NASA Kennedy Space Center, Cocoa Beach, FL USA
RADARSAT Launch
Nov. 01, 1995; In English; Videotape: 2 hrs. 30 min. playing time, in color, with sound
Report No.(s): 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 launch. The footage returns to "live" coverage and resumes the countdown to launch.

CASI

Spacecraft Launching; Load Tests; Microwave Antennas; Radarsat; Launchers

20000063811 NASA Johnson Space Center, Houston, TX USA
STS 101: Post Flight Presentation
Jun. 21, 2000; In English; Videotape: 15 min. 7 sec. playing time, in color, with sound
Report No.(s): 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 Vladimirich 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 rebooster the station from 230 statute miles to 250 statute miles.

CASI

Space Transportation System Flights; Spacecrews; Space Stations; Space Transportation System

20000088611 NASA Johnson Space Center, Houston, TX USA
STS--186 Crew Interviews: Boris Morukov
Jul. 20, 2000; In English; Videotape: 37 min. 51 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 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

20000088201 NASA Johnson Space Center, Houston, TX USA
STS--186 Crew Interviews: Richard A. Mastracchio
Jul. 20, 2000; In English; Videotape: 2 hrs. 18 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000011935; 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 Mastracchio became interested in the space program, 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 is the main goal of the STS-106 mission, and its scheduled docking with the new International Space Station Module. Mastracchio also mentions his responsibility during the much-anticipated docking and scheduled space-walk.

CASI

Crew Procedures (Preflight); Spacecrews; Astronauts; Talking
utilize the SPACEHAB Double Module and the Integrated Cargo Carrier (ICC)
to take supplies to the station. The mission will also include 2 spacewalks.

CASI

International Space Station: Space Transportation System: Space Shuttle Missions: Weightlessness: Cosmonauts

20000080268 NASA Johnson Space Center, Houston, TX USA
STS–106 Crew Interviews: Daniel Burbank
Jul. 20, 2000; In English; Videotape: 33 min. 51 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000110658; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

This NASA Johnson Space Center (JSC) video production presents an
STS–106 pre-launch interview with Mission Specialist Daniel C. Burbank, Lt.
Commander, USA Coast Guard (USCG). Among other topics, Burbank
discusses how his Coast Guard career evolved into spaceflight, his experiences
flying helicopters for the Coast Guard, and his chief duties on the upcoming
spaceflight. STS–106 is International Space Station assembly flight ISS–2A.2b
and will utilize the SPACEHAB Double Module and the Integrated Cargo Carrier
(ICC) to take supplies to the station. The mission will also include 2 spacewalks.

CASI

International Space Station: Space Transportation System: Space Shuttle Missions: Astronauts

20000080369 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–40/SL–1: Lift to Cargo Bay
Mar. 24, 1991; In English; Videotape: 11 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000011815; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The footage shows the lifting of the solid state micro-accelerometer into
Columbia’s cargo bay. This was done in a clean room setting and is part of the
In Orbit Technology Demonstration Program.

CASI

Accelerometers: Bays (Structural Units): Cargo

20000080370 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–40: Hinge Inspection
Mar. 17, 1991; In English; Videotape: 4 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000011817; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The footage shows hinge inspection for cracks and tolerance checks.
Scenes are from both the inspection shop and aboard Columbia.

CASI

Inspection: Hinges: Cracks; Columbia (Orbiter)

20000080371 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–41: Discovery Payload Bay Door Investigation
Jun. 04, 1990; In English; Videotape: 3 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000011826; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The brief footage shows the visual inspection of the bay door by 2 technicians.
They inspect the layers between the panels for structural defects, and the
toilet, joints, and hinges for wear, cracks, stress, and damage from flight.

CASI

Doors: Hinges; Inspection: Panels

20000080384 NASA Johnson Space Center, Houston, TX USA
STS–106 Crew Interviews: Terrence W. Wilcutt
Jul. 19, 2000; In English; Videotape: 25 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20000110660; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Live footage of a preflight interview with Mission Commander Terrence W.
Wilcutt is seen. The interview addresses many different questions including
why Wilcutt became an astronaut, the events that led to his interest, and his career
both as a High School Mathematics Teacher and as a member of the US Marine
Corps. Other interesting information that this one-on-one interview discusses are
his responsibilities during docking and undocking of the spacecraft, and possible
shorter time frame turnarounds for missions. Wilcutt also mentions the scheduled
installation and transfer of equipment into the new International Space Station
(ISS).

CASI

Crew Procedures (Preflight); Spacecrews; Astronauts; Cosmonauts; Talking

20000080388 NASA Johnson Space Center, Houston, TX USA
STS–106 Crew Interviews: Edward T. Lu
Jul. 19, 2000; In English; Videotape: 34 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20000111956; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Mission Specialist Edward T. Lu
is seen. The interview addresses many different questions including why Lu
became interested in the space program, the events that led to his interest, the
transition from an engineer to research scientist, and finally to getting selected
into the astronaut program. Other interesting information that this one-on-one
interview discusses are the main goals of the STS–106 mission, its scheduled
docking with the new International Space Station (ISS), making the Zvezda
Service Module ready for entrance, and crew training both in the United States
and Russia. Lu mentions his responsibilities during the much-anticipated
docking as well as his scheduled space-walk with Yuri Ivanovich Malenchenko.
Lu also discusses the use of the Robotic Arm during his space-walk, installation
of a magnetometer on the Zvezda Module, and work that will have to take place
inside the Service Module.

CASI

Crew Procedures (Preflight); Spacecrews; Astronauts; Cosmonauts; Talking

20000080451 NASA Johnson Space Center, Houston, TX USA
ISS Expedition 1 Crew Interviews: William M. Shepherd
Jul. 19, 2000; In English; Videotape: 32 min. 47 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20000111599; 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 responsi-
ibilities 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
modules, and spacecraft delivering equipment or performing Extra Vehicular Activities
(EVA). He explains his interpretation of the meaning of mission success, and the
implications of having human beings in space.

CASI

International Space Station: Expeditions: Space Flight; Spacecrews; Astronauts; Cosmonauts; Crew Procedures (Preflight); Talking

20000080452 NASA Kennedy Space Center, Cocoa Beach, FL USA
Orbiter Umbilical Hinge Door Program
Feb. 19, 1991; In English; Videotape: 4 min. 14 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20000113527; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

During processing work on the orbiter Discovery at Pad A, significant
cries were found on all four 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.

**Spacecraft Maintenance: Prelaunch Problems; External Tanks; Cracks; Doors; Hinges**

**STS-38: Bolt Tightening**

Jul. 20, 1990; In English; Videotape: 2 min. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-2000113534; No Copyright; Avail: CASI; B02, Videotape-Beta; V01, Videotape-VHS

The very brief footage shows the torquing of bolts by technicians. They are aiding in their efforts by a diagram that shows the torque sequence and amount of torque needed for each bolt.

**Bolts: Space Transportation System; Torque**

**STS-39 Discovery Rollback to the OPF High Bay**

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.

**Discovery (Orbiter): Spacecraft Maintenance; Ground Handling**

**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 habitation, 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 spacewalk. Krikalev also discusses the crew’s first tasks upon entrance including other scheduled tasks for the first week, docking from cargo ships, and spacecraft delivering equipment or performing Extra Vehicular Activities (EVA). He explains his opinion of the implications of having human beings in space.

CASI
Crew Procedures (Preflight): Spacecrews; Cosmonauts; Talking

2000081732 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–200011586; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Live footage of a preflight interview with Soyuz Commander Yuri P. Gidzenko is seen. The interview addresses many different questions including why Gidzenko became interested in the space program, the events that led to his interest, the transition from being a military pilot to being selected as a Russian cosmonaut. Other interesting information that this one-on-one interview discusses are the main goals of the first Expedition Crew, their scheduled docking with the International Space Station (ISS), making the ISS ready for human inhabitation, and all the specifics that will make his living arrangements difficult.
Gidzenko mentions his responsibilities during the much-anticipated two-day flight to the ISS on the Soyuz spacecraft, as well as the possibility of his spacewalk. Gidzenko also discusses the crew’s first tasks upon entrance including other scheduled tasks for the first week, docking from cargo ships, and spacecraft delivering equipment or performing Extra Vehicular Activities (EVA). He explains his opinion of the implications of having human beings in space.

CASI
Crew Procedures (Preflight): Spacecrews; Cosmonauts; Talking

2000081733 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–200011819; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Live footage shows the crew of STS-40, Commander Bryan D. O’Connor, Pilot Sidney M. Gutierrez, Mission Specialists James P. Bagian, Tamara E. Jernigan, M. Rhea Seddon, and Payload Specialists F. Drew Gaffney, and Millie-Hughes Fulford, as they arrive at Kennedy Space Center (KSC). The crew arrives on T-38 jets for Terminal Countdown (TCDT) at KSC. O’Connor is seen addressing the audience. Footage also shows the crew sitting around the table for their traditional breakfast, crew suit-up, and departure.

CASI
Spacecrews; Crew Procedures (Preflight); Astronaut Training

2000081755 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–2000118123; 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

2000081756 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–2000118122; 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, orbit stability, and the effects of cosmic rays on floppy disks. Also shown is a video release of the STS-40/SL-1 mission. The STS-40 crew, Commander Bryan D. O’Connor, Pilot Sidney M. Gutierrez, Mission Specialists James P. Bagian, Tamara E. Jernigan, M. Rhea Seddon, and Payload Specialists F. Drew Gaffney, and Millie-Hughes Fulford, are seen while they exercise and perform their experiments.

CASI
Space Transportation System: Columbia (Orbiter); Get Away Specials (NTS); Spaceborne Experiments; Spacelab Payloads

2000083226 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 some 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

2000083363 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–2000118127; 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

2000083364 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–2000118121; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

CASI
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

STS-106 Crew Training
Jul. 27, 2000; In English; Videotape: 22 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000111587; No Copyright; Avail: CASI; B02, Videotape-Beta: V02, Videotape-VHS

Live footage of the STS-106 crewmembers showing Commander Terrence W. Wilcutt, Pilot Scott D. Altman, Mission Specialists Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov going through various training activities. These activities include SpaceLab Training at Kennedy Space Center (KSC), EVA Pre-Post Operations, Post Launch Operations, Rendezvous, Baitout, and Post Landing Egress Training at Johnson Space Center (JSC). The crew is also seen participating in a group photograph session.

CASI
Spacecrews; Astronauts; Cosmonauts; Crew Procedures (Preflight); Astronaut Training

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 crewmembers of STS-41, Commander Richard N. Richards, Pilot Robert D. Cabana, Mission Specialists William M. Shepherd, Bruce E. Melnick, and Thomas D. Akers, participating in the traditional activities the day of their flight. The crew are shown eating breakfast, suiting-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)

STS-42/Discovery/IML-1 Admiral Richard Truly Press Briefing
Jan. 22, 1992; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000122913; No Copyright; Avail: CASI; B01, Videotape-Beta: V01, Videotape-VHS

A press briefing is presented by Admiral Richard Truly about the STS-42 Discovery International Microgravity Laboratory-1 (IML). He describes the launch that took place on the morning of January 22, 1992. It was NASA’s first launch of 1992 following the Challenger disaster. Life Sciences and materials science microgravity experiments were flown on the STS-42 to study the behavior of materials and living things in microgravity. The briefing ends with a short question and answer period.

CASI
Microgravity; Space Transportation System; Space Shuttles; Spaceborne Experiments

STS-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 STS-41 crewmembers 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 shown eating breakfast, suiting-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)

STS-106 Crew Activity Report / Flight Day Highlights Day 2
Sep. 09, 2000; In English; Videotape: 13 min. 31 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 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; Supplies; Crew Procedures (Inflight)

STS-106 Crew Activity Report/Flight Day 1 Highlights
Sep. 08, 2000; In English; Videotape: 17 min. 36 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000131281; No Copyright; Avail: CASI; B02, Videotape-Beta: V02, Videotape-VHS

On this first day of the STS-106 Atlantis mission, the flight crew, Commander Terrence W. Wilcutt, Pilot Scott D. Altman, and Mission Specialists Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov are seen performing pre-launch activities. They are shown sitting around the breakfast table with the traditional cake, suiting-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 readyed in the ‘white room’ for their mission. After the closing of the hatch and
On this fifth day of the STS-106 Atlantis mission, the flight crew, Commander Terrence W. Wilcutt, Pilot Scott D. Altman, and Mission Specialist 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 installing the third and final battery 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
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 05 Highlights
Sep. 12, 2000; In English; Videotape: 22 min., 24 sec. playing time, in color, with sound
Report No(s): NONP–NASA–VT–2000135181; 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 Specialist 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 opening the hatch of the Zvezda Service Module and the Zarya Control Module, and finally, the transfer chamber of Zvezda. Burbank and Mastracchio are seen transferring food and equipment, and removing the manual docking system of Zarya. Lu, Burbank and Malenchenko are also seen opening the hatch interfaces. Footage also shows the entire interior of the International Space Station (ISS) complex.

CASI
International Space Station: Service Module (Iss); Zarya Control Module; Space Transportation System; Space Transportation System Flights

STS–106 Crew Activities Report/Flight Day 06 Highlights
Sep. 13, 2000; In English; Videotape: 20 min., 8 sec. playing time, in color, with sound
Report No(s): NONP–NASA–VT–2000136103; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this seventh 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 preparing in several outfitting 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 performing a series of jet firings, Altman is shown as he narrates a tour of the Zvezda Service Module. Scenes also include Lu and Malenchenko unpacking the Russian-made Orbital space suits, Burbank and Wilcutt participating in an interview, and a beautiful night shot of the International Space Station (ISS) and Atlantis complex above the Earth.

CASI
International Space Station: Zarya Control Module; Service Module (Iss)

STS–106 Crew Activities Report/Flight Day 06 Highlights
Sep. 13, 2000; In English; Videotape: 20 min., 8 sec. playing time, in color, with sound
Report No(s): NONP–NASA–VT–2000136106; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live animation of the Space Shuttle Atlantis slowly pulling away from the International Space Station is presented. Pilot Scott Altman flew the Atlantis away from the ISS and describes this process. A live view of Commander Jerry Wilcutt, Pilot Scott Altman and Mission Specialists Ed Lu, Rick Mastracchio, Dan Burbank, Yuri Malenchenko and Boris Morukov board the Space Shuttle Atlantis is shown. The astronauts then answer questions inside the Space Shuttle module about the living conditions aboard the ISS and preparations that were made to the ISS for the next crew to arrive.

CASI
Space Shuttles; Space Transportation System Flights; International Space Station

STS–106 Crew Activities Report/Flight Day Highlight
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 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

CASI
STS–92 Crew Activities Report/Flight Day 09 Highlights
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 sixth 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 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
International Space Station: Service Module (Iss); Space Transportation System; Service Module (Iss)

STS–106 Crew Activities Report/Flight Day Highlight
Oct. 20, 2000; In English; Videotape: 21 min., 44 sec. playing time, in color, with sound
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CASI
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CASI
International Space Station: Service Module (Iss); Space Transportation System; Service Module (Iss)
participate in an audio interview while scenes are shown of the International Space Station (ISS) and the Earth.

**International Space Station: Discovery (Orbiter); Service Module (Iss); Unity Connecting Module; Zarya Control Module**

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.

**International Space Station; Astronauts; Prelaunch Summaries**

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.

**Inertial Upper Stage; Space Transportation System**

STS-46 TC/DT Software 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 Marshall H. Tins are seen introducing themselves and discussing the mission during a photo session. The crew then answers questions from the press.

**Atlantis (Orbiter); Prelaunch Summaries: Crew Procedures (Preflight)**

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 Mitch 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 Aubray 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.

**Endavour (Orbiter): Spacelab; Prelaunch Summaries; Spaceborne Experiments**

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.

**International Space Station: Discovery (Orbiter); Service Module (Iss); Unity Connecting Module; Zarya Control Module**

STS-92 Crew Activity Report/Flight Day 10 Highlights

Oct. 21, 2000; In English; Videotape: 17 min. 50 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT-2000157386; No Copyright; Avail: CASI; B02, Videotape-Beta: V02, Videotape-VHS

On this tenth day of the STS-92 mission, the flight crew, Commander Brian Duffy, Pilot Pamela A. Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter J.K. Wisoff, Michael E. Lopez-Alegria, and William S. McArthur prepare for the unlocking of Discovery from the International Space Station (ISS) as Lopez-Alegria 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.

**International Space Station; Discovery (Orbiter); Service Module (Iss)**

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.

**International Space Station; Service Module (Iss); Discovery (Orbiter)**

STS-92 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.

**International Space Station; Service Module (Iss); Discovery (Orbiter); Unity Connecting Module; Zarya Control Module**
**STS-92 Crew Activity Report/Flight Day 2 Highlights**  
Oct. 13, 2000; In English; Videotape: 17 min. 22 sec. playing time, in color, with sound  
Report No.(s): NONP--NASA--VT--2000157376; No Copyright; Avail: CASI; B02; Videotape-Beta; V02; Videotape-VHS  
On this second day of the STS-92 mission, the flight crew, Commander Brian Duffy, Pilot Pamela A. Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter J.K. Wisoff, Michael E. Lopez-Alegria, and William S. McArthur continue to approach the International Space Station (ISS) in the Discovery Orbiter. Wakata and Duffy are congratulated and questioned by Japanese dignitaries. A panoramic view of the Earth is seen as Discovery orbits. CASI  
International Space Station; Discovery (Orbiter); Service Module (ISS); Unity Connecting Module; Zarya Control Module

**STS-92 Crew Activity Report/Flight Day 5 Highlights**  
Oct. 16, 2000; In English; Videotape: 17 min. 29 sec. playing time, in color, with sound  
Report No.(s): NONP--NASA--VT--2000157375; No Copyright; Avail: CASI; B02; Videotape-Beta; V02; Videotape-VHS  
On this fifth day of the STS-92 mission, the flight crew, Commander Brian Duffy, Pilot Pamela A. Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter J.K. Wisoff, Michael E. Lopez-Alegria, and William S. McArthur prepare for the first of four spacewalks. McArthur and Chiao are seen shortly before suiting up and Wakata is seen at the controls of the robotic arm. Footage is shown of the spacewalk where McArthur and Chiao remove the S-band Antenna Subassembly (SASA). Duffy gives an overview on the day’s accomplishments. CASI  
International Space Station; Discovery (Orbiter); Service Module (ISS); Unity Connecting Module; Zarya Control Module

**STS-50 Countdown Status**  
Jun. 23, 1992; In English; Videotape: 20 min. 16 sec. playing time, in color, with sound  
Report No.(s): NONP--NASA--VT--2000152241; No Copyright; Avail: CASI; B02; Videotape-Beta; V02; Videotape-VHS  
George Diller of the NASA Public Affairs Office introduces Mike Leinbach, NASA Shuttle Test Director, Russ Lunnem, Kennedy Space Center (KSC) USML Payload Manager, and Ed Priseta, U.S. Airforce/KSC Weather Officer to give a briefing on the countdown status for STS-50. Leinbach gives an overview of when certain tests are run and what problems are encountered. Lunnem outlines the payload activities for the shuttle. Priseta describes the current weather as well as the conditions needed for launch. They also take questions from the press. CASI  
Countdown; Prelaunch Summaries; Spacecraft Launching; Prelaunch Texts; Prelaunch Problems

**STS-58 Crew Arrival**  
Jun. 22, 1992; In English; Videotape: 16 min. 54 sec. playing time, in color, with sound  
Report No.(s): NONP--NASA--VT--2000152240; No Copyright; Avail: CASI; B02; Videotape-Beta; V02; Videotape-VHS  
The crew of STS-58, Commander Richard N. Richards, Pilot Kenneth D. Bowersox, Payload Commander Bonnie J. Dunbar, Mission Specialists Ellen S. Baker and Carl J. Meade, and Payload Specialists Lawrence J. DeLucas and Eugene H. Trinh are seen landing four T-38 aircraft at Kennedy Space Center for a terminal countdown and demonstration test. They are introduced by Richards and each makes a brief statement about his or her expectations for the upcoming Columbia mission. CASI  
Spacecrews; Space Transportation System; Prelaunch Summaries; Crew Procedures (Preflight)
answers questions about his inspiration to become an astronaut, his training, and gives details on the mission, including overviews of the Z1 truss, the S-band antenna, the third pressurized meeting adaptor (PMA-3), the common berthing mechanism (CBM), and the spacewalks. He shares his thoughts on Russia’s contributions to the International Space Station (ISS), the role of STS-92 in preparing the ISS for its first resident crew, and the importance of the ISS in the future.

CASEI
International Space Station: Astronauts: Prelaunch Summaries

20000114499 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–2000138970; No Copyright; Avail: CASEI; B02, Videotape-Beta; V02, Videotape-VHS
The STS-92 Mission Specialist Peter J.K. Wisoff is seen being interviewed. He answers questions about his inspiration to become an astronaut and gives details on the mission, including overviews of the Z1 truss, the third pressurized meeting adaptor (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.
CASEI
International Space Station: Astronauts: Prelaunch Summaries

20000114500 NASA Johnson Space Center, Houston, TX USA
STS–92 Crew Interview/P. Melroy
Sep. 14, 2000; In English; Videotape: 23 min. 43 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000138903; No Copyright; Avail: CASEI; B02, Videotape-Beta; V02, Videotape-VHS
The STS-92 Pilot Pamela A. Melroy is shown being interviewed. She answers questions about her inspiration to become an astronaut and gives details on the mission, including overviews of the Z1 truss, the third pressurized meeting adaptor (PMA-3), and the spacewalks. She shares her thoughts on the international collaboration of space exploration, Russia’s contributions, the role of STS-92 in preparing the International Space Station (ISS) for its first resident crew, and the importance of the ISS and the Space Shuttle in the future.
CASEI
International Space Station: Astronauts: Prelaunch Summaries

20000114501 NASA Johnson Space Center, Houston, TX USA
STS–106 Crew Activity Report/Flight Day 8 Highlights
Sep. 15, 2000; In English; Videotape: 20 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000136107; No Copyright; Avail: CASEI; B02, Videotape-Beta; V02, Videotape-VHS
On this eighth day of the STS-106 Atlantis mission, the flight crew, Commander Terrence W. Wilcutt, Pilot Scott T. Altman, and Mission Specialists Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov move into the second half of preparing the International Space Station (ISS) for its first resident crew. Lu and Malenchenko are seen installing the power converters in the Zvezda module and components of the primary oxygen generation system. Mastracchio and Wilcutt moves supplies and logistics from the payload of Atlantis to the ISS. Wilcutt and Altman participate in several interviews and the crew wishes the Olympiads in Sydney good luck in their endeavors. Scenes also include external views of the ISS and images of Earth, including Sydney, Australia.
CASEI
International Space Station: Space Transportation System; Service Module (ISS); Space Transportation System Flights; Spacecraft Maintenance

20000114879 NASA Johnson Space Center, Houston, TX USA
STS–92 Crew Interview/M. Lopez–Allegria
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: CASEI; B02, Videotape-Beta; V02, Videotape-VHS
The STS-92 Mission Specialist Michael Lopez-Allegria is seen being interviewed. He answers questions about his inspiration to become an astronaut and gives details on the mission, including overviews of the Z1 truss, the third pressurized meeting adaptor (PMA-3), and his spacewalks. He shares his thoughts on the international collaboration of space exploration, the role of STS-92 in preparing the International Space Station (ISS) for its first resident crew, and the importance of the ISS and the Space Shuttle in the future.
CASEI
International Space Station: Astronauts: Prelaunch Summaries

20000114880 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–81 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: CASEI; B03, Videotape-Beta; V03, Videotape-VHS
Richard Godney, 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.
CASEI
Transfer Orbits; ACTS; Postlaunch Reports; Space Transportation System

20000114881 NASA Johnson Space Center, Houston, TX USA
STS–92 Crew Activity Report/Flight Day 3 Highlights
Oct. 14, 2000; In English; Videotape: 17 min. 38 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000157387; No Copyright; Avail: CASEI; B02, Videotape-Beta; V02, Videotape-VHS
On this third day of the STS-92 mission, the flight crew, Cmndr. Brian Duffy, Pilot Pamela A. Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter J.K. Wisoff, Michael E. Lopez-Allegria, and William S. McArthur prepare for their dock with the International Space Station (ISS). External views of the docking process are shown with the Earth as a backdrop. The crew is seen opening the outermost hatch between Discovery and the ISS.
CASEI
International Space Station: Discovery (Orbiter); Service Module (ISS)

20000116071 NASA Johnson Space Center, Houston, TX USA
STS–92 Crew Interview/L. Chiao
Sep. 14, 2000; In English; Videotape: 16 min. 37 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000138908; No Copyright; Avail: CASEI; B02, Videotape-Beta; V02, Videotape-VHS
The STS-92 Mission Specialist Leroy Chiao is seen being interviewed. He answers questions about his inspiration to become an astronaut, his training, and gives details of the mission, including overviews of the Z1 truss, the third pressurized mating adapter (PMA-3), the common berthing mechanism (CBM), and the spacewalks. He shares his thoughts on the role of STS-92 in preparing the International Space Station (ISS) for the first resident crew, Russia’s contribution to the ISS, and the importance of the ISS and Space Shuttle in the future.
CASEI
International Space Station: Astronauts: Prelaunch Summaries

20000416073 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–49 CPCG
Apr. 07, 1992; In English; Videotape: 29 min. 39 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000138910; No Copyright; Avail: CASEI; B02, Videotape-Beta; V02, Videotape-VHS
The STS-49 Mission Specialist in charge of the spacewalks 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 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.
CASEI
International Space Station: Astronauts: Prelaunch Summaries

128
2000/01/16074 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-46 Post Launch News Conference
Jul. 31, 1992; In English; Videotape: 18 min. 4 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000152229; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
Dick Young introduces Brewer Shaw, Deputy Director of the Space Shuttle Program, and Robert B. Sieck, Launch Director of Kennedy Space Center. Shaw and Young give an overview of the launch of the spaceship Atlantis and answer questions from the press.

2000/01/16075 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-46 Crew Training
Jul. 21, 1998; In English; Videotape: 25 min. 23 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000152242; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
The crew of STS-46, Commander Loren J. Shriver, Pilot Andrew M. Allen, and Mission Specialists Franklin R. Chang-Diaz, Jeffrey A. Hoffman, Claude Nicollier, 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.

2000/01/16076 NASA Johnson Space Center, Houston, TX USA
STS-92 Crew Activity Report/Flight Day 7 Highlights
Oct. 18, 2000; In English; Videotape: 22 min. 9 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000157373; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
On this seventh day of the STS-92 mission, the flight crew, Commander Brian Duffy, Pilot Pamela A. Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter J.K. Wisoff, 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-to-DC converter units and attach a second tool storage box on the Z1 truss.

2000/01/16068 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-39/Breakfast, Suit-Up, Depart O&C, Launch, On-Orbit, and Landing
May 01, 1991; In English; Videotape: 60 min. 33 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000118015; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
Footage of various stages of the Discovery mission is shown, including shots of the crew at breakfast, getting suited up, and departing to board the orbiter. The launch is shown from many vantage points, as is the landing. Discovery, its payload (Space Test Payload 1), and Earth are shown from space while Discovery orbits.

2000/01/18230 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-43 Astronaut Interview in Space
Aug. 06, 1991; In English; Videotape: 24 min. 36 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000122919; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
The crew of STS-43, Commander John E. Blaha, Pilot Michael A. Baker, and Mission Specialists Shannon W. Lucid, James C. Adamson, and G. David Low are interviewed. They answer questions about the International Space Station, their expectations for the flight, what it is like to be in space, observing Earth from their vantage point, how the day-to-day activities are progressing, and the legacy of their flight.

2000/01/18231 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-43 Atlantis/Breakfast & Suit-Up, Depart O&C, Ingress, Launch with Isolated Views, TDRS-E Deploy, and Landing with Isolated Views
Aug. 11, 1991; In English; Videotape: 61 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000122918; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS
Footage of various stages of the STS-43 Atlantis launch is shown, including shots of the crew at breakfast, getting suited up, and departing to board the Orbiter. The launch is shown from many vantage points, as is the landing. Atlantis is shown from space and the deployment of the fifth Tracking and Data Relay Satellite (TDRS-E) is also shown.

2000/01/18232 NASA Kennedy Space Center, Cocoa Beach, FL USA
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.

2000/01/18233 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-42 Discovery/Breakfast, Suit-Up, Depart O&C, Ingress, Launch, On-Orbit, and Landing
Jan. 30, 1992; 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.

2000/01/18234 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-42 Preflight Background Briefing Life Sciences (MSFC)
Jan. 10, 1992; In English; Videotape: 62 min. 26 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000122909; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS
A panel of scientists give an overview of the experiments that are to take place on-board the STS-42 Discovery mission. Ronald J. White, International Microgravity Laboratory (IML) Program Scientist, gives a general description of why going into space with IML is so important. Robert Snyder, IML Mission Scientist, describes other aspects of the microgravity environment. Millard

Mariana Long with the Center for Macromolecular Crystallography gives an overview of commercial protein crystal growth. She describes the applications of protein crystallography and explains why it is better to grow the crystals in space. She shows the results of experiments that have been performed on twelve previous Space Shuttle flights.

Crystallography; Protein Crystal Growth; Crystals; Spaceborne Experiments

STS-46/TDRS at the PCR/Cannister Doors Opening
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 Brilhout, Program Scientist of the Biorec Facility, gives an overview of the Biorec 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
Gravitational Effects: Gravitational Physiology; Life Sciences; Microgravity; Prelaunch Summaries; Spaceborne Experiments

STS-47 Spacelab-J Installation into Payload Bay of Endeavour OPF HB-3

Footage shows the lowering of Spacelab-J into the payload of Endeavour in a clean room.

CASI
Installing: Spacelab: Endeavour (Orbiter)

STS-45/Atlas-1 TCDT Activities

Footage shows three T-38 aircraft coming in for landing at Kennedy Space Center (KSC) and jetting on the runway. The crew of Atlantis gets out of the cockpits and are introduced by Commander Charles F. Bolden to the press. The crew is also shown learning about the Atlas-01 module before suiting up to board Atlantis.

CASI
T-38 Aircraft: Crew Procedures (Preflight); Astronaut Training: Atlantis (Orbiter)

STS-46/Eureka Guidance Installation/Astronaut Inspection

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)

STS-97 Crew Training

Footage shows the crew of STS-97, Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Turner, Carlos L. 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
Spacecrafts: bailout; Astronaut Training; Crew Procedures (Preflight)

STS-92 Crew Activity Report/Flight Day 1 Highlights

On this first 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 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)
2000118255 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-45 Atlantis; Breakfast & Suit-Up, Depart O&C, Ingress, Launch with Isolated Views, On-Orbit Activities, and Landing with Isolated Views
Apr. 02, 1992; In English; Videotape: 61 min. 18 sec. playing time, in color, with sound
Report No(s): NONP-NASA-VT--2000148084; 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
Launching: Atlantis (Orbiter); Spacecraft Launching; Spacecraft Landing; Crew Procedures (Preflight); Spaceborne Experiments

2000118256 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-42 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

2000118257 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-43 Astronaut Arrival for TCDD
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 in fireway after landing. The crew of STS-43 is shown getting out of the cockpits and boarding a bus to leave the runway.
CASI
Astronauts: Crew Procedures (Preflight); T-38 Aircraft

2000118258 NASA Johnson Space Center, Houston, TX USA
STS-92 Crew Interview – Wakata
Sep. 14, 2000; In English; Videotape: 38 min. 35 sec. playing time, in color, with sound
Report No(s): NONP-NASA-VT--2000138905; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
STS-92 Mission Specialist Koichi Wakata is interviewed. He answers questions about his inspiration to become an astronaut, his training, and gives details on the mission, including overview of the Z1 truss, the S-band antenna, the third pressurized mating adapter (PMA-3), the common berthing mechanism, and his part in controlling the robotic arm during the spacewalks. He shares his thoughts on Russia’s contribution to the International Space Station (ISS), the role of STS-92 in preparing the ISS for its first resident crew, and the importance of ISS in the future.
CASI
International Space Station; Astronauts; Prelaunch Summaries

2000118259 NASA Johnson Space Center, Houston, TX USA
STS-106 Crew Activities Report/Flight Day 9 Highlights
Sep. 16, 2000; In English; Videotape: 19 min. 11 sec. playing time, in color, with sound
Report No(s): NONP-NASA-VT--2000136105; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
On this ninth 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 transferring supplies and equipment. Equipment includes an exercise treadmill, for use by the first resident crew. Altman, Lu, Burbank and Morukov are seen installing the treadmill in the Zvezda module. Footage also shows Lu and Altman participating in a telecommunication interview. A beautiful night shot of the International Space Station (ISS) and Atlantis complex above the Earth is also shown.
CASI
Orbital Assembly; Assembling; Construction; Spacecraft Equipment; Treadmills

2000118260 NASA Johnson Space Center, Houston, TX USA
STS–106 Crew Activities Report/Flight Day 10 Highlights
Sep. 17, 2000; In English; Videotape: 18 min. 16 sec. playing time, in color, with sound
Report No(s): NONP-NASA-VT--2000136104; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
On this tenth day of the STS-106 Atlantis mission, the flight crew, Commander Commander Terrence W. Wilcutt, Pilot Scott D. Altman, and Mission Specialists Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov are shown preparing for their departure from the International Space Station (ISS). Crewmembers are shown closing the hatches of the Zarya, Unity and Zvezda modules. They are also shown packing up trash and packing materials into the Russian Progress ship.
CASI
Spacecruces: Crew Procedures (Preflight); Spacecraft Docking; Closing; Hatches

2000118261 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–43 TCDD
Jul. 03, 1990; In English; Videotape: 62 min. 26 sec. playing time, in color, with sound
Report No(s): NONP-NASA-VT--2000122920; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS
Footage is seen of the simulated ignition of Atlantis’ main engines up until about 30 seconds before ignition. The crew’s activities of the days before are seen, including emerging from two T-38 aircraft cockpits, suiting up, and leaving for the pad. The Tracking and Data Relay Satellite (TDRS) is seen close-up in the test cell in the Vertical Processing Facility.
CASI
Ignition; Prelaunch Tests; Spacecraft Launching; Crew Procedures (Preflight)

2000118262 NASA Kennedy Space Center, Lompoc, CA USA
STS–47/Vice President Dan Quayle’s Visit to KSC for Launch
Sep. 12, 1992; In English; Videotape: 45 min. 19 sec. playing time, in color, with sound
Report No(s): NONP-NASA-VT--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 seen 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

2000118263 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–49 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

2000118264 NASA Kennedy Space Center, Cocoa Beach, FL USA
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
131
Footage is shown of the slow rollback of Atlantis, travelling from pad A to the Vehicle Assembly Building (VAB).

CASI

Atlantis (Orbiting); Space Shuttles

STS-38 Atlantis Crew Arrival
Nov. 13, 1999; 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 (Orbiting); Crew Procedures (Preflight); T-38 Aircraft

STS-38 Rollout to Pad A
Jun. 18, 1999; In English; Videotape: 5 min. 11 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000113528; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage is shown of the slow rollout of Atlantis on pad A. Different close-up and panoramic shots of the orbiter are shown against a backdrop of the sunset.

CASI

Atlantis (Orbiting); Prelaunch Tests

STS-97 Crew Interviews: Michael J. Bloomfield
Nov. 01, 2000; In English; Videotape: 38 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000165429; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Pilot Michael J. Bloomfield is shown. The interview addresses many different questions including why Bloomfield became interested in the space program, the events and people that influence him and ultimately led to his interest, and his vigorous training in the astronaut program. Other interesting information that this one-on-one interview discusses are the main goals of the STS-97 mission, its scheduled docking with the new International Space Station (ISS), and its delivery of the first set of U.S.-provided solar arrays, batteries, and radiators. Bloomfield briefly discusses his responsibilities during the much-anticipated docking as well as during the scheduled spacewalks.

CASI

Crew Procedures (Preflight); Flight crews; Pilots (personnel); Talking

STS-97 Crew Interviews: Brent W. Jett Jr.
Nov. 01, 2000; In English; Videotape: 45 min. 23 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000165434; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Commander Brent W. Jett Jr is shown. The interview addresses many different questions including why Jett became interested in the space program, the events that led to his interest, and his vigorous training in the astronaut program. Other interesting information that this one-on-one interview discusses are the main goals of the STS-97 mission, its scheduled docking with the new International Space Station (ISS), and its delivery of the first set of U.S.-provided solar arrays, batteries, and radiators. Jett mentions his responsibilities during the much-anticipated docking as well as during the scheduled spacewalks.

CASI

Crew Procedures (Preflight); Flight crews; Talking

STS-38 Landing at Kennedy Space Center/Crew Exit
Nov. 20, 1990; In English; Videotape: 18 min. 48 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000113530; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage of the STS-38 touchdown at Kennedy Space Center is shown. The crew exits the spacecraft and is greeted by NASA personnel. The five member crew consists of Commander Richard Covey, Pilot Frank L. Culbertson, Mission Specialists: Robert C. Springer, Carl J. Meade, and Charles D. Gemar.

CASI

Space Transportation System: Spacecraft Landing; Touchdown; Spacecrafts

STS-92 Crew Training
Sep. 28, 2000; In English; Videotape: 43 min. 33 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000148106; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Footage shows the crew of STS-92, Commander Brian Duffy, Pilot Pamela A. Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter J.K. Wisoff, Michael E. Lopez-Alegria, and William S. McArthur during various parts of their training. Clips are seen of the Shuttle rollout training, Shuttle arm and extravehicular activity (EVA) training at the Virtual Reality Lab, EVA training at the Neutral Buoyancy Lab, Shuttle operations training, EVA prep and post training in the Full Fuselage Trainer, ascent and post insertion training in the Guidance Navigation Simulator, and Mission Specialist Wakata in the Shuttle Engineering Dome and training on the Manipulator Development Facility.

CASI

Training Devices; Spacecrafts; Astronaut training; Crew Procedures (Preflight)

STS-97 Crew Interview: Marc Garneau, MS2
Nov. 01, 2000; In English; Videotape: 48 min. 24 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000165432; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The STS-97 Mission Specialist Marc Garneau is seen being interviewed. He answers questions about his inspiration to become an astronaut, his career path, and his training. He gives details on the mission's goals and significance, its payload, the rendezvous with the International Space Station (ISS), and what it will be like to work knowing there is already a crew on board the ISS.

CASI

International Space Station; Astronauts; Prelaunch Summaries

STS-97 Crew Interview: Joseph Tanner, MS1
Nov. 01, 2000; In English; Videotape: 43 min. 37 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000165431; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The STS-97 Mission Specialist Joseph Tanner is seen being interviewed. He answers questions about his inspiration to become an astronaut, his career path, and his training. He gives details on the mission's goals and significance, its payload, the rendezvous with the International Space Station (ISS), and what it will be like to work knowing there is already a crew on board the ISS.

CASI

International Space Station; Astronauts; Prelaunch Summaries

STS-97 Crew Interview: Carlos Noriega, MS3
Nov. 03, 2000; In English; Videotape: 45 min. 53 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000165430; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The STS-97 Mission Specialist Carlos Noriega is seen being interviewed. He answers questions about his inspiration to become an astronaut, his career...
path, and his training. He gives details on the mission’s goals and significance, its payload, the rendezvous with the International Space Station (ISS), and what it will be like to work knowing there is already a crew on board the ISS.

CASI

Prelaunch 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 were seen having breakfast and while suiting up. The Astronauts 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 remained docked with the International Space Station (ISS) as Noriega and Tanner are seen during their spacewalk. The astronauts guide 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 spacecraft.

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

20010001533 NASA Johnson Space Center, Houston, TX USA
STS-97 Crew Activity Report/Flight Day 10 Highlights
Dec. 10, 2000; In English; Videotape: 23 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000179199; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this tenth day of the STS-97 mission, Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Tanner, Carlos I. Noriega, and Marc Garneau are seen saying goodbye to the International Space Station’s (ISS) resident crew (Commander Bill Shepherd, Pilot Yuri Gidzenko and Flight Engineer Sergei Krikalev) and sealing the hatch 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; Procedures (Inflight)

20010001544 NASA Johnson Space Center, Houston, TX USA
STS-97 Crew Activity Report/Flight Day 7 Highlights
Dec. 06, 2000; In English; Videotape: 20 min. 19 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000179198; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this seventh day of the STS-97 mission, Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Tanner, Carlos I. Noriega, and Marc Garneau are answering questions about the mission and their accomplishments. Footage shows Tanner and Noriega in the airlock preparing for the next day’s spacewalk.

CASI

International Space Station; Crew Procedures (Inflight)

20010001555 NASA Johnson Space Center, Houston, TX USA
STS-97 Crew Activity Report/Flight Day 8 Highlights
Dec. 06, 2000; In English; Videotape: 23 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000179197; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this 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 remained docked with the International Space Station (ISS) on the Endeavour Orbiter. Tanner and Noriega are seen during their spacewalks, studying the solar wing and moving the S-band antenna assembly.

CASI

Extravehicular Activity; International Space Station

20010001556 NASA Johnson Space Center, Houston, TX USA
STS-97 Crew Activity Report/Flight Day 9 Highlights
Dec. 08, 2000; In English; Videotape: 22 min. 33 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000179196; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this ninth day of the STS-97 mission, Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Tanner, Carlos I.
Noriega, and Marc Garneau are shown meeting the resident International Space Station (ISS) crew (Commander Bill Shepherd and Cosmonaut Yuri Gidzenko and Sergei Krikalev) for the first time. The two crews answer questions about the ISS and future missions, and what it is like living on the ISS.

CASI
International Space Station: Spacecrews

209180011557 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: Spacecrews

209180011581 NASA Johnson Space Center, Houston, TX USA STS-97 Crew Activity Report/Flight Day 8 Highlights Dec. 7, 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 board the Endeavour Orbiter. Tanner and Noriega are seen preparing for their spacewalks. Footage shows them removing debris from the outer shield of the Unity Module during their spacewalks.

CASI
Extravehicular Activity: International Space Station: Space Debris

209180010950 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 Iacobellis, 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

209180010951 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. Congressmen Tom Lewis (Florida) and Dr. Robert Duke 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. Thot, 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

209180010985 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–20001001568; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Footage of various stages of the STS-56 Discovery launch is shown, including shots of the crew at breakfast, getting suited up, and departing to board the Orbiter. The launch is shown from many vantage points, as is the landing. The deployment of Spartan-201 is seen against a backdrop of northeast Africa and Egypt. Kentucky is seen at night, as are New York City, Atlanta, and Philadelphia.

CASI
Spacecraft Launching: Spacecraft Landing: Crew Procedures (Preflight); Crew Procedures (Inflight); Discovery (Orbiter); Spartan Satellites

209180011122 NASA Kennedy Space Center, Cocoa Beach, FL USA STS-56 Astronaut Crew Arrival at KSC for Launch Apr. 13, 1993; In English; Videotape: 11 min. 56 sec. playing time, in color, with sound Report No.(s): NONP-NASA–VT–20001001557; 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 their role and expectations for the mission.

CASI
Spacecrews: Crew Procedures (Preflight); Prelaunch Problems

209180011123 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–20001001571; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The crew of STS-56, Commander Kenneth D. Cameron, Pilot Stephen S. Oswald, and Mission Specialists C. Michael Foale Ph.D., Kenneth D. Cockrell, and Ellen Ochoa are seen landing the T-38 aircraft as part of the terminal countdown and demonstration test (TCDT). The crew is introduced by Commander Cameron and each member gives a brief statement about the upcoming mission and answers questions from the press. The crew is seen during various stages of training, including emergency egress training.

CASI
Crew Procedures (Preflight); Astronaut Training
CASI overview of the mission activities, objectives, and payload (ACTS-TOS, Bursch, and Carl E. Walz, in a preflight conference. Each crew member gives an overview of the STS-55 Columbia mission activities, objectives, payload, crew, and Spacelab operations. Dr. H. Dodeck, Deputy Program 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–2000101578; No Copyright; Avail: CASI; B03, Videotape–Beta; V01, Videotape–VHS

Gary Cohen, Lead Flight Director, gives an overview of the STS-56 Columbia mission activities, objectives, payload, crew, and Spacelab operations. Dr. H. Dodeck, Deputy Program 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 Preflight Briefs/Mission Overview from MSPC
Mar. 19, 1993; In English; Videotape: 46 min. 42 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000101579; No Copyright; Avail: CASI; B03, Videotape–Beta; V01, Videotape–VHS

Dick Young introduces Dr. Jack Kaye, Program Scientist for NASA, Brewster Shaw, Deputy Program Manager Space Shuttle, and Robert Stock, 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-46 TSS-1

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-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
Report No.(s): NONP–NASA–VT–2000152225; No Copyright; Avail: CASI; B01, Videotape–Beta; V01, 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 K. Chilton, and Mission Specialists Pierre J. Thuot, Kathy C. Thornton, Richard A. Mears, 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/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–2000152226; No Copyright; Avail: CASI; B04, Videotape–Beta; V04, 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, suit-up, and exiting the Operations and Checkout (O&C) Building.

CASI
Endeavour (Orbiter); Checkout: Prelaunch Tests; Crew Procedures (Preflight)

2001011188 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-49 Endeavour Overview
Apr. 07, 1992; In English; Videotape: 41 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000152221; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Daniel Germany, Manager, Orbiter and GFE Projects, Johnson Flight Center, gives an overview of the STS-49 Endeavour mission. He discusses Endeavour’s successful firing test, the upcoming launch, and the Endeavour Orbiter’s recent enhancements. He then answers questions from the press.

CASI
Endeavour (Orbiter); Prelaunch Summaries

2001011186 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-47 Astronaut Crew at Pad B for TCDT, Emergency Egress Training, and Photo Opportunity
Aug. 26, 1992; In English; Videotape: 37 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000152218; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The crew of STS-47, Commander Robert L. Gibson, Pilot Curtis L. Brown, Payload Commander Mark C. Lee, Mission Specialists N. Jan Davis, Jay Apt, and Mae J. Jemison, and Payload Specialist Mario M. Mohn 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)

2001011187 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–50 Crew Briefing
May 26, 1992; In English; Videotape: 48 min. 4 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP–NASA–VT–2000152217; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Commander Richard N. Richards introduces the crew of STS-50, Pilot Kenneth D. Bowersox, Payload Commander Bonnie J. Dunbar, Mission Specialists Ellen S. Baker and Carl J. Meade, and Payload Specialists 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
Spacecrew; Crew Procedures (Preflight); Prelaunch Summaries

2001011188 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–49 Endeavour/Breakfast/Suit-up/Depart O&C/Launch/On-Orbit/Landing with ISOS
May 01, 1992; In English; Videotape: 58 min. 48 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000152212; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Footage of various stages of the STS-46 Endeavour launch is shown, including shots of the crew at breakfast, getting suited up, and departing to board the Orbiter. The launch is seen from many vantage points, as is the landing. On-orbit activities are shown, such as the Inertial rescue and deployment on flight day 7, and some of the Space Station assembly techniques.

CASI
Endeavour (Orbiter); Intelsat Satellite; Spacecraft Launching; Rescue Operations; Crew Procedures (Preflight); Crew Procedures (Inflight)

2001011189 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–46 Eureca/TSS/Compiled Tape for Editors
Jul. 17, 1992; In English; Videotape: 58 min. 26 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP–NASA–VT–2000148094; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Compiled footage shows shots of the Tethered Satellite System (TSS) lift in the Operations and Checkout (O&C) Building, TSS move onto satellite assembly section, the EURECA arrival and offload at Kennedy Space Center (KSC), EURECA instrument and tracker installation, the solar panel battery installation, and EURECA high-gain antenna deploy. The astronaut crew is seen at the O&C building for the TSS site test, and Atlantis rolls out to Pad B. CASI
EURECA (ESA): Tethered Satellites: Atlantis (Orbiter)

2001011190 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–43 Crew Briefing
Jun. 26, 1991; In English; Videotape: 44 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000148092; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS


CASI
Spacecrews; Crew Procedures (Preflight); Spaceborne Experiments; Prelaunch Summaries

2001011191 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–46 Standard Mission Handout Tape
Aug. 08, 1992; In English; Videotape: 61 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000148088; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Footage of various stages of the STS-46 Atlantis launch is shown, including shots of the crew at breakfast, getting suited up, and departing to board the Orbiter. The launch is shown from many vantage points, as is the landing. The EURECA deployment and the Tethered Satellite System (TSS-1) deployment and retrieval are seen.

CASI
EURECA (ESA): Spacecraft Launching; Spacecraft Landing; Crew Procedures (Preflight); Atlantis (Orbiter)

2001011192 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–44 Astronaut Crew Briefing
Oct. 28, 1991; In English; Videotape: 27 min. 59 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000148085; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Commander Frederick D. Gregory introduces the crew of STS-44, Pilot Terence T. Henriks, Mission Specialists F. Story Musgrave, Mario Runco, 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

2001011193 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–43 TDRS-E Sharp Edge Inspection at VPF
Jul. 22, 1991; In English; Videotape: 2 min. 5 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP–NASA–VT–2000148077; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Footage shows the inspection of the Tracking and Data Relay Satellite (TDRS) at the Vertical Processing Facility (VPF).

**TDR Satellites: Inspection**

20010101198 NASA Kennedy Space Center, Cocoa Bench, FL USA

**STS-56 Atlas-2/Spartan O&C and Hangar AO**
Feb. 01, 1993; In English; Videotape: 6 min. playing time, in color, with sound (no narration)
Report No.(s): NONP–NASA–VT–2001011580; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Close-up shots are seen of Atlas-2 and Spartan-201, the payload for the Discovery Orbiter.

**CASI**

**Satellite Satellites: Payloads**

20010101199 NASA Kennedy Space Center, Cocoa Bench, FL USA

**STS-56/TCDT O&C Walkout**
Mar. 18, 1993; In English; Videotape: 2 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001011591; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The crew of STS-56, Commander Kenneth D. Cameron, Pilot Stephen S. Oswald, and Mission Specialists C. Michael Foale Ph.D., Kenneth D. Cockrell, and Ellen Ochoa are seen exiting the Operations and Checkout (O&C) Building on their way to the bus that will take them to the launch pad.

**CASI**

**Crew Procedures (Preflight); Spacecrafts; Space Transportation System Flights**

20010101200 NASA Kennedy Space Center, Cocoa Bench, FL USA

**STS-55 Columbia Rollover from OPP to VAB**
Feb. 02, 1993; In English; Videotape: 8 min. 9 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP–NASA–VT–20010101582; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The Columbia Orbiter is seen during the rollover from the Orbiter Processing Facility (OPF) to the Vehicle Assembly Building (VAB).

**CASI**

**Columbia (Orbiters); Transferring**

20010101201 NASA Kennedy Space Center, Cocoa Bench, FL USA

**STS-56 Landing Replays at KSC**
Apr. 17, 1993; In English; Videotape: 46 min. 50 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2001011584; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

The landing of the Discovery Orbiter at Kennedy Space Center (KSC) is shown from many different vantage points, including footage of the landing taken with infrared cameras.

**CASI**

**Discovery (Orbiters); Spacecraft Landing**

20010101202 NASA Kennedy Space Center, Cocoa Bench, FL USA

**STS-55 Emergency Egress Training/Photo Opportunity at Pad A**
Feb. 11, 1993; In English; Videotape: 22 min. 3 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20010101585; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

The crew of STS-55, Commander Steven R. Nagel, Pilot Terence T. Henricks, Mission Specialists Jerry L. Ross, Charles J. Precourt, and Dr. Bernard A. Harris Jr., and Payload Specialists Dr. Ulrich Walter and Hans Schlegel are seen during emergency egress training. Then Commander Nagel introduces the members of the crew and they each give a brief statement about the mission and answer questions from the press.

**CASI**

**Astronaut Training; Prelaunch Summaries; Crew Procedures (Preflight)**

20010101203 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–20010101586; 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**

20010101653 NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS-92 H-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–20010001892; 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**

20010101854 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–2001006460; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Joe 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**

20010101855 NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS-97 Countdown Status**
Nov. 28, 2000; In English; Videotape: 17 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001006010; 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. 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**

20010101856 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–2001006009; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

John Un, International Space Station (ISS) Lead Increment Scientist, gives an overview of the STS-97 Endeavour mission payload (PV Module P6) and Expedition 1 crew. He describes the research and experimentation to take place on the ISS in the following fields: (1) Life Sciences, (2) Microgravity Research, (3) Commercial, (4) Space Sciences, and (5) Earth Sciences. Observations of
Earth include images of the Aral Sea in central Asia and fires in Mongolia. Mr. Un then answers questions from the press.

CASI

Spaceborne Experiments: Research and Development: International Space Station: Prelaunch Summaries

2001011867 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

Daryl Schuck, STS-92 Lead Extravehicular Activity (EVA) Officer, gives an overview of the four EVAs scheduled for the STS-92 mission. He discusses the construction phase of the International Space Station (ISS) and the equipment to be installed onto the ISS, such as the Z-1 Truss, PMA-3 (Third Pressurized Mating Adapter), S-Band Antenna, and the DC to DC Power Converter. Mr. Schuck describes the challenges of the mission, and the activities and objectives of the 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 2 of 2
Feb. 04, 1993; In English; Videotape: 24 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20040101575; 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, Dr. Charles J. Precourt, and Dr. Bernard A. Harris Jr., and Payload Specialists Dr. Ulrich Walter and Hans Schlegel, continue to answer questions from the press about the upcoming Columbia mission.

CASI

Prelaunch Summaries; Columbia (Orbiter)

2001011849 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–2001052216; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

George Diller, NASA Public Affairs, introduces Jeff Spaulding, NASA Test Director, Scott Higginbotham, KSC Payload Manager, and Ed Priselac, Shuttle Weather Officer. Mr. Spaulding 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. Priselac 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. Henmen, is seen at breakfast and suit up from the press about the upcoming Endeavour mission. Footage shows the LCC Firing room shortly before launch, and the lift-off 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 Launching; 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.
2001012101 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-56 Post Landing Press Conference
Apr. 17, 1993; In English; Videotape: 20 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001011569; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
Dick Young, NASA Public Affairs, introduces Brewster Shaw, 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
Astronaut Training; Prelaunch Summaries; Crew Procedures (Inflight);
Payloads; Extravehicular Activity

2001012124 NASA Johnson Space Center, Houston, TX USA
STS-98 Crew Interview: Ken Cockrell
Jan. 04, 2001; In English; Videotape: 48 min. 39 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001007206; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, 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

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–2001007204; 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: Marsha Ivins
Jan. 04, 2001; In English; Videotape: 29 min. 46 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001007203; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, 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

2001012127 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

2001012128 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-55 Post Launch Press Conference
Apr. 26, 1993; In English; Videotape: 19 min. 33 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001001588; 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-55 Discovery mission and landing. They then answer questions from the press.
CASI
Spacecraft Landing; Postmission Analysis (Spacecraft); Postflight Analysis

2001012136 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-46 Special Events Resource Tape, Part 1 of 2
Nov. 17, 1992; In English; In Italian; In Spanish; Videotape: 42 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000148089; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
Footage shows the inflight interviews of the crew of the STS-46 Atlantis Orbiter. An Italian VIP call and press conference (both spoken in Italian) are seen, and Mission Specialist Franklin R. Chang-Diaz participate in a Costa Rican VIP call (spoken in Spanish). See also 'STS-46 Special Events Resource Tape, Part 2 of 2'.
CASI
Postlaunch Reports; Atlantis (Orbiter)

2001012137 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-44 Crew Training
Nov. 01, 1991; In English; Videotape: 20 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000148089; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
Footage shows the various stages of STS-44 crew training, including KC-135 activities, Shuttle Activation Monitor (SAM) training, inertial upper stage orbital malfunction simulations, and 70 mm photo training.
CASI
Crew Procedures (Preflight); Astronaut Training; C-135 Aircraft

2001012138 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-45 Post Launch Press Conference
Mar. 24, 1992; In English; Videotape: 19 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000148089; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
Dick Young, NASA Public Affairs, introduces Admiral Richard Truly, who makes a brief statement about the STS-45 Atlantis Orbiter launch and answers questions from the press.
CASI
Spacecraft Landing; Postmission Analysis (Spacecraft); Postflight Analysis

2001012139 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-49 Endeavour/Intelsat Briefing
Apr. 07, 1992; In English; Videotape: 29 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000152209; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
Lak Virdoon of Intelsat, summarizes Intelsat's role in the STS-49 Endeavour mission. He discusses the reboost hardware, giving details on the capture arm and...
dock adapter assembly. He describes the rendezvous between Intelsat and the Endeavour Orbiter. Mr. Virdie then answers questions from the press.

CASI

Endeavour (Orbiter); Intelsat Satellites; Rendezvous

20010012140 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-51 Main Engine Shutdown Playbacks from OTV

Aug. 12, 1993; In English; Videotape: 9 min. 17 sec. playing time, in color, without sound

Report No.(s): NONP--NASA--VT--2000152232; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The shutdown of the main engines is shown from different vantage points.

CASI

Playbacks; Shutdowns; Space Shuttle Main Engine

200101012141 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-50 TCDT Activities

Jun. 09, 1992; In English; Videotape: 62 min. 39 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2000152238; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

Terminal Countdown and Demonstration Test (TCDT) activities are shown, such as the TCDT-50 crew (Commander Richards, Pilot Kenneth D. Bowersox, Payload Commander Bonnie J. Dunbar, Mission Specialists Ellen S. Baker and Carl J. Meade, and Payload Specialists Lawrence J. DeLucas and Eugene H. Trinh) emerging from T-38 aircraft and being introduced by Commander Richards. Emergency egress training is seen, as is the crew’s departure from the Operations and Checkout (O&C) Building. Footage shows the launch pad and launch control room as the countdown nears the engine ignition simulation.

CASI

Countdown; Crew Procedures (Pre-flight); Launching Pads: Columbia (Orbiter); Astronaut Training

200101012142 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-47 Countdown Status Briefing

Sep. 09, 1992; In English; Videotape: 6 min. 22 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2000152238; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

NASA officials answer questions from the press about the upcoming launch of the STS-47 Endeavour mission.

CASI

Endeavour (Orbiter); Countdown; Spacecraft Launching; Prelaunch Summaries

200101013076 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-44 Post Launch Press Conference

Nov. 24, 1991; In English; Videotape: 21 min. 28 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2001015360; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Dick Young, NASA Public Affairs, introduces Bob Sieck, Launch Director, Kennedy Space Center, who gives an overview of the STS-44 Atlantis countdown and launch. He discusses the hardware problem experienced shortly before liftoff (a replenishing valve for the liquid oxygen on the mobile launch platform had been leaking). He then answers questions from the press.

CASI

Postlaunch Reports: Countdown; Spacecraft Launching; Valves

200101013078 NASA Johnson Space Center, Houston, TX USA

STS-98 Crew Interview: Mark Polansky

Jun. 04, 2001; In English; Videotape: 48 min. 25 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2000151361; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

The STS-98 Pilot Mark Polansky is seen being interviewed. He answers questions about his inspiration to become an astronaut, his career path, and his training. He gives details on the mission’s goals and significance, and the payload (ORU, PDGF) and hardware it brings to the International Space Station (ISS). Ms. Polansky discusses her role in the mission’s spacewalks and activities.

CASI

Payloads; Crew Procedures (Pre-flight); Prelaunch Summaries; Astronaut Training

200101013127 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 1 of 2’ for the activities of flight days 11-12 and the landing of Endeavour.

CASI

Crew Procedures (Pre-flight); Crew Procedures (In-flight); Endeavour (Orbiter); Earth Observations (From Space); Spacecraft Launching

200101013129 NASA Johnson Space Center, Houston, TX USA

STS-101 Mission Highlights Resource Tape, Part 2 of 2

Sep. 19, 2000; In English; Videotape: 26 min. 13 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2000157334; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

A continuation of ‘STS-99 Mission Highlights Resource Tape, Part 1 of 2’, footage shows the activities of flight days 11 and 12. The retraction of the Shuttle Radar Topography Mission (SRTM) is seen, and the landing of Endeavour is seen from several vantage points.

CASI

Crew Procedures (In-flight); Earth Observations (From Space); Endeavour (Orbiter); Spacecraft Landing

200101013127 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--2000142667ar2z; 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 resoling 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 (In-flight); Orbital Assembly: Spacecraft Docking

200101013130 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--2000142667ar3; 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)

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-2000142665start1; No Copyright; Aval: 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)

STS-45 Atlas-1 Compiled Processing Footage
Feb. 20, 1992; In English; Videotape: 30 min. 53 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-2001013662; No Copyright; Aval: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Compiled footage shows shots of the Atmospheric Laboratory for Applications and Science's (Atlas-1s) 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

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; Aval: 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/SAI (MLM-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
Spacecrews; Crew Procedures (Inflight); Prelaunch Summaries; International Space Station

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-200016067; No Copyright; Aval: CASI; B01, Videotape-Beta; V01, Videotape-VHS

In a preflight interview, Commander James B. Wetherbee of the STS-63 Discovery mission gives an overview of the upcoming rendezvous with Mir and the five minute window in which the rendezvous takes place. Computerized simulations show the docking of the Discovery Orbiter with Mir.

CASI
Discovery (Orbiter); Computerized Simulation; Spacecraft Docking; Spacecraft Launching; Mir Space Station; Prelaunch Summaries

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-2000101828; No Copyright; Aval: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Various shots highlight the STS-106 Atlantis 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, eating, exercising, sleeping, and the crew transferring equipment from Atlantis to ISS. Shots show the southern lights and several shots of Earth can be seen, including views of the Mediterranean Sea and the Italian coastline. Footage shows some areas of interest on the ISS, such as the food preparation area, the sleeping rooms, and the toilet.
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 Launching; Postlaunch Reports

200101018416 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-52 Astronaut Crew Activities for TCCT 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 and Demonstration Test (TCCT) activities for the STS-52 Columbia mission, including shots of emergency egress training and the flight of T-38 aircraft. Commander James B. Wetherbee introduces Pilot Michael A. Baker and Mission Specialist Charles L. Veach, William M. Shepherd, Tamara E. Jernigan, and Steven G. MacLean, and gives a brief overview of the mission. The crew then answers questions from the press.
CASI
Spacecrews; Egress; Emergencies; Astronaut Training; Prelaunch Summaries; Crew Procedures (Preflight)

200101018417 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-52 Lagesse/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

200101018436 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 (ISS-07/5A1 (MPLM-1)), and spacewalks. Thomas discusses the upcoming transfer of the International Space Station’s (ISS) crew Expedition 2 and the role of the Mir Space Station in the evolution and success of the ISS.
CASI
International Space Station; Spacecrews; Prelaunch Summaries; Crew Procedures (Inflight)

200101018437 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

200101018493 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–106 Countdown Status Briefing Sep. 04, 2000; In English; Videotape: 2 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–2001023238; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
Joel Wells, NASA Public Affairs, introduces Jeff Spaulding, NASA Test Director, Scott Higgenbotham, Kennedy Space Center Payload Manager, and Ed Priselac, Shuttle Weather Officer, who give an overview of the successful countdown for the STS-106 Atlantis mission thus far. Prelaunch activities and the payload status are described. The weather forecast for the upcoming launch is given. The men then answer questions from the press.
CASI
Countdown; Spacecraft Launching; Prelaunch Tests; Prelaunch Summaries; Weather Forecasting

200101018492 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

200101018494 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. Creighston, Pilot Kenneth S. Reightler, and Mission Specialists James F. Buchli, Charles D. Gernan, and Mark N. Brown are seen during in-flight activities, such as eating and stowage procedures.
CASI
Upper Atmosphere Research Satellite (UARS); Crew Procedures (Inflight)

200101018495 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–55 Hydraulic Work in Att 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

200101018496 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–55 D-2 Spacelab in Cargo Bay of Columbia in OFP 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

200101018497 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;
Footage shows the rollback of the Endeavour Orbiter at the launch pad.

CASI
Endeavour (Orbiter): Launching Sites

STS-106 Countdown Status Briefing
Sep. 05, 2000; In English; Videotape: 21 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023240; No Copyright; Avid: CASI; B02, Videotape-Beta; V02, Videotape-VHS
George Diller, NASA Public Affairs, introduces Steve Altemus, NASA Test Director, Scott Higgenbotham, Kennedy Space Center Payload Manager, and Ed Priscel, Shuttle Weather Officer, who give an overview of the successful countdown for the STS-106 Atlantis mission thus far. Prelaunch activities are described, such as the engine preparations, the communications systems power up, final flight close outs, and payload status. The weather forecast for the upcoming launch is given. The men then answer questions from the press.

CASI
Countdown: Spacecraft Launching

STS–106 Post Launch Press Conference
Sep. 01, 2000; In English; Videotape: 10 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023257; No Copyright; Avid: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Bruce Buckingham, NASA Public Affairs, introduces Bill Gerstenmaier, Shuttle Program Integration Manager, and Mike Leimbach, Kennedy Space Center Launch Director, who give an overview of the successful countdown and launch of STS-106 Atlantis. They then answer questions from the press.

CASI
Endeavour (Orbiter): Spacecraft Landing
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 shows 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

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: Cans

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 Kaluzienski, Program Scientist, Wilton 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 arrival in space, and its objectives, along with an overview of the DXS mission, in which the DXS is part of the payload. The men then answer questions from the press. CASI

Endeavour (Orbiter): X Ray Spectrometers; Payloads; Prelaunch Summaries

STS-60 Mission Update
Feb. 07, 1994; In English; Videotape: 18 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001023145; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The activities of the STS-60 Discovery mission are reviewed, including

CASI

Final Review
Dec. 09, 1992; In English; Videotape: 35 min. 16 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 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

20010018720 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)

20010018721 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-54 Physics of Toys
Jan. 06, 1993; In English; Videotape: 32 min. 48 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001023121; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Greg Vogt, NASA Headquarters Education Specialist, and Carolyn Summers, 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. Summers then answer questions from the press.

CASI

Spaceborne Experiments: Gravitational Effects

20010018722 NASA Kennedy Space Center, Cocoa Beach, FL USA
Early Mission Blowups
Jan. 01, 1985; In English; Videotape: 12 min. 47 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP--NASA--VT--2001023108; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the explosions of many early model rockets and aircraft.

CASI

Explosions: Combustion

20010018724 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-49 Astronaut Flight Crew
Feb. 22, 1992; In English; Videotape: 5 min. 45 sec. playing time, in color, no sound
Report No.(s): NONP--NASA--VT--2001017555; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS


CASI

Compartments: Spacescans; Astronaut Training; Crew Procedures (Preflight)

20010018725 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-52 Crew Arrival for Launch
Oct. 19, 1992; In English; Videotape: 16 min. 43 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); Postlaunch Reports

20010018726 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS--48 UARS at PHSF
May 22, 1991; In English; Videotape: 9 min. 21 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP--NASA--VT--2001017549; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the Upper Atmosphere Research Satellite (UARS) being moved at the Payload Hazardous Servicing Facility (PHSF).

CASI

Upper Atmosphere Research Satellite (UARS); Payloads

20010018754 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS--54 TDRS--F in Cargo Bay at Pad B
Jan. 10, 1992; In English; Videotape: 5 min. 12 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001023167; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows close-up shots of the Tracking and Data Relay Satellite (TDRS) in the Endeavour Orbiter’s cargo bay at Launch Pad B.

CASI

TDR Satellites: Cargo

20010018756 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS--48 UARS Edited Flow Tape
Sep. 13, 1991; In English; Videotape: 12 min. 23 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001023176; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the Upper Atmosphere Research Satellite being lifted into place in the payload bay of the Discovery Orbiter.

CASI

Discovery (Orbit): Upper Atmosphere Research Satellite (UARS)

20010019071 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

20010019072 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

20010919005 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-51 ACTS/TOS and SPAS Deployment
Sep. 15, 1993; In English; Videotape: 62 min. 31 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2001023182; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Footage shows the deployment of the Advanced Communications Technology Satellite/Transfer Orbit Station (ACTS/TOS) and the Shuttle Pallet Satellite (SPAS) as seen from the Discovery Orbiter.

CASI
ACTS: Shuttle Pallet Satellites: Deployment

20010919006 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-2001023150; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Footage of various stages of the STS-48 Discovery launch is shown, including shots of the crews 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

20010919007 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 and Demonstration Test (TCDT), including Emergency Egress Training.

CASI
Astronaut Training; Crew Procedures (Preflight); Prelaunch Summaries

20010919008 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

20010919009 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 Mac C. Jernison, and Payload Specialist Murokoh Mohri, are 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; Bailout: Fire Fighting; Training Devices

20010919010 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

20010919011 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-69 Launch/Composite of Breakfast, Suit-up, and Fire Arm Room Activities
Sep. 07, 1995; In English; Videotape: 11 min. 44 sec. playing time, in color, no sound
Report No.(s): NONP-NASA-VT-2001023126; 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 Fire Arm Room activities before launch.

CASI
Crew Procedures (Preflight); Ground Based Control

20010919012 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-2001023120; 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

20010919013 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-53 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

20010919020 NASA Kennedy Space Center, Cocoa Beach, FL USA
A New Beginning
Feb. 01, 1989; 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

200101919655 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

20010191956 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 (SAFE-2).

CASI
Assembling; Spacecraft Modules

20010191907 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 Vance, 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

20010191958 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: 56 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

200101919731 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

200101919755 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 Sinelshikov of PKA, Vasily Tsibliev of GCTC, Steve Moses of CSA, Ian Pryke of ESA, and Masaaki Komatsu of NASDA. 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

200101919768 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

200101919849 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 suit-up and closing the payload bay doors) and Endeavour is seen landing. Shots of
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. Cockrell, Pilot Mark L. Polansky, and Mission Specialist Marsha 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

200101020032 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–2001028016; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eighth day of the STS–98 mission, Mission Specialists Tom Jones and Bob Curbeam perform their first spaceswalks 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

200101020281 NASA Johnson Space Center, Houston, TX USA
STS–97 Mission Highlights Resource Tape, Part 1
Feb. 20, 2001; In English; Videotape: 46 min. 57 sec. playing time, in color, with sound
Report No(s): NONP–NASA–VT–2001028105; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Various clips give an overview of the STS–97 Endeavour mission. Footage includes Endeavour on the launch pad, the crew of STS–97 (Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Tanner, Carl J. Noriega, and Marc Garneau) suiting up, replays of the nighttime launch, Launch Control Center at Kennedy Space Center during countdown, and the activities of flight days one through three. The activities of flight days four through six can be seen on ‘STS–97 Mission Highlights Resource Tape, Part 2 of 3’ (document ID 2001002082). The activities of flight days seven through eleven and Endeavour’s landing can be found on ‘STS–97 Mission Highlights Resource Tape, Part 3 of 3’ (document ID 2001002083).

CASI

Endeavour (Orbiter); Countdown; Spacecraft Launching; Crew Procedures (Preflight); Crew Procedures (Inflight)

200101020282 NASA Johnson Space Center, Houston, TX USA
STS–97 Mission Highlights Resource Tape, Part 2
Feb. 20, 2001; In English; Videotape: 58 min. 31 sec. playing time, in color, with sound
Report No(s): NONP–NASA–VT–2001028104; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of ‘STS–97 Mission Highlights Resource Tape, Part 1 of 3’ (document ID 2001002081), the activities of flight days four through six are seen. Footage includes the spaceswalks performed by Noriega and Tanner, the deployment of the Solar Array Blanket Box (SABB), various shots of Endeavour’s payload bay and the International Space Station (ISS), and the deployment of the solar radiators on the ISS. Flight days seven through eleven and Endeavour’s landing are shown in ‘STS–97 Mission Highlights Resource Tape, Part 3 of 3’ (document ID 2001002083).

CASI

Endeavour (Orbiter); International Space Station; Deployment; Crew Procedures (Inflight); Extravehicular Activity

200101020283 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–2001028103; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of ‘STS–97 Mission Highlights Resource Tape, Part 1 of 3’ (document ID 2001002081) and ‘STS–97 Mission Highlights Resource Tape, Part 2 of 3’ (document ID 2001002082), 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 Micrometeoroid/Oriental Debris Shield removal, the spaceswalks performed by Mission Specialists Joseph Tanner and Carl Noriega, the undocking of Endeavour and ISS, the Orbital Maneuvering System (OMS) firing, the payload bay doors closing, and the landing sequence of Endeavour. The Aurora Borealis and a night view of the French Rivera are seen from space.

CASI

International Space Station; Crew Procedures (Inflight); Extravehicular Activity; Spacecraft Landing; Spacecraft Docking

200101020287 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–2001028078; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this seventh day of the STS–98 mission, Pilot Mark L. Polansky and Mission Specialists Tom Jones, Bob Curbeam, and Marsha Ivins are seen answering questions about the International Space Station (ISS), the mission’s spaceswalks, 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

200101020288 NASA Johnson Space Center, Houston, TX USA
STS–98 Crew Activity Report/Flight Day 6 Highlights
Feb. 13, 2001; In English; Videotape: 18 min. 36 sec. playing time, in color, with sound
Report No(s): NONP–NASA–VT–2001028077; 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 spaceswalks.

CASI

International Space Station; Installing; Destiny Laboratory Module; Extravehicular Activity; Crew Procedures (Inflight)

200101021196 NASA Kennedy Space Center, Cocoa Beach, FL USA
The Lighthouse That Never Fails
Jun. 01, 1958; In English; Videotape: 3 min. 58 sec. playing time, black and white, with sound
Report No(s): NONP–NASA–VT–2001023129; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

A fictional piece of work, the film shows a man taken into space when the lighthouse that he is in launches.

CASI

Lighting Equipment; Launching

200101021485 NASA Johnson Space Center, Houston, TX USA
STS–102 Crew Training
Feb. 27, 2001; In English; Videotape: 37 min. playing time, in color, with sound
Report No(s): NONP–NASA–VT–2001029048; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Footage shows the crew of STS–102, Commander James D. Wetherbee, Pilot James M. Kelly, and Mission Specialists Andrew S. Thomas and Paul Richards, during various parts of their training. Scenes include: (1) neutral buoyancy lab training; (2) undocking/side-when 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. 9, 2001; In English; Videotape: 20 min. 1 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001031588; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The crew of STS–102 (Commander James D. Wetherbee, Pilot James M. Kelly, and Mission Specialists Andrew S. W. Thomas and Paul Richards) and the Expedition 2 crew (James S. Voss, Susan J. Helms, and Yuriy V. Usachev) are seen during the prelaunch breakfast, suiting up, leaving the Operations and Checkout (O&C) Building, and boarding the Discovery Orbiter. The launch of Discovery is seen from the ground and from an onboard camera.

CASI
Discovery (Orbiter); Checkout; Spacecraft Launching; Crew Procedures (Preflight)

STS–102 Crew Activity Report/Flight Day 2 Highlights
Mar. 10, 2001; In English; Videotape: 16 min. 36 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001031587; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Footage shows the docking of the Discovery Orbiter with the International Space Station (ISS). The STS–102 crew (Commander James D. Wetherbee, Pilot James M. Kelly, and Mission Specialists Andrew S. W. Thomas and Paul Richards) and the Expedition 2 crew (James S. Voss, Susan J. Helms, and Yuriy V. Usachev) are seen greeting the Expedition 1 crew (William M. Shepherd, Yuri Gidzenko, and Sergei K. Krikalev) after Commander Wetherbee opens the hatch connecting Discovery to the ISS.

CASI
Discovery (Orbiter); International Space Station; Docking; Crew Procedures (Inflight)

STS–102 Crew Activity Report/Flight Day 3 Highlights
Mar. 11, 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 4 Highlights
Mar. 12, 2001; In English; Videotape: 20 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001032301; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Experiments of Discovery and its payload show the robotic arm lifting and maneuvering the Leonardo Module into place on the Destiny Laboratory Module, which is part of the International Space Station (ISS). Footage shows Expedition 1 Commander Bill Shepherd opening the hatch between Destiny and Leonardo.

CASI
Destiny Laboratory Module; International Space Station; Discovery (Orbiter); Payloads

STS–102 Crew Activity Report/Flight Day 5 Highlights
Mar. 13, 2001; In English; Videotape: 20 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001032302; 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. 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 7 Highlights
Mar. 15, 2001; In English; Videotape: 19 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001032304; 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)
Voss and Susan Helms are seen preparing and 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
International Space Station; Space Station Modules; Crew Procedures (Inflight); Extravehicular Activity; Installing

STS-100 Mission Specialist Umberto Guidoni is seen being interviewed. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission’s goals and significance, the rendezvous and docking of Endeavour with the International Space Station (ISS), the mission’s spacewalks, and installation and capabilities of the Space Station robotic arm, UHF antenna, and Rafaello Logistics Module. Guidoni then discusses his views about space exploration as it becomes an international collaboration.

CASI
Extravehicular Activity; Prelaunch Summaries; Antennas; Installing; Orbital Rendezvous; Robot Arms; Spacecraft Docking

STS-100 Crew Interview: Kent Rominger
Apr. 03, 2001; In English; Videotape: 25 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001047823; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

STS-100 Commander Kent Rominger is seen being interviewed. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission’s goals and significance, the rendezvous and docking of Endeavour with the International Space Station (ISS), the mission’s spacewalks, and installation and capabilities of the Space Station robotic arm, UHF antenna, and Rafaello Logistics Module. Rominger then discusses his views about space exploration as it becomes an international collaboration.

CASI
Extravehicular Activity; Prelaunch Summaries; Antennas; Installing; Orbital Rendezvous; Robot Arms; Spacecraft Docking; Antennas

STS-100 Mission Specialist John Phillips is seen being interviewed. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission’s goals and significance, the rendezvous and docking of Endeavour with the International Space Station (ISS), the mission’s spacewalks, and installation and capabilities of the Space Station robotic arm, UHF antenna, and Rafaello Logistics Module. Phillips 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; Antennas

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
International Space Station; Space Station Modules; Crew Procedures (Inflight); Extravehicular Activity; Installing

STS-100 Crew Interview: Jeff Ashby
Apr. 03, 2001; In English; Videotape: 15 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001047827; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

STS-100 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. Ashley then discusses his views about space exploration as it becomes an international collaboration.

CAS1 Extravehicular Activity; Prelaunch Summaries; Installing; Orbital Rendezvous; Robot Arms; Spacecraft Docking; Antennas

2001047814 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 Raffaello Logistics Module. Parazynski then discusses his views about space exploration as it becomes an international collaboration.

CAS1 Extravehicular Activity; Prelaunch Summaries; Antennas; Installing; Orbital Rendezvous; Robot Arms; Spacecraft Docking

2001047815 NASA Kennedy Space Center, Cocoa Beach, FL USA Multi-Purpose Logistics Modules 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 Rabbii, MPLM Program Manager, Italian Space Agency, gives an overview of the Multi-Purpose Logistics Modules (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. Rabbii then answers questions from the press.

CAS1 Construction; Logistics; Space Station Modules; Specifications; Prelaunch Summaries

2001047816 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 Raffaello Logistics Module. Lonchakov then discusses his views about space exploration as it becomes an international collaboration.

CAS1 Extravehicular Activity; Prelaunch Summaries; Antennas; Installing; Orbital Rendezvous; Robot Arms; Spacecraft Docking

2001047817 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, and Mission Specialists Andrew Thomas and Paul Richards) and Expedition 2 (Commander Yuri Usachev and Flight Engineers James Voss and Susan Helms) are seen during this prelaunch press conference. Each crewmember describes his or her role in the mission, describing the spacewalks and transfer of supplies from the Leonardo Multi-Purpose Logistics Module to the Destiny Laboratory. They then answer questions from the press.

CAS1 Extravehicular Activity; Spacewalks; Prelaunch Summaries; Crew Procedures (Inflight); Loading Operations

2001047819 NASA Kennedy Space Center, Cocoa Beach, FL USA STS-102/Expedition 2 Mission Overview Feb. 28, 2001; In English; Videotape: 1 hr. 18 min. 45 sec. playing time, in color, with sound Report No.(s): NONP--NASA--VT--2001047882; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

John Shannon, STS-102 Lead Flight Director, Bernestine Dickosy, STS-102 Launch Flight Manager, and Rick La Brode, International Space Station (ISS) Lead Flight Director, give an overview of the STS-102 mission during a prelaunch press conference. Mr. Shannon discusses how the mission came into being and its objectives, including information on the launch and a day-by-day account of mission activities. Ms. Dickosy gives details on the payload of 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.

CAS1 International Space Station; Prelaunch Summaries; Space Station Modules; Spacecraft Docking

2001047820 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 Raffaello Logistics Module. Hadfield then discusses his views about space exploration as it becomes an international collaboration.

CAS1 Extravehicular Activity; Antennas; Prelaunch Summaries; Installing; Orbital Rendezvous; Robot Arms; Spacecraft Docking

2001047849 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, John 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 ISS. Mr. 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-reflex, colloids formation and interaction, protein crystal growth, plant growth, fermentation in microgravity, etc.). He also gives details on the scientific facilities to be used (laboratory racks and equipment such as the human torso ‘phantom torso’). Ms. Woodard gives an overview of Marshall Flight Center’s role in the mission. Computerized simulations show the installation of the Space Station Remote Manipulator System (SSRMS) onto the ISS and the installation
of the airlock using SSRMS. Live footage shows the interior of the ISS, including crew living quarters, the Progress Module, and the Destiny Laboratory. The three then answer questions from the press.

CASI

International Space Station; Microgravity; Spaceborne Experiments; Prelaunch Summaries; Aerospace Sciences; Earth Sciences; Life Sciences

**2001035850** NASA Kennedy Space Center, Cocoa Beach, FL USA

STS–102 Expedition 2 Increment Crew News Conference

Feb. 28, 2001; In English; Videotape: 45 min. 41 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001048990; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

 Expedition 2 crewmembers Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms are introduced in this prelaunch press conference. They answer questions from the press about their expectations and activities for the upcoming mission on the International Space Station.

CASI

International Space Station; Spacecraft; Prelaunch Summaries; Crew Procedures (Inflight)

**2001035853** NASA Kennedy Space Center, Cocoa Beach, FL USA

STS–102 Prelaunch Press Conference

Mar. 06, 2001; In English; Videotape: 37 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001048898; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Joel Wells, NASA Public Affairs, introduces Ron 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

**2001035854** NASA Kennedy Space Center, Cocoa Beach, FL USA

STS–102 Countdown Status

Mar. 05, 2001; In English; Videotape: 21 min. 56 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001048897; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

George Diller, NASA Public Affairs, introduces Jeff Spalding, NASA Test Director, Glenn Chin, Leonardo Payload Manager, and Ed Priselac, Shuttle Weather Officer, in this STS-102 prelaunch press conference. Mr. Spalding 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

Discovery (Orbiter); Countdown: Launch Windows; Spacecraft Launching; Prelaunch Tests; Prelaunch Summaries; Payloads; Weather Forecasting

**2001036656** NASA Kennedy Space Center, Cocoa Beach, FL USA

STS–102 Countdown Status Briefing

Mar. 06, 2001; In English; Videotape: 18 min. 35 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001052179; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Joel Wells, NASA Public Affairs, introduces Pete Nickolenko, NASA Test Director, Glenn Chin, Leonardo Mission Manager, and Ed Priselac, Shuttle Weather Officer, in this STS-102 prelaunch press conference. Mr. Nickolenko gives an overview of the countdown and built-in hold times, the launch window, and prelaunch activities (such as activation and checkout of the onboard computer systems, closing the payload bay doors, servicing of the onboard cryogenic cell tanks, main engine tests, and power-up of the ground communications systems). Mr. Chin confirms that the payload is in the final flight configuration and is ready for launch. Mr. Priselac gives the weather forecast for the launch date. The men then answer questions from the press.

CASI

International Space Station: Spacecraft Docking; Crew Procedures (Inflight); Prelaunch Summaries
Astronaut Training; Crew Procedures (Preflight); Extravehicular Activity; Egress; Astronaut Performance

STS--100 Crew Training
Apr. 05, 2001; In English; Videotape: 43 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001054057; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Footage shows the crew of STS-100, Commander Kent Rominger, Pilot Jeffrey Ashby, and Mission Specialists Chris Hadfield, Scott Parazynski, John Phillips, Umberto Guidoni, and Yuri Valentinovich Lonchakov, during various parts of their training, including the crew photo session, postlanding egress, extravehicular activity (EVA) large tool training, EVA training in the Neutral Buoyancy Laboratory (NBL), secondary payload training, and during VHF training.

CASI
Astronaut Training; Crew Procedures (Preflight); Extravehicular Activity; Egress; Astronaut Performance

STS--98 Mission Highlights Resource Tape, Part 2 of 3
Apr. 13, 2001; In English; Videotape: 56 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001054059; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of 'STS-98 Mission Highlights Resource Tape, Part 1 of 3' (internal ID 2001054058), this video shows the activities of flight days four through seven of the STS-98 mission on Atlantis. 'STS-98 Mission Highlights Resource Tape, Part 3 of 3' (internal ID 2001054060) shows footage from flight days 8-11.

CASI
Crew Procedures (Preflight); Astronaut Performance; Extravehicular Activity; International Space Station

STS--98 Mission Highlights Resource Tape, Part 3 of 3
Apr. 13, 2001; In English; Videotape: 59 min. 36 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001054060; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of 'STS-98 Mission Highlights Resource Tape, Part 1 of 3' (internal ID 2001054058) and 'STS-98 Mission Highlights Resource Tape, Part 2 of 3' (internal ID 2001054059), this video concludes the overview of the STS-98 mission. Footage shows the activities of flight days 8 through 11 and the landing of Atlantis.

CASI
International Space Station; Spacecraft Landing; Atlantis (Orbiter); Crew Procedures (Preflight)

STS--100 Crew Activity Report: Flight Day 3 Highlights
Apr. 19, 2001; In English; Videotape: 20 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001059992; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this third day of the STS-100 mission, the crew members of Endeavour (Commander Kent Rominger, Pilot Jeffrey Ashby, and Mission Specialists Chris Hadfield, Scott Parazynski, John Phillips, Umberto Guidoni, and Yuri Valentinovich Lonchakov) are seen during preparations for the upcoming spacewalk, installation of the Canadian Robot Arm, and the docking of Endeavour with the International Space Station (ISS). The docking is shown, and Endeavour is seen against a backdrop of Earth as it passes over the Pacific Ocean while it approaches the southern tip of South America.

CASI
Spacecraft Docking; Endeavour (Orbiter); International Space Station; Crew Procedures (Preflight)

STS--100 Crew Activity Report: Flight Day 2 Highlights
Apr. 24, 2001; In English; Videotape: 24 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001059990; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this second day of the STS-100 mission, the crew members of Endeavour (Commander Kent Rominger, Pilot Jeffrey Ashby, and Mission Specialists Chris Hadfield, Scott Parazynski, John Phillips, Umberto Guidoni, and Yuri Valentinovich Lonchakov) are seen during preparations for the upcoming spacewalk, installation of the Canadian Robt 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 (Preflight)
Module and the Canadian Robotic Arm, remove an early communications antenna from the Unity Module, and confirm power connections for the Canadian Robotic Arm. Commander Kent Rominger is seen during a workout on Endeavour’s ergometer.

CASI

Ergometers: Robot Arms; Crew Procedures (Inflight); Extravehicular Activity; Endeavour (Orbiter); International Space Station

2001038999 NASA Johnson Space Center, Houston, TX USA

STS--100 Crew Activity Report: Flight Day 5 Highlights
Apr. 24, 2001; In English; Videotape: 31 min. 03 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001059988; No Copyright; Avail: CASI; B03; Videotape-Beta; V03, Videotape-VHS

On this fifth day of the STS-100 mission, the 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 Yuriy Usachev and Flight Engineers James Voss and Susan Helms) are seen greeting each other after opening the connecting hatches between Endeavour and the International Space Station (ISS). Parazynski uses the newly installed Canadian Robotic Arm to lift the Raffaello Module out of the payload bay of Endeavour and install it onto the Destiny Laboratory Module on the ISS. Ashby, Hadfield, and Parazynski answer questions about the mission during an on-orbit press conference. Ashby and Parazynski give a guided video tour of the interior of the ISS/Endeavour complex.

CASI

Endeavour (Orbiter); International Space Station; Robot Arms; Crew Procedures (Inflight); Spacecrews

2001039000 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--2001056921; 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 crew members 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; Spacecrews; 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 04, 2001; In English; Videotape: 25 min. 32 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001064667; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this twelfth day of the STS-100 mission, the 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 Yuriy Usachev and Flight Engineers James Voss and Susan Helms, and the Soyuz crew greet each other and welcome space tourist Dennis Tito to the ISS.

CASI

Soyuz Spacecraft; International Space Station; Crew Procedures (Inflight); Spacecrews

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 Hobaugh
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 Hobaugh 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). Hobaugh 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)**

20010847594 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; Crew Procedures (Inflight); PreLaunch Summaries**

20010847595 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; Crew Procedures (Inflight); PreLaunch Summaries**

20010847633 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 Lonchakov, are seen as they unload equipment from the Raffello 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; Crew Procedures (Inflight); Space Station Modules: Loading Operations**

20010847634 NASA Johnson Space Center, Houston, TX USA

**STS-100 Flight Day 10 Highlights**

Apr. 30, 2001; In English; Videotape: 23 min. playing time, in color, with sound

Report No.(s): NONP-NASA–VT–2001061751; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

On this tenth day of the STS-100 mission, the computer problems that delayed tests on the Canadian robotic arm are discussed between the Atlantis and Mission Ground Control. The Canadian robotic arm is seen after it lifts Spacehab from the pallet on Atlantis and moves to meet the Space Shuttle’s robotic arm as it ‘hands over’ Spacehab to the smaller robotic arm. The Canadian robotic arm with Spacehab are seen against a backdrop of Earth as the Space Shuttle and International Space Station pass to the northeast of Australia.

CASI

**International Space Station; Robot Arms; Crew Procedures (Inflight); Computer Systems Performance**

20010847635 NASA Johnson Space Center, Houston, TX USA

**STS-100 Flight Day 9 Highlights**

Apr. 30, 2001; In English; Videotape: 27 mins. 58 sec. playing time, in color, with sound

Report No.(s): NONP-NASA–VT–2001061750; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

On this ninth day of the STS-100 mission, Commander Kent Rominger and Mission Specialist Chris Hadfield answer questions about the mission in an on-orbit press conference. The Expedition 2 crew, Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms, answer questions about their mission and the Canadian Robotic Arm in another on-orbit press conference. The Raffello Logistics Module is removed from the Unity Module on the International Space Station and transferred to the payload bay of Atlantis.

CASI

**International Space Station; Crew Procedures (Inflight); Astronaut Performance; Space Station Modules**

20010847641 NASA Johnson Space Center, Houston, TX USA

**STS-100 Flight Day 8 Highlights**

Apr. 26, 2001; In English; Videotape: 13 min. 40 sec. playing time, in color, with sound

Report No.(s): NONP-NASA–VT–2001059990; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

On this eighth day of the STS-100 mission, the crewmembers of Endeavour, Commander Kent Rominger, Pilot Jeffrey Ashby, and Mission Specialists Chris Hadfield, Scott Parazynski, John Phillips, Umberto Guidoni, and Yuri Valentinovich Lonchakov, are seen as they unload equipment from the Raffello 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; Computer Systems Performance; Astronaut Performance; Crew Procedures (Inflight)**

20010847642 NASA Johnson Space Center, Houston, TX USA

**STS-100 Crew Activity Report: Flight Day 4 Highlights**

Apr. 24, 2001; In English; Videotape: 29 min. playing time, in color, with sound

Report No.(s): NONP-NASA–VT–2001059520; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

On this fourth day of the STS-100 mission, Mission Specialists Chris Hadfield and Scott Parazynski are seen performing their spacewalks, where they work on the electrical connections between the Destiny Laboratory and the Canadian Robotic Arm, remove the ultrahigh frequency antenna from the pallet and install it onto Destiny, and raise the Robotic Arm to prepare it for deployment. The fully deployed Robotic Arm is seen against a backdrop of Earth.

CASI

**Extravehicular Activity; Robot Arms; Crew Procedures (Inflight); International Space Station**
ST5-102 Mission Highlights Resource Tape, Part 2 of 2

A continuation of ‘STS-102 Mission Highlights Resource Tape, Part 1 of 2’ (internal ID 2001096943), this video shows highlights from flight day five of STS-102, including the deployment of the Space Shuttle’s Robotic Arm and the opening of the hatch between the Unity Module and Leonid Multi-purpose Logistics Module by Expedition 1 Commander Bill Shepherd. The activities of flight days 6-14 can be seen on ‘STS-102 Mission Highlight Resource Tape, Part 2 of 2, Tape 1 of 2’ (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: Robot Arms; Crew Procedures (Inflight); Deployment; Hatches

STS-102 Mission Highlights Resource Tape, Tape 4 of 4, Part B

Jun. 21, 2001; In English; Videotape: 13 min. 5 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2001096940; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

A continuation of ‘STS-102 Mission Highlight Resource Tape, Part 1 of 2, Tape 1 of 2’ (internal ID 2001096942), this video shows highlights from flight day five of STS-102, including the deployment of the Space Shuttle’s Robotic Arm and the opening of the hatch between the Unity Module and Leonid Multi-purpose Logistics Module by Expedition 1 Commander Bill Shepherd. The activities of flight days 6-14 can be seen on ‘STS-102 Mission Highlight Resource Tape, Part 2 of 2, Tape 1 of 2’ (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: Robot Arms; Crew Procedures (Inflight); Deployment; Hatches

ST5-102 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 1 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 suiting 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 Krikal’ev) to the Expedition 2 crew (Yuri Usachev, James Voss, and Susan Helms), and the undocking of the Discovery Orbiter from the ISS. Activities for flight days 13 and 14 can be found on ‘STS-102 Mission Highlight Resource Tape, Part 2 of 2, Tape 1 of 2’ (internal ID 2001096940) and ‘STS-102 Mission Highlight Resource Tape, Part 2 of 2, Tape 2 of 2’ (internal ID 2001096940).

CASI
Extravehicular Activity: Unloading; Crew Procedures (Inflight); Spacecraft Docking

ST5-102 Post-Flight Presentation

Dec. 06, 2000; In English; Videotape: 20 min. 23 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2001101178; No Copyright; Avail: CASI; 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 Pam Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter Wisoff, Michael López-Alegría, 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. 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 ‘H-Reflex Experiment; Effects of Microgravity on the Spine’, the rendezvous and docking of Discovery with the International Space Station (ISS), and Helms and Voss preparing for and performing their spacewalks. The crew of STS-102 and both Expedition crews (E1 crew William Shepherd, Yuri Gidzenko, and Sergei Krikal’ev) 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 1 of 2, Tape 1 of 2’ (internal ID 2001096943) and ‘STS-102 Mission Highlight Resource Tape, Part 2 of 2, Tape 1 of 2’ (internal ID 2001096940) and ‘STS-102 Mission Highlight Resource Tape, Part 2 of 2, Tape 2 of 2’ (internal ID 2001096940).

CASI
Discovery (Orbiter): Extravehicular Activity; International Space Station: Spacecraft Docking; Spacecraft Launching; Spacecraft Landing; Crew Procedures (Inflight)
20010066319 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 Kenneth Cockrell, Pilot Jeffrey Ashby, and Mission Specialists Chris Hadfield, Scott Parazynski, John Phillips, Umberto Guidoni, and Yuri Valentinovich Lonchakov, are seen during various stages of their training. Footage shows the following: (1) Water Survival Training at the Neutral Buoyancy Laboratory (NBL); (2) Rendezvous and Docking Training in the Shuttle Mission Simulator; (3) Training in the Space Station Airlock; (4) Training in the Virtual Reality Lab; (5) Post-insertion Operations in the Fixed Base Simulator; (6) Extravehicular Activity Training at the NBL; (7) Crew Stowage Training in the Space Station Mock-up Training Facility; and (8) Water Transfer Training in the Crew Compartment Trainer.

CASI

Astronaut Training; Extravehicular Activity; Shuttle Mission Simulator; Spacecraft Docking; Space Station; Orbital Rendezvous; Crew Procedures; Water Transfer Training; Virtual Reality Training; Space Station Mock-up Training Facility; Water Survival Training; Neutral Buoyancy Laboratory (NBL); Crew Stowage Training; Extravehicular Activity Training; Space Station Mock-up Training Facility; Water Transfer Training; Virtual Reality Training.

20010066320 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 footage from the ceremonial breakfast, crew suitaup, and launch of Endeavour are seen. 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; Robotic Arms; Spacecraft Docking; Crew Procedures; Space Station; Orbital Rendezvous.

20010066321 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 frame as footage from the ceremonial breakfast, crew suit up, 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.
The crewmembers of STS-104, Commander Steven Lindsey, Pilot Charles Hobaugh, and Mission Specialists Michael Gemhardt, James Reilly, and Janet Kavandi, are seen as they perform their spacewalks, installing the oxygen tank in the payload bay of Atlantis. Mission Specialists Michael Gemhardt and James Reilly, and Mission Specialists Michael Gemhardt, 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 (In flight) 

The crewmembers of STS-104, Commander Steven Lindsey, Pilot Charles Hobaugh, and Mission Specialists Michael Gemhardt, James Reilly, and Janet Kavandi, are seen as they perform their spacewalks, installing the oxygen tank in the payload bay of Atlantis. Mission Specialists Michael Gemhardt and James Reilly, and Mission Specialists Michael Gemhardt, 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 (In flight) 

Expedition 2 Commander Yuriy Usachev and STS-104 Commander Steve Lindsey and Mission Specialist Charlie Hobabgh are 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 (In flight) 

The crewmembers of STS-104, Commander Steven Lindsey, Pilot Charles Hobaugh, and Mission Specialists Michael Gemhardt, James Reilly, and Janet Kavandi, are seen as they perform their spacewalks, installing the oxygen tank in the payload bay of Atlantis. Mission Specialists Michael Gemhardt and James Reilly, and Mission Specialists Michael Gemhardt, 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 (In flight) 

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 Charlie Hobabgh 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 (In flight) 

Expedition 2 Commander Yuriy Usachev and STS-104 Commander Steve Lindsey and Mission Specialist Charlie Hobabgh are 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 (In flight) 

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 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 Commander Scott Horowitz is seen during a prelaunch interview. He answers questions about his inspiration to become an astronaut, his career path, training for the mission, and his role in the mission’s activities. He gives details on the 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). Horowitz discusses the importance of the ISS in the future of human spaceflight.

Expedition 3 Commander Scott Horowitz is seen during a prelaunch interview. He answers questions about his inspiration to become an astronaut, his career path, training for the mission, and his role in the mission’s activities. He gives details on the 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). Horowitz discusses the importance of the ISS in the future of human spaceflight.

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Astronaut Training; Education; Astronauts; Crew Procedures (Inflight)

20010807420 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

20010807555 NASA Johnson Space Center, Houston, TX USA
STS–105 Crew Interview: Rick Sturckow
Jul. 23, 2001; In English; Videotape: 11 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001110189; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
STS-105 Pilot Rick Sturckow is seen during a prelaunch interview. He answers questions about his inspiration to become an astronaut, his career path, training for the mission, and his role in the mission’s activities. He gives details on the mission’s goals, which include the transfer of supplies from the Discovery Orbiter to the International Space Station (ISS) and the change-over of the Expedition 2 and Expedition 3 crews (the resident crews of ISS). Sturckow discusses the importance of the ISS in the future of human spaceflight.

CASI
Astronaut Training; Crew Procedures (Inflight); Astronauts

20010807672 NASA Johnson Space Center, Houston, TX USA
STS–100 Mission Highlights Resource Tape, Part 2 of 4
Jul. 31, 2001; In English; Videotape: 59 min. 14 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001117678; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of ‘STS-100 Mission Resource Tape, Part 1 of 4’ (internal ID 2001117677), this video shows highlights from flight days four through six, including footage of the installation of the Canadarm (ISS’ robotic arm) on the International Space Station (ISS), the spacewalks involved in this process, and the robotic arm lifting the Rafaello 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)

20010807673 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 FFT, Long Rendezvous Training in the CNS (Navigation Simulator), and Post Insertion Operations Training at FFT.

CASI
Astronaut Training; Egress; Spacecrews
STS–100 Mission Highlights Resource Tape, Part 1 of 4
Jul. 31, 2001; In English; Videotape: 59 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001117677; 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) and ‘STS–100 Mission Resource Tape, Part 2 of 4’ (internal ID 2001117678), this video shows footage from flight days 8-11. The video contains scenes of the Space Shuttle’s robotic arm and the preparation of the Unity Module for the Quest Airlock to be installed during the next mission. The undocking of Atlantis from the International Space Station is seen, and the landing of Endeavour from the International Space Station is seen, and the landing of the orbiter is shown from various viewpoints.

CASI


STS–92 Mission Highlights Resource Tape, Part 1 of 4
Aug. 02, 2001; In English; Videotape: 1 hr. 22 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001120375; No Copyright; Avail: CASI; B03, Videotape-Beta; V04, Videotape-VHS

An overview of the STS–92 Discovery mission (crew: Commander Brian Duffy, Pilot Pamela Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter Wisoff, Michael Lopez-Alegria, 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


STS–92 Mission Highlights Resource Tape, Part 2 of 4
Aug. 02, 2001; In English; Videotape: 1 hr. 22 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001120373; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of ‘STS–92 Mission Highlights Resource Tape, Part 1 of 2’ (internal ID 2001120375), this video shows footage from flight day six of the STS–92 mission. Mission Specialists Jeff Wisoff and Mike Lopez-Alegria are seen as they perform their spacewalks to work on the Earth Pressurized Mating Adapter and Z1 truss. Additional scenes show Mission Specialist Pam Melroy washing her hair and Commander Brian Duffy shaving. For footage from flight days 7-14, see ‘STS–92 Mission Highlights Resource Tape, Part 3 of 4’ (internal ID 2001120376) and ‘STS–92 Mission Highlights Resource Tape, Part 4 of 4’ (internal ID 2001120371).

CASI

Extravehicular Activity: Spacecrafts: International Space Station: Crew Procedures (Inflight)

STS–92 Mission Highlights Resource Tape, Part 3 of 4
Aug. 02, 2001; In English; Videotape: 1 hr. 46 min. 46 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001120371; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

A continuation of ‘STS–92 Mission Highlights Resource Tape, Part 1 of 4’ (internal ID 2001120375), ‘STS–92 Mission Highlights Resource Tape, Part 2 of 4’ (internal ID 2001120376), and ‘STS–92 Mission Highlights Resource Tape, Part 3 of 4’ (internal ID 2001120376), this video shows footage from flight days 11-14 of the STS–92 mission. The landing of the Discovery Orbiter is seen.

CASI

Discovery (Orbiter): Spacecraft Landing
and Pat Forrester are seen during their spacewalks as they work on the exterior of the Destiny Laboratory Module, installing handrails and connecting cables.

**CAS1**

**Density:** Laboratory Module; Extravehicular Activity; International Space Station; Crew Procedures (Inflight)

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**2001**076390 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–20011126405; No Copyright; Avail: CAS1; 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 crew members Mikhail Turin and Vladimir Dezhurov commemorate the 1000th flight day anniversary of the ISS.

**CAS1**

**Extravehicular Activity:** International Space Station; Orbital Servicing; Crew Procedures (Inflight)

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**2001**076472 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–20011126406; No Copyright; Avail: CAS1; B01, Videotape-Beta; V01, Videotape-VHS

In this sixth day of the STS-105 mission, Expedition 2 crew member 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.

**CAS1**

**International Space Station:** Crew Procedures (Inflight)

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**2001**077940 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–20011130665; No Copyright; Avail: CAS1; 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.

**CAS1**

**International Space Station:** Spacecrews: Spacecraft Docking; Crew Procedures (Inflight)

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**2001**077947 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–20011130666; No Copyright; Avail: CAS1; 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.

**CAS1**

**International Space Station:** Space Station Modules; Crew Procedures (Inflight)

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**2001**0877948 NASA Johnson Space Center, Houston, TX USA

**STS–105 Flight Day 12 Highlights**

Aug. 22, 2001; In English; Videotape: 20 min. 38 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–20011130664; No Copyright; Avail: CAS1; B02, Videotape-Beta; V02, Videotape-VHS

In this 12th day of the STS-105 mission, Discovery continues to fly towards Earth after the previous day's undocking from the International Space Station (ISS). Several on-orbit interviews are conducted, including questions to the STS-105 crew (Commander Scott Horowitz, Pilot Fred Sturckow, and Mission Specialists Dan Barry and Pat Forrester) about spaceflight, questions to the Expedition 2 crew (Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms) about their stay on the ISS, and questions to the Expedition 3 crew (Frank Culbertson, Jr., Mikhail Turin, and Vladimir Dezhurov) about some of the experiments on board the ISS. Typhoon 14 is seen from above as Discovery passes over the storm.

**CAS1**

**International Space Station:** Space Flight: Spacecrews; Crew Procedures (Inflight)

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**2001**0868461 NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS–105 Countdown Status Briefing**

Aug. 06, 2001; In English; Videotape: 20 min. 30 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–20011136094; No Copyright; Avail: CAS1; B02, Videotape-Beta; V02, Videotape-VHS

Joel Wells, NASA Public Affairs, introduces Steve Atkemus, NASA Test Director, Glenn Chin, STS-105 Mission Manager, and Ed Prisecta, Shuttle Weather Officer, in this STS-105 prelaunch press conference. An overview is given of the launch countdown, payload status (Leonardo Multipurpose Logistics Module), and weather forecast. The men then answer questions from the press.

**CAS1**

**Countdown:** Payloads: Weather Forecasting: Prelaunch Summaries

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**2001**0868462 NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS–105 Pre–Launch Press Conference**

Aug. 07, 2001; In English; Videotape: 28 min. 53 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–20011136091; No Copyright; Avail: CAS1; B02, Videotape-Beta; V02, Videotape-VHS

George Diller, NASA Public Affairs, introduces Bill Gerstenmayer, Deputy Manager of the ISS Program, Dave King, NASA Director of Shuttle Processing, and Judy Kennedy, Staff Meteorologist, in this STS-105 press conference. An overview is given of the launch countdown, payload status (Leonardo Multipurpose Logistics Module), and weather forecast. The men then answer questions from the press.

**CAS1**

**Countdown:** Weather Forecasting: Prelaunch Summaries: Astronaut Performance

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**2001**0868463 NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS–104 Pre–Launch Press Conference**

Jul. 10, 2001; In English; Videotape: 35 min. 55 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–20011136090; No Copyright; Avail: CAS1; B03, Videotape-Beta; V03, Videotape-VHS

George Diller, NASA Public Affairs, introduces Jim Halsell, Shuttle Program Launch Integration Manager, Dave King, NASA Director of Shuttle Processing, Michael Hawes, Deputy Associate Administrator for ISS, and John Weema, Launch Weather Officer, in this STS-104 press conference. An overview is given of the launch and mission activities, International Space Station activities during the mission, and the weather forecast for the launch. The men then answer questions from the press.

**CAS1**

**Weather Forecasting:** Prelaunch Summaries
in the mission. The crew is seen during suit-up, boarding the Shuttle, during launch, and performing many on-orbit activities, including the rendezvous with the International Space Station (ISS) (live and a computer animation), the three spacewalks (installing Quest Airlock and three external gas tanks), and the opening and outfitting of Quest. As the mission ends the crew bids farewell to the Expedition 2 crew (Commander Yuri Usachev and Flight Engineers James Voss and Susan Helms) and the Atlantis Orbiter undocks from ISS, performs the fly-around of the space station, and lands.

CASI
Extravehicular Activity; International Space Station; Spacecraft Launching; Spacecrafts: Crew Procedures (Preflight); Crew Procedures (Inflight)

20010115089 NASA Johnson Space Center, Houston, TX USA
Expedition 4 Crew Interviews: Yuri L. Onufrienko
Nov. 04, 2001; In English; Videotape: 26 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP-NASA_VT--20011189092; 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 S0 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; Spacecrafts: Prelaunch Summaries

20010115224 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--20011190435; 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 S0 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; Spacecrafts: Prelaunch Summaries

20010115230 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--20011195292; 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 S0 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; Spacecrafts: Prelaunch Summaries

20010116985 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, bail-out 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: Spacecrafts

20010116660 NASA Johnson Space Center, Houston, TX USA
STS–108 Crew Interviews: Don Gorie
Nov. 11, 2001; In English; Videotape: 30 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--20011194276; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

STS-108 Commander Don Gorie is seen during a prelaunch interview. He answers questions about the mission’s goals and significance, explaining the meaning of ‘utilization flight 1’ (UF-1) as opposed to an ‘assembly flight’. He gives details on the payload (Starshine Satellite, Avian Development Facility, and Rafaello Multipurpose Logistics Module (MPLM)), his role in the rendezvous, docking, and undocking of the Endeavour Orbiter to the International Space Station (ISS), how he will participate in the unloading and reloading of the MPLM, and the way in which the old and new resident crews of ISS will exchanged. Gorie ends with his thoughts on the short-term and long-term future of the International Space Station.

CASI
Endeavour (Orbiter); International Space Station: Spacecraft Docking: Prelaunch Summaries

20010116681 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 Rafaello 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 her thoughts on the short-term and long-term future of the International Space Station.

CASI
Endeavour (Orbiter); International Space Station: Spacecraft Docking: Prelaunch Summaries

20010116682 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 Rafaello Multipurpose Logistics Module (MPLM)), his role in the rendezvous, docking, and undocking of the Endeavour Orbiter to the International Space Station (ISS), how he will participate in the unloading and reloading of the MPLM, and the way in which the old and new resident crews of ISS will exchanged. 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

20010116603 NASA Johnson Space Center, Houston, TX USA

STS–108 Crew Interviews: Dan Tani

Nov. 11, 2001; In English; Videotape: 35 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–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 Rafaello Multipurpose Logistics Module (MPLM)), his role in the rendezvous, docking, and undocking of the Endeavour Orbiter to the International Space Station (ISS), how he will participate in the unloading and reloading of the MPLM, and the way in which the old and new resident crews of ISS will exchanged. Tani ends with his thoughts on the short-term and long-term future of the International Space Station.

CASI Endeavour (Orbiter); International Space Station; Spacecraft Docking; Prelaunch Summaries

20010117169 NASA Johnson Space Center, Houston, TX USA

STS–105 Post–Flight

Oct. 28, 2001; In English; Videotape: 16 min. 48 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–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 Docking; Spacecrews: Crew Procedures (Inflight); Discovery (Orbiter)

20010112948 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, suitup, departing the Operations and Checkout (O&C) Building, and boarding the orbiter. The launch of Endeavour is shown. The payload bay doors open once in orbit and Pilot Kelly is seen as the solid rocket boosters ignite.

CASI Spacecraft Launching; Spacecrews: Crew Procedures (Preflight); Crew Procedures (Inflight); Endeavour (Orbiter)

20020013148 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 Rafaello Multipurpose Logistics Module.

CASI Endeavour (Orbiter); Remote Manipulator System; Crew Procedures (Inflight)

200200002323 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 Turiin and Vladimir Dezhurov), and Expedition 4 crew (Commander Yuri Onufrienko and Flight Engineers Carl Walz and Daniel Bursch) are seen during a ceremony of remembrance 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 Rafaello Multipurpose Logistics Module.

CASI Spacecrews: International Space Station; Spacecrews: Crew Procedures (Inflight); Loading Operations

200200002356 NASA Johnson Space Center, Houston, TX USA

STS–104 Mission Highlights Resource Tape, Part 2 of 4

Dec. 12, 2001; In English; Videotape: 59 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20011214902; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of ‘STS-104 Mission Highlights Resource Tape, Part 1 of 4’ (internal ID 20011214904), this video shows footage from flight days four through seven of the STS-104 mission. Mission Specialists Mike Gernhardt and Jim Reilly are seen during their spacewalks, Pilot Charles Hobaugh and Mission Specialists Janet Kavandi, Mike Gernhardt, and Jim Reilly, and Expedition 2 Flight Engineer Susan Helms work inside the newly installed Quest Airlock. Expedition 2 Flight Engineer Jim Voss is seen as he works to outfit the vestibule between the Unity Module and Quest and opening the hatch between the two components of the International Space Station. Flight days seven (continued) though twelve can be found on the video ‘STS-104 Mission Highlights Resource Tape, Part 3 of 4’ (internal ID 20011214906) and ‘STS-104 Mission Highlights Resource Tape, Part 4 of 4’ (internal ID 20011214905).

CASI Airlocks: Extravehicular Activity; International Space Station; Spacecrews: Crew Procedures (Inflight)

200200002331 NASA Johnson Space Center, Houston, TX USA

STS–108 Flight Day 6 Highlights

Dec. 11, 2001; In English; Videotape: 39 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20011217633; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On this sixth day of the STS-108 mission, Mission Specialists Linda Godwin and Daniel Tani perform their spacewalks, where they place insulating blankets on the two Beta Gimbal Assemblies.

CASI Extravehicular Activity; International Space Station; Crew Procedures (Inflight)

200200002378 NASA Johnson Space Center, Houston, TX USA

STS–108 Flight Day 8 Highlights

Dec. 13, 2001; In English; Videotape: 22 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20011216282; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eighth day of the STS-108 mission, the STS-108 crew (Commander
Dominic Gorie, Pilot Mark Kelly, and Mission Specialists Linda Godwin and Daniel Tani), Expedition 3 crew (Commander Frank Culbertson, Jr. and Flight Engineers Mikhail Turin and Vladimir Dezhurov), and Expedition 4 crew (Commander Yuri Onufrienko and Flight Engineers Carl Walz and Daniel Bursch) work to reload the Raffaello Multipurpose Logistics Module. Commander Culbertson is seen on the International Space Station’s treadmill.

CASI

International Space Station; Crew Procedures (Inflight); Loading Operations

20020002385 NASA Johnson Space Center, Houston, TX USA

STS–108 Flight Day 4 Highlights

Dec. 10, 2001; In English; Videotape: 33 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20021214921; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

On this fourth day of the STS-108 mission, the robotic arm is seen as it moves towards the Raffaello Multipurpose Logistics Module to prepare for the grappling and transfer of the module from Endeavour to the International Space Station (ISS). Expedition 4 Flight Engineer Carl Walz and STS-108 Mission Specialist Linda Godwin are shown during preparations to open the hatch between ISS and Raffaello. Expedition 3 Commander Frank Culbertson, Expedition 4 Commander Yuri Onufrienko, and STS-108 Pilot Mark Kelly are seen during an on-orbit press conference, where they answer questions about the supply transfer between Raffaello and ISS and share their thoughts about the September 11th tragedy.

CASI

Endeavour (Orbiter); International Space Station; Crew Procedures (Inflight)

20020002387 NASA Johnson Space Center, Houston, TX USA

STS–108 Flight Day 3 Highlights

Dec. 9, 2001; In English; Videotape: 28 min. 59 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20021214917; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

On this third day of the STS-108 mission, the Endeavour Orbiter is seen docking with the International Space Station. The crew of STS-108 (Commander Dominic Gorine, Pilot Mark Kelly, and Mission Specialists Linda Godwin and Daniel Tani) and Expedition 4 (Commander Yuri Onufrienko and Flight Engineers Carl Walz and Daniel Bursch) greet the Expedition 3 crew (Commander Frank Culbertson, Jr. and Flight Engineers Mikhail Turin and Vladimir Dezhurov) in the Destiny Laboratory Module.

CASI

Endeavour (Orbiter); International Space Station; Spacecraft Docking; Crew Procedures (Inflight)

20020002389 NASA Johnson Space Center, Houston, TX USA

STS–108 Flight Day 5 Highlights

Dec. 10, 2001; In English; Videotape: 18 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20021214915; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

On this fifth day of the STS-108 mission, the STS-108 crew (Commander Dominic Gorine, Pilot Mark Kelly, and Mission Specialists Linda Godwin and Daniel Tani), Expedition 3 crew (Commander Frank Culbertson, Jr. and Flight Engineers Mikhail Turin and Vladimir Dezhurov), and Expedition 4 crew (Commander Yuri Onufrienko and Flight Engineers Carl Walz and Daniel Bursch) join in an on-orbit conference to honor those who lost loved ones in the September 11th tragedy. They are also seen moving equipment from the Raffaello Multipurpose Logistics Module to the International Space Station.

CASI

International Space Station; Spacecrafts; Crew Procedures (Inflight)

20020002390 NASA Johnson Space Center, Houston, TX USA

STS–104 Mission Highlights Resource Tape, Part 1 of 4

Dec. 11, 2001; In English; Videotape: 59 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20021214904; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

An overview of the STS-104 mission is given through footage of each flight day. Scenes from flight days one through three show activities such as astronaut prelaunch procedures (breakfast, suit-up, and boarding Atlantis), launch, and on-orbit activities such as the opening of the payload bay doors, rendezvous and docking of the Orbiter to the International Space Station (ISS), and the opening of the hatches separating the Orbiter from ISS. The STS-104 crew (Commander Steven Lindsey, Pilot Charles Hobaugh, and Mission Specialists Mike Gemhardt, Jim Reilly, and Janet Kavandi) greets the Expedition 2 crew (Commander Yuri Usachev and Flight Engineers James Voss and Susan Helms). Footage from flight days four through twelve can be found on the following videos: ‘STS-104 Mission Highlights Resource Tape, Part 2 of 4’ (internal ID 20021214902), ‘STS-104 Mission Highlights Resource Tape, Part 3 of 4’ (internal ID 20021214906), and ‘STS-104 Mission Highlights Resource Tape, Part 4 of 4’ (internal ID 20021214905).

CASI

International Space Station; Spacecraft Launching; Orbital Rendezvous; Spacecraft Docking; Crew Procedures (Inflight); Crew Procedures (Preflight)

20020002391 NASA Johnson Space Center, Houston, TX USA

STS–104 Mission Highlights Resource Tape, Part 4 of 4

Dec. 12, 2001; In English; Videotape: 56 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20021214906; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

A continuation of ‘STS-104 Mission Highlights Resource Tape, Part 1 of 4’ (internal ID 20021214904) and ‘STS-104 Mission Highlights Resource Tape, Part 2 of 4’ (internal ID 20021214902), this video shows footage from flight days seven (continued from part three) through twelve. Mission Specialists Mike Gemhardt and Jim Reilly are seen during their spacewalks, and Expedition 2 Flight Engineer Jim Voss and the 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 20021214905), which also shows flight days eleven and twelve.

CASI

Extravehicular Activity; Valves; Crew Procedures (Inflight); International Space Station

20020002392 NASA Johnson Space Center, Houston, TX USA

STS–108 Flight Day 11 Highlights

Dec. 15, 2001; In English; Videotape: 35 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20021220094; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

On this eleventh day of the STS-108 mission, the Expedition 3 crew (Commander Frank Culbertson, Jr. and Flight Engineers Mikhail Turin and Vladimir Dezhurov), Expedition 4 crew (Commander Yuri Onufrienko and Flight Engineers Carl Walz and Daniel Bursch), and STS-108 crew (Commander Dominic Gorine, Pilot Mark Kelly, and Mission Specialists Linda Godwin and Daniel Tani) are seen as the E3 crew bids farewell to the International Space Station (ISS) that has been their home for the previous several months. Endeavour undocks from ISS and performs the customary flyaround. The STS-108
crew and Commander Culbertson answer questions from the press in an on-orbit interview.  

**International Space Station; Crew Procedures (Inflight); Endeavour (Orbiter); Spacecraft Docking**

STS-108 Flight Day 10 Highlights

Dec. 15, 2001; In English; Videotape: 24 min. 49 sec. playing time, in color, with sound  

Report No.(s): NONP NASA VT 2001220096; 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.  

**International Space Station; Loading Operations; Crew Procedures (Inflight); Space Station Modules**

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 2001230089; 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 Tam) 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 Tam are seen on the middeck of Endeavour stowing equipment.  

**International Space Station; Spacecraft; Loading Operations; Crew Procedures (Inflight)**

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 2002033709; No Copyright; Avail: CASI;  
B02, Videotape-Beta; V02, Videotape-VHS  

On this twelfth day of the STS-108 mission, the deployment of the Star-Advanced Camera for Surveys (ACS), and installing a new Cryocooler for the Near Infrared Camera Multi-Object Spectrometer; (3) repairing the reaction wheel assembly; (4) installing additional solar arrays; (5) augmenting the power control unit; (6) working on the HST’s gyros. The reaction wheel assembly task, a late addition to the mission, may necessitate the abandonment of one or more of the other tasks, such as the gyro work.  

**Prelaunch Summaries: Extravehicular Activity; Hubble Space Telescope; Spacecraft Maintenance: Crew Procedures (Inflight); Spacecrews**

STS-109 Crew Interviews – Altman

Feb. 04, 2002; In English; Videotape: 37 min. 7 sec. playing time, in color, with sound  

Report No.(s): NONP NASA VT 2002033709; 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.  

**Prelaunch Summaries: Spacecrews; Hubble Space Telescope; Spacecraft Maintenance; Spacecraft Docking**

STS-109 Crew Interviews – Carey

Feb. 04, 2002; In English; Videotape: 45 min. 21 sec. playing time, in color, with sound  

Report No.(s): NONP NASA VT 2002033712; No Copyright; Avail: CASI;  
B03, Videotape-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 its role in the mission. He provides a brief background on the Hubble Space Telescope, and explains the plans for the rendezvous of the Columbia Orbiter with the Hubble Space Telescope. He provides details and timelines for each of the planned Extravehicular Activities (EVAs), which include replacing the solar arrays, changing the Power Control Unit, installing the Advanced Camera for Surveys (ACS), and installing a new Cryocooler for the Near Infrared Camera and Multi-Object Spectrometer (NICMOS). He gives further explanation of each of these pieces of equipment. He also describes the break-out plan in place for these spacewalks. The interview ends with Newman explaining the details of a late addition to the mission’s tasks, which is to replace a reaction wheel on the Hubble Space Telescope.  

**Columbia (Orbiter); Hubble Space Telescope; Prelaunch Summaries: Spacecrews; Orbital Rendezvous; Extravehicular Activity**

STS-109 Crew Interviews – Massimino

Feb. 05, 2002; In English; Videotape: 36 min. 14 sec. playing time, in color, with sound  

Report No.(s): NONP NASA VT 2002033713; 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 its 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–200203715; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

STS–109 Mission Specialist 3 (MS3) Richard M. Linnehan is seen during a prelaunch interview. He answers questions about his lifelong desire to become an astronaut and his career path, which included becoming a zoo veterinarian. He gives details on the Columbia Orbiter mission, which has as its main purpose the maintenance and augmentation of the Hubble Space Telescope (HST). As MS3, his primary role in the mission pertains to EVAs (Extravehicular Activities) 1, 3, and 5. During EVA 1, Linnehan and another crewmember will replace one of two flexible solar arrays on the HST with a smaller, more efficient rigid solar array. The second solar array will be replaced on EVA 2 by other crewmembers. EVA 3 will involve the replacement of the Power Control Unit (PCU), and will require the first complete powering down of HST since its deployment. The possibility of a serious problem occurring is greatest during this portion of the mission because the original PCU was not built to be replaced. In EVA 5, Linnehan and another crewmember will install a replacement cooling system on NICMOS (Near Infrared Camera Multi-Object Spectrometer), which has not been operational. Linnehan discusses his role during the mission as well as that of his crewmates, and provides an abbreviated timeline, including possible contingencies.

CASI

Prelaunch Summaries; Crew Procedures (Inflight); Extravehicular Activity; Hubble Space Telescope; Astronauts; Columbia (Orbiter); Spacecraft Maintenance

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–200203714; 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); Landing 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 Danne Carey, Payload Commander John Grunsfeld, and Mission Specialists Nancy Currie, James Newman, Richard Linnehan, and Michael Massimino) during various parts of their training. Scenes show the crew’s photo session, Post Landing Egress practice, training in Dome Simulator, Extravehicular Activity Training in the Neutral Buoyancy Laboratory (NBL), and using the Virtual Reality Laboratory Robotic Arm. The crew is also seen tasting food as they choose their menus for on-orbit meals.

CASI

Extravehicular Activity; Spacecrews; Training Simulators; Astronaut Training
STS-109 Flight Day 3 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

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. 05, 2002; In English; Videotape: 30 min. 12 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2002044499; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

STS-109 Payload Commander John Grunsfeld and Mission Specialist Richard Linnehan are seen suitting up in preparation for their spacewalk with the assistance of Mission Specialists Michael Massimino and James Newman. Linnehan and Grunsfeld move the old solar arrays from the Hubble Space Telescope (HST) into the cargo bay of the Columbia Orbiter for storage. Grunsfeld is seen maneuvering around the HST to remove the connections to the diode box controller. Linnehan is seen controlling the new rigid solar array as he moves it into position onto the HST and Grunsfeld locks it into place. Footage is shown of Linnehan unfolding the solar array and Grunsfeld attaching the cables to the diode box controller to supply power to the solar array. Scenes of the HST with its new starboard rigid solar array are shown. The video concludes with footage of the activities of Nancy Currie, James Newman, and Michael Massimino during the spacewalk.

CASI
Extravehicular Activity; Hubble Space Telescope; Solar Arrays; Crew Procedures (Inflight)

STS-109 Flight Day 2 Highlights

Mar. 03, 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-up shots 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 extravehicular activities (EVA) of Mission Specialists Jim Newman and Mike Massimino, who installed a new port solar array on the HST. Information is presented on the size and power capacity of the array. The reaction wheel assembly, one of four gyroscopic devices used to maneuver the HST, is also shown being replaced by the astronauts. A new insulation blanket panel was also installed at the end of the spacewalk because the astronauts had extra time.

CASI
Extravehicular Activity; Hubble Space Telescope; Reaction Wheels; Solar Arrays; Thermal Insulation; Space Maintenance; Spacecraft Maintenance

STS-109 Flight Day 5 Highlights

Mar. 06, 2002; In English; Videotape: 33 min. 4 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2002044648; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On the fifth day of the STS-109 mission, the crewmembers and Commander Scott Altman of the Columbia Orbiter are shown in their servicing mission to the Hubble Space Telescope (HST). Selected footage is presented of the extravehicular activities (EVA) of Mission Specialists Jim Newman and Mike Massimino, who installed a new port solar array on the HST. Information is presented on the size and power capacity of the array. The reaction wheel assembly, one of four gyroscopic devices used to maneuver the HST, is also shown being replaced by the astronauts. A new insulation blanket panel was also installed at the end of the spacewalk because the astronauts had extra time.

CASI
Extravehicular Activity; Hubble Space Telescope; Reaction Wheels; Solar Arrays; Thermal Insulation; Space Maintenance; Spacecraft Maintenance

STS-109 Flight Day 6 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)
During this space walk, the HST was powered down to a completely dormant state for the first time since its launch in 1990. Following the successful installation of the new PCU, the HST’s power was restored by engineers at the Goddard Space Flight Center (GSFC). There had been some concern about the telescope’s possible failure to restart, but everything went smoothly.

CASI

Control Equipment: Extravehicular Activity; Hubble Space Telescope; Spacecraft Maintenance

20020030208 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 Dune Carey, Payload Commander John Grunsfeld, and Mission Specialists Nancy Currie, James Newman, Richard Linnehan, and Michael Massimino) and of the International Space Station is seen as they discuss and share their experiences in space. Carey and Currie are seen as they answer questions sent from school children. Additional footage of the view of Earth is shown as the crew members answer more questions about the mission during an on-orbit interview. The view of the Hubble Space Telescope in the distance is seen. The video concludes with a view of the Galapagos Islands.

CASI

Earth Observations (From Space); Spacecrews

20020030739 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 grapples the Multipurpose Logistics Module (MPLM) from Discovery’s payload bay to the International Space Station (ISS). The three crews, STS-105 (Commander Horowitz, Pilot Fred Sturckow, and Mission Specialists Dan Barry and Forrester), Expedition 2 (Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms), and Expedition 5 (Commander Frank Culbertson, Jr. and Flight Engineers Mikhail Turin and Vladimir Dezhurov), are seen during unloading operations as they transfer equipment from the MPLM to the ISS. Forrester and Barry check their equipment and suits for the next day’s spacewalks. The E2 crew shows the E3 crew at the ISS. The crescent moon and the Earth is shown. Additional footage of the view of Earth is shown as the crew concludes with a view of the Galapagos Islands.

CASI

International Space Station; Spacecrews; Spacecraft Docking; Crew Procedures (Inflight); Discovery (Orbiter)

20020030740 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’ (internal ID 2002046549), 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 2002046551).

CASI

Extravehicular Activity; International Space Station; Orbital Servicing; Crew Procedures (Inflight)

20020030741 NASA Johnson Space Center, Houston, TX USA
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’ (internal ID 2002046549), and ‘STS-105 Mission Highlights Resource Tape: Flight Days 7-9’ (internal ID 2002046552), this video shows footage from flight days 10 through 13 of the STS-105 mission. The Multipurpose Logistics Module (MPLM) is moved from the International Space Station (ISS) to the payload bay of Discovery. The STS-105 crew (Commander Scott Horowitz, Pilot Fred Sturckow, and Mission Specialists Dan Barry and Pat Forrester) and Expedition 2 crew (Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms) bid farewell to the Expedition 3 crew (Commander Frank Culbertson, Jr. and Flight Engineers Mikhail Turin and Vladimir Dezhurov), who are to remain on ISS. ISS is seen against the Earth as Discovery performs its fly-around after the orbiter undocks. There is no flight day footage from flight day 12. Discovery is seen landing.

CASI

International Space Station; Spacecrews; Spacecraft Docking; Crew Procedures (Inflight); Discovery (Orbiter)

20020030742 NASA Johnson Space Center, Houston, TX USA
Mar. 04, 2002; In English; Videotape: 1 hr. 15 min. 7 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2002046550; No Copyright; 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-Reflex Experiment, an experiment to test the effects of microgravity on the human spinal cord. As Discovery approaches the International Space Station (ISS), the Expedition 2 (E2) crew, Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms, are seen working in the Destiny Laboratory Module aboard ISS. Discovery docks to the space station and the three crews (STS-105, E2, and E3) greet each other after the hatch between the orbiter and ISS are opened. As Discovery passes over the USA, Utah, Wyoming, South Dakota, and Minnesota are seen through patchy clouds. Footage from flight days 4-13 can be found on ‘STS-105 Mission Highlights Resource Tape: Flight Days 4-6’ (internal ID 2002046549), ‘STS-105 Mission Highlights Resource Tape: Flight Days 7-9’ (internal ID 2002046552), and ‘STS-105 Mission Highlights Resource Tape: Flight Days 10-13’ (internal ID 2002046551).

Derived from text

International Space Station; Spacecraft Launching; Spacecrews; Crew Procedures (Preflight); Crew Procedures (Inflight)

20020030743 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 Specialist 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.

CASI

Cooling Systems: Cryogenic Cooling; Extravehicular Activity; Hubble Space Telescope; Space Maintenance; Heat Radiators; Spacecraft Maintenance
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 extra-vehicular activities (EVAs). He describes the payload (50 Truss and Mobile Transporter) and the dry run installation of the STS truss that will take place the day before the EVA for the actual installation. Smith discusses the planned EVAs in detail and outlines what supplies will be left for the resident crew of the International Space Station (ISS). He ends with his thoughts on the most valuable aspect of the ISS.

Astronauts: Trusses: Crew Procedures (Inflight); Prelaunch Summaries

STS-108 Mission Highlights Resource Tape
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 Dominic Gorie, Pilot Mark Kelly, and Mission Specialists Linda Godwin and Daniel Tani) are seen reloading the Raffaello Multipurpose Logistics Module (MPLM). External shots show the MPLM departing 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 undocks from ISS and performs its flybys. 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 viewpoints.

CASI
Endeavour (Orbiter); International Space Station; Orbital Rendezvous; 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 54 Man/Systems Technology and Life Support. For related information, see also 05 Aircraft Design, Testing and Performance, 39 Structural Mechanics, and 16 Space Transportation and Safety.

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.

Scout Launch Vehicle: Scout Project

STS-32 post-flight press conference
Feb. 1, 1990; In English; 19 min. 20 sec. playing time, in color, with sound
Report No:(s): NONP-NASA-VT—93–185309; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Video footage of the post-flight press conference of STS-32 is presented. The footage is narrated by the crew, and it covers the following topics: launch, deployment of Syncom IV-5, retrieval of the Long Duration Exposure Facility, in-orbit activities, and the landing.

Author (revised)

Conferences: Space Transportation System; Space Transportation System Flights

19940009164 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

19940010310 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

19940010754 NASA Marshall Space Flight Center, Huntsville, AL, USA

Long Duration Exposure Facility is coming home
Nov 1, 1989; In English; 2 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--93--190454; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video tape describes how the Long Duration Exposure Facility will provide knowledge of the effects of space on various materials over a long period of time.

CASI

Long Duration Exposure Facility; Spaceborne Experiments

19940010794 NASA Goddard Space Flight Center, Greenbelt, MD, USA

Orbiting solar operations
Jul 1, 1988; In English; 10 min. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--93--190381; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
A short video presentation about the capabilities, accomplishments, and limitations of the Orbiting Solar Operations is presented.

CASI

Solar Activity; Solar Observatories

19940010796 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; TDRS Satellites

19940010801 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 documents the planned design and development of the Space Station.

CASI

NASA Space Programs; Space Station Freedom

19940010805 NASA Marshall Space Flight Center, Huntsville, AL, USA

Inertial Upper Stage
Feb 1, 1989; In English; 5 min. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--93--190452; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video tape details the importance of the Inertial Upper Stage in projecting various satellites from the Shuttle's cargo bay.

CASI

Inertial Upper Stage; Orbit Insertion; Payload Delivery (STS)

19940010823 NASA, Washington, DC, USA

Comet Halley returns
Dec 1, 1985; In English; 3 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--93--190406; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This videotape shows the exploratory spacecraft, representing several countries, that will study Comet Halley: Giotto, Vega 1 and 2, Planet A, and Soki-gaki.

CASI

Giotto Mission; Halley's Comet; Vega Project

19940010963 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--190367; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video shows the launchings of Viking 1 and 2 and discusses objectives of the first mission to Mars.

CASI

Mars Landing; Space Exploration; Viking Mars Project

19940010985 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

19940011023 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

19940011024 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
A short explanation of NASA's accomplishments and goals are discussed in this video. Space Station Freedom, lunar bases, manned Mars mission, and robotic spacecrafts to explore other worlds are briefly described.

CASI
- Aerospace Engineering
- NASA Space Programs: Research Projects: Technological Forecasting: Technology Assessment

19950824433 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Mir 18 post flight presentation
Jul 18, 1995; In English; 29 min. 15 sec. playing time, in color, with sound
Report No(s): NONP-NASA-VT-95-59072

This video features footage from the Mir 18 mission, with both the American astronauts and Russian Cosmonauts present for the press conference. They included: Gibson; Precourt; Baker; Harbaugh; Dunbar; Strekalov; Dezhurov; and Iliargard. Film footage and photographic slides of the various activities performed aboard the Mir Space Station and the spaceborne experiments accomplished during the flight mission are presented. Each of the operations are explained by the cosmonauts, with brief views of the Atlantis-Mir Earth orbital rendezvous over the Red Sea included.

CASI

19990832576 NASA Johnson Space Center, Houston, TX USA
Delta II Mars Pathfinder
Dec. 04, 1998; In English: Videotape: 1 hour 15 min. playing time, in color, with sound
Report No(s): NONP-NASA-VT-1999036756

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 in the Lander. After the countdown, important visual events include the launch of the Delta Rocket, burnout and separation of the three 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

19990832577 NASA Johnson Space Center, Houston, TX USA
Mars Climate Orbiter
Dec. 11, 1998; In English: Videotape: 1 hour 2 min. playing time, in color, with sound
Report No(s): NONP-NASA-VT-1999036757

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

19990832578 NASA Johnson Space Center, Houston, TX USA
Delta II Deep Space I Launch
Oct. 24, 1998; In English: Videotape: 1 hour 33 min. playing time, in color, with sound
Report No(s): NONP-NASA-VT-1999036758

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--1999026977; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The press conference concerns the Orbi ter 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

2000012873 NASA Kennedy Space Center, Cocoa Beach, FL USA
Atlas Centaur/GOES-J News Conference, Part 2 of 2
May 18, 1995; In English; Videotape: 28 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT--1999026992; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage includes a continuation of the discussions on Geostationary Satellites, the Automatic Surface Observation System (ASOS), and the Doppler Radar Network lead by Frederick Oshby, Director of the National Severe Storms Forecast Center. Live Coverage also shows the question and answer session between the panelists and the audience. This abstract describes the content of tape 2 of 2, 1 having a Report Number of NONP-NASA-VT-200000638.

CASI
Atlas Centaur Launch Vehicle: Conferences

2000013559 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 flyby with Chandra, two perspectives of Chandra’s deployment from the Shuttle, the Chandra deployment orbit sequence, the Initial Upper Stage (IUS) first stage burn, and finally a “beauty shot”, which represents another animated view of Chandra in space.

CASI
X Ray Astrophysics Facility: Computer Animation

2000014071 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 at 9:32 a.m. EDT on July 16, 1969. The crew of Apollo 11 included Commander Neil A. Armstrong, Command Module pilot Michael Collins, and Lunar Module pilot Edwin E. Aldrin, Jr. Several different camera viewpoints of the spacecraft as well as overhead shots of the Kennedy launch control center are presented prior to liftoff. Other footage includes shots of President Lyndon B. Johnson and his wife among the 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 start separation and launch escape tower separation from the spacecraft.

CASI
Apollo 11 Flight: Liftoff (Launch); Countdown

2000033143 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--2000003347; 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 soap cans attached by a string to demonstrate communication. Bill Nye the Science Guy talks briefly about science aboard the ISS. Charlie Spencer, Manager of Space Station Simulators, talks about communication aboard the ISS. The second topic of discussion is Engineering. Bonnie Dunbar, Astronaut at Johnson Space Flight Center, gives a tour of the Japanese Experiment Module (JEM). She takes us inside Node 2 and the U.S. Lab Destiny. She also shows where protein crystal growth experiments are performed. Audio terminal units are used for communication in the JEM. A demonstration of solar arrays and how they are tested is shown. Alan Bell, Project Manager MRMD (Mobile Remote Manipulator Development Facility), describes the robot arm that is used on the ISS and how it maneuvers the Space Station. The third topic of discussion is Science and Technology. Dr. Catherine Clark, using a balloon attached to a weight, drops the apparatus to the ground to demonstrate Microgravity. The bursting of the balloon is observed. Sherri Duniaette, 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 Krishen, Chief Technologist ISS, explains 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

2000007588 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta XTE Moved from Hangar M to Complex 17 at Cape Canaveral Air Station
Jul. 17, 1997; In English; Videotape: 3 min. playing time, in color, no sound
Report No.(s): NONP-NASA-VT--2000007588; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This Kennedy Space Center video presents a live footage of Delta XTE moved to CX 17.

CASI
Delta Launch Vehicle: X Ray Timing Explorer: Ground Support Equipment; Space Transportation

2000007581 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--2000007589; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This Kennedy Space Center video presents a live footage of Delta XTE move to vertical at CCAS AO.

**CASI**

**Delta Launch Vehicle: X Ray Timing Explorer; Spaceborne Astronomy; Ground Support Equipment**

20000057882  NASA Kennedy Space Center, Cocoa Beach, FL USA

**Delta 181 News Release**

Feb. 04, 1988; In English; Videotape: 5 min. 30 sec. playing time, in color, no sound
Report No.(s): NONP--NASA--VT--2000078600; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The Delta-181 mission was a military tracking exercise with released sub-satellites. It was also engaged in research and exploration of the upper atmosphere and the Earth Limb. This videotape consists of an animated film, which reviews the rocket stages, the launch and orbital insertion. It also shows the planned release of the sub-satellites in two groups. The plans for Earth limb observations are also shown.

**CASI**

**Military Spacecraft: Earth Observations (From Space); Satellite Constellations; Microsatellites**

20000057883  NASA Kennedy Space Center, Cocoa Beach, FL USA

**Delta II/Geotail Pre-Launch Press Conference**

Jul. 23, 1992; In English; Videotape: 62 min. 29 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000078601; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

This video presents a live coverage of a pre-launch press conference on the Delta II/Geotail Mission. George Diller, NASA Public Affairs, presents the panel. The panel consists of James Womack, NASA Launch Manager, Kennedy Space Center; Mario Acuna, Project Scientist, Goddard Space Flight Center; ATSuiro Nishida, Project Manager, ISAS (Institute of Space and Astronautical Science) Tokyo; Michael Calabrese, Program Manager, NASA Headquarters; Kenneth Sizemore, Project Manager, GSFC; Tono Usugi, Project Manager, ISAS; John Beckham, Delta Launch Manager, GSFC; and Joel Turnblom, Launch Weather Officer, CCAFS (Cape Canaveral Air Force Station). ATSuiro Nishida presents the objectives of the Geotail Mission which are: 1) to determine the characteristics of the Geomagnetic Tail; 2) to understand the inner 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 Usugi discusses spacecraft readiness for the July 24, 1992 launch, and Joel Turnblom gives the weather forecast for the launch. The press conference concludes with a question and answer period. See NONP--NASA--VT--2000078605 for additional questions and footage.

**CASI**

**Geomagnetic Tail; Prelaunch Summaries: Spacecraft Launching: Delta Launch Vehicle**

20000057884  NASA Kennedy Space Center, Cocoa Beach, FL USA

**Delta XTE Spacecraft Remover from Transfer Cannister at Hangar AO, CCAS**

Jun. 01, 1995; In English; Videotape: 7 min. playing time, in color, no sound
Report No.(s): NONP--NASA--VT--2000078617; 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 by workers in clean room clothing.

**CASI**

**X Ray Timing Explorer; Spaceborne Astronomy; Spacecraft Structures**

20000057885  NASA Kennedy Space Center, Cocoa Beach, FL USA

**Delta II Geotail Test DS040**

Jul. 24, 1992; In English; Videotape: 1 min. 48 sec. playing time, in color, without sound
Report No.(s): NONP--NASA--VT--2000078621; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video presents live footage of the Delta II Expansible Launch Vehicle Geotail 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 Magnetsphere**

20000057886  NASA Kennedy Space Center, Cocoa Beach, FL USA

**Delta XTE Fairing Installation at Complex 17–B CCAS**

Aug. 01, 1995; In English; Videotape: 3 min. playing time, in color, without sound
Report No.(s): NONP--NASA--VT--2000078625; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

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; Aerospace Systems**

20000057887  NASA Kennedy Space Center, Cocoa Beach, FL USA

**GOES 9 Spacecraft at Astrotech Plus Exterior and Logo**

Apr. 23, 1995; In English; Videotape: 7 min. 15 sec. playing time, in color, without sound
Report No.(s): NONP--NASA--VT--2000078628; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the removal of the Atlas GEOS-J from a military aircraft. Also shown is the uncovering covering of these components.

**CASI**

**Atlas Launch Vehicles: GOES Satellites (ESA); Geosat Project; Arrivals**

20000057888  NASA Kennedy Space Center, Cocoa Beach, FL USA

**Atlas GEOS-J Arrives at KSC and Uncaging at Astrotech**

Feb. 22, 1995; In English; Videotape: 13 min. 5 sec. playing time, in color, without sound
Report No.(s): NONP--NASA--VT--2000078628; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the removal of the Atlas GEOS-J from a military aircraft. Also shown is the uncovering covering of these components.

**CASI**

**GOES 9; Aerospace Systems**

20000057889  NASA Kennedy Space Center, Cocoa Beach, FL USA

**Arrival of SOHO Satellite at Kennedy Space Center–Atlas Launch**

Aug. 01, 1995; In English; Videotape: 3 min. playing time, in color, without sound
Report No.(s): NONP--NASA--VT--2000078630; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the removal of the SOHO satellite from the aircraft.

**CASI**

**SOHO Mission: ESA Satellites; Arrivals**

20000058129  NASA Kennedy Space Center, Cocoa Beach, FL USA

**Atlas SOHO Booster and Centaur Erection**

Sep. 29, 1995; In English; Videotape: 8 min. playing time, in color, no sound
Report No.(s): NONP--NASA--VT--2000078650; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The launch vehicle for the Solar Heliospheric Observatory (SOHO) mission is a two stage Atlas-IAS (Atlas/Centaur). The Atlas, consists of a solid
rocket booster stage powered by four Thiokol Castor IVA solid rocket boosters (SRB) and a core vehicle stage (booster and sustainer) powered by Rocketdyne MA-5A liquid propellant engines (RP-1 fuel and liquid oxygen). The multiple firing Centaur is powered by two Pratt and Whitney (RL10A-4) liquid hydrogen and liquid oxygen engines with extendible nozzles. This video shows the erection of the Atlas booster and transportation (to 36-B launching pad) and erection of the Centaur.

CASI
Atlas Centaur Launch Vehicle: Launch Vehicles; SOHO Mission: Space Shuttle Boosters: Ground Handling; Preflight Operations

20000058130 NASA Kennedy Space Center, Cocoa Beach, FL USA SOHO Payload Mate to Atlas/Centaur at the SAEF 2 Aug. 18, 1995; In English; Videotape: 5 min. playing time, in color, no sound Report No.(s): NONP--NASA--VT--2000078651; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The footage shows the Solar and Heliospheric Observatory’s (SOHO) payload mating with the Atlas Centaur launch vehicle in the Spacecraft Assembly and Encapsulation Facility (SAEF-2).
CASI

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--2000078556; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The footage shows technicians in the clean room checking and adjusting the deployment mechanism of the solar panel for XTE spacecraft. Other scenes show several technicians making adjustments to software for deployment of the solar panels.
CASI
Deployment: Solar Cells: Panels: Solar Collectors

20000058143 NASA Kennedy Space Center, Cocoa Beach, FL USA XTE Payload at Hangar AO Aug. 14, 1995; In English; Videotape: 3 min. 30 sec. playing time, in color, no sound Report No.(s): NONP--NASA--VT--2000078618; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The X-ray Timing Explorer (XTE), launched on Dec. 30, 1995, is a satellite that observes the fast-moving, high-energy world of black holes, neutron stars, X-ray pulsars and bursts of X-rays that light up the sky and then disappear forever. This videotape shows the 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.
Author
Clean Rooms: X Ray Timing Explorer

20000058144 NASA Kennedy Space Center, Cocoa Beach, FL USA Atlas Centaur 77 GOES--J Wet Dress Rehearsal at Cape Canaveral Air Station May 03, 1995; In English; Videotape: 6 min. playing time, in color, no sound Report No.(s): NONP--NASA--VT--2000078614; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
A Wet Dress Rehearsal (WDR) was successfully run on Atlas/Centaur 77 launch vehicle. The WDR verifies the launch readiness of the vehicle, the launch support equipment at the pad and in the blockhouse, the countdown procedure, and the launch countdown operations of the Eastern Range. During this countdown test liquid hydrogen, liquid oxygen and RP-1 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

20000058147 NASA Kennedy Space Center, Cocoa Beach, FL USA Delta II/GEOTAIL 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/GEOTAIL Mission. For the first part of the press conference, see NONP--NASA--VT--2000078601.
CASI
Geophysical: Spacecraft Launching: Prelaunch Summaries: Delta Launch Vehicle

20000058148 NASA Kennedy Space Center, Cocoa Beach, FL USA Delta Wind Mating to Upper Stage at PHFS Oct. 14, 1994; In English; Videotape: 14 min. playing time, in color, without sound Report No.(s): NONP--NASA--VT--2000078595; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Footage shows the mating of the Delta Wind to the Upper Stage rocket engine at the Payload Hazardous Servicing Facility (PHSF).
CASI
Spacecraft Components: Bonding: Upper Stage Rocket Engines

20000058149 NASA Kennedy Space Center, Cocoa Beach, FL USA XTE Delta 2nd Stage Erection at Complex 17A, Cape Canaveral Air Station Jul. 28, 1995; In English; Videotape: 4 min. 30 sec. playing time, in color, without sound Report No.(s): NONP--NASA--VT--2000078592; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Footage shows the erection of the Delta 2nd Stage vehicle at launch pad 17A. Scenes include the lifting of the component onto the launch pad.
CASI

20000058150 NASA Kennedy Space Center, Cocoa Beach, FL USA Delta XTE Lifted To Work Stand Jun. 28, 1995; In English; Videotape: 5 min. 13 sec. playing time, in color, without sound Report No.(s): NONP--NASA--VT--2000078590; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Live footage of the XTE (X-Ray Timing Explorer) being lifted to the work stand is presented.
CASI
X Ray Timing Explorer: Supports: Cranes

20000059213 NASA Kennedy Space Center, Cocoa Beach, FL USA WIND Mated to Delta Oct. 19, 1994; In English; Videotape: 6 min. 4 sec. playing time, in color, no sound Report No.(s): NONP--NASA--VT--2000078622; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This NASA Kennedy Space Center video release presents footage of the mating of NASA's WIND payload to the Delta launch vehicle at Cape Canaveral Air Station's complex 17B. The video includes shots of the work crews as well as wide angle views of the spacecraft in its launching position. WIND was launched on November 1, 1994 and is the first of two NASA spacecraft in the Global Geospace Science initiative and part of the International Solar Terrestrial Physics (ISTP) Project.
CASI
Payloads: Delta Launch Vehicle: Launch Vehicle Configurations

20000059214 NASA Kennedy Space Center, Cocoa Beach, FL USA Delta II/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--2000078607; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
Footage contains scenes from both the launch pad and Mission Directors
Center from T minus 4 minutes and counting until launch. The launch has a short window of 5 minutes. The Geotail satellite is a joint effort between NASA and the International Solar Terrestrial Physics Program. It was developed by the Japanese Inst. of Space and Astronautical Science.

CASI

Geomagnetic Tail: Launching; Delta Launch Vehicle

2000059215 NASA Kennedy Space Center, Cocoa Beach, FL USA

Delta II/Geotail Pre-Launch Press Conference Jul. 23, 1992; In English; Videotape: 10 min. 18 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2000078603; No Copyright; Avail: CASI
B01, Videotape-Beta; V01, Videotape-VHS

This footage contains scenes from the Geotail press conference. It covers a brief question and answer period. Questions about costs associated with the space mission were discussed.

CASI

Conferences; Geomagnetic Tail; Costs

2000059216 NASA Kennedy Space Center, Cocoa Beach, FL USA

Delta II/Geotail Launch with Pre-Launch Activities Jul. 24, 1992; In English; Videotape: 90 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2000078602; No Copyright; Avail: CASI
B04, Videotape-Beta; V04, Videotape-VHS

The footage contains scenes from both the launch pad and the Mission Directors Center. Pre-launch activities include fueling of both the 1st and 2nd stages of the engines and 2nd stage helium/nitrogen pressurization. The launch has a short window of 5 minutes.

CASI

Geomagnetic Tail: Launching; Refueling; Delta Launch Vehicle

2000059217 NASA Kennedy Space Center, Cocoa Beach, FL USA

Geotail Video News Release Jul. 20, 1992; In English; Videotape: 3 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2000078599; No Copyright; Avail: CASI
B01, Videotape-Beta; V01, Videotape-VHS

The Geotail mission, part of the International Solar Terrestrial Physics (ISTP) program, measures global energy flow and transformation in the magnetosphere to increase understanding of fundamental magnetospheric processes. The satellite was launched on July 24, 1992 onboard a Delta II rocket. This video shows animation of 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 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. 1, 1995; In English; Videotape: 3 min. 46 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2000078597; No Copyright; Avail: CASI
B01, Videotape-Beta; V01, Videotape-VHS

The SOHO satellite, part of the International Solar-Terrestrial Physics Program (ISTP), is a solar observatory designed to study the structure, chemical composition, and dynamics of the solar interior. It will also observe the structure (density, temperature and velocity fields), dynamics and composition of the outer solar atmosphere, and the solar wind and its relation to the solar atmosphere. The spacecraft was launched on December 2, 1995. This video shows the unloading of the satellite from the transport plane at the Kennedy Space Station and the lowering to an awaiting flatbed truck. The video also shows the uncrating of the satellite, the propulsion unit and the electric module in a clean room.

CASI

Clean Rooms; SOHO Mission; Solar Observatories; Scientific Satellites; Unloading

2000059219 NASA Kennedy Space Center, Cocoa Beach, FL USA

Delta XTE Lift and Mate at Complex 17A Aug. 16, 1995; In English; Videotape: 7 min. 30 sec. playing time, in color, no sound
Report No.(s): NONP-NASA-VT-2000078594; No Copyright; Avail: CASI
B01, Videotape-Beta; V01, Videotape-VHS

This NASA Kennedy Space Center (KSC) video release presents footage of the lift 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 work crews as well as wide angle views of the spacecraft in its launching position. The XTE was launched into a circular orbit with an altitude of 600 km and an inclination of 23 degrees on Dec. 30, 1995.

CASI

X Ray Timing Explorer; Ground Support Equipment; Delta Launch Vehicle

2000059220 NASA Kennedy Space Center, Cocoa Beach, FL USA

Delta Near Launch Activities, Launch Complex 17B, Cape Canaveral Air Station Feb. 17, 1996; In English; Videotape: 6 min. 54 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2000078593; No Copyright; Avail: CASI
B01, Videotape-Beta; V01, Videotape-VHS

This NASA Kennedy Space Center (KSC) video release presents footage of pre-launch activities as well as the actual spacecraft launching of NASA's Near Earth Asteroid Rendezvous (NEAR) spacecraft aboard a McDonnell Douglas Delta II rocket. The spacecraft was launched from Launch Complex 17B, Cape Canaveral Air Station, 17 February 1996.

CASI

Prelaunch Operations; Near Earth Asteroid Rendezvous Mission; Delta Launch Vehicle; Spacecraft Launching

2000060865 NASA Kennedy Space Center, Cocoa Beach, FL USA

Delta XTE Spacecraft Arrives at CCAS Skid Strip May 31, 1995; In English; Videotape: 6 min. 49 sec. playing time, in color, without sound
Report No.(s): NONP-NASA-VT-2000078616; No Copyright; Avail: CASI
B01, Videotape-Beta; V01, Videotape-VHS

The footage shows the X-ray Timing Explorer (XTE) spacecraft approaching, and landing at the Cape Canaveral Air Station Skid Strip (CCAS). The truck carrying the Delta XTE Spacecraft is also shown as it leaves the Air Mobility Command.

CASI

Delta Launch Vehicle; Arrivals

2000062361 NASA Kennedy Space Center, Cocoa Beach, FL USA

SOHO Mission Science Briefing Oct. 31, 1995; In English; Videotape: 1 hr. 6 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2000081535; No Copyright; Avail: CASI
B04, Videotape-Beta; V04, Videotape-VHS

Footage shows the SOHO Mission Pre-Launch Science Briefing. The moderator of the conference is Fred Brown, NASA/GSFC Public Affairs, introduces the panel members. Included are Professor Roger Bonnet, Director ESA Science Program, Dr. Wesley Huntress, Jr., NASA Associate Administrator for Space Science and Dr. Vicente Domingo, ESA SOHO Project Scientist. Also present are several members from the SOHO Team: Dr. Richard Harrison, Art Poland, and Phillip Scherrer. The discussions include understanding the phenomena of the sun, eruption of gas clouds into the atmosphere, the polishing of the mirrors for the SOHO satellite, artificial intelligence in the telescopes, and
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. Wolmaster, Mr. Gibbs, and Air Force Colonel Alsbrooke. Mr. Gibbs summarizes the steps that would be taken to review the launch failure. The questions from the press mostly concern the weather conditions, and the possibility that the weather might have caused the mission failure.

CASI

**Fleet Satellite Communication System: Launching:** Lightning; Failure; Liftoff (Launching); Launchers

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### 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 Levi, Director of CNES spoke briefly about the joint effort between National Aeronautics and Space Administration (NASA) and the European Space Agency (ESA). The NASA administrator, Don Golding also made a brief speech via telephone before the launching. Live footage also shows the launching of the TOPEX/POSEIDON satellite.

CASI

**Poseidon Satellite: TOPEX: Spacecraft Launching: Ariane Launch Vehicle**

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### 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; TOPEX; Poseidon Satellite; Oceanography; Ocean Currents; 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—2000078609; 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; Lift-off (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—2000085891; 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—2000148086; 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 2000; In English; Videotape: 22 min. 47 sec. playing time, in color, with sound
Report No.(s): NONP—NASA—VT—2001041436; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
A collection of computerized animations show various International Space Station (ISS) components and stages of assembly. Various clips show the following: (1) Space Shuttle dock and fly-around views; (2) Russian Proton rocket launch; (3) Service Module Zvezda flight; (4) Russian Progress vehicle, STS-92 Discovery, and the Soyuz spacecraft dock with ISS (separately); (5) Z-1 truss and Pressurized Mating Adapter 3 installation; (6) STS-97 installation of solar arrays; (7) STS-98 Destiny Laboratory Module installation; (8) ESA, Russian, and Columbus Attached Pressurized Modules; (9) fly-around of Russian research modules, US modules, and Kibo module; (10) view of truss structure; (11) Space Station fly-around; (12) solar arrays tracking the sun; (13) ISS Remote Manipulator System (robotic arm) attach and detach; (14) interior and exterior views of Columbus Attached Pressurized 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

20010029213 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—2001041438; 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) spacewalks 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 spacecrafs’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 dock; 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 space life jackets and stiff tethers, are described. Astronaut training in the Neutral Buoyancy Laboratory (NBL) and shuttle simulators also are seen.

CASI
International Space Station; Astronaut Training; Safety Devices; Tethers
Assembl.v; Space 5'talion Modules

Assembling for latmch at the Baikonur Cosmo&ome in Kazakhs_a, Russia. The interior and exterior of Zvezda are seen during construction. Computerized simulations show the solar arrays deploying on Zvezda in space, the maneuvers of the module as it approaches and connects with the International Space Station (ISS), the installation of the Z1 truss on the ISS and its solar arrays deploying, and the installations of the Destiny Laboratory, Remote Manipulator System, and Kibo Experiment Module. Live footage then shows the successful launch of the Proton Rocket.

CASI International Space Station; Computerized Simulation; Spacecraft Launching; Spacecraft Docking

2001035851 NASA Kennedy Space Center, Cocoa Beach, FL USA

Zvezda Launch Coverage
Jul. 12, 2000; In English; Videotape: 45 min. 31 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001048900; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Footage shows the Proton Rocket (containing the Zvezda module) ready for launch at the Baikonur Cosmodrome in Kazakhstan, Russia. The interior and exterior of Zvezda are seen during construction. Computerized simulations show the solar arrays deploying on Zvezda in space, the maneuvers of the module as it approaches and connects with the International Space Station (ISS), the installation of the Z1 truss on the ISS and its solar arrays deploying, and the installations of the Destiny Laboratory, Remote Manipulator System, and Kibo Experiment Module. Live footage then shows the successful launch of the Proton Rocket.

CASI International Space Station; Computerized Simulation; Spacecraft Launching; Spacecraft Docking

2001033318 NASA Kennedy Space Center, Cocoa Beach, FL USA

Expedition 1 Crew News Conference
Aug. 02, 2000; In English; Videotape: 55 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001048781; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The crew members of Expedition 1, William Shepherd, Yuri Gidzenko, and Sergei Krikalev, were shown during this prelaunch press conference where they describe their preparations and expectations for living on the International Space Station (ISS). They then answer questions from the press.

CASI International Space Station; Spacecruers

200100929217 NASA Johnson Space Center, Houston, TX USA

International Space Station General Resource Reel
Nov. 01, 1998; In English; Videotape: 78 min. 52 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001044442; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The construction and evolution 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 under 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 Expedition 1 crew (William Shepherd, Yuri Gidzenko, and Sergei Krikalev) during emergency escape training in the Black Sea and during water survival training at Johnson Space Center; (6) the X-38 Crew Return Vehicle Drop Test; and (7) the US Destiny Laboratory Module, Pressurized Mating Adapter (PMA), Service Module, Italian Multi-Purpose Logistics Module, US Airlock, and US Habitation Module under construction. Computerized animations show the following: (1) an ISS fly-around; (2) the STS-88 Space Shuttle as it docks with Zarya and attaches Unity Module; (3) the Space Shuttle as it docks with ISS and installs the Z1 truss segment and PMA; (4) the Soyuz spacecraft as it docks with ISS; (5) interior and exterior views of the Columbus Attached Pressurized Module; and (6) a Transcript animation showing the interior and exterior and marking the components.

CASI International Space Station; Construction; Spacecraft Docking; Orbital Assembly; Space Station Modules

20010038856 NASA Kennedy Space Center, Cocoa Beach, FL USA

Zarya Resource Reel
Dec. 08, 1998; In English; Videotape: 40 min. 45 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP–NASA–VT–2001044443; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

An overview of the Zarya Module (part of the International Space Station) is given through various clips of its construction, launch, and installation. Computerized animations show the deployment of Zarya’s solar panels, Zarya’s motor firing to a higher orbit, and the installation of Zarya to the Unity Module using the STS-88 Endeavour’s robotic arm. Live footage shows the following: (1) Zarya and the Proton Rocket under construction at the Khantsyev State Research and Production Center in Moscow, Russia; (2) Zarya launch preparations (test deployment of solar arrays) at the Baikonur Cosmodrome in Kazakhstan, Russia; (3) prelaunch activities (inspection, Proton Rocket rollout to launch pad); (4) the launch of Zarya on the Proton Rocket at the Baikonur Cosmodrome; and (5) Endeavour’s capture of Zarya and its berthing to Unity.

CASI Construction; Spacecraft Launching; Zarya Control Module; Solar Arrays

20010029216 NASA Johnson Space Center, Houston, TX USA

International Space Station Video Progress Report
Oct. 01, 2000; In English; Videotape: 7 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001044441; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

A narrated overview of the construction and assembly of the International Space Station (ISS) is given through a collection of clips ranging from the launch of the Russian Proton rocket containing the Zvezda module to computerized animations showing the installation of the Zarya and Unity connecting modules. Footage from some of the space missions that assembled the ISS in space (i.e., STS-106 and STS-92) are seen. The Z1 truss (including the deployment of the solar arrays), Destiny Laboratory Module, Leonardo Module, the Japanese Kibo Experiment Module, Columbus Pressurized Module, and the ISS’s robotic arm are seen. Animations show the assembly and evolution of the ISS as new components are added.

CASI International Space Station; Zarya Control Module; Installing; Construction; Assembling

2001035852 NASA Kennedy Space Center, Cocoa Beach, FL USA

ISS Expedition 1 Pre–Launch Press Conference
Oct. 19, 2000; In English; Videotape: 42 min. 13 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001048899; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Expedition 1 crewmembers William Shepherd, Yuri Gidzenko, and Sergei Krikalev are introduced in this prelaunch press conference. Each crewmember gives a brief statement about his expectations for the upcoming mission and they answer questions from the press.

CASI Prelaunch Summaries; Crew Procedures (Inflight); International Space Station; Spacecruers

2001036657 NASA Kennedy Space Center, Cocoa Beach, FL USA

ISS Service Module Pre–Launch
Jul. 07, 2000; In English; Videotape: 61 min. 27 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001052178; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Various shots show Discovery at the launch pad during the final 30-minute countdown. The prelaunch conditions are described and information is given on the upcoming launch and the orbiter’s docking with the International Space Station (ISS). A brief collage of rollout and launch footage of STS-92 Endeavour commemorates the 100th Space Shuttle mission and the 100th anniversary of the Philadelphia Orchestra (also seen). The music of ‘2001: A Space Odyssey’ is played by the orchestra.

CASI Countdown; Spacecraft Launching; Spacecraft Docking; Discovery (Orbiter)
crew performs experiments (solar effects, Earth observation), monitors their health, and goes about their day-to-day lives.

**Astronauts Health; Space Exploration; Skylab Program**

**20010116514 NASA Johnson Space Center, Houston, TX USA**

**Apollo Presentation**
Jan 01, 2001; In English; Videotape: 7 min. 2 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001174288; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video is a compilation of scenes from the Apollo 11 mission, from the speech President Kennedy gave declaring America's intention to go to the Moon through the Lunar Module liftoff from the Moon's surface, including footage from the Apollo 11 spacecraft launch, astronaut activities on the lunar surface, the placing of the American flag on the surface of the Moon, and an astronaut on the Lunar Rover.

**CASI**

**Astronauts Lunar Surface: Moon: Apollo 11 Flight**

**20010116515 NASA Johnson Space Center, Houston, TX USA**

**Legacy of Skylab**
May 11, 1989; In English; Videotape: 9 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001174286; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video is a compilation of footage from the Skylab missions. The three three-man crews are seen as they perform experiments (solar effects, Earth observations), exercise, and play in zero gravity.

**CASI**

Skylab Program; Spacecraft

**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 ASTRONOMICS**

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; and 89 Astronomy, Instrumentation and Photography. For spaceborne telescopes and other astronomical instruments see 89 Astronomy. For spacecraft instrumentation see 89 Spacecraft.
This video tape describes the redesign and construction of the Advanced Solid Rocket Motor.

**CASI**

**Advanced Solid Rocket Motor (SRM): Solid Propellant Rocket Engines**

19940010878 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**

**CASI**

19940011030 NASA Lewis Research Center, Cleveland, OH, USA

**Futurepath 1**

Apr 1, 1988; In English; 27 min. 15 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT-93-190228; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

- This video looks at the photovoltaic and solar dynamic power systems being developed for Freedom and the Advanced Turboprop Program.
- **Photovoltaic Conversion: Solar Dynamic Power Systems: Space Station Power Supplies: Turboprop Aircraft**

**CASI**

19940027312 NASA Lewis Research Center, Cleveland, OH, USA

**Solar connection**

Jan 1, 1992; In English; 14 min. 18 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT-94-9961; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

- This video explains the Work package 4, an electrical power system being developed by NASA Lewis Research Center, for use on the Space Station Freedom. It shows footage and explains steps in building and testing of actual flight hardware for Space Station Freedom. Details are given of the threat that plasma poses on cells.
- **Space Station Freedom: Space Station Power Supplies**

**CASI**

19940029051 NASA John C. Stennis Space Center, Bay Saint Louis, MS, USA

**ASRM testing at Stennis Space Center (proposed)**

Jan 1, 1993; In English; 6 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT-94-12923; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

- This summary of the Advanced Solid Rocket Motor (ASRM) program at Stennis Space Center has a specific focus on the environmental impact.

**CASI**

19940029076 NASA Lewis Research Center, Cleveland, OH, USA

**One fantastic ride**

Jan 1, 1991; In English; 14 min. 15 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT-94-12956; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

- This video gives an overview of work being done by the Space Propulsion Technology Division at LeRC. This division conducts research on chemical, nuclear-thermal, and solar propulsion systems and propellants. Two ongoing projects highlighted are a low-thrust rocket for moving around in Earth orbit and large unmanned cargo rockets, both for use with the Space Station.

**CASI**

19950004114 NASA Lewis Research Center, Cleveland, OH, USA

**Low thrust propulsion no. CV-110**

May 1, 1990; In English; 10 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT-94-23169; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

- This video presents an overview of low thrust rocket engine propulsion concepts for space missions. Chemical and electrical rocket engines are shown. Animation illustrates various propulsion applications.
- **LeRC**

**Low Thrust Propulsion: Rocket Engines: Spacecraft Propulsion**

2000058151 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 Paths: Solid Propellant Rocket Engines**

**CASI**

2000018239 NASA Kennedy Space Center, Cocoa Beach, FL, USA

**OV-155 Endeavour Main Engine Press Showing at VAB**

Oct. 31, 1990; In English; Videotape: 4 min. 58 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT-2000052211; 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.
- **Endeavour (Orbiter): Prelaunch Summaries: Engines**

**CASI**

2001019014 NASA Kennedy Space Center, Cocoa Beach, FL, USA

**SOHO Solid Rocket Booster Installation**

Nov. 04, 1995; In English; Videotape: 8 min. 42 sec. playing time, in color, no sound Report No.(s): NONP-NASA-VT-200102116; 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**

### 24 COMPOSITE MATERIALS

Includes physical, chemical, and mechanical properties of laminates and other composite materials.

19940010872 NASA, Washington, DC, USA

**Better airplane wings**

Nov 1, 1989; In English; 3 min. 23 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT-93-190243; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

- The videotape discusses the new composites that will be used to create lighter yet stronger aircraft wings.
- **CASI**

**Aircraft Design: Composite Materials: Composite Structures: NASA Programs: Wings**
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.

199400729244 NASA Lewis Research Center, Cleveland, OH, USA
National aerospace plane
Jul 1, 1990; In English; 5 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–13533; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video concentrates on materials being developed and tested at LeRC for possible use in NASP.
CASIAerospace Planes; Aircraft Construction Materials; National Aerospace Plane Program; Spacecraft Construction Materials

26 METALS AND METALLIC MATERIALS

Includes physical, chemical, and mechanical properties of metals and metallic materials; and metallurgy.

199400729143 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; Avail: 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

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.

199400618840 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–93–190408; No Copyright; Avail: 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.
CASIAntique 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.

199400618897 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–26 SSP briefings
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; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Lloyd Bruce, student experimenter, explains his Titanium Grain Formation Experiment. Dr. Charles Scaife demonstrates Richard Caroili's Crystal Membrane Experiment.
CASICrystal Structure; Grain Boundaries; Space Shuttle Missions; Spaceborne Experiments; Titanium

199400729778 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–93–190447; No Copyright; Avail: 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.
CASIAstronauts; Education; Gravitation; Microgravity

19950084106 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, with sound
Report No.(s): NONP–NASA–VT–93–23164; No Copyright; Avail: 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 experi-
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

19970805613 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; videotape 4 of 4; videotape 4 of 4; videotape 4 of 4
Report No.(s): NONP-NASA–VT–97–1997005940; No Copyright; Available: 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 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 the induced heating mixing process for the first 2 min. of the mixing period, was also recorded on video. Analyses of data from the two flight experiments (TPCE and TPCE/TP) and their comparison with the results obtained in drop tower experiments suggest that as Bond number approaches zero the flow pattern produced by an axial jet and the mixing time can be predicted by the Weber number. This is video tape 4 of 4.

CASI

Tank (Containers); Bubbles; Flow Distribution; Fluid Jets; Freon; Jet Mixing Flow; Microgravity; Pressure Reduction; Heat Flux

19970805657 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; videotape 3 of 4; videotape 3 of 4; videotape 3 of 4
Report No.(s): NONP-NASA–VT–97–1997005939; No Copyright; Available: 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 the induced heating mixing process for the first 2 min. of the mixing period, was also recorded on video. Analyses of data from the two flight experiments (TPCE and TPCE/TP) and their comparison with the results obtained in drop tower experiments suggest that as Bond number approaches zero the flow pattern produced by an axial jet and the mixing time can be predicted by the Weber number. This is video tape 3 of 4.

CASI

Tank (Containers); Bubbles; Flow Distribution; Fluid Jets; Freon; Jet Mixing Flow; Microgravity; Pressure Reduction; Heat Flux

19950404113 NASA Lewis Research Center, Cleveland, OH, USA
TES (Thermal Energy Storage) video news release
Feb 1, 1994; In English; 3 min. 30 sec. playing time, with sound
Report No.(s): NONP–NASA–VT–94–23166; No Copyright; Available: 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

19950404151 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): NONP–NASA–VT–94–23166; No Copyright; Available: 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; Dendrite; Crystals; Isothermal Processes; Mathematical Models; Metals; Space Shuttle Payloads

19970805007 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; videotape 2 of 4; videotape 2 of 4
Report No.(s): NONP–NASA–VT–97–1997005938; No Copyright; Available: 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 near saturation conditions. The test tank was filled with liquid to about 83 percent by volume. The experiment consisted of 21 tests. Each test generally started with a heating phase to increase the tank pressure and to develop temperature stratification in the fluid, followed by a fluid mixing phase for the tank pressure reduction and fluid temperature equilibration. The heating phase provided pool boiling data from large (relative to bubble sizes) heating surfaces (0.1046 m by 0.0742 m) at low heat fluxes (0.23 to 1.16 kW/m²). The system pressure and the bulk liquid subcooling varied from 39 to 78 kPa and 1 to 3 deg C, respectively. The boiling process during the entire heating period, as well as a jet-induced mixing process for the first 2 min. of the mixing period, was also recorded on video. Analyses of data from the two flight experiments (TPCE and TPCE/TP) and their comparison with the results obtained in drop tower experiments suggest that as Bond number approaches zero the flow pattern produced by an axial jet and the mixing time can be predicted by the Weber number. This is video tape 2 of 4.

CASI

Tank (Containers); Bubbles; Flow Distribution; Fluid Jets; Freon; Jet Mixing Flow; Microgravity; Pressure Reduction; Heat Flux

19970805051 NASA Johnson Space Center, Houston, TX USA
Tank Pressure Control Experiment: Thermal Phenomena in Microgravity. Tape 1 of 4
Feb 20, 1996; In English; Videotape: 1 hr. 22 min. playing time, in color, with sound; videotape 1 of 4; videotape 1 of 4
Report No.(s): NONP–NASA–VT–97–1997005937; No Copyright; Available: 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 (TPCE and TPCE/TP) and their comparison with the results obtained in drop tower experiments suggest that as Bond number approaches zero the flow pattern produced by an axial jet and the mixing time can be predicted by the Weber number. This is video tape 1 of 4.

CASI

Tank (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 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) [1] (exp 2). The system pressure and the bulk liquid subcooling varied from 39 to 78 kPa and 1 to 3 deg C, respectively. The boling 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; Freon; Jet Mixing Flow; Microgravity; Pressure Reduction; Heat Flux

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 38.

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

NIST Automated Manufacturing Research Facility (AMRF): March 1987
Herbert, Judith E., editor, National Inst. of Standards and Technology, USA; Kane, Richard, editor, National Inst. of Standards and Technology, USA; Mar 1, 1987; In English; 19 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-95-49097; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The completion and advances to the NIST Automated Manufacturing Research Facility (AMRF) is described in this video. The six workstations: (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 work station are visited. Viewing 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

Cooler Deployment, GOES J on ATLAS
Mar. 14, 1995; In English; Videotape: 5 min. 13 sec. playing time, in color, no sound
Report No.(s): NONP-NASA-VT-200078613; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This NAS Kennedy Space Center video release presents footage of work crews overseeing the cooler deployment on the GOES-J weather satellite that will be launched on the Atlas Centaur rocket from Complex 36 at the Cape Canaveral Air Station.
CASI
Coolers; GOES Satellites; Spacecraft Components

COMMUNICATIONS AND RADAR
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.

COBE video news
Oct 1, 1989; In English; 3 min. 46 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-19036; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This videotape was produced for hand-out to both local and national broadcast media as a prelude to the launch of the Cosmic Background Explorer. The tape consists of short clips with multi-channel sound to facilitate news media editing.
CASI
Cosmic Background Explorer Satellite: News Media; Spacecraft Launching

High resolution microwave survey
Scheibe, J., editor, NASA, USA; Sep 18, 1992; In English; 12 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-95-46001; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Research information on radar tracking systems, computer animation of star formation, footage of solar systems, and desert radar equipment and research facilities are contained in this video. Frank Drake, President of SETI (Search for Extraterrestrial Intelligence) Institute is interviewed along with Jill Tarter, NASA's High Resolution Microwave Survey Project Scientist.
CASI
Computer Animation; High Resolution; Microwaves; Radar Tracking; Radio Astronomy; Radio Communication

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.

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-94-12557; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video gives an overview of work being done by the different branches of the Space Electronics Division at LeRC. The video highlights electron beam, solid state, high speed circuit design and, high frequency communication research.
CASI
Electron Beams; Electronic Equipment; NASA Programs; Solid State Devices
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.

19940010737 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
fluid system chosen is the liquid sessile droplet to show the
phenomena, boundary layers, aerelasticity, rotor blades, stators, jet ground
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 cowl is hidden from view by the inlet sidewall. The end of the cowl
activator 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 test, but did prove
sufficient to identify inlet start and unrest. 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 unrest.

Author
Engine Inlets: Flow Distribution; Flow Visualization; Free Flow; Hypersonic
Inlets; Hypersonic; Wind Tunnels; Inlet Flow; Schlieren Photography; Supersoni
Combustion Ramjet Engines; Wind Tunnel Tests

19980069484 NASA Langley Research Center, Hampton, VA, USA
Two-dimensional scramjet inlet unstalt test: Wind–tunnel blockage and
actuation system test
Holland, Scott D., NASA Langley Research Center, USA; Nov 1, 1994; In
English; Videotape supplement: 10 min. 52 sec. playing time, in color, in VHS
and Beta formats

This supplement to NASA TM 109152 shows the Schlieren video (10 min.
52 sec., color, Beta and VHS) of the external flow field and a portion of the
internal flow field of a two-dimensional scramjet inlet model in the NASA
Langley 20-Inch Mach 6 Tunnel. The intent of the overall test program is to study
both experimentally and computationally the dynamics of the inlet unstall; this
phenomenon is of major significance to the development of scramjet inlets, and it
is therefore important to understand and control these interactions.

This document presents highlights of 1989's CFD graphics, which show
shuttle flight problems, F-18 flows, artificial heart, and rotorator with more
complex blades.

CASl
Computational Fluid Dynamics: Numerical Flow Visualization; Scientific Visuali-

19940010779 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.

CASl
Boundary Layer Control: Drag Reduction; Hydrodynamics; Riblets

19940010958 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, stators, jet ground
effects, the F-18, flow about the shuttle, hypersonic flow, and flow in an artificial
heart.

CASl
Computational Fluid Dynamics: Computer Graphics; Computerized Simula-

19940027380 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–94–199558; No Copyright; Avail: CASI;
B02, 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 convec-
tion and surface tension-dominated convection is graphically displayed. The clear
differences between these mechanisms of fluid transport, thermocapillary convec-
tion, and buoyancy dominant convection is illustrated.

CASl
Capillary Flow; Convection; Convective Heat Transfer; Cooling Systems;
Crystal Growth; Drops (Liquids); Drying; Evaporation; Single Crystals; Space-
craft Radiators; Sprayers

19950104104 NASA Lewis Research Center, Cleveland, OH, USA
ZENO: A critical fluid light scattering experiment
Feb 1, 1994; In English; 7 min. 25 sec. playing time, with sound
Report No.(s): NONP–NASA–VT–94–23162; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The ZENO experiment flown on the STS-62, it is designed to verify
attempts to describe dramatic changes in the properties of fluids near the critical
temperature at which the vapor and liquid forms co-exist.

CASl
Critical Temperature; Fluids; Light Scattering; Liquid Phases; Physics; Space-
borne Experiments; Vapor Phases

19940010674 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–94–190434; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video presents great model photography along with astronaut activity
as practiced in mockup.

CASl
Astronaut Training; Space Station Freedom; Spacecraft Models

19940010631 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

35

INSTRUMENTATION AND PHOTOGRAPHY

Includes remote sensors; measuring instruments and gauges; detectors; cameras

19901092668 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–94–190434; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video presents great model photography along with astronaut activity
as practiced in mockup.

CASl
Astronaut Training; Space Station Freedom; Spacecraft Models

19940010631 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; Photography Equipment; Space Shuttle Orbits; Spaceborne Photography

19940010843 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 CBT.

CASI
Astronaut Training: Cameras; Space Shuttle Missions

19940010801 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-30 IMAX camera audio class FET
Mar 1, 1990; In English; 15 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93–190340; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

The astronauts are shown how to work the audio portion of the IMAX camera system.

CASI
Astronaut Training: Astronauts; Audio Equipment; Cameras; Space Shuttle Missions

19940010907 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; Spacecrews

19940010924 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; Spacecrews

19940010932 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-27 crew photo training and habitation procedures
Nov 1, 1988; In English; 15 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93–190296; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The crew is shown studying photography equipment they will carry into orbit, and how to take the best shots possible.

CASI
Astronaut Training: Photographic Equipment; Photography

19940010990 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-35 payload specialists Durrance and Parise; 76mm photo training and cabin familiarization
Apr 1, 1990; In English; 14 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93–190296; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video shows astronauts Durrance and Parise being trained with photography equipment.

CASI
Astronaut Training: Astronauts; Photographic Equipment; Space Flight Training; Space Shuttle Missions; Space Transportation System Flights

199400110999 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 various aerial shots of the NASA JSC. Views of downtown Houston, TX, are also provided.

CASI
Aerial Photography; Houston (TX); Research Facilities

199400111319 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-31 crew Linof, Arriflex, and IMAX camera training
Mar 1, 1990; In English; 29 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93–190282; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

The crew is shown on the roof of Bldg. 1 at the NASA Johnson Space Center learning about the Linof camera system. The crew is shown taking pictures with the Linof camera from the roof.

CASI
Astronaut Training: Cameras

19970035833 NASA Lewis Research Center, Cleveland, OH USA
Improved Optical Techniques for Studying Sonic and Supersonic Injection into Mach 3 Flow
Buggle, Alvin E., NASA Lewis Research Center, USA; Seacholtz, Richard G., NASA Lewis Research Center, USA; Sep. 1997; 22p; In English; 2ndnd; International Society for Optical Engineering Conference, 27 Jul. - 1 Aug. 1997, San Diego, CA, USA; Sponsored by International Society for Optical Engineering, USA; Original contains color illustrations

Contract(s)/Grant(s): RTOP 953--70.40
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 Thermal Rocket Program. The present study used an injection-seeded, frequency doubled Nd:YAG pulsed laser to illuminate a transverse section of the injectant 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 injectant 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 are presented several ways for the three configurations of injection designs with and without helium and/or air injection into Mach 3 flow. A 12 min. video supplement is also included.

Author

19970035939 TRW Space and Electronics Group, PMMW Camera Consortium, Redondo Beach, CA USA
1997, 32p; In English
Contract(s)/Grant(s): NCCI-196
Report No.(s): NONP-NASA-VT–1997057310; 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
develop and demonstrate the capabilities of a W-band PMMW camera with a microwave/millimeter wave monolithic integrated circuit (MMIC) focal plane array (FPA) that can be manufactured at low cost for both military and commercial applications. This overall objective was met in July 1997 when the first video images from the camera were generated of an outdoor scene. In addition, our consortium partner McDonnell Douglas was to develop a real-time passive millimeter wave flight simulator to permit pilot evaluation of a PMMW-equipped aircraft in a landing scenario. A working version of this simulator was completed. This work was carried out under the DARPA-funded PMMW Camera Technology Reinvestment Project (TRP), also known as the PMMW Camera DARPA Joint Dual-Use Project. In this final report for the Phase 1 activities, a year by year description of what the specific objectives were, the approaches taken, and the progress made is presented, followed by a description of the validation and imaging test results obtained in 1997.

Derived from text
Cameras; Spatial Resolution; Millimeter Waves; Microwaves; Imaging Techniques; High Resolution

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/Systems Technology and Life Support.

19940109131 NASA Goddard Space Flight Center, Greenbelt, MD, USA Goddard Space Flight Center robotics demo
Nov 1, 1988; In English; 15 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT--93-185317; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Documentary footage of a fascinating look at Goddard Space Flight Center’s Robotic Capability during a demonstration by Goddard robotics engineers is presented.

Author
Documentation; NASA Programs; Robot Control; Robotics; Tests

19940101790 NASA Goddard Space Flight Center, Greenbelt, MD, USA Robotics 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--93-190376; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

This video shows robotics for the Space Station.

CASI
Robotics; Space Stations

19940104795 NASA Goddard Space Flight Center, Greenbelt, MD, USA Robotics in space
Nov 1, 1988; In English; 7 min. 30 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT--93-190382; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Produced for the AIAA symposium, this fast paced video shows robotics and tele robotics in the exploration of space.

CASI
Robotics; Space Exploration

19940107909 NASA Goddard Space Flight Center, Greenbelt, MD, USA Robotics for Space Station, tape 1
Aug 1, 1989; In English; 30 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT--93-190366; 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

19940104778 NASA Lewis Research Center, Cleveland, OH, USA High temperature NASP engine seal development
Jan 1, 1992; In English; 6 min. 25 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT--94-90950; 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)

19940109808 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--94-12660; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

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 video describes robotic research such as the EVA retriever and virtual reality.

CASI
Extravehicular Activity; Robotics; Virtual Reality

19940101874 NASA, Washington, DC, USA Uninom 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

19940101983 NASA Lyndon B. Johnson Space Center, Houston, TX, USA EVA retriever demonstration
Apr 1, 1988; In English; 10 min. 30 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT--93-190370; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The EVA retriever is demonstrated in the Manipulator Development Facility (MDF). The retriever moves on the air bearing table ‘searching’ for its target, in this case tools ‘dropped’ by astronauts on orbit.

CASI
Extravehicular Activity; Retrieval; Target Acquisition

19940101986 NASA Lyndon B. Johnson Space Center, Houston, TX, USA STS-41 VCS training with mission specialist Bruce Melniek and Bill Shepard
Sep 1, 1990; In English; 12 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT--93-190310; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Astronaut Bill Shepard is shown using the Voice Command System (VCS) in the Manipulative Development Facility (MDF) under the eye of project engineers and crew trainers. The video shows VCS in action moving cameras around the MDF payload bay mockup.

CASI
Remote Handling; Voice Control

19940102798 NASA Lewis Research Center, Cleveland, OH, USA High temperature NASP engine seal development
Jan 1, 1992; In English; 6 min. 25 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT--94-90950; 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)

19940102908 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--94-12660; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video describe 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 stationery 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**

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**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**

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**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**

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**200000032743** NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS-36: Turbo Pump Deinstalled and Being Inspected**

Feb. 07, 1996; 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

This video presents the removal of a turbo pump, and visual and internal inspection of the pump.

**CASI**

**Inspection; Turbine Pumps: Space Shuttle Orbiters**

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**200000034859** 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**

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**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

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This video tape 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**

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**20 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.

**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–94–996; No Copyright; Avail: CASI;

B02, Videotape–Beta; V02, Videotape–VHS

The story of research and technology at NASA Lewis Research Center’s Structures Division is presented. The job and designs of the Structures Division needed for flight propulsion is described including structural mechanics, structural dynamics, fatigue, and fracture. The video briefly explains why properties of metals used in structural mechanics need to be tested. Examples of tests and simulations used in structural dynamics (bodies in motion) are briefly described. Destructive and non-destructive fatigue/fracture analysis is also described. The arc sprayed monolape (a composite material) is explained, as are the programs in which monolape plays a role. Finally, the National Aero-Space Plane (NASP or x-30) is introduced, including the materiel development and metal matrix as well as how NASP will reduce costs for NASA.

**CASI**

**Aerospace Planes; Dynamic Structural Analysis; National Aerospace Plane Program; Propulsion System Configurations; Propulsion System Performance**

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**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 06 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–93–190432; No Copyright; Avail: CASI;

B01, Videotape–Beta; V01, Videotape–VHS

This document shows how views from the shuttle provide valuable information as to the condition of earth.

**CASI**

**Earth Observations (From Space); Environmental Monitoring; Remote Sensing; Space Shuttle Orbiters**

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**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

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This videotape shows the use of remote sensing to better target mosquito larvae for more effective control.

CASI

Insects: Parasitic Diseases; Remote Sensing

1994#10837 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#10861 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#10936 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#10955 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#10992 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 Uranium moon, Miranda. The last movie is 'Monterey the Bay'.

CASI

Earth Observations (From Space); Remote Sensing; Satellite Imagery

1994#29242 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 Systems (EOS); Earth Resources; Resources Management

1996#025967 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, Oman, Iran, Iraq, Kuwait, Bahrain, Qatar, and the United Arab Emirates), northeastern Africa (Egypt, Sudan, Ethiopia, Somalia, and Djibouti), Russia, Siberia, India, Sri Lanka, Tibet, Bhutan, western China, and Mongolia. Various lakes, seas, rivers, and islands are shown, along with several pieces of film footage of sunsets, moon sets, clouds, and tropical storms. Each film clip has a heading that names the shuttle and the geographical location of the footage.

CASI

Space Shuttles; Earth Observations (From Space); Color Photography; Geographic Distribution

1996#025968 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

1996#025969 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
**Shuttle Earth Views, 1994, Part 3**

Ape. 26, 1995; In English; Videotape: 59 min. 10 sec. playing time, in color, no sound-3

Report No.(s): NONP-NASA-VT-96-1996031300; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

In this third part of a four part video compilation of Shuttle's Earth views various geographical areas are shown, including both land and water masses. The views cover South America, Asia (North Vietnam, Laos, Cambodia, China, Malaysia, Thailand, Java, various islands, Burma, Philippines, Taiwan, Guam), New Guinea, Australia, Morocco, Southern Europe (Spain, Portugal, Algeria, Italy, Sicily, Greece, Former Republic of Yugoslavia, Tunisia), and parts of the Middle East (Libya, Saudi Arabia, Egypt, Israel, Jordan, Sinai, Cyprus, Lebanon, Iraq), the Pacific Ocean, the Atlantic Ocean, the Indian Ocean, and the Mediterranean. Dead Coral, Tyrrhenian, Adriatic, Ionian, Red, South China, Mindanao, Arafura, Sulu, Java, and China Seas. Each film clip has a heading that names the shuttle and the geographical location of the footage.

CASI

Space Shuttles: Earth Observations (From Space): Geographic Distribution; Color Photography: Europe; Middle East: Asia; South America; Australia; Indonesia; Mediterranean Sea; Atlantic Ocean; Pacific Ocean; Indian Ocean

**Glacier Bay, Alaska, from the Ground, Air, and Space**

Hall, Dorothy K., NASA Goddard Space Flight Center, USA; Feb. 23, 1997; In English; Videotape: 13 min. 13 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-1997032498; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This tape uses a combination of video, three-dimensional computer imaging, and still photographs to provide a descriptive overview of the life-cycle and environmental effects of glaciers. An historical prospective of researchers and the contribution that they have made to the understanding of glaciers and Glacier Bay is presented. The data collected from these scientists have been documented and used by means of scientific visualization in the hope of learning how glacial activity relates to climate changes.

CASI

Glaciers; Environment Effects; Scientific Visualization; Climate Change; Glacial Drift; Satellite Imagery; Imaging Techniques

**Glaciers; Environment Effects; Scientific Visualization; Climate Change; Glacial Drift; Satellite Imagery; Imaging Techniques**

19970028396 NASA Goddard Space Flight Center, Greenbelt, MD USA

**What is the Value of Space Exploration? - A Prairie Perspective**

1995; 48p; In English; What is the Value of Space Exploration? - A Prairie Perspective, 1-2 Nov. 1995, Grand Forks, ND, USA; Sponsored by NASA, Washington, USA

Contract(s)/Grant(s): NAGw-4524

Report No.(s): NONP-NASA-VT-1997082334; No Copyright; Avail: CASI; A10, Hardcopy; A01, Microfiche; V02, Videotape-VHS

The symposium addresses different topics within Space Exploration. The symposium was fed, using satellite downlinks, to several communities in North Dakota, the first such symposium of its type ever held. The specific topics presented by different community members within the state of North Dakota were: the economic, cultural, scientific and technical, political, educational and social value of Space Exploration. Included is a 22 minute VHS video cassette highlighting the symposium.

CASI

Conferences: North Dakota; Space Exploration; Education

**ENERGY PRODUCTION AND CONVERSION**

Includes specific energy conversion systems, e.g., fuel cells, and solar, geothermal, wind power, and wave energy 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.

1995004112 NASA Lewis Research Center, Cleveland, OH, USA

**SAMP IE (Solar Array Module Plasma Interactions Experiment)**

Feb 1, 1994; In English; 7 min. 20 sec. playing time, with sound

Report No.(s): NONP-NASA-VT-94-23160; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

SAMP IE 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

**ENVIRONMENT POLLUTION**

Includes atmospheric, water, soil, noise, and thermal pollution.

1994009129 NASA Goddard Space Flight Center, Greenbelt, MD USA

**Arctic ozone expedition**

Feb 1, 1989; In English; 18 min. 14 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-93-185316; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Documenting the expedition of scientists to the uppermost reaches of the North Pole, this tape shows what is involved in collecting this valuable climatic data.

Author

Arctic Regions: Data Acquisition; Ozone; Polar Meteorology

19940010765 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-91-190465; No Copyright; Avail: CASI; B01, Videotape-Beta; 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

19940016816 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-93-190304; No Copyright; Avail: CASI; B01, Videotape-Beta; 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)

19940016817 NASA Goddard Space Flight Center, Greenbelt, MD, USA

**TOMS computer graphics**

Nov 1, 1988; In English; 3 min. 46 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-93-190395; No Copyright; Avail: CASI; B01, Videotape-Beta; 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)**

1994010856 NASA Goddard Space Flight Center, Greenbelt, MD, USA

**Atmospheric Ozone, 1978–1988**

Feb 1, 1989; In English; 41 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–93–190253; No Copyright; Avail: CASI;

B03, Videotape-Beta; V03, Videotape-VHS

This video contains very graphic images of the seasonal accumulation and depletion of the world’s ozone layer, as depicted by the Total Ozone Mapping Satellite (TOMS).

CASI

**Annual Variations: Ozone; Ozone Depletion; Ozone: Total Ozone Mapping Spectrometer**

1994010877 NASA, Washington, DC, USA

**What’s killing the trees?**

Oct 1, 1987; In English; 3 min. 7 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–93–190419; No Copyright; Avail: CASI;

B01, Videotape-Beta; V01, Videotape-VHS

The possible causes for forest decline are discussed, including acid rain on Camel’s Hump Mountain, Vermont.

CASI

**Acid Rain: Forest Management: Forests**

1994010891 NASA, Washington, DC, USA

**Global Greenhouse Expedition**

Oct 1, 1990; In English; 3 min. 18 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–93–190411; No Copyright; Avail: CASI;

B01, Videotape-Beta; V01, Videotape-VHS

This video covers an airborne study of greenhouse gases in the atmosphere.

CASI

**Atmospheric Composition: Global Warming: Greenhouse Effect**

1994010892 NASA, Washington, DC, USA

**Arctic ozone**

Apr 1, 1990; 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**

1994010935 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**

1994010952 NASA, Washington, DC, USA

**Forest fire study**

Mar 1, 1987; In English; 3 min. 49 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–93–190413; No Copyright; Avail: CASI;

B01, Videotape-Beta; V01, Videotape-VHS

The impact of natural fires on our environment is examined, especially regarding greenhouse gases.

CASI

**Environment Effects; Forest Fires; Greenhouse Effect**

1994011448 NASA, Washington, DC, USA

**Ozone hole**

Feb 1, 1988; In English; 3 min. 15 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–94–198215; No Copyright; Avail: CASI;

B01, Videotape-Beta; V01, Videotape-VHS

The first segment of this video gives an overview of the Ozone Hole Airborne Arctic Stratospheric Expedition, an international effort using balloon payloads, ground based instruments, and airborne instruments to study ozone depletion and the hole in the ozone over Antarctica which occurs every spring. False color imagery taken from NASA’s Nimbus 7 satellite which documents daily changes in ozone is also shown. The second segment of this video shows actual take-off and flight footage of the two aircraft used in the experiment: the DC-8 Flying Laboratory and the high flying ER-2.

CASI

**Airborne Equipment; Arctic Regions; Expeditions; Ozone Depletion; Research Aircraft; Satellite Imagery; Stratosphere**

19940114594 NASA Goddard Space Flight Center, Greenbelt, MD, USA

**October 1979–1989 Southern Hemisphere total ozone as seen by TOMS**

Nov 1, 1989; In English; 7 min. 20 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–94–198222; No Copyright; Avail: CASI;

B01, Videotape-Beta; V01, Videotape-VHS

This is raw video from space taken by the Total Ozone Mapping Satellite (TOMS).

CASI

**Ozone: Total Ozone Mapping Spectrometer**

199406029845 NASA Ames Research Center, Moffett Field, CA, USA

**Ozone hole airborne Arctic stratospheric expedition (pre-flight)**

Feb 1, 1989; In English; 7 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–94–12928; No Copyright; Avail: CASI;

B01, Videotape-Beta; V01, Videotape-VHS

Ozone research done in the Antarctic region is detailed.

CASI

**Antarctic Regions: Ozone Depletion; Ozone Metery: Stratosphere**

19940803697 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA

**Insight to global change: EOS/SAR mission**

Jun 1, 1990; In English; 8 min. 30 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–94–15911; No Copyright; Avail: CASI;

B01, Videotape-Beta; V01, Videotape-VHS

This video presentation describes the methods and instrumentation used to help in determining future climate changes on Earth and explains the benefits of experimentation with synthetic aperture radar (SAR). It also gives a better understanding of the burning of fossil fuels, deterioration of the biosphere and deforestation of the rain forest which causes the green house effect.

CASI

**Climate Change: Earth Observing System (EOS); Remote Sensing: Synthetic Aperture Radar**

199508004367 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

**The desert tortoise: A delicate balance**

Aug 1, 1992; In English; Prepared in cooperation with Dept. of the AF. Edwards AFB, CA; 14 min. 12 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–94–23639; No Copyright; Avail: CASI;

B01, Videotape-Beta; V01, Videotape-VHS

This award winning program looks at the efforts to preserve the desert tortoise in and around the Edwards Air Force Base, CA area. It also explains what
people should do if they come in contact with a tortoise. This video was produced in cooperation with Edwards Air Force Base.

**Endangered Species: Environment Protection; Mojave Desert (CA); Turtles**

1995#011633 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**

1994#000002 NASA Goddard Space Flight Center, Greenbelt, MD, 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)

**CRRES (Satellite); Radiation Protection; Spacecraft Shielding**

1999#000003 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**

1994#000003 NASA Goddard Space Flight Center, Greenbelt, MD, USA

**Global climate study**

Jul 1, 1989; In English; 3 min. 18 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190410; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The Global Surface Radiation Budget Experiment, which determines if current climate models are accurate, is explained.

CASI

**Climate; Earth Radiation Budget Experiment; Radiation**

1995#000003 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**

1995#000003 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**

1995#000003 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 Donskoy, Geophysicist at JPL, and Dr. Jim Delan, earthquake geologist from Cal. Tech. The interviews discuss earthquake forecasting by tracking changes in the earth’s crust using antenna receiving signals from a series of satellites called the Global Positioning System (GPS).

JPL

**Earth Crust; Earthquakes; Forecasting; Geological Surveys; Global Positioning System**

1995#000003 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 Dick Frison) explain and discuss the Earth’s atmosphere, its needs, the changes occurring within it, the importance of ozone, and some of the reasons behind the ozone depletion in the Earth’s atmosphere. The questions of: (1) what is ozone; (2) what has happened to the ozone layer in the atmosphere; and (3) what exactly does ozone do in the atmosphere, are answered. Different chemicals and their reactions with ozone are discussed. Computer animation and graphics show how these chemical reactions affect the atmosphere and how the ozone hole looks and develops at the south pole during its winter season appearance.

CASI

**Annual Variations; Carbon Dioxide; Chemical Reactions; Chlorofluorocarbons; Climate Change; Earth Atmosphere; Global Warning; Nitrogen Compounds; Ozone; Ozone Depletion; Ozonosphere**

1995#000003 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 Camile 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 Antarctica 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; Geology; Meteorology; Research Facilities

19950020175 Maryland Public Television, Owings Mills, MD, USA

Live from Antarctica: The coldest, windiest place on Earth
Jan 1, 1994; In English; Sponsored by NASA; NSF; PBS K-12 Learning Services; DOE; Amoco; and Duracell Its Passport to Knowledge Special Series; 1 hr. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–42904; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

In this first part of a four part ‘Passport to Knowledge Special’, hosted by Camille Jennings from Maryland Public Television, children from Maryland and Texas schools had the opportunity to directly interact with and ask questions of scientists and researchers in Antarctica live. The physical characteristics of Antarctica are featured, along with their effects on the human and microbiological organisms living in the region. The reasons behind the clothing worn in the Antarctic and the importance of the meteorological station are featured. Interviews with Professor Ian Dolziel (U of Texas) and Lt. Commander John Joseph, NSPA (the head of the Navy Meteorology Center) occur with the school children, along with actual video footage of the surrounding geological features and geography. The ‘Weatherops’ is located at McMurdo Station, Antarctica.

CASI

Antarctic Regions: Geography; Geology; Marine Meteorology; McMurdo Sound; Microbiology; Organisms; Weather Stations

19950020176 Maryland Public Television, Owings Mills, MD, USA

Live from Antarctica, volume 4
Jan 1, 1994; In English; Sponsored by NASA; NSF; PBS K-12 Learning Services; DOE; Amoco; and Duracell Its Passport to Knowledge Special Series; 57 min. playing time. in color, with sound
Report No.(s): NONP–NASA–VT–95–42905; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

In this fourth video of a four part ‘Passport to Knowledge Special’, hosted by Camille Moody Jennings from Maryland Public Television, children from Maryland and Alaska public schools had the opportunity to directly interact with and ask questions of scientists and researchers from the Antarctic, and learn about the different geological and meteorological research going on in the Antarctic and McMurdo Base at McMurdo Sound. The scientists questioned included: Donal Manahan (biologist from Un. of So. California), who described some of the geological features from Hut Point, the historic hut built by Capt. Scott in 1902; SriRat Anandakrishnan (Penn State Un.). whose research includes ice plate movement of the central ice sheet and earthquakes and how they affect the sheet; and Lt. j.g. Kate McNitt, who spends her winters investigating the trace gases, aerosols, CFC’s and ozone levels over the Antarctic area that are affecting the seasonal ozone hole that appears in that region. Historical film footage of Capt. Scott’s exploration of the Antarctic is included.

CASI

Air Pollution; Air Sampling; Antarctic Regions; Atmospheric Composition; Earthquakes; History; Marine Meteorology; McMurdo Sound; Meteorological Balloons; Ozone Depletion; Plumes (Tectonics); Topology; Weather Forecasting

47 METEOROLOGY AND CLIMATOLOGY

Includes weather observation forecasting and modification

19920026062 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
Cotten, Robert C., NASA Langley Research Center, USA; Stock, Larry V., Hampton Univ., USA; Sep 15, 1992; In English; 8 min., color, sound, VHS
Contract(s)/Grant(s): RTP05-41-01
Report No.(s): NONP–NASA–VT–92–125097; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

In this video (8 min., color, sound, VHS), animation depicts the inertial oscillation of a new mathematical model (‘vertical rotating draft’) for spinning up a single supercell storm. The oscillation consists of a long quiescent phase when the draft is large in diameter and rotates 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), where the horizontal pressure gradient is zero and the Coriolis force balances the centrifugal force. A side view of the oscillation shows that contraction and expansion are linked, respectively, to buoyantly driven compressible downdraft and updraft. An aerial view tracks the draft as it moves above the surface of the Earth and turns to the right during the intense phase. Radar echoes from a supercell storm are superimposed for comparison. The data appear to support only the intense phase. A critical experiment would measure the predominantly downward flow that theoretically occurs before the right turn in a supercell track and causes contraction and spin-up.

CASI

Atmospheric Circulation; Atmospheric Models; Computerized Simulation; Mathematical Models; Oscillations; Rotation; Thunderstorms; Vertical Air Currents

19940010753 NASA Marshall Space Flight Center, Huntsville, AL, USA

Mesoscale lightning
Apr 1, 1989; In English; 2 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190453; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video tape addresses ongoing lightning research and how data is valuable to upcoming projects.

CASI

Lightning; Mesoscale Phenomena

19940010853 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 counteracting the effects of wind shear and heavy rain situations on flight stability.

CASI

Aerodynamic Stability; Aircraft Stability; Rain; Rainstorms; Wind Shear

19940010957 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
Air Purification; Plants (Botany); Water Treatment

Aerospace Engineering; Disasters; Hurricanes; Technology Utilization

Oceanography

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

Aerospace Medical; Gravitational Effects; Gravitational Physiology; Life Sciences

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.

Crop Vigor; Infestation; Parasites; Remote Sensing; Vineyards

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.

Air Water Interactions; Energy Transfer; Water Waves

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.

Air Purification; Plants (Botany); Water Treatment

STS-29 crew with student experiment

Feb 1, 1989; In English; 15 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93–190342; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

John Vellinger, student experimenter, and Mark Deuser, Kentucky Fried Chicken Sponsor, are shown explaining the Chicken Embryo experiment to the crew.

Chicken; Embryos; Experiment Design; Spaceborne Experiments; Students
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 physiological and behavioral effects of aerospace environments see 53 Behavioral Sciences. For the effects of space on animals and plants see 51 Life Sciences.

1994011777 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

1994011780 NASA, Washington, DC, USA

New insulin pump
Feb 1, 1988; In English; 3 min. 30 sec. playing time, in color, with sound Report No.(s): NONP--NASA--VT--93--190440; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video details the Programmable Implant Medicine Monitoring System.
CASI

Endocrinology; Insulin; Medical Equipment; Medical Science; Pumps

1994011798 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

1994011806 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

1994011839 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

1994011895 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

1994016686 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

Living well in space: Ensuring crew capability
Jul 1, 1989; In English; 7 min. 45 sec. playing time, in color, with sound Report No.(s): NONP--NASA--VT--93--190355; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video describes the Exercise Countermeasure Facility (ECF). 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 Anthropomorphic and Biomechanical Laboratory, and the Artificial Intelligence Laboratory.
CASI

Aerospace Medicine; Astronauts; Biodynamics; Countermeasures; Exercise Physiology; Ecobiology; Gravitational Physiology; Physical Exercise; Physical Fitness; Physiological Effects

1994016687 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--190365; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video describes the Health Maintenance Facility (HMF). The HMF provides in-flight 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

1994016698 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

1994016694 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 in-flight 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

1995014138 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. SpaceLab is another precursor to long-term science aboard the space station. 

CASI
Bioastronautics: Space Adaptation Syndrome; Spaceborne Experiments; Space Lab

19950004139 NASA, Washington, DC, USA
Aircraft to medicine
Dec 1, 1991; In English; 3 min. 5 sec. playing time, with sound
Report No.(s): 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

19950004150 NASA Lewis Research Center, Cleveland, OH, USA
Telemedicine Spacebridge
May 1, 1994; In English; 6 min. 44 sec. playing time, with sound
Report No.(s): 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

19990116193 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA
Robotic Assisted Microsurgery – RAMS FY’97
Oct. 15, 1997; In English; Videotape: 5 min., 13 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–199902515; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
JPL and Microdexterity Systems collaborated to develop new surgical capabilities. They developed a Robot Assisted Microsurgery (RAM) tool for surgeons to use for operating on the eye, ear, brain, and blood vessels with unprecedented dexterity. A surgeon can hold the surgical instrument with motions of 6 degrees of freedom with an accuracy of 25 microns in a 70 cm workspace. In 1996 a demonstration was performed to remove a microscopic particle from a simulated eyeball. In 1997, tests were performed at UCLA to compare teleoperation with mechanical operation. In 5 out of 7 tests, the RAM tool performed with a significant improvement of preciseness over mechanical operation. New design features include: (1) amplified force feedback; (2) simultaneous slave robot instrumentation; (3) index control switch on master handle; and (4) tool control switches. Upgrades include: (1) increase in computational power; and (2) installation of hard disk memory storage device for independent operation and independent operation of forceps. In 1997 a final demonstration was performed using 2 teleoperators simultaneously in a microsurgery suture procedure to close a slit in a thin sheet of latex rubber which extended the capabilities of microsurgery procedures. After completing trials and demonstrations for the FDA the potential benefits for thousands of operations will be exposed.

CASI
Telebotics: Surgical Instruments; Robotics: Degrees of Freedom; Surgery; Robots

53 BEHAVIORAL SCIENCES
Includes psychological factors; individual and group behavior; crew training and evaluation; and psychiatric research.

19940010764 NASA, Washington, DC, USA
Teacher in space
Dec 1, 1985; In English; 4 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190464; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video presentation covers the Teacher in Space program from the competition and selection process to the training of Christa McAuliffe and Barbara Morgan.

CASI
Astronauts; Education; Instructors: NASA Programs

199400001926 NASA Lewis Research Center, Cleveland, OH, USA
Astronauts number 1
Sep 1, 1988; In English; 28 min. 51 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190225; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
The story of the selection and training of the seven Mercury astronauts is presented. A re-release of US Project Mercury.

CASI
Astronaut Training: Mercury Project; Personnel Selection

20010116555 NASA Johnson Space Center, Houston, TX USA
Expedition 4 Crew Training Clip
Nov. 15, 2001; In English; Videotape: 40 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001194278; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
This video shows clips of the Expedition 4 crewmembers, Commander Yuri Onufrienko and Flight Engineers Carl Walz and Daniel Bursch, during various parts of their training, including T-38 operations at Ellington, training in the virtual reality laboratory, Hydroball training in Russia, International Space Station (ISS) food selection, and ISS Hab equipping and procedures in the Space Station Mockup and Test/Training Facility (NSMTF).

CASI
Spacecrews: Astronaut Training; International Space Station

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 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.(s): NONP–NASA–VT–93–185315; 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
Extravehicular Activity; Inertial Upper Stage; Magellan Project (NASA); Microgravity; Space Shuttle Mission 61-A: Space Shuttle Payloads; Weightlessness Simulation

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.(s): NONP–NASA–VT–93–185322; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Using robotic techniques, NASA researchers have developed end-effec-
for food during long-duration space travel. The primary focus is on the Controlled Ecological Life Support System (CELLS).

CASI

Consumables (Spacecrew Supplies); Food Production (In Space); Long Duration Space Flight

19940310813 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; Aval: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video tape shows how Navajo Indians are involved in making the spacecrafts of the future.

CASI

American Indians; Space Suits

19940010830 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; Aval: 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

19940010857 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; Aval: 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

19940010886 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–93–190201; No Copyright; Aval: 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

19940010887 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; Aval: CASI; B01, Videotape-Beta; V01, Videotape-VHS

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; Aval: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This videotape examines NASA research regarding the growing of plants designed to meet individual needs of hand and below the elbow amputees that are more efficient than the traditional hook.

Author

Mark Brown

Closed Ecological Systems; Environmental Engineering; Long Duration Space Flight; Recycling

19940010317 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; Aval: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage showing astronaut Lounge and Hoffman donning EVA suits while astronaut Duration watches is presented. The footage also shows Lounge and Hoffman working on an ASTRO-1 mockup in the WETF.

Author (revised)

Astronaut Training; Extravehicular Activity; Payloads; Spacecrews; Weightlessness Simulation

19940010721 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; Aval: 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

19940010722 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; Aval: 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

19940010751 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

Brown, Mark

Jul 1, 1989; In English; 8 min. 20 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–93–190302; No Copyright; Aval: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Mark Brown is shown during ASCAN training programs including parachute and classroom instruction.

CASI

Astronaut Training; Astronauts

19940010812 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; Aval: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This videotape examines NASA research regarding the growing of plants...
This video shows crews practicing bailout procedures in the CCT.

CASI
Astronaut Training: Bailout; Space Shuttle Missions

STS-32 bailout training in WETF
1990 ASCAN ground escape/parasail

The crew is shown tasting food that will be served on the Space Shuttle.

CASI
Consumables (Spacecrew Supplies); Food; Spacecrews; Taste

STS-32 crew 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

STS-29 crew bailout in WETF
Feb 1, 1989; In English; 13 min. 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

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

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

STS-29 crew bailout in WETF
Feb 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

STS-29 EV&A 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

STS-33 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 that 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

STS-29 crew food tasting in building 45
Jan 1, 1989; In English; 5 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

CASI
Astronaut Training: Astronauts: Extravehicular Activity; Long Duration Exposure Facility; Payload Retrieval (STS); Spacecrews; Weightlessness Simulation
This video tape shows astronaut candidates practicing ground egress and parachute landing procedures.
CASI

Astronaut Training: Egress; Parachute Descent

19940010919 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Crew escape certification test
Aug 1, 1988; In English; 2 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190327; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video tape shows the Shuttle hatch jettison test at Rockwell facilities.

19940010928 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–27 Egress training: Crew and Equipment Procedures, bailout in CCT, 70mm photo class, EVA prep and post, and firefighting
Aug 1, 1990; In English; 2 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190291; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Several aspects of crew training are shown, including habitation equipment procedures and bailout procedures (both in CCT), 70mm photo class, EVA prep and post, and firefighting.
Author (revised)

Astronaut Training: Space Suits; Weightlessness Simulation

19940010980 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–38 crew training: Habitation equipment procedures, bailout in CCT, 70mm photo class, EVA prep and post, and firefighting
Jan 1, 1991; In English; 2 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190291; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Various aspects of crew training are shown, including habitation equipment procedures and bailout procedures (both in CCT), 70mm photo class, EVA prep and post, and firefighting.

Astronauts McCandless and Sullivan are shown suiting up for training with a telescope mockup in the Weightless Environment Training Facility (WETF).

CASI

Astronaut Training: Space Suits; Weightlessness Simulation

19940010968 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–31 Hubble space telescope contingency training in WETF with McCandless and Sullivan
Feb 1, 1990; In English; 13 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190277; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Astronauts McCandless and Sullivan are shown suiting up for training with a telescope mockup in the Weightless Environment Training Facility (WETF).

CASI

Astronaut Training: Space Suits; Weightlessness Simulation

19940010997 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–26 crew clothing, glove molding, and personal hygiene
Jul 1, 1988; In English; 19 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190317; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video explores the food preparation and selection over the years of space flight.

CASI

Food for space

19940010962 NASA, Washington, DC, USA
Food for space
Jan 1, 1985; In English; 3 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190466; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video 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; SHEPARD; ROSS; WETF; RMS; Meteor; Meteorite; Crew posg–insertion

19940010929 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–33 Carter and Thornton during WETF activities
Nov 1, 1989; In English; 8 min. 54 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190268; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Astronauts Carter and Thornton are shown putting in the Weightless Environment Training Facility (WETF). 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; Spacecrafts; Weightlessness Simulation

19940010931 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–27 crew post–insertion deorbit–prep in CCT
Nov 1, 1988; In English; 14 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190350; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
The crew is shown when the cell is back in the Weightlessness Environment Training Facility. They are now practicing EVA and 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; Spacecrafts

19940010933 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–27 crew fire training and glove molding
Nov 1, 1988; In English; 14 min. 39 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; Spacecrafts

199400109662 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 tape shows 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; Extravehicular Mobility Units; Spacecrews

19940010929 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–33 Carter and Thornton during WETF activities
Nov 1, 1989; In English; 8 min. 54 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190268; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Astronauts Carter and Thornton are shown practicing bailout exercises. They are also shown looking over equipment they will carry into space, including medical equipment, clothing, and cameras.

CASI

Astronaut Training; Astronauts; Extravehicular Activity; Fire Fighting; Space Station Structures; Space Technology Experiments; Space Tools

19940010987 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–37 astronauts Ross and Apt during CETA hardware checkout
Mar 1, 1990; In English; 7 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190293; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Astronauts Ross and Apt are shown checking out Crew and Equipment Translation Aide (CETA) equipment.

CASI

Astronaut Maneuvering Equipment: Checkout; Extravehicular Activity; Space Station Structures; Space Technology Experiments; Space Tools

19940010989 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–36 crew EVA prep and post–training, bailout exercises, final bench review
Feb 1, 1990; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190295; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
The crew is shown in the CCT airlock checking out EVA equipment and practicing bailout exercises. They are also shown looking over equipment they will carry into space, including medical equipment, clothing, and cameras.

CASI

Air Locks; Astronaut Training; Extravehicular Activity; Space Flight Training; Space Shuttle Missions; Space Suits; Space Transportation System Flights; Spacecraft Equipment; Spacecrews
This videotape shows the crew during various phases of flight clothing fit checks, space suit glove molding, and selection of personal hygiene articles for use onboard the Shuttle.

CASI

Space Suits; Space Transportation System Flights: Spacecrews

19940010934 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

199400110841 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--190304; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Astronaut Jerry Ross tests the new Mark 111 spacesuit in the WETF. The Mark 111 could be used as the main spacesuit on the Space Station Freedom.

CASI

Design Analysis: Space Suits

19950016854 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

19950022759 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

20010929212 NASA Johnson Space Center, Houston, TX, USA

1995 ASCAN Training: Land Survival
Jan 1, 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

Astronauts Training: Survival

20010929214 NASA Johnson Space Center, Houston, TX, USA

ASCAN Training: Egress and Parachute Training
Jan 1, 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

Astronauts Training: Egress; Parachute Descent

2001080925 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.

19940027983 NASA Ames Research Center, Moffett Field, CA, USA

The quest for contacts
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 1960 'Ozma' experiment, the current META experiment, and planned efforts incorporating an international Deep Space Network of radio telescopes that will be trained on over 800 stars.

CASI

Deep Space Network; Extraterrestrial Intelligence; Project Seti; Radio Telescopes
COMPUTER OPERATIONS AND HARDWARE

Includes hardware for computer graphics, firmware and data processing. For components see 33 Electronics and Electrical Engineering. For computer vision see 63 Cybernetics, Artificial Intelligence and Robotics.

1994/09/1356 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-93-185321; 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

1994/01/0755 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

1994/01/0982 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 text 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

1994/01/4488 NASA, Washington, DC, USA The world's most powerful computer
Oct 1, 1986; In English; 2 min. 42 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, water flow 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

1994/01/27310 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

COMPUTER PROGRAMMING AND SOFTWARE

Includes software engineering, computer programs, routines, algorithms, and specific applications, e.g., CAD/CAM. For computer software applied to specific applications, see also the associated category.

1994/09/163 NASA Lyndon B. Johnson Space Center, Houston, TX, USA Six degree of freedom
Nov 1, 1990; In English; 7 min. 41 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT-93-185310; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This animated clip shows operations of the Six Degree of Freedom (DOF) computer during a simulated mission. The clip is intercut with live video of a shuttle crew 'docking' with Space Station Freedom.

Author (revised)
Computerized Simulation; Degrees of Freedom; Space Shuttle Orbiters; Spacecraft Docking

1994/03/2011 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
Jan 31, 1992; In English; 9 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT-94-12970; 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

1995/04/143 NASA, Washington, DC, USA Virtual reality
Dec 1, 1991; In English; 3 min. 32 sec. playing time, with sound Report No.(s): NONP-NASA-VT-94-23148; 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 air flow to be studied inside the tunnel from any
conceivable location. Dr. Carol Stoker (NASA's Ames Research Center) comments on Telepresence, one form of virtual reality.

CASI
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-96-199606000; 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.

19940110442 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-93-1903055; 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.

19960101040 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

19960011864 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

19960010164 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

19960010164 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

19960010167 California Inst. of Tech., Irvine, CA, USA Similarity Apostol, Tom M., editor, California Inst. of Tech., USA; Jan 1, 1999; 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. He 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

Apostol, Tom M., editor, California Inst. of Tech., USA; Jan 1, 1995; In English; Sponsored by NASA, Washington and NSF Its Project Mathematics Series; 72 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, sponsored by CalTech, the mathematical concept of polynomials in rectangular coordinate (x, y) systems are explored. Using film footage of real life applications and computer animation sequences, the history of the application of, and the different linear coordinate systems for quadratic, cubic, intersecting, and higher degree of polynomials are discussed.

Author

Cartesian Coordinates; Computer Animation; Linear Systems; Polynomials

1996001069 California Inst. of Tech., Irvine, CA, USA

Discovering the Theorem of Pythagorus

Laftanzio, 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, Pythagorus’ 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

1996001070 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, Pythagorius, 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.

200000027708 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA

FIDO - Video File

Apr. 27, 1999; In English; Videotape; 10 min. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2000033990; 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; Rovering; Robotics: Research Vehicles; Mars (Planet); Mars Exploration; Mars Surface

70

PHYSICS (GENERAL)

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.

19940010768 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--91--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

1995001683 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

Newton in space

Herbert, Dexter, editor, NASA Lyndon B. Johnson Space Center; USA; Mar 4, 1992; In English; Its Liftoff to Learning Series; 12 min. 35 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--95--43938; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

In this ‘Liftoff to Learning’ series video, astronauts (Charles Vanch, Gregory Harbaugh, Donald Monk, Michael Couth, L. Blaine Hammond, Guion Bluford, Richard Hieb) from the SIS-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.

19940029873 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--91--12953; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video details research being conducted at LeRC on aircraft acoustics and the impact of aircraft noise on communities and passengers. The video
describes LeRC researchers utilization of a laser Doppler velocimeter to study aircraft and the development of the Advanced Ducted Propeller.

CASI
Aeroacoustics; Aircraft Noise; Noise Pollution; Shrouded Propellers

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

19940029214 NASA Marshall Space Flight Center, Huntsville, AL, USA
Rotating unbalanced mass proof--of-concept
Jan 1, 1995; In English; 7 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--94--12942; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The video describes the Rotating Unbalanced Mass. The Rotating Unbalanced Mass is a device for scanning ground-based, balloon-borne, and space-based gimbaled payloads, as well as free-flying spacecraft. This device offers advantages over other methods of scanning—especially large payload scanning at high frequencies—such as reduced system power and mass, improved system stability and reliability, and better scan accuracy.

CASI
Control Moment Gyrosopes; Payloads; Pointing Control Systems; Rotating Bodies; Scanners; Torque Motors

80
SOCIAL AND INFORMATION SCIENCES (GENERAL)
Includes general research topics related to sociology; educational programs and curricula.

19940009146 NASA John C. Stennis Space Center, Bay Saint Louis, MS, USA
Taeanniatics: Sharing the dream
Apr 1, 1989; In English; 13 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--93--185328; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

A week-long teacher workshop is described. Highlights include underwater simulation training, model rocket building and launching, map reading, and survival training.

Author (revised)
Environment Simulation; Instructors

19940010757 NASA Marshall Space Flight Center, Huntsville, AL, USA
SHARP
Jan 1, 1989; In English; 7 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--93--190457; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video tape describes the benefits of NASA's Summer High School Apprenticeship Research Program to participating students.

CASI
Education; NASA Programs

19940010759 NASA Marshall Space Flight Center, Huntsville, AL, USA
Space classroom
Nov 1, 1990; In English; 2 min. 21 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--93--190459; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video presentation provides information on the first classroom taught from space to encourage student interest in astronomy and space exploration.

CASI
Education; NASA Programs

19940010775 NASA, Washington, DC, USA
Enhancing sight
Feb 1, 1990; In English; 3 min. 54 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--93--190435; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video describes a new reading program for people with limited sight.

CASI
Blindness; Optometry; Reading; Vision; Visual Perception; Visual Tasks

19940016807 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

19940016809 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Short walk to everywhere
Jul 1, 1988; 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

19940016945 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

19940016947 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; Mirandas: Space Shuttles; Wind Tunnel Tests; Wind Tunnels

1994001631 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

1994001632 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

19940027390 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; Aval: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video describes an educational student activity sponsored by the Challenger Center for Science Education and the Educational Information and Resource Center, which was held at the Lewis Research Center. Marsville was held in May 1992, involving students from schools in three counties around Cleveland. In commemoration of the International Space Year, students worked together to plan a simulated colony on Mars, which culminated in the erection of a balloon tent 'city' at the Lewis Research Center.
CASI
Education: Mars (Planet); NASA Programs: Space Colonies

19940027301 NASA Lewis Research Center, Cleveland, OH, USA
Space acceleration measurement system
May 1, 1993; In English; 23 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--94--9954; No Copyright; Aval: 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

19940027309 NASA Lewis Research Center, Cleveland, OH, USA
Welcome to the Ohio Aerospace Institute
Nov 1, 1992; In English; 10 min. 22 sec. playing time, in color with sound
Report No.(s): NONP--NASA--VT--94--9956; No Copyright; Aval: 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

19940027311 NASA Lewis Research Center, Cleveland, OH, USA
NASA report to education, volume 9
Mar 1, 1991; In English; 26 min. 44 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--94--9960; No Copyright; Aval: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This is an addition 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 Administrative Facilities, conducting an egg survival system and an interactive video conference with astronaut Stori Musgrave. Participants share impressions of the workshop. The second segment tells how 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

The sky is your classroom
Jan 1, 1982; In English; 28 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--94--9959; No Copyright; Aval: CASI; B02, Videotape-Beta; V02, Videotape-VHS
An overview of NASA's 11th annual Aerospace Education Workshop Program is presented. A portion of activities that are performed during the workshop sessions, which are used to familiarize teachers with up-to-date information are shown. An overview of aerospace concepts and terms is provided. Activities shown include: how model rockets are used to teach about the principles of rocketry; how eggs are packaged to represent an astronaut landing on another planet; a trip to the Cleveland Museum of Natural History was used to introduce a telescope and planetarium; and a visit to LeRC. How lectures and discussion material are presented on such topics as the history of aircraft and the space shuttle is demonstrated.
CASI
Aerospace Sciences: Education: NASA Programs

Indianapolis CIP review
Dec 1, 1988; In English; 14 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--94--12949; No Copyright; Aval: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video presents the community involvement program at the Indianapolis Children's Museum and Indianapolis Art League.
CASI
Museums: NASA Programs

NEWEST 1990 no. 4007
Aug 1, 1990; In English; 15 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--94--23173; No Copyright; Aval: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Twenty-two teachers go through the NASA Educational Workshops for Elementary School Teachers Program at the Lewis Research Center. LeRC
Aerospace Sciences: Education: Instructors

Anton Grdina Primary Achievement Program
Nov 1, 1993; In English; 20 min. 20 sec. playing time, with sound
Report No.(s): NONP--NASA--VT--94--23159; No Copyright; Aval: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The Anton project presents a partnership between NASA Lewis, CMHA, and the Cleveland Public Schools. The intent of this project is to empower parents to work with their children in science and math activities.
LeRC
Education: Mathematics: Science
The STEP program is the Boeing 777, the first paperless airplane. Concurrent engineering; data processing; data transfer (computer); government/industry relations; process control (industry); quality control.

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 is shown and there are brief descriptions covering several of NASA's major projects, such as: Skylab; Viking; Voyager; Coby; and the 1990 Hubble Space Telescope.

CASI

Awards: Government/Industry Relations; Industries; Quality Control; Reliability.

Getting it right, making it better
Jan 1, 1992; In English; 15 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–49118; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The research into the advancement of software error compensation techniques is discussed in this video. Although these techniques were originally designed for coordinate measuring machines, they are now used for machine tools as well.

Author (revised)

Error Analysis; Mechanical Engineering; Metrology; Software Development Tools; Software Engineering; Units of Measurement.

Malcolm Baldrige National Quality Award winners 1989
Jan 1, 1990; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–49119; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The 1989 Malcolm Baldrige award winners - Miliken and Company; and Xerox Business Products and Services are highlighted in this video. Their strategies for producing quality products are discussed, along with their applications and importance in today's competitive workplace.

CASI

Awards: Government/Industry Relations; Quality Control; Reliability; Strategy.
of raw science and engineering data with universities who help NASA analyze and distribute that data.

NASA Programs: University Program

19940010778 NASA, Washington, DC, USA

Monitoring history
Jan 1, 1987; In English; 3 min. 25 sec. playing time, in color, with sound Report No.(s): NONP-NASA--VT--93-190438; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This deep space technology is applied to help monitor the aging process of the treasured documents in the National Archives.

CAS

Aerospace Technology Transfer; Aging (Materials); Documents; Records; Records Management; Technology Utilization

19940010827 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; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This video shows Text and Graphics Systems (TAGS) in action and describes how the system will be used on Space Shuttle missions.

CAS

Computer Graphics; Space Shuttle Missions

19940011047 NASA, Washington, DC, USA

Medical imaging
Jun 1, 1986; In English; 3 min. 40 sec. playing time, in color, with sound Report No.(s): NONP-NASA--VT--93-190473; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video shows how satellite data processing techniques (multispectral scanning) can improve disease detection and treatment.

CAS

Diagnosis; Diseases; Imaging Techniques; Medical Equipment; Multispectral Band Scanners; Scanning; Technology Transfer

199400111050 NASA John C. Stennis Space Center, Bay Saint Louis, MS, USA

Coast encounters: A space age adventure in science literacy
Apr 1, 1989; In English; 6 min. 20 sec. playing time, in color, with sound Report No.(s): NONP-NASA--VT--93-190475; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video recaps the NASA Community Involvement Program for education held on the Mississippi Gulf Coast, April 1989.

CAS

Aerospace Sciences; Education: NASA Programs

19980900461 NASA Lewis Research Center, Cleveland, OH, USA

STI: Managing a universe of information
Jan 1, 1992; In English; 7 min. playing time Report No.(s): NONP-NASA--VT--94-23626; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video highlights the NASA STI Program, its mission and key elements and how the program manages the ever growing universe of scientific and technical information. The mission of the program is to provide world-wide access to aerospace-related scientific and technical information. A key element of the program is a massive online database of more than three million citations to technical reports and journal literature, acquired, processed and disseminated by the NASA STI Program.

CAS

Data Bases; Information Management

199508026788 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; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The information management strategies developed for the NIST Automated Manufacturing Research Facility (AMRF) - a prototype small batch manufacturing facility used for integration and measurement related standards research are outlined in this video. The five major manufacturing functions - design, process planning, off-line programming, shop floor control, and materials processing are explained and their applications demonstrated.

Author (revised)
Automatic Control; Computer-Aided Design; Concurrent Engineering; Control Equipment; Control Systems Design; Government/Industry Relations; Information Management; Mechanical Engineering; Process Control (Industry); Prototypes; Research Facilities

19980905687 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; CENCI Workshop, 16 Apr. 1997, Bethesda, MD, USA; Videotape: 5 hrs. 51 min. playing time, in color, with sound Report No.(s): NONP-NASA--VT--1998000466; No Copyright; Avail: CASI; V06, Videotape-VHS; B06, Videotape-Beta; V06, Videotape-VHS

The main mission of the CENCI Cataloging Working Group is to provide guidelines for cataloging practices that support the sharing of database records among the CENCI agencies, and that incorporate principles based on cost effectiveness and efficiency. Recent efforts include the extension of COSATI Guidelines for the Cataloging of Technical Reports to include non-print materials, and the mapping of each agency's export file structure to USMARC. Of primary importance is the impact of electronic documents and the distributed nature of the networked information environment. Topics discussed during the workshop include the following: Trade-offs in Cataloging and Indexing Internet Information; The Impact on Current and Future Standards; A Look at WWW Metadata Initiatives; Standards for Electronic Journals; The Present and Future Search Engines; The Roles for Text Analysis Software; Advanced Search Engine Meets Metathesaurus; Locator Schemes for Internet Resources; Identifying and Cataloging Web Document Types; In Search of a New Bibliographic Record. The videos in this set include viewgraphs of charts and related materials of the workshop.

CAS

Catalogs (Publications); Bibliographies; Cost Effectiveness; Data Management; Data Bases; Indexes (Docemntation); Internets; Texts

85 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.

19940010776 NASA, Washington, DC, USA

From space to Earth
Jan 1, 1987; In English; 3 min. 30 sec. playing time, in color, with sound Report No.(s): NONP-NASA--VT--93-190436; No Copyright; Avail: 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.

CAS

Aerospace Technology Transfer; Industries: NASA Programs; Technology Transfer; Technology Utilization

213
Aerospace Technology

Aerospace Engineering: Aerospace c_era, infrared c_eras, CCD catneras, QWIP (Quantum Well infrared technology). Some of the technological developments include fire active pixel sensor Lander spacecraft, at_d higJ1 resolution maps taken by the Mars Global Studyor. images of Mat's taken by the Mariner 4 spacecraft, color images from the Viking visible and infratTed pictures of the Orion nebula. Also included atTe the first the universe, pictures of Venus through tire use of radar instrumeNs, mad the

focuses on fire technological developments, improvements, and applicatkms in the health of premature babies.

This video describes NASA technology that is in everyday use. 

Aerospace Technology Transfer; Imaging Techniques: Remote Sensing; Satellite Imagery; Technology Utilization; Ultrasound

This video looks at a spinoff application of the technology from advanced microsensors -- those that monitor and condition elements of spacecraft like the Space Shuttle. The application featured is concerned with the monitoring of the health of premature babies.

Aerospace Technology Transfer: Biotechnology Sensors

As speaker of this lecture series Michael Sandor, Director of Technology and Application at the Jet Propulsion Laboratory (JPL), addresses three questions that scientists and engineers at JPL and NASA face daily. These questions are: how did the universe evolve, how did life start, and are we alone? The video focuses on the technological developments, improvements, and applications in society. Slides include several still pictures (infrared, x-ray, radio, and visible) of the universe, pictures of Venus through the use of radar instruments, and the visible and infrared pictures of the Orion nebula. Also included are the first images of Mars taken by the Mariner 4 spacecraft, color images from the Viking Lander spacecraft, and high resolution maps taken by the Mars Global Surveyor. Radar images of Los Angeles (Pasadena), San Francisco and San Juan are also shown. Some of the technological developments include the active pixel sensor camera, infrared cameras, CCD cameras, QWIP (Quantum Well Infrared Photo-detector) cameras, a 3 inch diometer 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.

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.

Waves, orbits; Uncontrolled Reentry (Spacecraft) Launching: Spacecraft; Spacecraft Orbits; Uncontrolled Reentry (Spacecraft)

Author

Robert H. Goddard (considered the Father of Rocketry), who, in 1929, invented the first liquid 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, 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 Environment: Descent; Histories: Photographic Film: Prototypes; Space Exploration: Space Programs; Spacecraft: spacecraft Launching: Spacecraft Orbits; Uncontrolled Reentry (Spacecraft)

ASTRONOMY

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

The four great observatories

Dec 1, 1986; In English; 5 min. 40 sec. playing time, in color, with sound.

IRAS, ASTROPHYSICS FACILITY: Space Infrared Telescope Facility (SIRTF); Author


Lunar ranging

Aug 1, 1985; In English; 4 min. 38 sec. playing time, in color, with sound.

This video describes the work at the Lunar 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
Astronomical Photography; The challenge and complexity of operations
Jun 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; V02, Videotape-VHS
This video presentation touches on the truly vast complexity of the first of NASA’s great observatories, the Hubble Space Telescope.

Hubble Space Telescope: NASA Space Programs

BBXRT clip: The Broad Band X-ray Telescope
May 1, 1990; In English; 18 min. playing time
Report No.(s): NONP–NASA–VT–94–198206; 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.

Hubble Space Telescope: Space Observations (From Earth)

Hubble Images from 1996
Jun. 28, 1997; In English; Videotape: 14 min. 33 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997082306; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Primarily composed of animation, movies, and stills, this video is divided into 12 segments or slugs as the video refers to them. They are: Global Map of Pluto, Images of Pluto, Surface Map of Pluto, Helix Nebula- NGC 7293, Gaseous Knots, Animation of the Formation of the Helix Nebula, Crab Nebula, Jupiter Aurora Movie, Birth of a Quasar, Merging Galaxies, and Spiral Galaxies.

Best of Hubble Space Telescope
Jan. 28, 1997; 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 the solar winds from both the equator and the (North and South) poles of the Sun. The moderator of this lecture is Dr. Steve Maran, NASA/Goddard Space Flight Center, and panel members include Dr. Richard Marsden, ESA (European Space Agency) Project Scientist, Dr. Edward J. Smith, JPL/NASA Project Scientist, Dr. Antoinette Galvin, University of Maryland College Park, Dr. Randy Jokipii, University of Arizona, and Dr. John Phillips, Los Alamos National Laboratory. Each panel member contributes to the informative nature of this live video coverage. Topics discussed are the direction of the magnetic fields, solar winds, and cosmic rays. Visual aids of this lecture consist of various slides and computerized simulations.

Ulysses Mission: Solar Probes; Cosmic Rays: Magnetic Fields; Solar Wind

NASA space astronomy update 6
Oct 1, 1992; In English; 6 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–46007; No Copyright; 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.

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 the solar winds from both the equator and the (North and South) poles of the Sun. The moderator of this lecture is Dr. Steve Maran, NASA/Goddard Space Flight Center, and panel members include Dr. Richard Marsden, ESA (European Space Agency) Project Scientist, Dr. Edward J. Smith, JPL/NASA Project Scientist, Dr. Antoinette Galvin, University of Maryland College Park, Dr. Randy Jokipii, University of Arizona, and Dr. John Phillips, Los Alamos National Laboratory. Each panel member contributes to the informative nature of this live video coverage. Topics discussed are the direction of the magnetic fields, solar winds, and cosmic rays. Visual aids of this lecture consist of various slides and computerized simulations.

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–1999206989; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Hubble Space Telescope upgrades are discussed during this overview.
Among those discussed are the Space Telescope Imaging Spectrograph, the New Infrared Camera, upgrading of instruments with 90's technology, new CCD detectors, corrective optics, reconfiguration of mirrors, reduction in overall exposure time. A question and answer period with Johnson Spaceflight Center, Goddard Space Flight Center and the press focuses primarily on these upgrades to the Hubble Space Telescope.

CASI
Hubble Space Telescope: Infrared Instruments; Imaging Techniques; Charge Coupled Devices; Cameras

200000040912 NASA Kennedy Space Center, Cocoa Beach, FL USA Hubble Space Telescope Scientific Overview Briefing Jan. 13, 1994; In English; Videotape: 46 min., 18 sec., playing time, in color, with sound Report No.(s): NON--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 Exner (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.

CASI
Hubble Space Telescope: Space Maintenance

200000013497 NASA Kennedy Space Center, Cocoa Beach, FL USA Hubble Space Telescope Briefing: IST Science Overview Jan. 13, 1994; In English; Videotape: 1 hr. 2 min. 41 sec. playing time, in color, with sound Report No.(s): NON--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 Macherot (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.

CASI

200000013498 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA Searching for Planets Around other Stars Jan. 28, 1998; In English; Videotape: 1 hr. 19 min. playing time, in color, with sound Report No.(s): NON--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 which 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 Ursae Majoris, 16 Cygni B, 51 Pegasi, and 56 Rho 1 Cnc. In the case of 56 Rho 1 Cnc the planet appears to be too 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 Kek observatory. This move will allow observations of smaller planets, as opposed to the massive planets thus far discovered. The astronomers also hope to observe smaller stars with the Kek data. Future spaceborne observations will allow the discovery of even smaller planets. A spaceborne interferometer is in the planning stages, and an even larger observatory, called the Terrestrial Planet Finder, is hoped for. Professor Marcy shows artists' renderings of two of the planets thus far discovered. He also briefly discusses planetary formation and shows slides of both observations from the Orion Nebula and models of stellar system formation.

CASI

200000013499 NASA Kennedy Space Center, Cocoa Beach, FL USA Hubble Spies Huge Cluster of Stars Formed by Ancient Encounter Mar. 01, 2001; In English; Videotape: 6 min. 20 sec. playing time, in color, with sound Report No.(s): NON--NASA--VT--20001030025; No Copyright; Avail: CASI; B01, Videotape-Beta: V01, Videotape-VHS

This release marks the beginning of a new outlet for the Space Telescope Science Institute, the 'Hubble Minute'. Hubble Minute is an edited vignette suitable for use in newscasts, magazine shows, and as an interstitial program. The Minute explains how scientists are determining when M82 and M81 collided, and how dating the crash may result in a better understanding of how our own galaxy formed.

Author
Crushes: Galaxies: Star Clusters: Time Measurement

200000013491 NASA Kennedy Space Center, Cocoa Beach, FL USA Farthest Supernova Bolsters Proof for a Mysterious Form of Energy Pervading the Universe [2001]; In English; Videotape: 16 min. 42 sec. playing time, in color, with sound Report No.(s): NON--NASA--VT--20001047824; 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 supernova are useful as standard candles. Dr. Adam Riess describes how astronomers used supernova to discover that the universe is expanding and why it might be expanding.

CASI
Luminous Intensity; Supernova: Expansion: Cosmology

2000000059304 NASA Goddard Space Flight Center, Greenbelt, MD USA Microlensing: Globular Cluster M22 Video File [2001]; In English; Videotape: 6 min. 55 sec. playing time, in color, with sound Report No.(s): NON--NASA--VT--20001092796; 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 massive lens, deflects the light gravitationally. This bending, or lensing, causes a momentary 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 Hubble Deep Field with a supernova (from an artist's conception animation to a ground-based view). Dr. Ron Gilliland explains that he looked for a supernova in the Hubble Deep Field and how supernova are useful as standard candles. Dr. Adam Riess describes how astronomers used supernova to discover that the universe is expanding and why it might be expanding.

CASI
Luminous Intensity; Supernova: Expansion: Cosmology

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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**

**ASTROPHYSICS**

Includes cosmology; celestial mechanics; space plasmas; and interstellar and intergalactic gases and dust.

1994011822 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**

19940929056 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**

19940929095 NASA, Washington, DC, USA Aeronautics and Space Reports number 267: Comet impacts Jupiter Jun 1, 1994; In English; 15 min. 48 sec. playing time, in color, with sound Report No.(s): NONP--NASA--VT--94--13198; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video contains three different segments of computer generated simulations of the impact of comet Shoemaker-Levy 9 with Jupiter that will take place in July 1994. It includes interviews with Shoemaker and Levy, discussing pictures taken at Mt. Kalamur Observatory, the comets approach to Jupiter, fragment size, and the affects of the comets impact on Jupiter and its atmosphere. The impact will be viewed by the Galileo spacecraft.

CASI

**Cometary Collisions; Computerized Simulation; Jupiter (Planet); Shoemaker-Levy 9 Comet**

19990117114 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA Colliding Galaxies: Hubble Space Telescope Oct. 21, 1997; In English; Videotape: 6 min., 13 sec. playing time, in color, no sound Report No.(s): NONP--NASA--VT--199902658; 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**

20000006443 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--199904560; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This is a composite tape showing 10 short segments primarily about asteroids. The segments have short introductory slides, which include brief descriptions about the shots. The segments are: (1) Radar movie of asteroid 1620 Geographos; (2) Animation of the trajectories of Toutatis and Earth (3) Animation of a landing on Toutatis; (4) Simulated encounter of an asteroid with Earth, includes a simulated impact trajectory; (5) An animated overview of the Manover vehicle; (6) The Near Earth Asteroid Tracking project, includes a photograph of USAF Station in Hawaii, and animation of Earth approaching 4179 Toutatis and the asteroid Gaspara; (7) live video of the anchor tests of the Champollion anchoring apparatus; (8) a second live video of the Champollion anchor tests showing anchoring spikes, and collision rings; (9) An animated segment 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**
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 nuclei 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 panels are: Dr. Eugene Shoemaker (from Lowell Observatory and US Geological Survey), the moderator and Shoemaker-Levy co-discoverer; Dr. Hal Weaver (from Space Telescope Science Institute); Dr. Lucy McFadden (from University of California-San Diego and the University of Maryland); Dr Melissa McGrath (from Space Telescope Science Institute); and Dr. Heidi Hammel (from Massachusetts Institute of Technology).

Topics discussed include: interactions of cometary material with Jupiter’s atmosphere, dynamical parameters of Jupiter’s troposphere and stratosphere, and Hubble Space Telescope (HST) Observations of the SL9 Impacts on Jupiter’s Atmosphere. The panel answered some of the audience’s questions at the end of the discussion. This video, Part 2 of 2, is a continuation of Part 1. It presents the second part of the question and answer session and a replay of the animations.

**Shoemaker-Levy 9 Comet: Cometary Collisions; Jupiter (Planet); Astronomical Observatories; Hypervelocity Impact**

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**Comet Shoemaker-Levy 9 Impact: Briefing, Pt. 1**

May 18, 1994; In English; Videotape: 62 min., 40 sec. playing time, in color, with sound

Report No.: NONP-NASA–VT–2000001071; No Copyright; Avail: CASI; B01, 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 nuclei 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 panels 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.

**CA**

**Jupiter (Planet); Shoemaker-Levy 9 Comet; Cometary Collisions; Hypervelocity Impact; Astronomical Observatories; Fragments**

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**Black Holes Shed Light on Galaxy Formation**

[2000]; In English; Videotape: 13 min. 10 sec. playing time, in color, with sound

Report No.: NONP-NASA–VT–2001026551; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This videotape is comprised of several segments of animations on black holes and galaxy formation, and several segments of an interview with Dr. John Kormendy. The animation segments are: (1) a super massive black hole, (2) Centaurus A active black hole found in a collision, (3) galaxy NGC-4261 (active black hole and jet model), (4) galaxy M-32 (orbits of stars are effected by the gravity of the black hole), (5) galaxy M-37 (motion of stars increases as mass of black hole increases), (6) Birth of active galactic nuclei, (7) the collision of two galaxy leads to merger of the black holes, (8) Centaurus A and simulation of the collision of 2 galaxies. There are also several segments of an interview with John Kormendy. In these segments he discusses the two most important aspects of his recent black hole work: (1) the correlations between galaxy speed and the mass of the black holes, and (2) the existence of black holes and galactic formation. He also discusses the importance of the Hubble Space Telescope and the Space Telescope Imaging Spectrograph to the study of black holes. He also shows the methodology of processing images from the spectrograph in his office.

**CA**

**Hubble Space Telescope: Black Holes (Astronomy); Collisions; Galaxies; Simulation; Galactic Structure**

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**Orion Nebula Movie**

Feb. 01, 2001; In English; Videotape: 5 min. 11 sec. playing time, in color, no sound

Report No.: NONP-NASA–VT–2001026555; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the following simulations derived from Hubble Space Telescope images: (1) the tilting of the Orion mosaic; (2) Orion mosaic fly-through; and (3) a close-up of the Orion mosaic.

**CA**

**Orion Nebula: Simulation**

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**The Secret Lives of Galaxies**

Feb. 01, 2001; In English; Videotape: 3 min. 55 sec. playing time, in color, no sound

Report No.: NONP-NASA–VT–2001026546; 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.

**CA**

**Barred Galaxies; Galactic Bulge; Spiral Galaxies; Star Clusters**

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**Galactic Nuclei; Star Clusters; Giant Stars; Sagittarius Constellation**
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—2001026553; 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 Clusters; Extrasolar Planets; Gas Giant Planets

200101036751 Space Telescope Science Inst., Baltimore, MD USA
Quasar Host Galaxies/Neptune Rotation/Galaxy Building Blocks/Hubble Deep Field/Saturn Storm
[2001]; In English; Videotape: 13 min. 57 sec. playing time, in color, no sound
Report No.(s): NONP-NASA—VT—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 quasar's 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 video 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)

200101036752 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 planets. Ten images from the Hubble Space Telescope (HST) show young stellar disks (taken with the Near-Infrared Camera Multi-Object Spectrometer (NICMOS)) and stellar disks around young stars (taken with the Wide-Field Planetary Camera 2 (WFPC2)). Dr. Deborah Padgett describes what astronomers see in the images of young stellar disks and Dr. Karl Stapelfeldt explains HST's role in helping astronomers to examine young stars in order to understand how solar systems like our own may form.

CASI
Planetary Evolution; Planets; Stellar Models; Computerized Simulation; Proto-planetary Disks

200101036753 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

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

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 Spacecraft Design, Testing and Performance.

2000099140 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

1999099153 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

1999091766 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA
Voyager encounter highlights
Jun 28, 1989; In English; 30 min. 18 sec. playing time, in color, with sound
Report No.(s): NONP-NASA—VT—93—190217; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
The following are presented: computer animation of trajectories for both Voyagers 1 and 2; view of Jupiter during one orbit of Ganymede; computer animation of Voyager 2's encounter with Jupiter and its satellites; time lapse of the planet's rotation and its satellites; spectroscopic sequence of selected frames; cloud motion; Jupiter's Great Red Spot (4/25 - 5/24, 1979) through a violet filter; and the Great Red Spot through a blue filter by Voyager 1. The dynamics of Jupiter's clouds are shown - the whole planet is shown first, then two closer looks are repeated several times. Also included are pans of stills of Jupiter's satellites and a computer simulation tour of Saturn system from POV just behind Voyager, made of 116 images of Saturn through a green filter and of 516 images taken by Voyager 1 (9/12 - 9/14, 1980). Frames are enhanced to show the motion of features in Saturn's rings. Pans of stills of Saturn's satellites are shown. There is computer animation of the planet's system, rings, and Sigma Sagittarii. Images on January 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
1994/01/0767 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA
Neptune encounter highlights
Nov 28, 1989; In English; 32 min. 18 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190218; No Copyright; Avail: CASI;
B01, Videotape-Beta; V03, Videotape-VHS
Voyager encounter data are presented in computer animation (CA) and real
(R) animation. The highlights include a view of 2 full revolutions of Neptune. It
shows spacecraft trajectory ‘diving’ over Neptune and intercepting Triton’s
orbit, depicting radiation and occultation zones. Also shown are a return orbit
of Triton and Voyager’s encounter with Neptune’s Magnetopause. A model of
the spacecraft’s complex maneuvers during close encounters of Neptune and
Triton is presented. A view from Earth of Neptune’s occultation experiment is
shown as well as a recreation of Voyager’s final pass. There is detail of Voyager’s
Image Compensation technique which produces Voyager images. Eighteen
images were produced on June 22-23, 1989, from 57 million miles away. A 68
day sequence which provides a stroboscopic view - colorization approximates
what is seen by the human eye. Real time images recorded live from Voyager on
3/24/89 are presented. Photoclinometry produced the topography of Triton.
Three images are used to create a sequence of Neptune’s rings. The globe of
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. Photoclinometry 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

1994/01/0821 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 Schmidt.
CASI
Lunar Bases; NASA Space Programs

1994/01/0869 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
reentry, LANDSAT, satellite freeze warming, Fire Fighting Module, SAGE, wind
generators, Solar Energy Project, electric car research, XV-15, HiMAT, and crash
worthiness tests.
CASI
Energy Technology: HEAO: Highly Maneuverable Aircraft; Hubble Space Tele-
scope; LANDSAT Satellites; Space Shuttles; XV-15 Aircraft

1994/01/0875 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

1994/01/0894 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

1994/01/1059 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; Para-
chute Descent; Parachutes: Spacecraft Components

1994/01/1068 NASA, Washington, DC, 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–93–190214; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
Voyager’s encounters with Jupiter, Saturn, Uranus, and pre-Neptune are
reviewed.
CASI
Images: Saturn (Planet); Uranus (Planet); Voyager Project

1994/01/1063 NASA Lewis Research Center, Cleveland, OH, USA
NASA images 13
Apr 1, 1988; In English; 28 min. 30 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)

1994/01/1048 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA
Life and the solar system: The CRAF 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)

1994/01/1597 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.

CASI

Checkout: Computer Animation; Galileo Probe; Galileo Project; Manufacturing; Prelaunch Summaries; Space Vehicle Checkout Program

19940114484 NASA, Washington, DC, USA

Voyager's last encounter
Nov 1, 1989; In English; 3 min. 16 sec. playing time, in color, with sound Report No.(s): NONP-NASA- VT-94-198209; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video describes Voyager 2's encounter with Neptune. Computer animation and actual data convey Voyager's discoveries such as turbulent storms and dark spots in Neptune's atmosphere, six new moons, Neptune's three rings, and the presence of frozen methane on Triton, as researchers at NASA's Jet Propulsion Laboratory describe Voyager's achievements.

CASI

Neptune (Planet); Neptune Atmosphere; Neptune Satellites; Planetary Rings; Voyager 2 Spacecraft

19940114485 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.

CASI

Galileo Project; Galileo Spacecraft; Magellan Project (NASA); Magellan Spacecraft (NASA); Planetary Geology; Space Exploration; Ulysses Mission

19940114486 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.

CASI

Helium Isotopes; Lunar Excavation Equipment; Lunar Mining; Lunar Resources: Space Commercialization

19940114493 NASA Lewis Research Center, Cleveland, OH, USA

Spacework 17: O'Leary's Mars
May 1, 1988; In English; 28 min. 40 sec. playing time, in color, with sound Report No.(s): NONP-NASA- VT-94-198221; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Brian O'Leary gives his ideas on reaching and exploring Mars.

CASI

Mars (Planet); Space Exploration

19940127299 NASA Lewis Research Center, Cleveland, OH, USA

Mars: Four 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 'canals' or possible ancient waterways on the surface. An overview of the accomplishments of the Mariner spacecraft in mapping the surface of Mars as well as a detailed description of the Viking missions to Mars are presented. The results of the Viking Biology Experiment, conducted by the Viking Landers, are highlighted. There is also a discussion of the possible presence of monuments and a huge 'face' on the Martian surface. The video includes several computer simulations of flight over the Martian surface.

CASI

Extraterrestrial Life; General Overview; Histories: Mars (Planet); Mars Probes; Mars Surface: Planetary Mapping

19940292981 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA

And then there was Voyager
Sep 25, 1990; In English; 30 min. 19 sec. playing time, in color, with sound Report No.(s): NONP-NASA- VT-94-9954; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

NASA's legendary grand tour of the outer solar system from the mission conception in the early 1970's is described. The search for the heliopause is discussed. This presentation is told in the words of the key members of the Voyager team.

CASI

Grand Tours; Milky Way Galaxy; Voyager Project

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

19940309998 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA

Galileo: The Jovian laboratory
Oct 1, 1989; In English; 6 min. playing time, in color, with sound Report No.(s): NONP-NASA- VT-94-15912; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video presentation gives a pre-launch description of the Galileo Mission.

CASI

Galileo Project; Space Exploration

19940309999 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA

Voyager: National Air and Space Museum
Oct 1, 1989; In English; 4 min. 30 sec. playing time, in color, with sound Report No.(s): NONP-NASA- VT-94-15913; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

A recap of the travels of the Voyager spacecraft to the outer planets is presented. (This video was originally made for a talk at the National Air and Space Museum.

CASI

Space Exploration; Voyager Project

19940310000 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA

Voyager last picture show
Sep 1, 1990; In English; 5 min. 30 sec. playing time, in color, with sound Report No.(s): NONP-NASA- VT-94-15914; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video presentation blends animation, actual photos, and data of the Voyager-Neptune encounter.

CASI

Neptune (Planet); Space Exploration; Voyager Project
19940809101 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA

Atmosphere of Venus

Nov 1, 1990; In English; 2 min. 18 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–94–15915; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video presents preliminary results as seen through the violet filter of the Galileo Solid State Imaging System. CASI

Venus (Planet); Venus Atmosphere

19940809102 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA

Galileo Earth/Moon 1 encounter

Dec 1, 1990; In English; 3 min. 1 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–15916; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video presents sequences of Galileo images showing the dynamics of the Earth-Moon system. CASI

Earth-Moon System: Galileo Spacecraft

19940809103 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA

Magellan collection of radar calibration results

Nov 1, 1990; In English; 8 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–15917; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video presents three sequences acquired by Magellan, Aug.-Oct 1990 and includes the globe of Venus in black and white, the Golubkina crater, and 12 short scenes of different pan moves. CASI

Planetary Craters; Radar Imagery; Venus (Planet)

19940809104 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA

Voyager science summary tape

Jun 1, 1990; In English; 28 min. 21 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–15921; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

A summary of Voyager science is presented by Dr. Edward Stone (originally part of a press conference on June 6, 1990). CASI

Space Exploration; Voyager Project

19950803001 NASA, Washington, DC, USA

Comet impact tape 5

Jul 1, 1994; In English; 1 hr. 14 min. playing time, with sound
B04, Videotape-Beta; V04, Videotape-VHS

Continued press coverage of the comet Shoemaker-Levy 9 impact on the surface of Jupiter is presented. This tape covers 19 Jul. 1994. CASI

Cometary Collisions; Jupiter (Planet); Shoemaker-Levy 9 Comet

19950803002 NASA, Washington, DC, USA

Comet impact tape 6

Jul 1, 1994; In English; 1 hr. 12 min. playing time, with sound
Report No.(s): NONP–NASA–VT–94–23155; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

Continued press coverage of the comet Shoemaker-Levy 9 impact on the surface of Jupiter is presented. This tape covers 20 Jul. 1994. CASI

Cometary Collisions; Jupiter (Planet); Shoemaker-Levy 9 Comet

19950803003 NASA, Washington, DC, USA

Comet impact tape 7

Jul 1, 1994; In English; 1 hr. 30 min. playing time, with sound
Report No.(s): NONP–NASA–VT–94–23156; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

Continued press coverage of the comet Shoemaker-Levy 9 impact on the surface of Jupiter is presented. This tape covers 21 Jul. 1994. CASI

Cometary Collisions; Jupiter (Planet); Shoemaker-Levy 9 Comet

19950803004 NASA, Washington, DC, USA

Comet impact tape 8

Jul 1, 1994; In English; 1 hr. 32 min. playing time, with sound
Report No.(s): NONP–NASA–VT–94–23157; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

Continued press coverage of the comet Shoemaker-Levy 9 impact on the surface of Jupiter is presented. This tape covers 22 Jul. 1994. CASI

Cometary Collisions; Jupiter (Planet); Shoemaker-Levy 9 Comet

19950803005 NASA, Washington, DC, USA

Comet impact tape 9

Jul 1, 1994; In English; 1 hr. 21 min. playing time, with sound
B04, Videotape-Beta; V04, Videotape-VHS

Continued press coverage of the comet Shoemaker-Levy 9 impact on the surface of Jupiter is presented. This tape covers 23 Jul. 1994. CASI

Cometary Collisions; Jupiter (Planet); Shoemaker-Levy 9 Comet

19950803006 NASA, Washington, DC, USA

Comet impact tape 3

Jul 1, 1994; In English; 1 hr. 22 min. playing time, with sound
Report No.(s): NONP–NASA–VT–94–23155; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

Continued press coverage of the comet Shoemaker-Levy 9 impact on the surface of Jupiter is presented. This tape covers 17 Jul. 1994. CASI

Cometary Collisions; Jupiter (Planet); Shoemaker-Levy 9 Comet
Apollo 16: Nothing so hidden
Jan 1, 1972; In English; 28 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--95--33955; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This film shows the landing and the three lunar traverses in the highland region of the moon, near the crater Descartes. It includes an astronaut's eye view from the rover, lunar grand prix, discovery of the house-sized rock, lunar lift-off and eva 173,000 miles above the earth. Microphones and cameras in mission control record the emergency problem solving during the prelanding crisis and the reactions of scientists on earth as the astronauts explore the moon.
JSC
Apollo 16 Flight: Lunar Craters; Lunar Exploration; Lunar Landing; Lunar Launch: Lunar Photography; Lunar Rocks; Lunar Trajectories; Moon

Apollo 17: On the shoulders of giants
Jan 1, 1975; In English; 28 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--95--33956; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
A documentary view of the Apollo 17 journey to Taurus-Littrow, the final lunar landing mission in the Apollo program is discussed. The film depicts the highlights of the mission and relates the Apollo program to Skylab, the Apollo-Soyuz linkup and the Space Shuttle.
Author
Apollo Soyuz Test Project; Apollo 17 Flight; Lunar Landing; Space Shuttles

Apollo New look at the old Moon
Jan 1, 1980; In English; 28 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--95--33957; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The decade of 1969-1979 is seen as the time when lunar science emerged from the dark ages as a result of the geophysical and sample investigations made possible by the Apollo flights to the moon. After a brief summary of the Apollo missions and laboratory investigative techniques, the film treats the major epochs in lunar history uncovered by the investigations. Finally, the moon is depicted as having a practical role in the future of science and technology. As well as serving as the pattern for the future exploration of space.
JSC
Apollo Flights: Lunar 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; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video features the following: (1) extra vehicle activity (EVA); (2) the three traversed of the lunar surface; (3) film taken from the Lunar Rover; (4) hammer and feather tests of Galileo’s theory on falling objects in gravity fields; (5) Worden’s EVA; (6) subsatellite launching; (7) X-ray pulsar observations; and (8) splash down with one parachute collapsed.
JSC
Apollo 15 Flight: Extravehicular Activity; Lunar Exploration System For Apollo

Mercury: Exploration of a planet
Jan 1, 1976; In English; 22 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--95--39134; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The flight of the Mariner 10 spacecraft to Venus and Mercury is detailed in animation and photography. Views of Mercury are featured. Also included is animation on the origin of the solar system. Dr. Bruce C. Murray, director of the Jet Propulsion Laboratory, comments on the mission.
JSC
Mercury 10 Space Probe: Mercury (Planet); Solar System Evolution; Venus (Planet)

Mars observer mission: Mapping the Martian world
Jan 1, 1992; In English; 7 min. 14 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--95--42155; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The 1992 Mars Observer Mission is highlighted in this video overview of the mission objectives and planning. Using previous photography and computer graphics and animation, the main objectives of the 687 day (one Martian year) consecutive orbit by the Mars Observer Satellite around Mars are explained. Dr. Arksen Abee, the project scientist, speaks about the pole-to-pole mapping of the Martian surface topography, the planned relief maps, the chemical and mineral composition analysis, the gravity fields analysis, and the proposed search for any Mars magnetic fields.
CASI
Gravitational Fields; Mars (Planet); Mars Exploration: Mars Observer; Mars Satellites; Mars Surface; Mission Planning; Planetary Magnetic Fields; Planetary Mapping; Satellite-Borne Photography; Topography

Collection of Magellan Venus radar mapping results
Mar 8, 1991; In English; 6 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--95--46003; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Through computer animation several geological features of Venus are presented in this video. The Sin Mons, a 1.2 mile high volcano and the Guia Mensa, a 1.8 mile high volcano are shown. Also, radar images of a rift valley, several impact craters, and a corona can be seen. The video ends with a northeast view of Eistla Regio.
CASI
Computer Aided Mapping; Planetary Geology; Planetary Mapping; Radar Imagery; Radar Maps; Venus (Planet); Venus Surface

Rover story
Jul 9, 1990; In English; Sponsored by NASA, Washington; 6 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--95--56825; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Future Mars exploration missions and operations are discussed using computer animation along with proposed vehicles and equipment, for example, a Mars surface land rover. There is a Presidential Address by President George Bush where he discusses future goals for space exploration. This video also
Apo//o 14 F/(eht, Astronauts; Lunar Exploration; Lunar Surface; Moon;
System; Voyage to the ONer Planets; A
Some of the individual short videos that are compiled are entitled: The Solar
mainly comprised of compNer animations of these planets and their moons.
moou (from orbit), Saturn (actual), Neptune (actual) and Uranus (actual), hut is
craft trajectory. Voyager visited the Ibur outer planets: Jupiter, Saturn, 1 Jranus,
platretas T nmgnetic fields, oNer plarletat'y lunar surfaces, at_d the "Vbyager space-
aminatiordsimulations comprise the largest portion of the video and include outer
the best videos that have been published of
Matured Spacecraft; Soil Sampling
There is lihn-.fbotage of the lunar7 surface, of the command module's approach
and left for continuorls data collection and snrface monitoring experimenks_ The
and soil samples and hmar exploration. The soil and rock sampling was for the

B04, Videotape-Beta; V04, Videotape-VHS

Voyager Project: Space Probes; Space Missions: Neptune (Planet); Unmanned
Spacecraft: Voyager 1 spacecraft; Voyager 2 spacecraft; Computer Animation

Galileo Outreach Compilation
Sey. 17, 1998; In English; Videotape: 1 hr. 23 min. 4 sec. playing time, in color,
with sound
Report No.(s): NONP-NASA-VT--1999206758; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This NASA JPL (Jet Propulsion Laboratory) video production is a compilation of the best short movies and computer simulation/animations of the Galileo spacecraft’s journey to Jupiter. A limited number of actual shots are presented of Jupiter and its natural satellites. Most of the video is comprised of computer animations of the spacecraft’s trajectory, encounters with the Galilean satellites Io, Europa and Ganymede, as well as their atmospheric and surface structures. Computer animations of plasma wave observations of Ganymede’s magnetosphere, a surface gravity map of Io, the Galileo/lo flyby, the Galileo space probe orbit insertion around Jupiter, and actual shots of Jupiter’s Great Red
Spot are presented. Panoramic views of our Earth (from orbit) and moon (from orbit) as seen from Galileo as well as actual footage of the Space Shuttle/Galileo
liftoff and Galileo’s space probe separation are also included.

CASI
Galileo Spacecraft: Unmanned Spacecraft; Jupiter (Planet); Galileo Project; Galileo Probe: Galilean Satellites; Flyby Missions

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--1999206687; No Copyright; Avail: CASI; B02, Videotape-Beta; V03, Videotape-VHS

This video is a compilation of the best NASA JPL (Jet Propulsion Laboratory) videos of the Mars Pathfinder and Mars Global Surveyor missions. The mission is described using animation and narration as well as some actual footage of the entire sequence of mission events. Included within these animations are the spacecraft orbit insertion; descent to the Mars surface; deployment of the airbags and instruments; and exploration by Sojourner, the Mars rover. JPL activities at spacecraft control during significant mission events are also included at the end. The spacecraft camera pans the surrounding Mars terrain and film Sojourner traversing the surface and inspecting rocks. A single, brief, processed image of the Cydonia region (Mars face) at an oblique angle from the Mars Global Surveyor is presented. A description of the Mars Pathfinder mission, instruments, landing and deployment process, Mars approach, spacecraft orbit insertion, rover operation are all described using computer animation. Actual color footage of Sojourner as well as a 360 deg pan of the Mars terrain surrounding the spacecraft is provided. Lower quality black and white photography depicting Sojourner traversing the Mars surface and inspecting Martian rocks also is included.

CASI
Mars Pathfinder; Mars Global Surveyor; Mars Landing; Mars Surface; Rovering Vehicles; Computer Animation
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. Orchestrated selections from Vivaldi’s Four Season’s serves as background.

NASA
Galileo Project: Galileo spacecraft; Ganymede; Io; Jupiter (Planet); Jupiter Atmosphere; Europa

19991116991 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

19991117115 NASA Kennedy Space Center, Cocoa Beach, FL USA Galileo Probe: spacecraft Mission to Jupiter Press Release Sep. 1989; In English; Videotape: 9 min. playing time, in color, no sound Report No.(s): NONP–NASA–VT–1999207897; 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)

19991117249 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–1999206983; 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 animations from the views taken on December 8, 1992.

CASI
Earth (Planet): Galileo Project

20000004248 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–1999208079; No Copyright; Avail: CASI; B04, Videotape-Beta: V04, Videotape-VHS

A press conference held on July 20, 1994 is presented. Loading off the press conference was an announcement about a major discovery that was made possible from the study of the impact. The participants in the panel were: (1) Roger Yelle from the University of Arizona, (2) Renee Prange of the Institute Astrophysique Spatiale, (3) Lucy McFadden of the University of California, and the University of Maryland, (4) David Levy, the co-discoverer of the Shoemaker-Levy comet. The moderator for this conference was Steven Maran of the Goddard Space Flight Center. Roger Yelle, who had been working on analyzing 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 had caused a shift in the aurora of Jupiter. The observations of the impact sites made by amateurs were discussed.

A summary of the observations from different observatories was also given. Included in these observations were reports from the airborne Kuiper Observatory Telescope and the McDonald observatory.

CASI
Auroras; Cometary Collisions; Fragments; Shoemaker-Levy 9 Comet; Sulfur; Jupiter (Planet); Jupiter Atmosphere

20000006254 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–1999207899; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video has five sections. The first is a live discussion of the information that scientists hope to gain by the Galileo flyby of the Moon. This section has no introduction. There is a great deal of the discussion about the lunar craters and lunar volcanism. There is also some discussion of the composition of the far side of the moon. The second section is a short animation that shows the 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

20000006448 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA Voyager II Encounter with Neptune: Voyager/Neptune Briefing Aug. 07, 1989; In English; Videotape: 1 hr. 57 min. 39 sec. playing time, in color, with sound Report No.(s): NONP–NASA–VT–1999206990; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The main focus of this lecture is to discuss the relative size of the planets, the formation of the solar system, details of atmospheric motion (atmospheric dynamics), the aspects of the magnetic fields, different ring systems, and the Triton satellite. The study evolves around the planets of Jupiter, Saturn, Uranus, and Neptune. Their temperature and absorption properties of the ice are discussed. Two of the chemicals being absorbed by the ice are ammonia and methane. Also discussed are the belt and zonal circulation models, jet streams, plumes and clouds, magnetic fields, planetary rings, the pressure on Triton, the atmosphere of Titan, 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)

20000006442 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–1999206979; 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 about 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.


2000004676 NASA Kennedy Space Center, Cocoa Beach, FL USA

Galileo Science Writers’ Briefing, Part 3
Aug. 20, 1989; In English; Videotape: 1 hr., 2 min., 17 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–200000170; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This NASA Kennedy video production presents Part 3 of a press conference held at JPL on August 8, 1989. The briefing in its entirety covers the Galileo Project’s mission design from launch to completion in 1997 and is moderated by JPL Public Information Mgr. Robert Macmillan. Part 3 of the 3 part video series centers on the Galileo science goals, which are to explore not only Jupiter but the entire Jovian system, and the individual instruments that will make these objectives possible. Dr. Torrence V. Johnson (Project Scientist) introduces Dr. Richard Young (Probe Scientist [AMES]) and Dr. Clayne M. Yeates (Acting Science Mission Design Manager) who discuss the six main instruments included on the Probe and the Orbiter experiments and instrumentation, respectively. The video is rounded out by a period in which the Science Writer’s are given an opportunity to ask questions of the seven member panel.

CASI Galileo Project: Galileo Spacecraft: Spacecraft Instruments: Space Exploration

2000004677 NASA Kennedy Space Center, Cocoa Beach, FL USA

Galileo Science Writers’ Briefing, Part 2
Aug. 20, 1989; In English; Videotape: 55 min., 48 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–200000169; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This NASA Kennedy video production presents Part 2 of a press conference held at JPL on August 8, 1989. The briefing in its entirety covers the Galileo Project’s mission design from launch to completion in 1997 and is moderated by JPL Public Information Mgr. Robert Macmillan. Part 2 of the 3 part video series begins with Richard J. Spehalski’s (Galileo Project Manager) description of the spacecraft and mission operations. E. Chemack gives a slide presentation of a Galileo spacecraft model and some design features unique to the spacecraft. John Givens (Probe System Design Manager) then presents a brief overview of the mission and subsystems surrounding the Galileo Space Probe. Neil E. Ausman, Jr. (Mission Director) ends the video with a discussion of mission operations including slides of the Galileo launch scenario and a trajectory correction maneuver.

CASI Galileo Project: Galileo Spacecraft: Galileo Probe

2000004678 NASA Kennedy Space Center, Cocoa Beach, FL USA

Galileo Science Writers’ Briefing, Part 1
Aug. 20, 1989; In English; Videotape: 41 min., 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–200000168; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This NASA Kennedy video production presents Part 1 of a press confer-
Galileo spacecraft: Galileo Project: Flyby Missions

This NASA Kennedy Space Center 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 volcanic 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 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—2000001074; 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

2000013897 NASA Kennedy Space Center, Cocoa Beach, FL USA

Galileo Mission Science Briefing

Jul. 21, 1999; 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

The first of two tapes of the Galileo Mission Science press briefing is presented. The panel is 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 Spenulis, 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 assist from planet Earth and Jupiter are reviewed. Detailed designs of the orbiter are shown. The condition of certain scientific spacecraft instruments is discussed. Probes 1 and 3 of the press conference can be found in document numbers NONP—NASA—VT—2000001073, and NONP—NASA—VT—2000001074.

CASI

Galileo Project: Galileo Probe; Jupiter Atmosphere

2000015387 NASA Kennedy Space Center, Cocoa Beach, FL USA

Galileo Space Probe News Conference, Part 2

Jan. 22, 1996; In English; Videotape: 25 min., 52 sec. playing time, in color, with sound

Report No.(s): NONP—NASA—VT—2000001075; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This NASA Kennedy Space Center (KSC) video release presents Part 2 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 is continued from Part 1. 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 computer 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 this document.

CASI

Galileo Project: Galileo Probe; Jupiter Atmosphere

2000014366 NASA Kennedy Space Center, Cocoa Beach, FL USA

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—2000001074; 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

CAS

Galileo Project: Galileo Probe; Jupiter Atmosphere

20000015388 NASA Kennedy Space Center, Cocoa Beach, FL USA

Galileo Space Probe News Conference, Part 1

Jan. 22, 1996; In English; Videotape: 1 hr., 2 min., 26 sec. playing time, in color, with sound
Report No.(s): NONP--NASA-VT--2000001073; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This NASA Kennedy Space Center (KSC) video release presents Part 1 of a press conference regarding the successful entry of the Galileo Space Probe into Jupiter’s atmosphere. The press conference panel is comprised of twelve principal investigators and project scientists that oversaw the Galileo mission. Among these panelists, William J. O’Neil (Jet Propulsion Lab.) begins the video praising all of the scientists that worked on the orbiter mission. He then presents a visual overview of Galileo’s overall mission trajectory and schedule. Marcie Smith (NASA Ames Research Center) then describes the Galileo Probe mission and the overall engineering and data acquisition aspects of the Probe’s Jupiter atmospheric entry. Dr. Richard Young (NASA Ames Research Center) follows with a brief scientific overview, describing the measurements of the atmospheric composition as well as the instruments that were used to gather the data. Atmospheric pressure, temperature, density, and radiation levels of Jupiter were among the important parameters measured. It is explained that these measurements would be helpful in determining among other things, the overall dynamic meteorology of Jupiter. A question and answer period follows the individual presentations. Atmospheric thermal structure, water abundances, wind profiles, radiation, cloud structure, chemical composition, and electricity are among the topics discussed. Parts 2 and 3 of the press conference can be found in document numbers NONP--NASA-VT-2000001074, and NONP-NASA-VT-2000001075.

CAS

Galileo Project: Galileo Probe; Atmospheric Entry

20000012050 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA

Galileo Update: The Search for Water in Jupiter’s Atmosphere

Jun. 05, 1997; In English; Videotape: 1 hr. 12 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP--NASA-VT--2000008140; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This videotape presents a panel discussion press conference about the attempts to discover if there is moisture in the atmosphere of Jupiter. David Seidel, of the Jet Propulsion Laboratory (JPL) moderates the discussion. The panel consists of Andrew Ingersoll, California Institute of Technology, Tobias Owen, of the University of Hawaii, Glenn Orton, Robert Carlson of JPL, and Ashwin Vasavada, a graduate student at Cal Tech. Each of the panelists discusses evidence for moisture in Jupiter’s atmosphere. They show video tapes of either animation or shots from the Galileo mission or diagrams of the atmosphere of Jupiter. The videos clips that are shown, include a brief summary of the Galileo mission. A diagram showing the layers of Jupiter’s atmosphere is discussed. One panelist discusses and shows shots from the nightside of Jupiter. Another video clip shows evidence for convergence downdrafts around dry spots. Evidence for thunderstorms and updrafts is also reviewed. Shots of the giant red spot on Jupiter are shown, and explanations are given as to what it may be.

CASI

Galileo Project: Jupiter Atmosphere; Moisture; Jupiter (Planet); Vertical Air Currents; Atmospheric Circulation

200000121095 NASA Kennedy Space Center, Cocoa Beach, FL USA

Galileo Science Update

Dec. 16, 1997; In English; Videotape: 1 hr. 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP--NASA-VT--2000008139; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Live footage shows Jane Platt, JPL Public Information Office, introducing the moderator of the panel discussion. The moderator introduces the panel members include Bill O’Neil, Project Manager Galileo Primary Mission; Dr. Torrence V. Johnson: Galileo Project Scientist, Prof. Ronald Greeley from Arizona State University Galileo Imaging Team, Bob Mitchell Project Manager Galileo Europa Mission, and Dr. Karen Burnham Galileo Science Planning Manager. The panelists give the audience information about the Galileo Mission and answers questions from the audience and from Kennedy Space Center. An animation of the Galileo Spacecraft approaching and passing Europa is presented. The panelists mentions High Resolution Images, Detail Gravity studies, Spectral Maps of non-ice materials, Jupiter studies, Callisto studies, Europa studies, and Io studies.

CASI

Galileo Spacecraft: Flybys Missions; Galileo Project; Europa; Io; Callisto; Jupiter (Planet)

20000027670 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA

MGS images of Mars

Jun. 23, 1999; In English; Videotape: 4 min. 21 sec. playing time, in color, with sound
Report No.(s): NONP--NASA-VT--2000033901; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The Mars Global Surveyor (MGS) camera captured images of a pit formed when a straight-walled trough collapsed. The heart shaped pit is about 2.3 kilometers (1.4 miles) wide. It is located on the east flank of the Alba Patera volcano in northern Tharsis.

CASI

Mars Global Surveyor; Mars Photographs; Mars Surface; Troughs

20000027776 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA

Mars Global Surveyor MOC Images

Jul. 09, 1999; In English; Videotape: 3 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP--NASA-VT--2000033902; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Images of several dust devils were captured by the Mars Orbiter Camera (MOC) during its global 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

20000027771 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA

Mars Global Surveyor Images

Jun. 29, 1999; In English; Videotape: 2 min. 26 sec. playing time, in color, with sound
Report No.(s): NONP--NASA-VT--2000033899; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

High resolution images that help scientists fine tune the landing site for NASA’s Mars Surveyor lander mission are shown. These images reveal a smooth surface in the southern cratered highlands near the Nepheleus Mensae.

CASI

Mars Global Surveyor; Images

20000027712 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; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Mars Global Surveyor images of the following are shown: Margin of lava flow in Daedalia Planum; Ripples in cratered terrain north of Hesperia Planum; Martian variety exhibited by the Olympia Fossae; and East Tithonium chasma wall, Valles Marineris.

CASI

Mars Global Surveyor; Images; Mars Surface; Craters; Mars (Planet)
This video presents a Magellan Science update on the most recent findings from the Magellan Mission to Venus. Brian Dunbar, NASA Public Affairs, introduces Dr. Wes Huntress, Division Director Solar System Exploration Division. Dr. Huntress explains the Magellan Mission to Venus, which tested the temperature and emissivity of Venus, and collected high resolution radar imagery of 92% of the surface of the planet. Dr. Steve Saunders, Magellan Project Scientist, Jet Propulsion Lab, presents a visual global view of the North Pole of Venus. He also presents planet wide patterns of fracture on Venus. Dr. Saunders showed a video presentation of radio mapping results from Artemis. Dr. Wood, Radar Investigator, Smithsonian Astrophysical Observatory explains Mat Mons, which is the second highest mountain on Venus. Dr. John Wood also presents a video presentation of his findings. Dr. Gordon Pettengill, Principle Investigator, Massachusetts Institute of Technology, presents a video on the Topography of the Magellan Mission, which is able to give resolution ten times finer and further into the South and into the North than was possible earlier. The video of the Magellan Science update ends with a question and answer period.
The Mars Observer spacecraft was primarily designed for exploring Mars and the Martian environment. The Mars Observer was launched on September 25, 1992. The spacecraft was lost in the vicinity of Mars on August 21, 1993 when the spacecraft began its maneuvering sequence for Martian orbital insertion. This videotape shows a press briefing, held after the spacecraft had not responded to attempts to communicate with it, to explain the press the problems and the steps that were being taken to re-establish communication with the spacecraft. The communications had been shutdown prior to the orbital insertion burn to protect the instruments. At the time of the press conference, the communications system was still not operational, and attempts were being made to re-establish communication. Bob McMillan of the Public Affairs Office at JPL, gives the initial announcement of the continuing communication problem with the spacecraft. Mr. McMillan introduces William Pietrowski, acting director of solar system exploration, who reiterates that there is indeed no communication with the Observer spacecraft. He is followed by Glenn Cunningham, the Project Manager of the Mars Observer who speaks about the attempts to re-establish contact. Mr. Cunningham is followed by Satesens 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.

CASI

Failure; Orbit Insertion; Mars Probes; Mars Missions

20000663384 NASA Kennedy Space Center, Cocoa Beach, FL USA Mars Observer Press Conference JPL Aug. 24, 1993; In English; Videotape: 55 min. 1 sec. playing time, in color, with sound Report No.(s): NONP--NASA--VT--200081550; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The Mars Observer mission spacecraft was primarily designed for exploring Mars and the Martian environment. The Mars Observer was launched on September 25, 1992. The spacecraft was lost in the vicinity of Mars on August 21, 1993 when the spacecraft began its maneuvering sequence for Martian orbital insertion. This videotape shows a press briefing, held after the spacecraft had not responded to attempts to communicate with it, to explain to the press the problems and the steps that were being taken to re-establish communication with the spacecraft. The communications had been shutdown prior to the orbital insertion burn to protect the instruments. At the time of the press conference, the communications system was still not operational, and attempts were being made to re-establish communication. Bob McMillan of the Public Affairs Office at JPL, gives the initial announcement of the continuing communication problem with the spacecraft. Mr. McMillan introduces William Pietrowski, acting director of solar system exploration, who reiterates that there is indeed no communication with the Observer spacecraft. He is followed by Glenn Cunningham, the Project Manager of the Mars Observer who speaks about the attempts to re-establish contact. Mr. Cunningham is followed by Satesens 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.

CASI

Failure; Orbit Insertion; Mars Probes; Mars Missions
Livio describes the shapes of Persian planetary nebulae, gives three reasons to study coacervation shows Mint our solar system might look like in a billion years. Maen images display various planetary nebulae, such as M2-9 TwiIwt Nebula, NGC 3675. Space Telescope Science Institute. Theorist Dr. Mat'io Livio. A computerized report No.(s): NONP NASA VT 93 190474; No Copyright; Avail: CASI; Jan. 29, 1991; In English; Videotape: 16 min. 2 sec. playing time, in color, with sound Report No.(s): NONP--NASA--VT--2000013435; No Copyright; Avail: CASI; B01, 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 transpor aircraft to one of the runways at Kennedy. Other footage includes Kennedy workers moving the GRO into position as well as discussions between the STS-37 crews regarding GRO operation. CASI

Gamma Ray Observatory: Cape Kennedy Launch Complex

The NASA news format primarily focuses on the 3 month orbit of Mars and the images obtained by the Observer spacecraft. The spacecraft orbits 316 miles from the surface and rotates once every 100 minutes. Other topics include the MODE mini-lab, Goddard student programs, and Pluto. CASI

Mars Observer: Spacecraft Orbits: Mars (Planet)

2001/02/16/09 Space Telescope Science Inst., Baltimore, MD USA Worlds Smaller than Saturn Mar. 01, 2001; In English; Videotape: 64 min. 7 sec. playing time, in color, with sound Report No.(s): NONP--NASA--VT--2001030026; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Computerized animations show the following: (1) an artist’s conception of a Saturn-like extrasolar planet; (2) star and planet motion; and (3) young stellar disk and planet formation. Footage shows the outside of the Mauna Kea 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. Anne 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 extrasolar planets that are orbiting the stars HD46375 and 79 Seti, 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.

1994/01/08/14 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

1994/01/10/49 NASA Ames Research Center, Moffett Field, CA, USA C 141 KAO solar eclipse mission Apr. 1, 1988; In English; 4 min. playing time, in color, with sound Report No.(s): NONP--NASA--VT--93--190474; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video presents the C 141 Kuiper Airborne Observatory Solar Eclipse Mission. CASI: Kuiper Airborne Observatory: Solar Eclipses

2001/03/37/54 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 simulation creates a giant star as it swallows its smaller companion. HST images display various planetary nebulae, such as M2-9 Twinjet Nebula, NGC 3568, NGC 3918, NGC 5307, NGC 6826, NGC 7099, and Hubble 5. An artists conception shows what our solar system might look like in a billion years when the Sun has burned out and cast off its outer layers in a shell of glowing gas. Dr. Livio describes the shapes of the planetary nebulae, 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 Sorre. 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.

2000/02/07/89 NASA Kennedy Space Center, Cocoa Beach, FL USA STS--37: Gamma Ray Observatory Jan. 29, 1991; In English; Videotape: 16 min. 2 sec. playing time, in color, with sound Report No.(s): NONP--NASA--VT--2000013426; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This NASA Kennedy Space Center (KSC) video release presents footage of the STS-37 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 workers moving the GRO into position as well as discussions between the STS-37 crews regarding GRO operation. CASI: Gamma Ray Observatory: Cape Kennedy Launch Complex

2000/02/24/67 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 with background sound 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 door 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

2000/03/06/88 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

2000/03/37/77 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
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.

19940094139 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, Kuiper 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

19940099160 NASA Hugh L. Dryden Flight Research Facility, Edwards, CA, USA
Flight operations highlights, tapes 1 and 2
Apr 1, 1990; In English; 1 hr 40 min. playing time, in color, NO sound
Report No.(s): NONP-NASA–VT–93–185308; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

Historical film footage of the X-series aircraft (including Yeager's X-1 flight), lifting bodies, and early Apollo landing tests is presented.

Author (revised)
Flight Operations: Histories

19940010768 NASA, Washington, DC, USA
The 1960 highlights
Dec 1, 1969; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190428; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video includes Mariners to Mars; Orbiting Solar Observatory; Orbiting Geophysical Observatory; sounding rockets; weather satellites - Tiros and Nimbus; applications technology; advanced research; space shuttle research; VSTOL; jet noise abatement; and Apollo 9, 10, 11, 12 missions.

CASI
Aerospace Engineering: NASA Programs; NASA Space Programs: Research and Development; Space Missions

19940010769 NASA, Washington, DC, USA
The 1972 highlights
Jan 1, 1973; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190429; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This document includes Mariners to Mars, Pioneer to Jupiter, Orbiting Astronomical Observatory, Small Astronomy Satellite, sounding rockets, earth resources, Nimbus weather watch, communication satellites, 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

19940010770 NASA, Washington, DC, USA
The 1965 highlights
Dec 1, 1965; In English; 4 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190430; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This document includes Ranger to the Moon, Mariner to Mars, Tiros weather watch, Early Bird satellite, scientific satellites, sounding rockets, aeronautical research, preparation for the moon, and manned Gemini flights.

CASI
Aerospace Engineering: NASA Programs; NASA Space Programs: Research and Development; Space Missions: Spacecraft

19940010842 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

19940010849 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

19940010878 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, Pogo, Pioneer, sounding rockets, solar eclipse, X-15, lifting bodies, solid rockets, nuclear powered engines, Project Gemini ends, and Apollo-Saturn.

CASI
Apollo Project; Lifting Bodies; Lunar Exploration; Lunar Orbiter: OGO; X-15 Aircraft
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 & 9 encounter, Mars Pictures, LANDSAT 4, wind energy, ion-electric engines, solar powered medical system, medical image analysis, rotor systems research aircraft, XV-15, propan research, aircraft icing studies, and Oshkosh Sirshow.
CASI

**Aircraft icing: Challenger (Orbiters); Hubble Space Telescope; LANDSAT 4; Manned Spacecraft; Pioneer Space Probes; Prop-Fan Technology; Propeller Fans; Rotor Systems Research Aircraft; Space Transportation System; Space Transportation System 3 Flight; Space Transportation System 4 Flight; Wind-power Utilization; XF-15 Aircraft**

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 Scissor Wing, and automated pilot advisory system.
CASI

**Automated Pilot Advisory System; Balloon Sounding; GOES 4; Meteorological Satellites; Oblique Wings; Rocket Sounding; Rotor Systems Research Aircraft; Solar Maximum Mission; Space Shuttles; Voyager 1 Spacecraft**

1994011596 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 Report No.(s): NONP-NASA–VT–94–198212; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video gives an historical overview of Langley Research Center’s major achievements in aeronautics and astronautics research between the years 1917-1967. Historical footage accompanies explanation of research into wind tunnel, spin tunnel, and hydrodynamic test tanks for studying aircraft airflow, wartime research into overwater combat ditching, diving, and braking, the X series aircraft experiments with supersonic flight, helicopter and vertical Take Off and Landing (VTOL) aircraft, airport landing studies, and early prototypes for the Space Shuttle.
CASI

**Histories; Hydrodynamics; Research Projects: Space Shuttles; Wind Tunnels**

19940929667 NASA Lewis Research Center, Cleveland, OH, USA

NASA report to education, volume 6
Sep 1, 1989; In English; 26 min. 46 sec. playing time, in color, with sound Report No.(s): NONP-NASA–VT–94–12946; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Segments include NASA Spacelink, STS-28 Mission, Voyager encounters Neptune, robotics development at GSFC, and the National Boy Scout Jamboree.
CASI

**Computer Networks; Education: NASA Programs; Robotics: Space Exploration; Voyager Project**

19940925983 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

**Apolo Project; Astronauts**

19950504300 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**

19950504301 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

NASA/NACA 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**

19950504338 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

Dryden summer 1994 update
Jul 8, 1994; In English; 17 min. playing time, in color, with sound Report No.(s): NONP-NASA–VT–94–23569; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video presents a complete, technically detailed report on all Dryden projects, achievements, and employee activities for 1994.
DFRC

**Aeronautical Engineering: Research and Development; Research Projects**

19950502696 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 Report No.(s): NONP-NASA–VT–95–61007; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Historical footage (1958–1983) concerning NASA’s Space Program, is reviewed in this two-part video. Host, Lynn Bondurant describes the birth of NASA and its accomplishments through the years. Part one contains: the launch of Russian satellite Sputnik on October 4, 1957; the first dog (Soviets) in space; NASA Space Research, Explorer-6; and still photographs of various Space projects. Tiros one experimental weather satellite, Microgravity simulators, Echo 1 passive communications satellite, and the first U.S. manned spacecraft Mercury are included in part two. The seven Mercury astronauts are: Captain Donald Slayton, Lt. Commander Allen Shepard, Lt. Commander Walter Schirra, Captain Virgil Grissom, Lt. Col. John Glenn Jr., Captain Leroy Cooper Jr. and L.t. Malcolm Scott Carpenter. Also included are an ongoing interview (throughout the video) with NASA’s first Administrator Keith Glennan, the first flight in 1961
with Eurus the Monkey, President Kennedy’s speech in Washington about the Space Program, Project Gemini - the 2-maned 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

2001018719 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;
Beta; 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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