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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- Telephone the NASA STI Help Desk at (301) 621-0390
- Write to:
NASA STI Help Desk
NASA Center for AeroSpace Information
7121 Standard Drive
Hanover, MD 21076-1320
Introduction

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

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

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

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

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

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

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

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

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

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

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

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

19 Spacecraft Instrumentation and Astrionics  
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**
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.
### NASA CASI Price Tables — Effective October 1, 2001

Prices are subject to change without notice

#### Video Prices (Betacam SP) NTSC

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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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Please Read These Instructions Carefully Before Completing Form

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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.

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# NASA Scientific and Technical Information Program

规约: STI 帮助台
NASA 航空航天信息中心
7121 Standard Drive
Hanover, MD 21076-1320 USA
Phone: (301) 621-0390  Fax: (301) 621-0134
E-mail: help@sti.nasa.gov

## VIDEO ORDER FORM

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

- Invoicing or Deposit Account (for user with an active billing account registered at CASI, enter Customer ID number above)
- Check (must be drawn from a U.S. bank, made payable to NASA Center for Aerospace Information)
- 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:**

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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.

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Method of Payment
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### NASA Scientific and Technical Information Program

**ATTN:** STI Help Desk  
NASA Center for AeroSpace Information  
7121 Standard Drive  
Hanover, MD 21076-1320 USA  
Phone: (301) 621-0390  
Fax: (301) 621-0134  
E-mail: help@sti.nasa.gov

**VIDEO ORDER FORM**

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#### Shipping & Handling: per item
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  International - $7.00 (delivered within 4-7 business days to most destinations)
- USPS Express (U.S. only)  
  $13.00, 1-day delivery service to most destinations)
- Fax: up to 30 pages  
  (U.S. $16.50; International $24.00)
- Federal Express (User’s Account only)

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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.
NASA VIDEO CATALOG

APRIL 2002

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.

19940129166 NASA Lewis Research Center, Cleveland, OH, USA

NACA fire crash research
Jan 1, 1992; In English; 39 min. playing time, in color, with sound
Report No(s): NONP NASA VT-94-12922; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video provides a better understanding of the important factors involved in the start and spread of crash fires, as a necessary first step leading to significant reduction in the crash fire hazards.

19950104297 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.

19950104337 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

NACA/NASA: X-1 through X-31
Apr 4, 1994; In English; 28 min. playing time, in color, no sound
Report No(s): NONP NASA VT-94-23649; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video presents clips (in-flight, ground crew, pilots, etc.) of almost everything from X-1 through X-31.

DFRC

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

Research Aircraft: Research Projects

02 AERODYNAMICS

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

19940109148 NASA Lewis Research Center, Cleveland, OH, USA

A future view of computational science in aircraft
Aug 1, 1989; In English; 9 min. 26 sec. playing time, in color, with sound
Report No(s): NONP NASA VT-93-185300; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

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

Author (revised)

Aircraft Design: Computational Fluid Dynamics: Research Facilities

19940101159 NASA Langley Research Center, Hampton, VA, USA

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

This is an overview of research being done in laminar flow at Ames Dryden Flight Research Center and Langley Research Center. Airflow research at Ames Dryden has resulted in a special wing covering that will artificially induce laminar flow on the wing surface; this specially adapted wing is shown being tested in different flying conditions. This video also features research done at Langley in producing a chemical covering for wings that will make visible natural laminar flow and turbulent airflow patterns as they occur. Langley researchers explain possible use of this technology in supersonic flight.

CASI

AirFlow: Coatings: Flow Visualization: Laminar Flow: Wings

19940101491 NASA, Washington, DC, USA

Airflow research
Dec 1, 1985; In English; 3 min. 5 sec. playing time, in color, with sound
Report No(s): NONP NASA VT-94-198219; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video 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

Leading-edge vortex–system details obtained on F-106B aircraft using a rotating vapor screen and surface techniques

Lamar, John E., NASA Langley Research Center, USA; Johnson, John F., NASA Langley Research Center, USA; Styh, Kathary, NASA Langley Research Center, USA; Johnson, Thomas D., Jr., Lockheed Engineering and Sciences Co., USA; Severance, Kurt, NASA Langley Research Center, USA; Childers, Brooks A., NASA Langley Research Center, USA; Nov 1, 1993; In English; Videotape supplement to NASA-TP-3374: 14 min., color, sound, VHS

Contract(s)/Grant(s): RTOP 505-59-30-03
Report No(s): NONP NASA SUPPL VT-94-209775; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

In this video the following sequences are presented: flight-test operational procedures; animation of post-processing key elements; digitization process of flight video tape; extractor procedure demonstration; reconstructor procedure demonstration; reconstructor used to compare flight results from 1985 with those in 1991; enhancer procedure demonstration; and mapping of oil-flow photographs onto surface geometry for comparison with vapor-screen-determined vortex characteristics.

Author

F-106 Aircraft: Flow Visualization: Leading Edges: Vortices

19940102668 NASA Langley Research Center, Hampton, VA, USA

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

19940102668 NASA Langley Research Center, Hampton, VA, USA

Leading-edge vortex–system details obtained on F-106B aircraft using a rotating vapor screen and surface techniques

Lamar, John E., NASA Langley Research Center, USA; Johnson, John F., NASA Langley Research Center, USA; Styh, Kathary, NASA Langley Research Center, USA; Johnson, Thomas D., Jr., Lockheed Engineering and Sciences Co., USA; Severance, Kurt, NASA Langley Research Center, USA; Childers, Brooks A., NASA Langley Research Center, USA; Nov 1, 1993; In English; Videotape supplement to NASA-TP-3374: 14 min., color, sound, VHS

Contract(s)/Grant(s): RTOP 505-59-30-03
Report No(s): NONP NASA SUPPL VT-94-209775; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

In this video the following sequences are presented: flight-test operational procedures; animation of post-processing key elements; digitization process of flight video tape; extractor procedure demonstration; reconstructor procedure demonstration; reconstructor used to compare flight results from 1985 with those in 1991; enhancer procedure demonstration; and mapping of oil-flow photographs onto surface geometry for comparison with vapor-screen-determined vortex characteristics.

Author

F-106 Aircraft: Flow Visualization: Leading Edges: Vortices
Aircraft Design; Aircrews; \text{CASI} \text{ment through NASA research at its various centers.}

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

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

\text{CASI} \text{Balloon Sounding; High Altitude Balloons}

\text{Scientific balloons}

\text{Oct 19, 1991; In English; 3 min. 38 sec. playing time}
\text{Report No.(s): NONP--NASA--VT--94--23140; No Copyright; \text{Avail: CASI}; B01, Videotape-Beta; V01, Videotape-VHS}

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

\text{CASI} \text{Balloon Sounding; High Altitude Balloons}

\text{Transportation and Safety; and Technology Utilization and Surface Transportation}

\text{Investigates 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.}

\text{DFRC} \text{Aircraft Design; Airfoils; F-16 Aircraft}

\text{Wind Tunnel Tests of an Inflatable Airplane}

\text{Oct 9, 1996; In English; Videotape: 32 min. playing time, in color, with sound}
\text{Report No.(s): NONP--NASA--VT--97--1997005936; No Copyright; \text{Avail: CASI}; V03, Videotape-VHS}

\text{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 test 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.}

\text{CASI} \text{Inflatable Structures: Wings; Buckling; Deflection; Aerodynamic Stability; Aerodynamic Loads; Aerodynamic Characteristics}

\text{03 AIR TRANSPORTATION AND SAFETY}

\text{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.}

\text{NASA images 6}

\text{Jan 1, 1988; In English; 28 min. 30 sec. playing time, in color, with sound}
\text{Report No.(s): NONP--NASA--VT--93--190234; No Copyright; \text{Avail: CASI}; B02, Videotape-Beta; V02, Videotape-VHS}

\text{The videotape is comprised of clips regarding aircraft safety and development through NASA research at its various centers.}

\text{CASI} \text{Aircraft Safety; NASA Programs; Research and Development; Research Facilities}

\text{Life saving satellites}

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

\text{Details of \text{COSPAS/SARSAT}, the international search and rescue project, are covered.}

\text{CASI} \text{COSPAS; Rescue Operations; SARSAT}

\text{WHIPICE}

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

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

\text{CASI} \text{Aircraft Hazards; Aircraft Icing; Applications Programs (Computers); Deicing; Ice Prevention}

\text{Airline safety and economy}

\text{Jan 1, 1993; In English; 6 min. 30 sec. playing time, in color, with sound}
\text{Report No.(s): NONP--NASA--VT--93--190239; No Copyright; \text{Avail: CASI}; B01, Videotape-Beta; V01, Videotape-VHS}

\text{This video documents efforts by 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.}

\text{CASI} \text{Aircraft Maintenance; Aircraft Safety; Aviation Meteorology; Flight Management Systems; Flight Safety; Inspection}

\text{Crash impact survival in light planes}

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

\text{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.}

\text{CASI} \text{Aircraft Accidents; Civil Aviation; Crashes; General Aviation Aircraft; Light Aircraft; Passengers}

\text{The High Speed Research Program}

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

\text{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.}

\text{CASI} \text{Air Transportation; High Speed; Supersonic Transports}
04 AIRCRAFT COMMUNICATIONS AND NAVIGATION

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

VSTOL Systems Research Aircraft (VSRA) Harrier
Dec 1, 1994; In English; 9 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–37002; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

NASA's Ames Research Center has developed and is testing a new integrated flight and propulsion control system that will help pilots land aircraft in adverse weather conditions and in small confined areas (such as, on a small ship or flight deck). The system is being tested in the VSTOL (Vertical/Short Takeoff and Landing) Systems research Aircraft (VSRA), which is a modified version of the U.S. Marine Corps's AV-8B Harrier jet fighter, which can take off and land vertically. The new automated flight control system features both head-up and panel-mounted computer displays and also automatically integrates control of the aircraft's thrust and thrust vector control, thereby reducing the pilot's workload and help stabilize the aircraft for landing. Visting pilots will be encouraged to test the new system and provide formal evaluation flight data and feedback. An actual flight test and the display panel of control system are shown in this video.
CASI
Automatic Control; Flight Control; Harrier Aircraft; Head-Up Displays; Research Aircraft; Thrust Vector Control; VSTOL Aircraft; Vertical Landing; Vertical Takeoff

This document examines the goals and accomplishments of the modified aircraft's wing as it can change shape in flight from a flat to a curved surface according to the necessary flight mode.
CASI
Mission Adaptive Wings; Wing Camber; Wing Profiles

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.

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

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 a curved surface according to the necessary flight mode.
CASI
Mission Adaptive Wings; Wing Camber; Wing Profiles

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–93–190248; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This document presents a series of takes and sequences of model photography of the 1991 NASP design.
CASI
Aircraft Models; National Aerospace Plane Program; Photography

National Aero–Space Plane resource reel
Aug 1, 1991; In English; 22 min. 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 presents a series of takes and sequences of model photography of the 1991 NASP design.
CASI
Aircraft Models; National Aerospace Plane Program; Photography

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 shows the rollont 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

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 examines the goals and accomplishments of the modified aircraft's wing as it can change shape in flight from a flat to a curved surface according to the necessary flight mode.
CASI
Mission Adaptive Wings; Wing Camber; Wing Profiles

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–93–190244; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This document shows the rollont 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

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 examines the goals and accomplishments of the modified aircraft's wing as it can change shape in flight from a flat to a curved surface according to the necessary flight mode.
CASI
Mission Adaptive Wings; Wing Camber; Wing Profiles

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

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

This document shows the rollont 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

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 examines the goals and accomplishments of the modified aircraft's wing as it can change shape in flight from a flat to a curved surface according to the necessary flight mode.
CASI
Mission Adaptive Wings; Wing Camber; Wing Profiles
The central optimization of the wing, the forward canard, and the rear flaps by an onboard flight computer is also described.

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

1994002065 NASA, Washington, DC, USA

**Person: Global watcher**

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

Report No.(s): NONP--NASA--VT--94--12941; No Copyright; Avail: CASI;
B01, Videotape-Beta: V01, Videotape-VHS

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

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

19940029284 NASA Lewis Research Center, Cleveland, OH, USA

**STOVL**

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

Report No.(s): NONP--NASA--VT--94--13535; No Copyright; Avail: CASI;
B01, Videotape-Beta: V01, Videotape-VHS

This video examines research and applications of the STOVL aircraft.

**CASI**

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

19940004299 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

**F-18 HARV presentation for industry**

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

Report No.(s): NONP--NASA--VT--94--23631; No Copyright; Avail: CASI;
B02, Videotape-Beta: V02, Videotape-VHS

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

**DFRC**

**Angle of Attack: F-18 Aircraft: Research Aircraft**

19950004303 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

**Research excitation system flight testing**

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

Report No.(s): NONP--NASA--VT--94--23635; No Copyright; Avail: CASI;
B01, Videotape-Beta: V01, Videotape-VHS

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

**DFRC**

**Excitation: F-16 Aircraft: Flight Tests: Research Aircraft**

19950004304 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

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

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

Report No.(s): NONP--NASA--VT--94--23636; No Copyright; Avail: CASI;
B01, Videotape-Beta: V01, Videotape-VHS

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

**DFRC**

**Flight Tests: SR-71 Aircraft**

19950004328 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

**H-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 H-10 lifting body, being put on display at NASA Dryden Flight Research Center, is shown.

**DFRC**

**HL-10 Reentry Vehicle: Lifting Bodies**

19950004329 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

**F-104 resource tape**

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

Report No.(s): NONP--NASA--VT--94--23641; No Copyright; Avail: CASI;
B03, Videotape-Beta: V03, Videotape-VHS

This video presents raw, unedited material of Dryden's F-104 aircraft.

**DFRC**

**F-104 Aircraft: Research Aircraft**

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

**F-15 B35 (HIDEC) resource tape**

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

Report No.(s): NONP--NASA--VT--94--23642; No Copyright; Avail: CASI;
B04, Videotape-Beta: V04, Videotape-VHS

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

**DFRC**

**F-15 Aircraft: Flight Control; Research Aircraft**

19950004331 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

**F-16XL resource tape**

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

Report No.(s): NONP--NASA--VT--94--23643; No Copyright; Avail: CASI;
B04, Videotape-Beta: V04, Videotape-VHS

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

**DFRC**

**F-16 Aircraft: Research Aircraft**

19950004332 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

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

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

Report No.(s): NONP--NASA--VT--94--23644; No Copyright; Avail: CASI;
B04, Videotape-Beta: V04, Videotape-VHS

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

**DFRC**

**F-18 Aircraft: Research Vehicles**

19950004333 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

**X-31 resource tape**

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

Report No.(s): NONP--NASA--VT--94--23645; No Copyright; Avail: CASI;
B04, Videotape-Beta: V04, Videotape-VHS

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

**DFRC**

**Research Aircraft: X-31 Aircraft**

19950004339 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

**X-31 tailless testing**

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

Report No.(s): NONP--NASA--VT--94--23651; No Copyright; Avail: CASI;
B01, Videotape-Beta: V01, Videotape-VHS
This video addresses the NASA Dryden and X-31 International Test Organization (ITO) testbed provided for the Pentagon’s ‘tailless’ and quasi-tailless vehicle configuration testing.

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

1995010567 NASA, Washington, DC, USA

**Revitalizing general aviation**

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

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

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

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

1995010567 NASA, Washington, DC, USA

**Acoustic climb to cruise test**

Nov 27, 1991; In English; 3 min. 30 sec. playing time, in color, with sound

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

This 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.

**F-15 resource tape**

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

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

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

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

1995010567 NASA Lewis Research Center, Cleveland, OH, USA

**Futurepath 2**

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

Report No.(s): NONP--NASA--VT--93--18520; 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**

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

1995010567 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--19023; 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**

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

1995010567 NASA Lewis Research Center, Cleveland, OH, USA

**Acoustic climb to cruise test**

Jan 1, 1997; In English; 2 min. 50 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--93--19024; 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**

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

1995010567 NASA Lewis Research Center, Cleveland, OH, 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--19025; 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**

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

1995010567 NASA Lewis Research Center, Cleveland, OH, USA

**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.

1995010567 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--18530; 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**

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

1995010567 NASA Lewis Research Center, Cleveland, OH, USA

**Futurepath 2**

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

Report No.(s): NONP--NASA--VT--93--18520; 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**

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

1995010567 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--19023; 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**

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

1995010567 NASA Lewis Research Center, Cleveland, OH, 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--19024; 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**

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

1995010567 NASA Lewis Research Center, Cleveland, OH, USA

**AIRCRAFT STABILITY AND CONTROL**

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

1994009135 NASA Ames Research Center, Moffett Field, CA, USA

**Rudder height**

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

Report No.(s): NONP--NASA--VT--93--19035; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video shows astronaut Rick Hauck at the Shuttle Training Aircraft (STA), CU's of the heads-up display, and air-to-air exercises. CASI

Astronaut Training: Head-Up Displays: Training Aircraft

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

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

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

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. DERC

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

2000010606 NASA Johnson Space Center, Houston, TX USA

STS-103 Crew Interviews: Claude Nicollier
Sep. 9, 1999; In English; Videotape: 43 min. 36 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT--1999213443; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Mission Specialist Claude Nicollier is seen. The interview addresses many different questions including why Nicollier became an astronaut, the events that led to his interest, any role models that he had, and his inspiration. Other interesting information that this one-on-one interview discusses is an explanation of the why this required mission to service the Hubble Space Telescope must take place at such an early date, replacement of the gyroscopes, transistors, and computers. Also discussed are the Chandra X-Ray Astrophysics Facility, and a brief touch on Nicollier's responsibility during any of the given four space walks scheduled for this mission. CASI

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

09 RESEARCH AND SUPPORT FACILITIES (AIR)

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

19940010852 NASA, Washington, DC, USA

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

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

Computerized Simulation; Rotary Wing Aircraft; Wind Tunnel Tests

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

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

199400292964 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

199400292245 NASA Lewis Research Center, Cleveland, OH, USA

Icing research tunnel
Jan 1, 1990; In English; 7 min. 39 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT--94-13534; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

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

Aircraft Icing; Ice Prevention; Wind Tunnels

19950004135 NASA Langley Research Center, Hampton, VA, USA

Langley overview
Feb 10, 1993; In English; 6 min. 31 sec. playing time Report No.(s): NONP-NASA-VT--94-23139; 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

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

199400292964 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

199400292245 NASA Lewis Research Center, Cleveland, OH, USA

Icing research tunnel
Jan 1, 1990; In English; 7 min. 39 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT--94-13534; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

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

Aircraft Icing; Ice Prevention; Wind Tunnels

19950004135 NASA Langley Research Center, Hampton, VA, USA

Langley overview
Feb 10, 1993; In English; 6 min. 31 sec. playing time Report No.(s): NONP-NASA-VT--94-23139; 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

1995004298 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–94–23636; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video provides educators an overview of Dryden's facilities, from early research to present projects. The presentation is directed toward 6th-grade and older students. This video is also offered to educators who want to learn more about Dryden before bringing their students on a tour. CASI
Education; General Overviews; NASA Programs; Research Facilities

1995004302 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 educators an overview of Dryden's flight research center. This is the program shown to visitors during the tour at Dryden.
CASI
General Overview; NASA Programs; Research Facilities

1995004326 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.
CASI
NASA Programs; Test Facilities

1995004334 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 (WTR) and its connection to NASA Dryden is presented.
DFRC
Test Facilities; Test Ranges

1995004335 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 Dryden Flight Research Center and the Center’s various projects. The presentation is directed toward a 6th-grade audience and emphasizes staying in school to learn the vital skills needed to succeed today.
DFRC
Education; Research Facilities

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

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

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

19940010835 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
This video tape 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 Shuttle; Spaceborne Experiments

19940010996 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; Spacecraft

19940011998 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 video 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
This video presents cell animation of the Magellan approach to Venus, orbit insertion, and mapping sequence.

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

199404031054 JPL, 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.

**NASA Space Programs: Roving Vehicles**

1995004107 NASA Lewis Research Center, Cleveland, OH, USA

**NASA images 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**

1995004108 NASA Lewis Research Center, Cleveland, OH, USA

**Challenger Center: Rendezvous with Comet Halley no. 3072**

Dec 1, 1990; In English; 12 min. playing time, in color, with sound
Report No(s): NONP--NASA--VT--94--23171; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

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

**LeRC**

**Education; Halley’s Comet**

1995004109 NASA Lewis Research Center, Cleveland, OH, USA

**Challenger Center: Return to the Moon no. 4005**

Dec 1, 1989; In English; 8 min. 49 sec. playing time, in color, with sound
Report No(s): NONP--NASA--VT--94--23172; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

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

**LeRC**

**Education; Lunar Programs**

1995004306 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA

**LLRV/Apollo 11 25th anniversary**

Jul 1, 1994; In English; 2 min. 51 sec. playing time, in color, with sound
Report No(s): NONP--NASA--VT--94--23638; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video salutes the 25th anniversary of the Apollo 11’s landing on the moon and Dryden’s contribution with the Lunar Landing Research Vehicle (LLRV) program.

**DFRC**

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

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

**STS--68 post flight press conference**

Jan 1, 1994; In English; 18 min. playing time, in color, with sound
Report No(s): NONP--NASA--VT--94--23617; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

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

**JSC**

**Space Shuttle Missions; Space Shuttle Payloads; Space Transportation System Flights; Spaceborne Experiments**
Apollo program. The first video documentary is a tribute to the historical accomplishments of the Apollo program. 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.

Shuttle to Space Station, Heart Assist implant, Hubble Update, X-30 mock-up
Aug 1, 1992; In English; 17 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–63007; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

STS Mission 8 and its night flight (both launch and landing) are highlighted in this color video. The 5-member crew is introduced and their special assignments for this flight are discussed, along with their continuous weightlessness experiments performed during the flight. The first black astronaut, Guion S. Bluford, Jr., is introduced and film footage of an STS Mission orbiting the earth is shown.

CASI
Apollo 12: Pinpoint for science
Sep 30, 1991; In English; 28 min. playing time, in color and black and white, with sound
Report No.(s): NONP–NASA–VT–95–46065; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video, using historical film footage, photography, and computer animation, describes the launch, flight, lunar landing and exploration, and return flight of Apollo 12, one of the manned lunar missions. The astronauts were Charles Conrad, Richard Gordon, and Alan Bean. Thirty-six seconds into the November 14, 1969 launch, the spacecraft was hit by lightning from the thunderstorm surrounding the launch site. In spite of this mishap, the vehicle and astronauts were not harmed and continued with their mission. The Yankee Clipper (command module) docked with the Intrepid (lunar module) and upon reaching the Moon, the Intrepid disconnected during lunar orbit and descended to the Moon’s surface to a landing area previously marked by the Surveyor satellite. After lunar surface exploration, soil sample collection, satellite maintenance, and setting up various lunar surface monitoring equipment (a seismometer and two atmospheric monitors), the Intrepid launched back into lunar orbit, docked with the Yankee Clipper, and returned to Earth. There are both B/W and color photography and film footage, which includes the earth launch, lunar orbit, descent and ascent of Intrepid on the Moon, return flight, atmospheric reentry, and recovery on the Earth, and ground to air and space communication is shown.

CASI
Apollo 11: For all mankind
Jan 1, 1969; In English; 34 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–51757; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Historical film footage of Apollo 11 is shown. The pre-flight, launch, module docking, lunar orbit, lunar landing, ascent, and return-to-Earth flight is shown. There are lunar surface shots, Moon views, Earth views, Earth views from Earth orbit, Moon view, and footage of actual moon walk by astronauts. Mission control and space to ground control communication is heard.

CASI
Apollo 11 Flight: Earth Observations (From Space); Histories; Lunar Exploration; Lunar Landing; Lunar Orbit; Lunar Surface; Manned Spacecraft; Moon

19980226746 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

1995012604 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

Apollo 11: For all mankind
Jan 1, 1969; In English; 34 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–51757; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Historical film footage of Apollo 11 is shown. The pre-flight, launch, module docking, lunar orbit, lunar landing, ascent, and return-to-Earth flight is shown. There are lunar surface shots, Moon views, Earth views, Earth views from Earth orbit, Moon view, and footage of actual moon walk by astronauts. Mission control and space to ground control communication is heard.

CASI
Apollo 11 Flight: Earth Observations (From Space); Histories; Lunar Exploration; Lunar Landing; Lunar Orbit; Lunar Surface; Manned Spacecraft; Moon

19950813579 NASA, Washington, DC, USA

Challenger’s night flight
Aug 1, 1983; In English; 4 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–41115; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

STS Mission 8 and its night flight (both launch and landing) are highlighted in this color video. The 5-member crew is introduced and their special assignments for this flight are discussed, along with their continuous weightlessness experiments performed during the flight. The first black astronaut, Guion S. Bluford, Jr., is introduced and film footage of an STS Mission orbiting the earth is shown.

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

19950112643 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

Legacy of Gemini
Jan 1, 1967; In English; 28 min. running time, in color, with sound
Report No.(s): NONP–NASA–VT–95–39131; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

In the perspective of a single composite mission, this documentary illustrates the major accomplishments of the Gemini two man space flights and the significance of these flights to the Apollo Program. This film includes outstanding photography of the Earth and man in space.

JSC
Apollo Project: Earth Observations (From Space); Gemini Flights; Manned Space Flight; Spaceborne Photography

19950112644 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

Skylab: The second manned mission. A scientific harvest
Jan 1, 1974; In English; 36 min. 30 sec. playing time, in black and white, no sound
Report No.(s): NONP–NASA–VT–95–39132; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This black and white video presentation covers the Skylab launch activities and docking with unmanned SL-1 workshop. Included are observations of student experiments (the Mischmog minnows and Arabella, the spider), observations of student experiments, exercise routines, and the enabling of the Earth Resources Experiments Package. Also shown is planet Earth documentation, manned operation of the Apollo Telescope Mount for observations of the Sun and beyond, outside EVA activity, testing of the Astronaut Maneuvering Unit, experiments to explore industrial uses of space, and the Skylab living routine.

JSC
Apollo Telescope Mount; Earth Observations (From Space); Earth Resources Program; Manned Maneuvering Units; Manned Space Flight; Skylab 1; Space Technology Experiments; Spaceborne Experiments

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

Time of Apollo
Jan 1, 1975; In English; 29 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–39133; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

In the year 1961, President John F. Kennedy set forth the task that... This nation should commit itself to achieving the goal, before this decade is out, of landing a man on the Moon and returning him safely to Earth. The decade is over and the task has been accomplished. Project Apollo has been achieved. This video documentary is a tribute to the historical accomplishments of the Apollo program.

JSC
Apollo Flights; Apollo Project: Lunar Exploration; Lunar Landing; Moon
This video gives a brief history of the Jet Propulsion Laboratory, current missions and what the future may hold. Scenes includes various planets in the solar system, robotic exploration of space, discussions on the Hubble Space Telescope, the source of life, and solar winds. This video was narrated by Jodie Foster. Animations include: close-up image of the Moon; close-up images of the surface of Mars; robotic exploration of Mars; the first mapping assignment of Mars; animated views of Jupiter; animated views of Saturn; and views of a Giant Storm on Neptune called the Great Dark Spot.

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

19990032587 NASA Johnson Space Center, Houston, TX USA
1998 Mars Missions Science Briefing
Nov. 13, 1998; In English; Videotape: 58 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1999037064; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
NASA executives gathered together for an interview to discuss the 1998 Mars Mission. A simulated overview of the Lander Mission is presented. Also presented are views of pre-launch activities, countdown, and launch of the spacecraft, burnouts of the first, second, and third engines, and the probe separating from the spacecraft. During this mission the Lander performs in situ investigations that address the science theme "Volatiles and Climate History" on Mars. The purpose of this mission is to study the following: climate; life; water; carbon dioxide; and dust particles.
CASI
Mars (Planet); Mars Atmosphere; Mars Environment; Mars Sample Return 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--1999053774; 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? - Humanity'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); Mars Sample Return Missions; Mars Surveyor 98 Program; Exobiology

19990116571 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA
Welcome to Outer Space
Aug. 26, 1999; In English; Videotape: 19 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1999020512; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

2000032783 NASA Johnson Space Center, Houston, TX USA
New Mission Control Center Briefing
May 16, 1995; In English; Videotape: 58 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000039783; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
Live footage shows panelists, Chief Center Systems Division John Muratore, and Acting Chief, Control Systems Division, Linda Uljon, giving an overview of the new Mission Control Center. Muratore and Uljon talk about the changes and modernization of the new Center. The panelists mention all the new capabilities of the new Center. They emphasized the Distributed real time command and control environment, the reduction in operation costs, and even the change from coaxial cables to fiber optic cables. Uljon also tells us that the new Control Center will experience its first mission after the launch of STS-70 and its first complete mission (both launching and landing) during STS-71.
CASI
Command and Control; Ground Based Control; Flight Control; Ground Operational Support System; Control Systems Design; Systems Integration

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

2000069212 NASA Kennedy Space Center, Cocoa Beach, FL USA
ATLAS SOHO Presentation, SAEF 2
Aug. 23, 1995; In English; Videotape: 5 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000078653; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Live footage of the Solar and Heliospheric Observatory (SOHO) spacecraft located at the Spacecraft Assembly and Encapsulation Facility (SAEF 2) is presented. A representative from the European Space Agency (ESA) SOHO project, and Kenneth Simozere, 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

testers; Da Maria H. Acuna, Project Scientist for the WIND Project, Goddard Space

preseNted by George Dille. NASA public affairs; Dr. Robert L. Cas'ovillano, near-Earth solar wind; and 4) Provide baseline ecliptic plane observations to be

in the upstream region; 3) Investigate basic plasma processes occurring in the

spheric 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 Geoapace 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. Jean Louis Bougeret, Principle Investigator, Radio/

Plasma Wave Experiment, Paris; and Dr. Eugeny Mazets, Co-Investigator,

Russian Gamma Ray Spectrometer Instrument, St. Petersburg, Russia. Dr. Carovillano presents a cartoon slide describing GEOTAIL, POLAR, Wind, SOHO, ULYSSES and Cluster which are the various tools used to study the complex solar terrestrial system. Dr. Ogilvie explains four particle and wave instruments on Wind. These instruments will be used to study the contributions and characteristics of plasma and plasma waves that occur in the solar wind. Dr. Bougeret explains the European participation in the WIND mission. He also shows a slide presentation of SOHO and the CLUSTER spacecraft. Dr. Mazets explains the main objective of the Transient Gamma Ray Spectrometer (TGRS) aboard the WIND spacecraft, which is to perform high resolution measurements of Gamma Ray Burst spectra and time histories, with emphasis on the search for line features in the energy spectra. The briefing ends with a question and answer period. See NONP-NASA-

VT-2000078325 for additional question and answer footage.

CASI

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

Magnetosphere

20000660880 NASA Kennedy Space Center, Cocoa Beach, FL USA

XTE Science Briefing from KSCNF

Oct. 06, 1995; In English; Videotape: 42 min. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2000078608; No Copyright; Avail: CASI;

B03, Videotape-Beta; V03, Videotape-VHS

The X-ray Timing Explorer (XTE), launched on Dec. 30, 1995, is a Satellite that

observes the fast-moving, high-energy worlds of black holes, neutron stars, x-ray

pulsars and bursts of X-rays that light up the sky and then disappear forever. This

videotape presents a pre-launch science briefing to the press by a few of the

scientist and managers associated with the XTE satellite. The moderator for the

press briefing is Jim Sahl, 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 Mashotzky, X Ray Scientist at GSFC; Rick Rothschild, Principal Inves-

tigator 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. Mashotzky expands

the viewpoint to beyond the galaxy, and explains the interests of scientists who

hope to use XTE to further study Quasars and Active Galactic Nuclei. Dr. 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

20000669403 NASA Kennedy Space Center, Cocoa Beach, FL USA

Delta WIND Mission Science Briefing

Oct. 31, 1994; In English; Videotape: 12 min. 7 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2000078325; No Copyright; Avail: CASI;

B01, Videotape-Beta; V01, Videotape-VHS

A continuation of the question and answer period on the Delta WIND science

briefing is presented. See NONP--NASA--VT--2000078324 for live

coverage of the WIND science briefing.

CASI

Solar Wind; Space Missions; Earth Magnetosphere; Plasmas (Physics)

20000669404 NASA Kennedy Space Center, Cocoa Beach, FL USA

Delta WIND Mission Science Briefing

Oct. 31, 1994; In English; Videotape: 62 min. 41 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2000078324; No Copyright; Avail: CASI;

B04, Videotape-Beta; V04, Videotape-VHS

The science objectives of the WIND mission are to: 1) provide complete plasma,

energetic particle, and magnetic field input for magnetospheric and tereo-
spheric 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 Geoapace 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. Jean Louis Bougeret, Principle Investigator, Radio/

Plasma Wave Experiment, Paris; and Dr. Eugeny Mazets, Co-Investigator,

Russian Gamma Ray Spectrometer Instrument, St. Petersburg, Russia. Dr. Carovillano presents a cartoon slide describing GEOTAIL, POLAR, Wind, SOHO, ULYSSES and Cluster which are the various tools used to study the complex solar terrestrial system. Dr. Ogilvie explains four particle and wave instruments on Wind. These instruments will be used to study the contributions and characteristics of plasma and plasma waves that occur in the solar wind. Dr. Bougeret explains the European participation in the WIND mission. He also shows a slide presentation of SOHO and the CLUSTER spacecraft. Dr. Mazets explains the main objective of the Transient Gamma Ray Spectrometer (TGRS) aboard the WIND spacecraft, which is to perform high resolution measurements of Gamma Ray Burst spectra and time histories, with emphasis on the search for line features in the energy spectra. The briefing ends with a question and answer period. See NONP-NASA-

VT-2000078325 for additional question and answer footage.

CASI

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

Magnetosphere

20010856851 NASA, Washington, DC USA

Looking Back, Looking Forward: Forty Years of US Human Spaceflight;

Parts 1 and 2

May 08, 2001; In English; Videotape: 6 hr. 34 min. 35 sec. playing time, in color,

with sound

Report No.(s): NONP--NASA--VT--2001083803; No Copyright; Avail: CASI;

V04, Videotape-VHS

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

CASI

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

20010857599 NASA Langley Research Center, Hampton, VA USA

Apollo 10 – 11

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 cosmonauts, 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 lift-off from the moon is seen.

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

Apollo 11 Facts Project [On-Orbit Activities]
Jun. 20, 1994; In English; Videotape: 1 hr. 30 min. playing time, in color, without sound
Report No(s): NONP NASA VT 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); Spacecrews

Apollo 11 Recovery
Jun. 17, 1994; In English; Videotape: 1 hr. 28 min. 49 sec. playing time, in color, without sound
Report No(s): NONP-NASA-VT-2001171206; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
The Apollo 11 spacecraft is lifted from the ocean after its water landing (not shown) onto the deck of the USS Hornet. The crewmembers, Commander Neil A. Armstrong, Lunar Module Pilot Edwin E. Aldrin, Jr., and Command Module Pilot Michael Collins, are seen going from the spacecraft to the quarantine chambers. They talk to family members over the phone after their arrival at the Ellington Air Force Base. Footage shows the celebration of Armstrong’s birthday and the release of the crew from quarantine.

CASI
Command Modules; Spacecrews

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

Apollo 11 Facts Project [EVA Training/Washington, D. C., Tour]
Jun. 20, 1994; In English; Videotape: 1 hr. 15 min. 46 sec. playing time, in color, without sound
Report No(s): NONP-NASA-VT-2001173324; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
Footage shows the crew of Apollo 11, Commander Neil Armstrong, Lunar Module Pilot Edwin Aldrin Jr., and Command Module Pilot Michael Collins, during various pre-mission activities. They are seen training for the extravehicular activity on the surface of the Moon, giving speeches in front of the White House, and during a parade in Houston.

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

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)

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, with 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

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, without sound
Report No(s): NONP-NASA-VT-2001169895; 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 suit-up, 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

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-2001173305; 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

Apollo 11 Facts Project [Tracking]
Jun. 16, 1994; In English; Videotape: 1 hr. 32 min. 49 sec. playing time, in color, without sound
Report No(s): NONP-NASA-VT-2001169711; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
This video shows footage of the ground support team tracking Apollo 11’s progress on its way to the Moon.

CASI

Ground Support Systems: Apollo 11 Flight

20010115233 NASA Johnson Space Center, Houston, TX USA
Apollo 11 Facts Project: Earth Views and Crew Activities
Jun. 17, 1994; In English; Videotape: 1 hr. 32 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001185555; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

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

CASI

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

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


CASI

Apollo 11 Flight: Postflight Analysis; Moon

20010117633 NASA Johnson Space Center, Houston, TX USA
Apollo 11 Onboards
Jun. 17, 1994; In English; Videotape: 1 hr. 2 min. playing time, in color, without sound
Report No.(s): NONP--NASA--VT--2001181400; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Footage shows the surface of the Moon from orbit and the Earth seen from the Moon. Apollo 11 astronauts Neil Armstrong and Edwin Aldrin, Jr. are seen on the lunar surface as they set up the American flag.

CASI

Lunar Surface; Moon; Apollo 11 Flight

20010117634 NASA Johnson Space Center, Houston, TX USA
Apollo 11 Onboards
Jun. 17, 1994; In English; Videotape: 55 min. 42 sec. playing time, in color, without sound
Report No.(s): NONP--NASA--VT--2001181402; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Footage shows the surface of the Moon as the Lunar Module passes overhead. The astronauts Neil Armstrong and Edwin Aldrin, Jr., are seen as they erect the American flag on lunar surface. Various shots show Earth from the Moon and an Earth sunset from space.

CASI

Astronauts: Lunar Module; Lunar Surface; Moon; Apollo 11 Flight

20010117635 NASA Johnson Space Center, Houston, TX USA
Node Resource Tape
Jan. 01, 2001; In English; Videotape: 31 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001181403; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, 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 Krikaliev, inspects the Node.

CASI

Construction: Connectors

20010117636 NASA Johnson Space Center, Houston, TX USA
Expedition 1 Crew Resource Red
Aug. 04, 1998; In English; Videotape: 55 min. 52 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001181404; 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 Krikaliev, 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 Krikaliev 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
Apollo 11 Commander Neil Armstrong and Lunar Module Pilot Edwin Aldrin, Jr., are seen on the surface of the Moon performing their extravehicular activities (EVAs).

CASI

Extravehicular Activity: Moon: Apollo 11 Flight

20010117839 NASA Johnson Space Center, Houston, TX USA

Apollo 11 Facts [Post Mission Honorary Ceremony]
Jan. 01, 2001; In English; Videotape: 1 hr. 5 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001181409; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

The Apollo 13 astronauts, James Lovell, Jr., John Swigert, Jr., and Fred Haise, Jr., are 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

20010117840 NASA Johnson Space Center, Houston, TX USA

Apollo 13 Facts [Post Flight Press Conference]
Jan. 01, 2001; In English; Videotape: 1 hr. 16 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001181410; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

The Apollo 13 astronauts, James Lovell, Jr., John Swigert, Jr., and Fred Haise, Jr., are seen during this post flight press conference. They describe their mission and answer questions from the audience.

CASI

Apollo 13 Flight: Astronauts: Postflight Analysis

20010117841 NASA Johnson Space Center, Houston, TX USA

Apollo 13 Facts: Press Conference
Jan. 01, 2001; In English; Videotape: 1 hr. 24 min. playing time, in color, most with sound
Report No.(s): NONP--NASA--VT--2001181430; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

Flight Director Gene Kranz gives an overview of the Apollo 13 mission as corrections are made in the power down checklist, passive thermal control, and orbital burns after the spacecraft runs into problems. He then answers questions from the press with the help of Tony England, Bill Peters, and Dick Thomson. Footage then shows newspaper headlines ‘We’re Not Concerned’ and ‘Getting Ready to Land’ as people watch televisions to see if the astronauts landed safely.

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

CASI

Apollo 13 Flight: Spacecraft Landing: Procedures

20010117842 NASA Johnson Space Center, Houston, TX USA

Apollo 13 Facts [On–Orbit Activities]
Jan. 01, 2001; In English; Videotape: 1 hr. 1 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001174283; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

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

CASI

Checkout: Command Modules: Lunar Module: Apollo 13 Flight

20010117843 NASA Johnson Space Center, Houston, TX USA

ISS Node 1 and 2 Resource Reel
Sep. 01, 1995; In English; Videotape: 1 hr. 14 min. 24 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001181408; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

This video shows Nodes 1 and 2 being constructed (machined, refined, and washed) and tested (pressure tests) for the International Space Station. A computer animation shows the Space Shuttle as it attaches to an orbiting Node.

CASI

Machining: Refitting: Space Station Structures

20010117167 NASA Johnson Space Center, Houston, TX USA

Apollo 11 Facts: First Moonwalks
Jun. 22, 1994; In English; Videotape: 1 hr. 20 min. 15 sec. playing time, black and white, with sound
Report No.(s): NONP--NASA--VT--2001181432; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

Video footage shows 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

20010117192 NASA Johnson Space Center, Houston, TX USA

Apollo 13 Facts
Jan. 01, 2001; In English; Videotape: 1 hr. 28 min. 17 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001181443; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

Footage is seen of the Earth from the Apollo 13 spacecraft as it travels towards the Moon. The crew, James Lovell, Jr., John Swigert, Jr., and Fred Haise, Jr., are shown performing various on-orbit activities. The Lunar Module rendezvous and docking, tunnel repressurization, and S4-B separation are also seen.

CASI

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

13

ASTRODYNAMICS

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

Nasa 1999011626 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--99–190221; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

15
This is a primer on orbital mechanics originally intended for college-level physics students.

CASI

Orbital Mechanics: Space Navigation

2000080177 NASA Kennedy Space Center, Cocoa Beach, FL, USA

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

Steve Wall is the host of this video entitled, "Return to the Red Planet". Live animation of the Mars Observer orbiting Mars is presented. Steve Wall explains the spacecraft insertion maneuver and also explains the purpose for the Mars Observer launch. Live coverage of the Cape Canaveral launch of the Mars Observer is also presented. Suzanne Dodd, Chief of the Mission Planning team describes the burn start and how the spacecraft will be captured by Mars’ gravity. Glenn Cunningham, Mars Observer Project Manager, gives background information on the Mars Observer and describes the organizations behind the Mars Observer spacecraft, such as the Deep Space Network, the Mission Operations Support Office, Science Investigators, the Flight Engineering Office, Operations Office, and the Ground Data System Office. Dr. William Piotrowski, 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 Klemetsen, Technical Manager, Propulsion Subsystem Jet Propulsion Laboratory (JPL). George Chen, Lead Engineer, Attitude and Articulation Subsystem spacecraft team, explains the importance of the attitude control engines on the spacecraft. Marvin Traxler, Manager of tracking and data acquisition, describes how searching for a signal from the Mars Observer works. See NONP-NASA–VT–2000081555 for a continuation of this discussion with Marvin Traxler.

CASI

Mars Observer; Orbit Insertion; Spacecraft Maneuvers; Spacecraft Launching

14

GROUND SUPPORT SYSTEMS AND FACILITIES (SPACE)

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

19940010262 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

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

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

Author

Garbage; Spacecraft; Waste Disposal

19940016314 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

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

19940010763 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–85–190379; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, 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

19940010792 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

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

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

CASI

Astronaut Training; Space Shuttle Missions

19940010797 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

19940010880 NASA Goddard Space Flight Center, Greenbelt, MD, USA

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

Produced for Century Teleproductions in Boston, MA this video is a
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**

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

1994010828 NASA Lyndon B. Johnson Space Center, Houston, TX, USA  
**STS-30 Magellan deploy Sim in SMS and MOCR**  
Feb 1, 1989; In English; 9 min. playing time, in color, with sound  
Report No.(s): NONP-NASA-VT-93-190369; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS  
The Space Shuttle crew is shown in SMS training for the Magellan spacecraft deployment. Intercuts of the MOCR are included.  
CASI  
**Astronaut Training: Magellan Spacecraft (NASSA): Space Shuttle Missions**

1994010845 NASA Ames Research Center, Moffett Field, CA, USA  
**Manned vehicle systems research facility**  
Mar 1, 1989; In English; 8 min. playing time, in color, with sound  
Report No.(s): NONP-NASA-VT-93-190448; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS  
This videotape presents a guided tour of the Manned Vehicle Systems Research Facility (MVSRF) at ARC.  
CASI  
**Flight Simulation: Man Machine Systems: Research Facilities**

1994010858 NASA Lyndon B. Johnson Space Center, Houston, TX, USA  
**STS-26 IUS and latch contingency training**  
Mar 1, 1989; In English; 16 min. 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 Loutre are shown in the WETF while astronauts Covey and Hilmer observe topside.  
CASI  
**Astronaut Training: Astronauts: Spacecrews: Weightlessness Simulation**

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

1994010860 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 astronauts Covey, Hilmer, and Hauck training in SES. It involves a simulated EVA rescue using the RMS. A computer-generated image is used to simulate the movement of a free-floating astronaut for grappling with the arm.  
CASI  
**Astronaut Training: Computerized Simulation: Extravehicular Activity: Remote Manipulator System: Rescue Operations: Space Shuttle Missions**

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

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

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

1994010976 NASA Lyndon B. Johnson Space Center, Houston, TX, USA  
**STS-31 HST deploy sim in SMS and MOCR**  
Apr 1, 1990; In English; 15 min. playing time, in color, with sound  
Report No.(s): NONP-NASA-VT-93-190280; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS  
This video shows the crew on a simulated middeck during the Hubble Space Telescope deploy simulation, intercut from the MOCR is included.  
CASI  
**Astronaut Training: Hubble Space Telescope: Simulation**

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

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

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

19940819979 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-40 crew during spacelab 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; Sim: Simulators; Space Shuttle Missions; Space Transportation System Flights; Spaceborne Experiments; Spacelab; Spacelab Payloads

19940819994 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Richards, Dick: Training clip
Jul 1, 1989; In English; 12 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190300; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

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

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

19940811000 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Commitment to challenge
May 1, 1988; In English; 13 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190320; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This videotape gives a brief overview of the NASA JSC including the following: mission control, mission operations, and mission planning: new scientific and technologies developments; and educational programs.

CASI
Mission Planning; NASA Space Programs: Research Facilities; Space Laboratories

19940811001 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–26 long duration simulation: Crew entering SMS
Sep 1, 1988; In English; 2 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190358; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video shows the crew entering the SMS for the long-duration SIM in preparation for their flight.

CASI
Astronaut Training: Astronauts: Long Duration Space Flight; Simulation

19940811044 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–41 crew training bailout in 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

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 Plumbrook field station is given. The video highlights four main structures and explains their uses. The Space Power Facility is the world’s largest space environment simulation chamber, where spacebound hardware is tested in simulations of the vacuum and extreme heat and cold of the space plasma environment. This facility was used to prepare Atlas I rockets for 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

NASA 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

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

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

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

**1995\^0\#04142** 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**

**200\#0\#11228** NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS-103 Payload Removal From Shipping Canister PIBSF: Discovery Engine Flights & Repair Mission**

Aug 16, 1999; In English; Videotape: 3 min., 30 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2000068207; 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**

**200\#0\#58142** NASA Kennedy Space Center, Cocoa Beach, FL USA

**Atlas GEOS--J Pad Activity with Blockhouse**

May 19, 1995; In English; Videotape: 4 min. 32 sec. playing time, in color, without sound

Report No.(s): NONP--NASA--VT--2000078626; No Copyright; Avail: CASI;

B01, Videotape-Beta; V01, Videotape-VHS

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

CASI

**Launching Pads; Preflight Operations; Flight Operations; Aircraft Maintenance**

**15 LAUNCH VEHICLES AND LAUNCH OPERATIONS**

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

**1994\#0\#18868** 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**

**1995\#0\#67116** 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


**1995\#0\#7287** NASA Goddard Space Flight Center, Greenbelt, MD, USA

**Delta, America's space ambassador**

Oct 1, 1994; In English; 24 min. playing time

Report No.(s): NONP--NASA--VT--94--20868; No Copyright; Avail: CASI;

B02, Videotape-Beta; V02, Videotape-VHS

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

GSFC

**Delta Launch Vehicle: Space Programs**

**1999\#0\#32673** NASA Johnson Space Center, Houston, TX USA

**Delta II Stardust Pre--Launch Press Briefing**

Feb. 05, 1999; In English; Videotape: 1 hour 2 min. 13 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--99036752; 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 high--lights, 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**

**1999\#0\#32574** NASA Johnson Space Center, Houston, TX USA

**Delta II Stardust Mission Briefing**

Jan. 13, 1999; In English; Videotape: 1 hour 7 min. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--99036753; No Copyright; Avail: CASI;

B04, Videotape-Beta; V04, Videotape-VHS

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

CASI

**Conferences; Stardust Mission; Space Probes; Cosmic Dust; Space Debris**
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

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

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

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**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-200008447; 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**

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**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-2000078236; No Copyright; Avail: CASI; B01, Videotape-Beta; V05, Videotape-VHS

The footage begins with scenes from Space Launch Complex 2 at Vandenburg 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**

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

**Delta/NEAR Launch**

Feb. 17, 1996; In English; Videotape: 60 min. 14 sec. playing time, in color, with sound

**Report No(s):** NONP-NASA-VT-2000078322; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of the live presentation of the Delta/NEAR Earth Asteroid Rendezvous Spacecraft (NEAR) launch is presented. Data from the launch of NEAR is anticipated. While waiting for data to be received, a video tape is shown by Andrew Santo of the Johns Hopkins University Applied Physics Laboratory in Laurel, Maryland. Data is finally received from Guam and all of the spacecraft functions are proper. For the first part of the Delta/NEAR launch, see NONP-NASA-VT-2000078323.

**CASI**

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

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**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-Telvision (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 Spacecraft 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**

**Spacecraft; Spacecraft Payloads; Earth Atmosphere; Solar Activity**

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

**ATLAS-1 Video News Release**

Mar. 06, 1992; In English; Videotape: 2 min. 28 sec. playing time, in color, with sound

**Report No(s):** NONP-NASA-VT-2000081543; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Allen Kenitzer, from Marshall Space Flight Center (MSFC), narrates this NASA Kennedy Space Center video presenting a MSFC-Television news release describing the overall scientific objectives of the Atmospheric Laboratory for Applications in Science-1 (ATLAS-1) Spacecraft 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 Spacecraft flight of the National Aeronautics and Space Administration's (NASA's) Mission to Planet Earth.

**CASI**

**Spacecraft; Spacecraft Payloads; Earth Atmosphere; Ultraviolet Radiation; Space Shuttle Missions**

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

**Delta XTE Spacecraft Activities at CCAS Skid Strip**

Dec. 10, 1995; In English; Videotape: 3 min. 30 sec. playing time, in color, without sound

**Report No(s):** NONP-NASA-VT-2000078619; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

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

**CASI**

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

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

**Delta II Geotail — 1st Stage and Solid Motor Booster Erection**

Jul. 22, 1992; In English; Videotape: 2 min. playing time, in color, no sound

**Report No(s):** NONP-NASA-VT-2000078584; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

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

**CASI**

**Construction: Delta Launch Vehicle: Rocket Vehicles**

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

**Mars Observer Spacecraft Processing**

Sep. 25, 1992; In English; Videotape: 51 min. 36 sec. playing time, in color, with sound

**Report No(s):** NONP-NASA-VT-2000081547; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

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

**CASI**

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

A panel discussion features questions from both the audience as well as other NASA Centers.

The atmospheric laboratory for Instrumentation and Science-2 (ATLAS-2), was designed to collect data on the relationship between Earth’s middle atmosphere and how these factors affect the ozone layer. The ATLAS-2 flew on the Space Shuttle Discovery’s mission STS-56, launched on April 8, 1993. The video tape consists of an animated tour of the instruments that were included as part of the mission. The first half of the tape shows the various instruments, pointing to each in turn and identifying each by the associated initialism. The instruments identified were: the Atmospheric Trace Molecule Spectroscopy (ATMOS), Millimeter Wave Atmospheric Sounder (MAS), Shuttle Solar Backscatter Ultraviolet (SSBUV/A) spectrometer, Solar Spectrum Measurement (SOLSPEC) instrument, Solar Ultraviolet Irradiance Monitor (SUSIM), Active Cavity Radiometer (ACR) and Solar Constant (SOLCON). The second half of the animation shows the same tour without the pointing or the identification of the instruments.

CASI

Solar Instruments: Space Transportation System Flights; Radiation Measuring Instruments

Footage shows George Diller, NASA’s Public Affairs Officer, as he introduces the panel members. Speakers included: William Piotrowski, 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 Saucier, 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

SPACE TRANSPORTATION AND SAFETY

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

CASI

Titan Launch Vehicles; Spacecraft Landing; Spacecraft Launching; Spacecraft Recovery
Aerospace Safety; Bailout; Space Shuttle Mission 61-A; Spacecraft Deployment; middeck experiments.

STS-26 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 preparation 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; Spacecrafts

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

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

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

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

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

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

STS-39 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

Crew Procedures (Inflight); Space Shuttle Missions; Space Shuttle Orbiters

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
Conferences; Space Shuttle Missions; Space Shuttle Orbiters; Spacecrews

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
Conferences; Space Shuttle Missions; Space Shuttle Orbiters; Spacecrews

Crew Procedures (Inflight); Space Shuttle Missions

STS-29 onboard 16mm photography quick release
Mar 1, 1989; In English; 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 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
Conferences; Space Shuttle Missions; TDR Satellites

STS-25 onboard 16mm photography quick release
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
Conferences; Space Shuttle Missions; TDR Satellites

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
Conferences; Space Shuttle Missions; TDR Satellites

Crew Procedures (Inflight); Space Shuttle Missions

STS-25 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
Conferences; Space Shuttle Missions; TDR Satellites

Crew Procedures (Inflight); Space Shuttle Missions

STS-26 Post-Flight Press Conference
Oct 1, 1988; 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 contains 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
Conferences; Space Shuttle Missions; Space Transportation System Flights; Spacecraft Landing; Spacecraft Launching

STS-25 onboard 16mm photography quick release
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 contains 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
Conferences; Space Shuttle Missions; Space Transportation System Flights; Spacecraft Landing; Spacecraft Launching

STS-26 Post-Flight Press Conference
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 scenes shot by the crew of onboard activities including the TDRS (Tracking and Data Relay Satellite) deploy, Earth views, and middeck experiments.

CASI
Conferences; Space Shuttle Missions; TDR Satellites

Crew Procedures (Inflight); Space Shuttle Missions

STS-25 onboard 16mm photography quick release
Feb 1, 1989; In English; 23 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

This videotape features scenes shot by the crew of onboard activities including the TDRS (Tracking and Data Relay Satellite) deploy, Earth views, and middeck experiments.

CASI
Conferences; Space Shuttle Missions; TDR Satellites

Crew Procedures (Inflight); Space Shuttle Missions

STS-26 Post-Flight Press Conference
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 contains footage selected and narrated by the Commander and the Space Shuttle crew including launch, Magellan/IUS deployment, onboard crew activities, and landing.

CASI
Conferences; Space Shuttle Missions; Space Shuttle Orbiters; Spacecrews

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
Conferences; Space Shuttle Missions; Space Shuttle Orbiters; Spacecrews

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
Conferences; Space Shuttle Missions; Space Shuttle Orbiters; Spacecrews

STS-29 mission tape
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
Conferences; 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; Spacecrews
Environment of space flight. The video also includes onboard activities from Skylab to Space Shuttle missions.

**CASI**

**Bioastronautics: Microgravity; Weightlessness**

19940810925 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-33 EVA prep and post with Gregory, Blaha, Carter, Thornton, and Musgrave in FFT

Oct 1, 1989; In English; 9 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93–190266; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

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

CASI

**Extravehicular Activity; Spacewalks**

19940810927 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-33 crew post flight film

Feb 1, 1990; In English; 20 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93–190267; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

This video tape contains footage selected by the Commander and crew of the STS-33 DoD mission, including launch, limited onboard activities, and landing.

CASI

**Space Shuttle Missions: Spacecrafts**

19940810930 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-27 crew presentation clip

Jan 1, 1989; In English; 14 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93–190349; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

This video features scenes from this Department of Defense Space Shuttle Mission. Included are launch, landing, the crew playing weightless football and exercising, and food preparation on middeck.

CASI

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

19940810934 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-26 missions highlight resource tape

Oct 1, 1989; In English; 57 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93–190357; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

This video contains important visual events including launch, TDRE-1 operation, middeck experiments, flight deck views, and Earth and payload bay views.

CASI

**Astronauts: Defense Program; Space Shuttle Missions: Space Transportation System Flights; Spacecraft Landing; Spacecraft Launching**

19940810950 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-30 onboard 16mm photography quick release

May 1, 1999; In English; 21 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-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**

19940810965 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-31 onboard 16mm photography quick release

May 1, 1990; In English; 30 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93–190275; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

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

CASI

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

19940810967 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-31 mission highlights resource tape

Jun 1, 1990; In English; 56 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93–190276; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

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

CASI

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

19940810968 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-36 crew presentation clip

Jul 1, 1990; In English; 20 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93–190294; No Copyright; Avail: CASI;
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 Landing; Spacecraft Launching**

19940810991 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-35 onboard photography quick release

Dec 1, 1990; In English; 25 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93–190297; No Copyright; Avail: CASI;
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: Inflight; Space Shuttle Missions: Space Shuttle Payloads; Spaceborne Photography**

19940810992 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-35 mission highlights resource tape

Feb 1, 1991; In English; 59 min. 27 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93–190298; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

This video contains scenes of this Department of Defense Shuttle crew on the STS-35 mission showing crew onboard activities.

CASI

**Astronauts: Defense Program; Space Shuttle Missions: Space Transportation System Flights; Spacecraft Communication; Spacecraft Landing**

19940810993 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

Science operation in space: Lessons

Jan 1, 1998; In English; 32 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-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
operation onboard shuttle flights. shuttle astronauts dunbar, seddon, hoffman, cleaver, ross, and chang/diaz also show how crews live and work in space. casi

astronauts: experiment design; intravehicular activity; space shuttle payloads; space transportation system flights; spaceborne experiments

1994/0010995 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-27 crew deorbit prep in sms with gibson, shepherd, 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

1994/0011043 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–93–190313; 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

1994/0011045 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-41 onboard 16mm photography quick release

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

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

Deployment: Space Transportation System Flights: ulysses mission

1994/0011048 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

1994/0014447 NASA, Washington, DC, USA

Robotics

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 orbital maneuvering vehicle to retrieve and repair satellites. casi

External tanks; Remote Manipulator System; Robotics; Robots; Space Shuttles; Spacecraft Maintenance; Thermal Control Coatings

1994/0014481 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 Vehicles; Orbital Assembly; Orbital Maneuvering Vehicles; Shuttle Derived Vehicles; Space Exploration; Space Stations; Spacecraft Design

1994/0014482 NASA, Washington, DC, USA

Return to space

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

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

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

1994/0014598 NASA Marshall Space Flight Center, Huntsville, AL, USA

Pathfinder: Shuttle exhibit

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

This video introduces the Pathfinder Shuttle Exhibit, a joint project between the Marshall Space Flight Center and the state of Alabama's Space and Rocket Center in huntsville. the exhibit features a never flown Shuttle vehicle, Pathfinder, that was used in early ground tests in the Shuttle Program, as well as an actual external fuel tank and set of booster rockets. the video includes footage of actual launches, the Pathfinder Shuttle Exhibit, and shots of the Space Camp at Alabama's Space and Rocket Center. casi

Museums: Space Shuttle Orbiters

1994/0029665 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–94–12965; 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

1994/0029893 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–94–12966; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video contains footage selected and narrated by crew members. 

**CASI**

**Space Shuttle Missions: Space Transportation System**

1994029282 NASA, Washington, DC, USA

**Space Shuttle 51-L: Challenger**

Jan 1, 1994 In English; 45 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–94–12963; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

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

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

1994029133 NASA John F. Kennedy Space Center, Cocoa Beach, FL, USA

**KSC technology: Automated orbiter window inspection system**

Mar 30, 1993 In English; 2 min. 42 sec. playing time.

Report No.(s): NONP–NASA–VT–94–23138; No Copyright; Avail: CASI; B03, Videotape-Beta; V01, Videotape-VHS

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

**Inspection; Quality Control**

1995004153 NASA Lewis Research Center, Cleveland, OH, USA

**Simulated Shuttle no. 4008**

May 1, 1993 In English; 10 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–94–23168; No Copyright; Avail: CASI; B03, Videotape-Beta; V01, Videotape-VHS

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

**Education; Space Shuttles**

1995004322 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**STS–60 mission highlights resource tape**

Jan 1, 1994 In English; 58 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–94–23622; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

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

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

1995004323 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**STS–62 mission highlights resource tape**

Jan 1, 1994 In English; 54 min. 30 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–94–23623; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

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

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

1995004324 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**STS–59 mission highlights resource tape**

Jan 1, 1994 In English; 59 min. 30 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–94–23625; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

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

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

19950046799 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

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

Jan 1, 1994 In English; 15 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–94–28236; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This is an educational production featuring 'Ari', an 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**

19950046717 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**STS–65 mission highlights resource tape**

Jan 1, 1994 In English; 57 min. 30 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–94–28238; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

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

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

19950046718 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 Analyses; Space Shuttle Missions; Space Transportation System Flights**

19950046719 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**STS–61 mission highlights resource tape**

Jan 1, 1994 In English; 2 hr. 1 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–94–28240; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

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

**Postflight Analyses; Space Shuttles; Space Transportation System; Space Transportation System Flights**

19950046720 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**Memorial service for the mission 51-L crew (edited)**

Jan 31, 1994 In English; 27 min. 30 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–94–28241; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

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

**Challenger (Orbiter); Deaths; Space Shuttle Mission 51-L; Spacecruw**

19950045485 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

**STS–66 post flight presentation**

Jan 1, 1994 In English; 40 min. 30 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–94–33203; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

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

Post-launch Reports: Space Transportation System Flights; Spaceborne Experiments; Spacecraft Launching

1995014696 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS 63 flight day 4 highlights/MIR–Shuttle rendezvous
Feb 5, 1995; In English; 1 hr. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–42156; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
STS 63 Flight, day 4, the MIR–Shuttle rendezvous is highlighted in this video. The six-member team in the Shuttle are introduced and discuss their functions and tests for this day of the flight. There is actual footage of earth from space, of the MIR Space Station, a tour of the Shuttle cockpit, some footage from the MIR of the Space Shuttle, and footage from inside the MIR with the cosmonauts. Mission control communications with the Shuttle, communication between the Shuttle and MIR, and an historic communication between the Shuttle’s astronauts and President Bill Clinton are included. President Clinton interviews each of the six-member team and discusses the upcoming space walk by Dr. Bernard Harris, the first black astronaut to walk in space. This video was recorded on February 6, 1995.

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

1995015141 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS 63: Post flight presentation
Feb 27, 1995; In English; 42 min. 33 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–42494; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
At a post flight conference, Captain Jim Wetherbee, of STS Flight 63, introduces each of the other members of the STS 63 crew (Eileen Collins, Pilot; Dr. Bernard Harris, Payload Commander; Dr. Michael Foale, Mission Specialist from England; Dr. Janice Voss, Mission Specialist; and Colonel Vladimir Titov, Mission Specialist from Russia. A short biography of each member and a brief description of their assignment during this mission is given. A film was shown that included the pre-launch suit-up, a view of the launch site, the actual night launch, a tour of the Space Shuttle and several of the experiment areas, several views of earth and the MIR Space Station and cosmonauts, the MIR–Space Shuttle rendezvous, the deployment of the Spartan Ultraviolet Telescope, Foale and Harris’s EVA and space walk, the retrieval of Spartan, and the night entry home, including the landing. Several spaceborne experiments were introduced: the radiation monitoring experiment, environment monitoring experiment, solid surface combustion experiment, and protein crystal growth and plant growth experiments. This conference ended with still, color pictures, taken by the astronauts during the entire STS 63 flight, being shown.

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

1995015878 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS Flight 64 mission highlights
Feb 21, 1995; In English; 1 hr. 4 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–42495; No Copyright; Avail: CASI;
B04, Videotape-Beta: V04, Videotape-VHS
The pre-launch, launch, in-flight, and landing activities of STS Flight 64 are highlighted in this video. Footage of the astronauts (Richard, Hammond, Lee, Helms, Meade, and Linenger) suit up, the payload activities with the Shuttle arm, the deployment of the Spartan satellite, the tethered spacecraft of Lee and other in-space experiments with Lee and Meade (including a body roll), the pre-launch shots and actual landing, and some footage of the Mission Operations Control Room watching the Space Shuttle maneuverers are included.

CASI
Gravity; Astronaut Locomotion; Extravehicular Activity; Lift-off (Launch); Payload Deployment & Retrieval System; Roll; Space Shuttle Missions; Space Shuttle Payloads; Space Transportation System; Spaceborne Experiments; Spacecraft Landing

1995016055 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Toys in space, 2
Herbert, Dexter, editor, NASA Lyndon B. Johnson Space Center, USA; Jun 24, 1993; In English; Its Lift-off to Learning Series; 37 min. 53 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–43004; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
In this educational video from the ‘Lift-off to Learning’ series, astronauts from the STS-54 Mission (Mario Runco, John Casper, Don McDonough, Susan Helms, and Greg Harbaugh) explain how microgravity and weightlessness in space affects motion by using both mechanical and nonmechanical toys (gravitrons, slinky, dart boards, magnetic marbles, and others). The gravitational effects on rotation, force, acceleration, magnetism, magnetic fields, center of axis, and velocity are actively demonstrated using these toys through experiments onboard the STS-54 Mission flight as a part of their spaceborne experiment payload.

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

1995017244 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Endeavor: Now and then
Sep 22, 1992; In English; Its Lift-off to Learning Series; 19 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–43042; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
In this educational ‘Lift-off to Learning’ video series, astronauts from STS-40 Space Shuttle Mission (Thomas Akers, Bruce Melnick, Pierre Thuot, Kathy Thorton, Kevin Chilton, and Richard Hieb) compare their mission aboard the Space Shuttle Endeavor and their shuttle with its namesake, the ship ‘Endeavor’, commanded by Captain James Cook of England in the late 1700’s. Using historical paintings, drawings, and computer graphics, Cook’s Endeavor is brought to life. Its voyage path, problems, biological experiments, and discoveries are shown and compared to the modern-day Endeavor, its mission and experiments. The Space Shuttle Endeavor was named in 1988, through a nation-wide school contest. It is the fifth Space Shuttle to be built and employs new technology in its design, for example, its drag shoot for shuttle landings. One part of the STS-49 Mission was the retrieval of the Intel satellite.

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

1995017245 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
All systems go!
Sep 2, 1992; In English; Its Lift-off to Learning Series; 33 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–43045; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
In this educational ‘Lift-off to Learning’ video series, astronauts from STS-40 Space Shuttle Mission (F. Drew Gaffney, Millie Hughes-Fulford, Rhea Seddon, James Bagia, Bryan O’Connor, Tamara Jernigan, and Sidney Gutierrez) show, using footage and highlights from their mission, how microgravity causes changes in the human body. The STS-40 was a mission of spaceborne experiments concerned with the physiological, biological, and chemical changes that occur in the human body as a result of microgravity. Different experiments are shown and their significance are explained.

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

In this educational video series, "Liftoff to Learning," astronauts from the STS-37 Space Shuttle Mission (Jay Apt, Jerry Ross, Ken Cameron, Steve Nagel, and Linda Godwin) show what EVA (extravehicular activity) means, talk about the history and design of the space suits and why they are designed the way they are, describe different ways they are used (payload work, testing and maintenance of equipment, space environment experiments) in EVA work, and briefly discuss the future applications of the space suits. Computer graphics and animation is included.

STS–66 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 Parryski, and Jean-Francois Cletoy (collaborating French astronaut). Footage includes: pre-launch setup, entering Space Shuttle, countdown and launch of Atlantis, ESA operations (ATLAS-3, CRISTA/SPAS, SSBUVA, ESCAPE-2), on-board experiments dealing with microgravity and its effects, protein crystal growth experiments, daily living and sleeping compartment footage, earthviews of various meteorological processes (dust storms, cloud cover, ocean storms), pre-launch and landing footage (both from inside the Shuttle and from outside with long range camera), and tracking and landing shots from inside Mission Control Center. Included is air-to-ground communication between Mission Control and the Shuttle. This Shuttle was the last launch of 1994.

Advanced Technology Laboratory: Descent; Earth Orbits; Extravehicular Activity; Microgravity; Space Shuttle Missions; Space Shuttles; Space Transportation System Flights; Spaceborne Experiments; Spaceborne Telescopes; 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 (Hopkins UV telescope, Wisconsin UV polarimeter, and Astrostar 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).

Astronautical Polarimetry; Astronomical Spectroscopy; Earth Observations (From Space); Gravitational Physiology; Human Body; Microgravity; Pathological Effects; Physiological Responses; Space Shuttle Missions; Spaceborne Experiments

STS–13: Houston, we've got a problem
Apr 10, 1991; In English; 28 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 third Lunar Mission and the third spacecraft that was to land on the Moon. Apollo-13's launch date was 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.

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

STS–63 mission highlights resource tape
Jan 1, 1995; In English; 1 hr.; playing time, in color, with sound
Report No.s: NONP–NASA–VT–95–45997; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, 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 date was 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.

STS–67 mission highlights resource tape
May 10, 1995; In English; 57 min.; playing time, in color, with sound
Report No.s: NONP–NASA–VT–95–50092; 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 Specialists), 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 Polimeter Experiment)), spaceborne experiments (astronomical observation and data collection, protein crystal growth, and human physiological processes), and pre-reentry activities are shown. There are astronomical telescopic 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.

Astronomical Polarimetry; 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 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

199507184431 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-71 post flight presentation

Jul 18, 1995; In English; 31 min, 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–59071; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

The post flight presentation for the STS-71 Space Shuttle Atlantis Mission is featured on this video, with astronauts Gibson, Precourt, Baker, Harboug, Dunbar, Strekalov, Dezhurou, and Thagard, present for the press conference. They showed film footage and photographic slides of various pre-launch and launch activities, and onboard Shuttle activities and explained each of the different operations from the footage.

CASI

Covonavants; Earth Orbital Rendezvous; Mir Space Station; Prelaunch Tests; Space Shuttle Missions; Space Transportation System Flights; Spaceborne Experiments

199507184452 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-70 flight: Day 8

Jul 20, 1995; In English; 21 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–59164; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

The eighth day of the STS-70 Space Shuttle Discovery mission is featured on this video. The crew is interviewed in orbit via satellite regarding their personal opinions about their mission before they return to Earth.

CASI

Astronauts: Discovery (Orbiter); Space Shuttle Missions; Space Shuttles; Space Transportation System Flights

199507184453 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-70 flight: Day 7

Jul 19, 1995; In English; 14 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–59165; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The seventh day of the STS-70 Space Shuttle Discovery mission is featured on this video. The astronauts obtained a successful alignment of the Hercules geo-locating camera and evaluated the manual setup procedures for the rotating wall Barocore. Specialist Don Thomas activated and deactivated the Microencapsulation in Space experiment, using a device that produces a timed-release of an antibiotic medication in a weightlessness environment. The Discovery crew begins to wrap up their experiments after a week of gathering data, ranging from observations of Earth's surface and atmosphere to biological studies. There are several minutes of Shuttle observations of Earth included.

CASI

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

199507184454 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-70 flight: Day 6

Jul 18, 1995; In English; 31 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–59166; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

The sixth day of the STS-70 Space Shuttle Discovery mission is featured on this video. During another trouble-free day, the crew again performed a variety of experiments ranging from optical studies to biological investigations. One such biological experiment showed orange colon cancer cells coalescing into globules. Using the Hercules Camera, the crew shot film footage of the Earth's surface and during the Windex experiment, several views of the Shuttle were shown.

CASI

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

199507184455 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-70 flight: Day 5

Jul 17, 1995; In English; 25 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–59167; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

The first day of the STS-70 Space Shuttle Discovery mission is contained on this video. This crew continues working on various 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

199507184456 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 working 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

199507184457 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 astronaut's reflexes and hand-eye coordination. During the day, the crew spoke with World War 2 veteran, Harland Claussen, 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 Communication; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System Flights; Spaceborne Experiments

199507184458 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 was shown onboard the Shuttle working on a variety of secondary experiments. These range from the Hercules camera, which implants 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 Communication; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System Flights; Spaceborne Experiments

199507184459 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 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.
The first day of the STS-70 flight of the Space Shuttle Discovery is contained on this video. This mission highlights the deployment of NASA's communications satellites and the launch and landing of the Space Shuttle. The STS-70 crew consists of Commander Tom Henricks, Pilot Kevin Kregal, and Mission Specialists Don Thomas, Nancy Currie, and Mary Ellen Weber. Flight footage contains prelaunch and landing activities.

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

19950126118 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

Liftoff to landing: Assignment space
Mar 27, 1995; In English; Sponsored by NASA, Washington; 16 min. 05 sec. playing time, in color, with sound; No Copyright; Avail: CASI: B02, Videotape-Beta; V02, Videotape-VHS

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

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

19950127307 EVKO Productions, Inc., Alexandria, VA, USA

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

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

CASI
NASA Space Programs: Research Facilities; Space Shuttles

19950127859 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS--42 mission highlights resource tape, Part 1 of 2
Jan 1, 1992; In English; 44 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--95--65005; No Copyright; Avail: CASI: B03, Videotape-Beta; V03, Videotape-VHS

The mission of STS-42, the first International Microgravity Laboratory (IML-1), is highlighted. The main purpose of this seven-member crew (including Payload specialist Raberto Bondur from Canada and Payload specialist Ulf D. Merbold from Germany) space shuttle was to perform different experiments at microgravity environment. The experiments were focused on the following two major study areas: (1) life sciences; (biorack, biostack, space physiology, mental workload and performance, Microgravity vestibular investigation); 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, Manicouagan Reservoir, St. Lawrence River, and Mountain range); and orbiter activities are also included.

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

19950127860 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

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

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

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

1996017165 NASA, Washington, DC, USA

ST5--43 post flight press conference
Jan 1, 1991; In English; 30 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--95--65004; No Copyright; Avail: CASI: B02, Videotape-Beta; V02, Videotape-VHS

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

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

1996017166 NASA, Washington, DC, USA

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

In this post-flight overview, the flight crew of the STS-70 mission, Tom Hendricks (Cmd.), Kevin Kregal (Pilot), Major Nancy Currie (MS), Dr. Mary Ellen Weber (MS), and Dr. Don Thomas (MS), discuss their mission and accompanying experiments. Pre-launch, launch, and orbital footage is followed by the in-orbit deployment of the Tracking and Data Relay Satellite (TDRS) and a discussion of the following spaceborne experiments: a microgravity bioreactor experiment to grow 3D body-like tissue; pregnant rat muscular changes in microgravity; embryonic 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; lighting over Brazil. A three planet view (Earth, Mars, and Venus) was taken right before sunrise. The end footage shows shuttle pre-landing checkout, entry, and landing, along with a slide presentation of the flight.

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

1996017167 NASA, Washington, DC, USA

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

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

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

19960801168 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-48 mission highlights resource tape. Part 1 of 2
Jan 1, 1991; In English; 60 min. playing time, in color and black and white, with sound
Report No.(s): NONP--NASA--VT--95--65007; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

In this first part of a two part video mission-highlights set, the flight of the STS-48 Space Shuttle Orbiter Discovery is reviewed. The flight crew consisted of: J. O. Creighton (Commander); Ken Reightler (Pilot); Charles 'Sam' Gorman (Mission Specialist); James 'Jim' Buchli (MS); and Mark Brown (MS). Step-by-step pre-launch and 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/Cosmic Ray Effects and Activation Monitor Experiment; and the Physiology and Anatomical Rodent Experiment (PARE). Crew activities were shown, along with Earth views (Aurora Borealis (B-W), light from the Kuwait oil fires, lightning over Italy and other areas, polar regions and ice caps, and the USA at night (B+W)). This was the thirteenth flight of the Space Shuttle Discovery. A night landing is shown. CASI

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

19960801169 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-linked interview with the flight crew of the STS-48 Mission. Listeners called in and the astronauts answered questions about their flight and space travel in general. The flight crew consisted of: Cmdr. J. O. Creighton, Pilot Ken Reightler, MS Charles Gorman, MS James Buchli, and MS Mark Brown. Review their mission and discuss their in-flight activities and experiments in this video. The primary goal of this mission was the deployment of the Upper Atmosphere Research Satellite (UARS). Secondary payloads included: the Mid-Deck Zero Gravity Experiment (MODE) that showed how fluids in microgravity and in-orbit conditions respond to different influences (dynamics and harmonic analysis) and the Extended Duration Orbiter physiological tests of astronaut heat and lung functions. Through these experiments, information useful in the construction and design of the proposed Space Station is hoped to be gained. Earth views included: the Aurora Borealis (B/W), polar region ice packs and caps; the Nile River (at night); the Galapagos Islands, and Earth lightning shots. A night landing is shown. CASI

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

19960801428 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-47 mission highlights resource tape
Sep 1, 1992; In English; 1 hr. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--95--65630; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The mission of the STS-47 flight is highlighted in this video. The flight crew consisted of: Cmdr. 'Hoot' Gibson, Pilot Kurt Brown, Payload Cmdr. Jan Davis, Payload Specialist, M. Mohri (Japanese Astronaut), and Mission Specialists Jay Apt and May Jameson. The primary goal of this mission was the set-up and carrying out of experiments in the accompanying Japanese Spacelab (SL-3) in cooperation with the Japanese Space Program. Dr. Mohri is the first professional Japanese astronaut to fly in space. Vice President Dan Quayle and his wife are shown addressing the astronauts of the Space Shuttle Endeavour with a small pre-launch speech. On this flight many different physical, physiological, and biological spaceborne experiments were performed. These experiments included: a gas evaporation in low gravity environment experiment; a brainwave signals from carp experiment; several human eye movement and visual physiological tests; various physiological tests on a variety of insects and frogs; an embryology experiments on tadpoles; several experiments concerned with fluid dynamics; an imaging furnace test with heated glass containing gold particles (flow measurement); a Solid Surface Combustion Experiment; and a protein crystal growth experiment. Launch, in-orbit, and landing footage is shown, along with a variety of crew activities. One feature that astronauts were able to videotape was the actual in-orbit movement of the side wing flaps of the Space Shuttle. CASI

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

19960801487 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-44 onboard 16mm photography
Dec 1, 1991; In English; 14 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--95--65628; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

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

Artificial Satellites; Cameras: Deployment; Space Shuttle Payloads; Space Shuttles; Spacelab: Spacelaboratory

19960801777 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS--48 post flight press conference
Jan 1, 1991; In English: 28 min. 30 sec. playing time, in color and black and white, with sound
Report No.(s): NONP--NASA--VT--95--65009; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

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

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

19960802572 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS--44 mission highlights resource tape. Part 2 of 2
Nov 1, 1991; In English; 25 min. 55 sec. playing time, in color and sound
Report No.(s): NONP--NASA--VT--95--72064; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

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

News Media; Space Communication; Space Shuttle Missions; Space Shuttles; Space Transportation System Flights; Spacecrews
The STS-44 mission highlights in this first part of a two part video set.

The flight crew consisted of: Cmdr. Fred Gregory; Pilot Tom Hendrick; Payload Specialist Tom Hennen; 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 M85-1 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

CASI

The STS-69 mission is highlighted in this first part of a two part video set.

The flight crew consisted of: Cmdr. Dave Walker, Pilot Ken Cockrell, and Mission Specialists Jim Voss, Jim Newman, and Mike Gernhardt. The remaining crew of the STS-69 mission, Cmdr. Dave Walker, Pilot Ken Cockrell, and Mission Specialists Jim Voss, Jim Newman, and Mike Gernhardt, were awakened by 5 year old Madeleine Cockrell (Ken Cockrell's daughter) staging 'Wake Up'. The remainder 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

CASI

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

CASI

The STS-69 mission is highlighted in this first part of a two part video set.

The flight crew consisted of: Cmdr. Dave Walker, Pilot Ken Cockrell, and Mission Specialists Jim Voss, Jim Newman, and Mike Gernhardt. The remaining crew of the STS-69 mission, Cmdr. Dave Walker, Pilot Ken Cockrell, and Mission Specialists Jim Voss, Jim Newman, and Mike Gernhardt, were awakened by 5 year old Madeleine Cockrell (Ken Cockrell's daughter) staging 'Wake Up'. The remainder 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

CASI
The highlights of the STS-69 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 orbit spacecraft. Secondary mission objectives included activating and studying the Physiological and Anatomical Rodent Experiment (PARE/NII-R), the Bioreactor Demonstration System (BDS), the Commercial Protein Crystal Growth (CPCG) studies, the Space Tissue Loss/National Institutes of Health-Cells (STL/NIH-C) experiment, the Biological Research in Cansers (BRIC) experiment, Shuttle Amateur Radio Experiment-2 (SAREX-2), the Visual Function Test-4 (VFT-4), the Hand- Held, Earth Oriented, Real-Time, Cooperative, User-Friendly, Location- Targeting and Environmental System (HERCULES), the Microcapsules in Space-B (MIS-B) experiment, the Windows Experiment (WINDEX), the Radiation Monitoring Equipment-3 (RME-3), and the Military Applications of Ship Tracks (MAST) experiment. There was an in-orbit dedication ceremony by the spacecraft and the newly integrated Mission Control Center to commemorate the Center’s integration. The STS-70 mission was the first mission monitored by this new control center. Earth views included the Earth’s atmosphere, a sunrise over the Earth’s horizon, several views of various land masses, some B/W lightning shots, some cloud cover, and a tropical storm.

CASI

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

The STS-70 mission was the first mission monitored by this new control center. Earth views included the Earth’s atmosphere, a sunrise over the Earth’s horizon, several views of various land masses, some B/W lightning shots, some cloud cover, and a tropical storm.

CASI

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

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

STS–69 flight day 10 highlights
Sep 16, 1995; In English; 17 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–72086; No Copyright; Avail: CASI; B02, Videotape-Beta; V03, Videotape-VHS

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

CASI

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

1996h002584 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

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

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

CASI

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

1996h002585 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

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

The song, ‘He’s A Tramp’, from the Walt Disney cartoon movie, ‘Lady and the Tramp’, awakened the astronauts, Cmdr. Dave Walker, Pilot Ken Cockrell, and Mission Specialists Jim Voss, Jim Newman, and Mike Gernhardt, on the ninth day of the STS-69 mission. The Wake Shield Facility (WSF) was again unberthed from the shuttle cargo bay and, using the shuttle’s robot arm, held over the side of the shuttle for five hours when 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 rechecked their Extravehicular Activity (EVA) spacewalk, which was planned for the next day. Earth views included cloud cover, a hurricane, and its eye.

CASI

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

1996h002586 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

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

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

CASI

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

1996h003228 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS–70 mission highlights
Sep 5, 1995; In English; 39 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–1995005639; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

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

CASI

Payload Deployment & Retrieval System; Payloads; Space Transporation System Flights; Spaceships

1996h007440 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS–71 mission highlights resource tape
Sep 25, 1995; In English; 1 hr 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–1995006082; 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 Systems tests and the Shuttle Amateur Radio Experiment-2 (SAREX-2). There is footage of the shuttle landing.

**CASI**

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

1996/08/07441 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--1999060683; 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 its 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 (CAPL-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 Canister-6 (BRIC-6) experiment. Earth views consisted of Saudi Arabia water wells, uncommon vortices over Oman, the Amazon River, the Bahamas, Somalia, a sunset over the Earth's horizon, and two hurricanes, Luis and Marilyn.

**CASI**

**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; Spacecrafts; Ultraviolet Astronomy**

1996/08/08123 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--19990506227; 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 Saeco 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 Advanced Protein Crystallization Facility (APCF), the Astroculture (tmASC) experiment, the Protein Crystal Growth (PCG) experiment, and the Drop Physics Module (DPM) experiment. A High-Packed Digital Television (Hi-PAC) demonstration system. 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.

**CASI**

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

1996/08/08083 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--19990606230; 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 Saeco 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 High-Packed Digital Television (Hi-PAC) demonstration system, 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.

**CASI**

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

1996/08/08084 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--19990606231; 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 Saeco 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 High-Packed Digital Television (Hi-PAC) demonstration system onboard the Shuttle. The experiments shown include the Drop Physics Module (DPM) experiment, the
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

19956008645 NASA Lyndon B. Johnson Space Center, Houston, TX, USA STS-73 flight day 6 Oct 25, 1995; In English; 22 min. 55 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VI-95-199506232; No Copyright; Aval: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this sixth day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine 'Cady' Collman, and Michael Lopez-Alegria are shown performing several of the spaceborne experiments onboard the USA Microgravity Lab-2 (USML-2). The experiments shown include the Protein Crystal Growth (PCG) experiment, the Astroculture(tm)(ASC) experiment, the Drop Physics Module (DPM) experiment, and the Surface Tension Driven Convection Experiment (STDCE). The 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

19956008646 NASA Lyndon B. Johnson Space Center, Houston, TX, USA STS-73 flight day 7 Oct 26, 1995; In English; 10 min. 15 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VI-95-199506233; No Copyright; Aval: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this seventh day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine 'Cady' Collman, and Michael Lopez-Alegria are shown performing several of the spaceborne experiments onboard the USA Microgravity Lab-2 (USML-2). The experiments shown include the Surface Tension Driven Convection Experiment (STDCE), the Drop Physics Module (DPM), the Protein Crystal Growth (PCG) experiment, and the Glovebox (GBX) demonstration. All the experiments were monitored by the High-Packed Digital Television (HI-PAC) system onboard the shuttle.
CASI
Ground-Air-Ground Communication; Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecrews; Spacelab

19956008647 NASA Lyndon B. Johnson Space Center, Houston, TX, USA STS-73 flight day 8 Oct 27, 1995; In English; 16 min. 45 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VI-95-199506234; No Copyright; Aval: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this eighth day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine 'Cady' Collman, and Michael Lopez-Alegria are shown performing several of the spaceborne experiments onboard the USA Microgravity Lab-2 (USML-2). The experiments shown include the Astroculture(tm)(ASC) experiment, the Protein Crystal Growth (PCG) experiment, the Surface Tension Driven Convection Experiment (STDCE), the Commercial Generic Bioprocessing Apparatus (CGBA), and further testing of the High-Packed Digital Television (HI-PAC) system. An interview with Bowersox and Thornton regarding the mission's status was conducted by radio World News Now in Houston.
CASI
Ground-Air-Ground Communication; News Media; Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecrews; Spacelab

19956008648 NASA Lyndon B. Johnson Space Center, Houston, TX, USA STS-73 flight day 9 Oct 28, 1995; In English; 12 min. 30 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VI-95-199506235; No Copyright; Aval: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this ninth day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine 'Cady' Collman, and Michael Lopez-Alegria are shown performing several of the spaceborne experiments onboard the USA Microgravity Lab-2 (USML-2). The experiments shown include the Surface Tension Driven Convection Experiment (STDCE) and the Protein Crystal Growth (PCG) experiment with different types of solution mixtures used. The imagery of the experiments inside the Spacelab were downlinked to Mission Control with the High-Packed Digital Television (HI-PAC) system.
CASI
Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecrews; Spacelab

19956008649 NASA Lyndon B. Johnson Space Center, Houston, TX, USA STS-73 flight day 10 Oct 29, 1995; In English; 12 min. 5 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VI-95-199506236; No Copyright; Aval: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this tenth day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine 'Cady' Collman, and Michael Lopez-Alegria are shown performing several of the spaceborne experiments onboard the USA Microgravity Lab-2 (USML-2). The experiments shown include the Surface Tension Driven Convection Experiment (STDCE), the Drop Physics Module (DPM) experiment, and the Geophysical Fluid Flow Cell Experiment (GFFC). All experiment imagery was downlinked from the shuttle to Mission Control using the High-Packed Digital Television (HI-PAC) system.
CASI
Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecrews; Spacelab

19956008650 NASA Lyndon B. Johnson Space Center, Houston, TX, USA STS-73 flight day 11 Oct 30, 1995; In English; 7 min. 25 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VI-95-199506237; No Copyright; Aval: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this eleventh day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine 'Cady' Collman, and Michael Lopez-Alegria are shown performing several of the spaceborne experiments onboard the USA Microgravity Lab-2 (USML-2). The experiments shown include the Drop Physics Module (DPM) and the Surface Tension Driven Convection Experiment (STDCE). Thermistors are used in the STDCE to study the fluid dynamics behind particle motion.
CASI
Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecrews; Spacelab
On this twelfth day of the STS-73 sixty-six 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 space-borne experiments onboard the USA Microgravity Lab-2 (USML-2). The experiments shown include the Drop Physics Module (DPM) experiment, the Surface Tension Driven Convection Experiment (STDCE), and the Astronaut-in-the-Loop (im/ASC) demonstration. Rominger was interviewed by a Colorado radio news show and asked questions about the mission and living in space. Earth views included cloud cover.

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

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

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

On this last day of the STS-73 sixty-six 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 space-borne experiments onboard the USA Microgravity Lab-2 (USML-2). The experiments shown include the Drop Physics Module (DPM) experiment, human physiological experiments, and a Crystal Gel experiment.

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

On this eighteenth day of the STS-74 mission, the flight crew Cmdr. Kenneth Cameron, Pilot James Halsell, and Mission Specialists William McArthur, Jerry Ross, and Chris Hatfield, 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

On this last day of the STS-74 mission, the flight crew Cmdr. Kenneth Cameron, Pilot James Halsell, and Mission Specialists William McArthur, Jerry Ross, and Chris Hatfield, 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
On this first day of the STS-74 mission, the flight crew, Cmdr. Kenneth Cameron, Pilot James Halsell, and Mission Specialists William McArthur, Jerry Ross, and Chris Hatfield, are shown in prelaunch and launch activities. This mission is the second of seven Mir-Space Shuttle hook-ups. Major objectives of this mission are to include a docking between Mir and the Space Shuttle and the transfer of a Russian docking module, water, supplies, and two solar arrays to the Mir space station. This mission highlights the first time that astronauts from Canada, Russia, the U.S. and the European Space Agency (ESA) will be onboard a single spacecraft in space at the same time. Additional experimental payloads onboard the shuttle are the GLO-4 PASDE Payload (GPP) experiment and the Photogrammetric Apparatus Structural Dynamics Experiment (PASDE).

**CASI**

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

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

**CASI**

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

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**On this third day of the STS-74 mission, the flight crew, Cmdr. Kenneth Cameron, Pilot James Halsell, and Mission Specialists William McArthur, Jerry Ross, and Chris Hatfield successfully connect the Russian-made docking module to the Space Shuttle using the shuttle’s robotic arm. There is a live, in-orbit press interview with the astronauts from inside the Russian docking module regarding the status of the mission thus far. The docking module will remain with Mir after the two spacecraft have undocked.

**CASI**

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

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**On this fourth day of the STS-74 mission, the flight crew, Cmdr. Kenneth Cameron, Pilot James Halsell, and Mission Specialists William McArthur, Jerry Ross, and Chris Hatfield, perform a successful docking between the space shuttle and the Mir space station using the Russian-made docking module that had been previously installed on the third day of the mission. The astronauts and the Mir 20 cosmonauts, Cmdr. Yuri Gidzenko, Flight Engineer Sergei Avdeyev, and Cosmonaut-Researcher (ESA) Thomas Reiter, are shown greeting each other from inside the docking module and an in-orbit interview between the crews is conducted in both English and Russian.

**CASI**

**Flight Crews:** Mir Space Station; Orbital Maneuvers; Space Communication; Space Shuttle Missions; Space Shuttle Payloads: Space Shuttles; Space Transportation System; Space Transportation System Flights; Spacecraft Docking
Chilton, Pilot Richard A. Scarpino, and Mission Specialists Shannon W. Lucid, Linda M. Godwin, Michel R. Clifford, and Randal 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 NHC show, 'Nightside'. The construction of the SPACEHAB unit also was started.

**Space Transportation System: Space Shuttles; Hydrualic Equipment**

**STS-75 Post Flight Presentation**

Feb. 29, 1996; In English; Videotape: 38 min. 18 sec. playing time, in color, with sound.

Report No.(s): NONP-NASA-VT–96–1996039902; No Copyright; Avail: CASI; B03, Videotape-VHS

The flight crew of the STS-75 Space Shuttle, Cmdr. Andrew Allen, Pilot Scott Horowitz, Payload Cmdr. Franklin Chang-Diaz, Payload Specialist Umberto Guidoni (Italy), and Mission Specialists Jeffrey Hoffman, Maurizio Cheli (ESA) and Claude Nicollier (ESA), present a post flight analysis of their mission through the use of color slides and video footage. Prelaunch and launch activities are shown along with Earth entry and landing footage. Both middeck and payload bay microgravity experiments are shown and briefly discussed. The deployment and loss of the European Tethered Satellite experiment are presented and discussed. Earth views include the Nile Valley, Chad, the Himalayas and Mount Everest, and China. A unique moonset is also shown.

**Space Transportation System: Tethered Satellites; Postflight Analysis; Space Shuttles; Gravitational Effects; Deployment**

**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-VHS

On this ninth day of the STS-75 mission, the flight crew, Cmdr. Andrew Allen, Pilot Scott Horowitz, Payload Cmdr. Franklin Chang-Diaz, Payload Specialist Umberto Guidoni (Italy), and Mission Specialists Jeffrey Hoffman, Maurizio Cheli (ESA) and Claude Nicollier (ESA), are shown tracking the free-floating tethered satellite and performing various experiments from the USA Microgravity Payload-3 (USMP-3). An in-orbit interview with Allen, Cheli, and Guidoni by the Italian news media is shown. The astronauts answer a variety of questions concerning the loss of the tethered satellite, and the progress of the other mission experiments. Earth views include a sunset and horizon shots.

**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**

**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-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.

**Space Transportation System: Space Transportation System Flights; Spacecrews; Microgravity; Space Shuttle Missions; Space Shuttle Payloads; Spaceborne Experiments; Earth Observations (From Space); Columbia (Orbiter)**
Control’s help, still trying to correct the problems with the ‘Smart Flex’ computer system which is delaying the deployment of the Tethered Satellite System Reflight (TSS-1R). There is imaging shown of the shuttle’s exhaust system using water vapor.

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

19960025963 NASA Johnson Space Center, Houston, TX USA
STS–75 Flight Day 1
Feb. 22, 1996; In English; Videotape: 30 min. playing time, in color, with sound
Report No(s): NONP–NASA–VT–96–1996037036; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this first day of the STS-75 mission, the flight crew, Cmdr. Andrew Allen, Pilot Scott Horowitz, Payload Cmdr. Franklin Chang-Diaz, Payload Specialist Umberto Guidoni (Italy), and Mission Specialists Jeffrey Hoffman, Maurizio Cheli (ESA) and Claude Nicollier (ESA), were shown performing pre-launch and launching activities. This international space mission’s primary objective is the deployment of the Tethered Satellite System Reflight (TSS-1R) to a 12 mile length from the shuttle, a variety of experiments, and the satellite retrieval. These experiments include: Research on Orbits Plasma Electric Dynamics (ROPE); TSS Deployer Core Equipment and Satellite Core Equipment (DCORE/SCORE); Research on Electrodynamic Tether Effects (RETE); Magnetic Field Experiments for TSS Missions (TEMG); 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 mission’s secondary objectives were those experiments found in the USA Microgravity Payload-3 (USMP-3), which include: Advanced Automated Directional Solidification Furnace (AADSF); Material for l’Etude des Phénomènes Intéressant 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); Columbia (Orbiter); International Cooperation; Earth Observations (From Space)

19960025964 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–96–1996037045; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
In this post flight presentation video for the STS-72 mission, the flight crew, Cmdr. Brian Duffy, Pilot Brent Jett, and Mission Specialists Daniel T. Barry, Winston E. Scott, Leroy Chiao, and Koichi Wakata (NASA), discuss their mission using flight footage and slides. The pre-launch and launching activities are shown. Using the robot arm inside the space shuttle’s cargo bay, the Japanese Space Flyer Unit (SU) 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)

19960025998 NASA Johnson Space Center, Houston, TX USA
STS–75 Flight Day 15
Mar. 07, 1996; In English; Videotape: 11 min. 30 sec. playing time, in color, with sound
Report No(s): NONP–NASA–VT–96–1996037070; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this fifteenth day of the STS-75 mission, the flight crew, Cmdr. Andrew Allen, Pilot Scott Horowitz, Payload Cmdr. Franklin Chang-Diaz, Payload Specialist Umberto Guidoni (Italy), and Mission Specialists Jeffrey Hoffman, Maurizio Cheli (ESA) and Claude Nicollier (ESA), are shown performing various experiments. Chang-Diaz gives a short presentation about the importance of certain crystals and their use in research. A water vapor exhaust test is performed with the shuttle’s exhaust jets. Earth views include land and water masses, the horizon, and there are views of the shuttle’s cargo bay.

CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Spaceborne Experiments; Space Shuttle Missions; Space Shuttle Payloads; Columbia (Orbiter); Earth Observations (From Space); Space Communication; Microgravity
On this thirteenth day of the STS-75 mission, the flight crew, Cmdr. Andrew Allen, Pilot Scott Horowitz, Payload Cmdr. Franklin Chang-Diaz, Payload Specialist Umberto Guidoni (Italy), and Mission Specialists Jeffrey Hoffman, Maurizio Cheli (ESA) and Claude Nicollier (ESA), are shown conducting combustion and burn experiments. The flight crew is interviewed by news reporters from USA and Europe via a satellite hookup. Earth views include clouds and storm systems. A view of the lost, free-flying tethered satellite is shown.

CASI

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

On this twelfth day of the STS-75 mission, the flight crew, Cmdr. Andrew Allen, Pilot Scott Horowitz, Payload Cmdr. Franklin Chang-Diaz, Payload Specialist Umberto Guidoni (Italy), and Mission Specialists Jeffrey Hoffman, Maurizio Cheli (ESA) and Claude Nicollier (ESA), are shown being interviewed via satellite hookup by reporters. Cheli, through the demonstration of a simple experiment, explains a simple acceleration physics concept. Middcreek Glovebox burn and combustion experiments are also shown. Earth views include Italy, other land masses, some cloud cover, a sunrise, and horizon shots.

CASI

Space Transportation System: Space Transportation System Flights; Spacecrews; Spaceborne Experiments; Microgravity; Space Communication; Space Shuttle Missions; Space Shuttle Payloads; Columbia (Orbiter)

On this eleventh day of the STS-75 mission, the flight crew, Cmdr. Andrew Allen, Pilot Scott Horowitz, Payload Cmdr. Franklin Chang-Diaz, Payload Specialist Umberto Guidoni (Italy), and Mission Specialists Jeffrey Hoffman, Maurizio Cheli (ESA) and Claude Nicollier (ESA), are shown conducting combustion experiments in the Middcreek Glovebox station, conducting physiological tests, and performing a variety of daily activities (eating, exercising, etc.). Horowitz, Cheli, and Guidoni are interviewed by Voice of America via satellite hookup and they answered general questions regarding the mission, experiments, and the lost tethered satellite. Earth views include a sunrise and some cloud cover.

CASI

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

The STS-69 mission of the Endeavour Space Shuttle and crew are highlighted in this video. The 'Dog Crew', as they called themselves, Cmdr. Dave Walker, Pilot Ken Cockrell, and Mission Specialists Mike Gernhardt, Jim Voss, and Jim Newman, are shown performing pre-launch and launch activities; the SPARTAN-201 and the Wake Shield Facility (WSF) deployments, retrievals, and berthing; physiological and other Middeck experiments; and jet thruster firing tests on the WSF. A 6 1/2 hour EVA was conducted to test the thermal properties of the new space suits and to test the tools and equipment to be used in the construction of the International Space Station. General crew activities are also shown and Earth views include cloud cover and the WSF with the Earth as the background.

CASI

Space Transportation System: Space Transportation System Flights; Spacecrews; Space Shuttle Missions; Space Shuttle Payloads; Rocket Engines

On this second day of the STS-72 mission, the flight crew, Cmdr. Brian Duffy, Pilot Brent W. Jett, and Mission Specialists Leroy Chiao, Daniel J. Berry, Winston E. Scott, and Koichi Wakata (NASA), awakened to music from the motion picture 'Star Wars'. The crew performed a systems checkout, prepared for the retrieval of the Japanese Space Flyer Unit (SFU), tested the spacesuits for the EVA, and activated some of the secondary experiments. An in-orbit news interview was conducted with the crew via satellite downlinking. Questions asked ranged from the logistics of the mission to the avoidance procedures the Endeavour Orbiter performed to meet the U.S. Air Force satellite, nicknamed 'Misty' (MSTI). Earth views included cloud cover, several storm systems, and various land masses with several views of the shuttle's open cargo bay in the foreground.

CASI

Space Transportation System: Space Transportation System Flights; Endeavour (Orbiter); Flight Crews; Space Shuttle Missions; Earth Observations (From Space); Computer Systems Performance; Checkout; Space Communication

On this third day of the STS-76 mission, the flight crew, Cmdr Kevin P. Chilton, Pilot Richard A. Searfoss, and Mission Specialist 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 Specialist Shannon W. Lucid, Linda M. Godwin, Michael R. Clifford, and Ronald M. Sega, pay tribute to the late astronaut Bob Overmeyer with views from the Atlantis/Mir configuration with the Earth in the background. Atlantis astronauts, interviewed by reporters from NASA Centers and Russia during an in-orbit press conference, describe their observations of Comet Hyakutake as it continues its close pass by Earth, remarking on the comet's brilliance and visibility. The astronauts and cosmo-
nauts also took time out from their transfer and resupply activities to talk with Charlie Gibson of 'Good Morning America'.

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

19960826004 NASA Johnson Space Center, Houston, TX USA

STS–76 Flight Day 6
Mar. 30, 1996; In English; Videotape: 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996039806; No Copyright; Avail: CASI; B02, Videotape-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 extravehicular activity (EVA). The two astronauts are shown egressing from the Shuttle and performing activities during the EVA while 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.

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

19960826005 NASA Johnson Space Center, Houston, TX USA

STS–76 Flight Day 7
Mar. 31, 1996; In English; Videotape: 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996039805; No Copyright; Avail: CASI; B02, Videotape-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 Omurkendo, along with spacewalkers Godwin and Clifford took time out to talk with CBS 'Up to the Minute.' The space flyers discussed the success of their joint mission and the 6-hour spacewalk. The astronauts and cosmonauts exchanged handshakes and hugs in the Mir core module, and then praised both mission control centers, Houston and Kalamingrad for their support throughout the joint phase of the mission.

CASl
Space Transportation System Flights: Space Transportation System: Crew Procedures (In flight); News Media

19960826017 NASA Johnson Space Center, Houston, TX USA

STS–73 Post Flight Presentation
Dec. 15, 1995; In English; Videotape: 28 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996031304; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The post flight presentation of the STS-73 Space Shuttle's USA Microgravity Lab. (USML) mission was presented by the flight crew, Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine 'Cady' Collman, and Michael Lopez-Alegria, using color video and slides. Film footage includes the prelaunch and launch activities, the USML and Middeck experiments (Advanced Protein Crystalization 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, reentry, and space shuttle landing. The USML experiments were monitored via the HI-PAC system downlink. Earth views included mostly geographical locations (Mediterranean Sea; Turkey; Lake Powell, Arizona/Utah area; San Francisco Bay; Baltimore, Maryland; Washington, DC; India; Tibet; China; Bhutan; Philadelphia; and the Himalayas).

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

19960826028 NASA Johnson Space Center, Houston, TX USA

STS–75 Flight Day 2
Feb. 23, 1996; In English; Videotape: 10 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996037037; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this second day of the STS-75 mission, the flight crew, Cmdr. Andrew Allen, Pilot Scott Horowitz, Payload Cmdr. Franklin Chang-Diaz, Payload Specialist Umberto Guidoni (Italy), and Mission Specialists Jeffrey Hoffman, Maurizio Cheli (ESA) and Claude Nicollier (ESA), are shown, via satellite downlinking, online with Dan Golden, the Director of NASA, discussing the mission and performing system set-ups. A problem with the 'Smart Flex' computer system develops and the crew spends most of the day trying to fix the problem with the help of Mission Control. Earth views include cloud cover, various land and water masses, and Earth's Arctic regions.

CASl
Space Transportation System: Space Transportation System Flights: Columbia (Orbiters); Spacecrews; International Cooperation; Spaceborne Experiments; Space Shuttle Missions; Spacecraft Electronic Equipment

19960826029 NASA Johnson Space Center, Houston, TX USA

STS–72 Flight Day 1
Jan. 11, 1996; In English; Videotape: 28 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996034087; No Copyright; Avail: CASI; B02, Videotape-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. Barry, Winston E. Scott, and Koschi Wakata (NASA), 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 (SIFU) spacecraft, the deployment and retrieval of the NASA Office of Aeronautics and Space Technology Flyer (OASF-FLYER) spacecraft, and two 6 1/2 hour spacewalks to test hardware and tools that will be used to assemble the International Space Station. Secondary objectives included the Shuttle Solar Backscatter Ultraviolet (SSBUV-8), the Shuttle Laser Altimeter (SLA-01/GAS(5)), the National Institutes of Health-R3 (NIH-R3), the Space Tissue Loss (STL-NIH-C), and Thermal Energy Storage (TES-2) experiments. Get-Away-Specials (GAS) included the USAF Academy G-342 Flexible Ballast Can with Sample Retrieval Experiment. This flight also took time out from their transfer and resupply activities to talk with CBS 'Up to the Minute.' The space flyers discussed the success of their joint mission and the 6-hour spacewalk. The astronauts and cosmonauts exchanged handshakes and hugs in the Mir core module, and then praised both mission control centers, Houston and Kalamingrad for their support throughout the joint phase of the mission.

CASl
Get Away Specials (GAS); Endeavour (Orbiters); Spacecrews; International Cooperation; Spaceborne Experiments; Space Shuttle Missions; Spacecraft Electronic Equipment

19960826030 NASA Johnson Space Center, Houston, TX USA

STS–72 Flight Day 3
Jan. 13, 1996; In English; Videotape: 31 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996034085; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On this third day of the STS-72 mission, the flight crew, Cmdr. Brian Duffy, Pilot Brent W. Jett, and Mission Specialists Leroy Chiao, Daniel T. Barry, Winston E. Scott, and Koschi Wakata (NASA), awakened to a traditional
Japanese song, "Sea in Springtime". Wakata, using the shuttle's robot arm, successfully retrieved the Japanese Space Flyer Unit (SFU) satellite and berthed it in the shuttle's cargo bay. Duffy and Wakata were interviewed, via satellite, by Japanese journalists and reporters in Houston, Texas. Earth views include cloud cover, storm systems, Africa and several other land masses.

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

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. Scarefoss, and Mission Specialists Shannon W. Lueid, Linda M. Godwin, Michael R. Clifford, and Ronald M. Sega, are shown performing prelaunch and launch activities for the night launch of the Space Shuttle Atlantis. The primary objective of this mission is the third docking between the Mir Space Station and Atlantis and a crew transfer. Lucid will remain onboard the Mir for about four months. Other activities include an EVA by Godwin and Clifford, logistics operations, and scientific research with a SPACEHAB module, some middeck experiments, and a Get Away Special (GAS) canister. Also, almost a ton of equipment and supplies will be transferred to the Mir. Experiments include the Mir Electric Field Characterization (MEFC), European Space Agency (ESA) Biorack life science experiments, Queen's University Experiment in Liquid Diffusion (QUELD), Optizon Liquid Phase Sintering Experiment (OLIPS), and a Naval Research Laboratory (NRL) GAS payload Trapped Ions in Space (TRIS), which will measure low-energy particle radiation in the inner magnetosphere. This mission also will include a KissSat, 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 Shuttles; Space Shuttle Missions; Payloads; Space Station

19960826036 NASA Johnson Space Center, Houston, TX USA
STS-75 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-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 Hoffinan, Maurizio Chei (ESA) and Claude Nicoller (ESA), are shown performing middeck and Microgravity lab experiments, including the Material pour l’Etude des Phenomnes Interessant la Solidification sur Terre et en Orbite (MPEHISTO) experiment, as well as some material burn tests. Earth views include cloud cover and horizon shots.

CASI
Space Transportation System Flights; Spacecrafts; Space Transportation System; Microgravity; Space Shuttle Missions; Space Shuttle Payloads; Columbus (Orbiter); Spaceborne Experiments; Earth Observations (From Space)

19960826038 NASA Johnson Space Center, Houston, TX USA
STS-75 Flight Day 6
Feb. 27, 1996; In English; Videotape: 18 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–96–1996037041; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this sixth day of the STS-75 mission, the flight crew, Cmdr. Andrew Allen, Pilot Scott Horowitz, Payload Cmdr. Franklin Chang-Diaz, Payload Specialist Umberto Guidoni (Italy), and Mission Specialists Jeffrey Hoffinan, Maurizio Chei (ESA) and Claude Nicoller (ESA), are shown performing experiments from the USA Microgravity Payload-3 (USMP-3). Mission Control continues to update the flight crew regarding the status of the free orbiting tethered satellite and the few experiments that they were able to start-up onboard the satellite. There is an in-orbit question and answer interview with the astronauts by a group of sixth graders from a West Virginia school. Earth views include water masses and horizon shots.

CASI
Space Transportation System; Space Transportation System Flights; Spacecrafts; Tethered Satellites; Microgravity; Space Communication; Space Shuttle Missions; Space Shuttle Payloads; Columbus (Orbiter); Spaceborne Experiments

19960826039 NASA Johnson Space Center, Houston, TX USA
STS-76 Flight Day 4
Mar. 25, 1996; In English; Videotape: 30 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–96–1996037039; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fourth day of the STS-76 mission, the flight crew, Cmdr. Kevin P. Chilton, Pilot Richard A. Scarefoss, and Mission Specialists Shannon W. Lueid, 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 Onufenskeno talk with NASA Administrator Dan Goldin via satellite link. Lucid will be joining the cosmonauts, Onufenskeno and Flight Engineer Yuri Usachev, for a 140 day mission on the Mir.

CASI
Space Transportation System; Space Transportation System Flights; Spacecrafts; Earth Observations (From Space)

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. Scarefoss, 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 prepare for the return to Earth. Chilton, Scarefoss and Clifford perform a routine checkout of Atlantis' flight control surfaces and a hotfire test of the orbiter's reaction control system jets. Views include the undocking maneuver; Atlantis as seen from the Mir Space Station; Atlantis' fly-round of Mir; and the firing of the Reaction Control System (RCS) primary thrusters.

CASI
Space Transportation System Flights; Space Transportation System; Space Station; Earth Observations (From Space)
1996028531 NASA Johnson Space Center, Houston, TX USA
STS-72 Mission Highlights Resource Tape

1996028549 NASA Johnson Space Center, Houston, TX USA
STS-77 Flight Day 9

1996028576 NASA Johnson Space Center, Houston, TX USA
STS-77 Flight Day 7

1996028548 NASA Johnson Space Center, Houston, TX USA
STS-77 Flight Day 10

1996028571 NASA Johnson Space Center, Houston, TX USA
STS-77 Flight Day 3

1996028533 NASA Johnson Space Center, Houston, TX USA
STS-76 Post Flight Press Conference

The flight crew of the STS-72 Space Shuttle Orbiter Endeavour Cmdr. Brian Duffy, Pilot Brent W. Jett, and Mission Specialists Leroy Chiao, Daniel T. Barry, Winston E. Scott, and Koichi Wakata (NASA) present an overview of their mission, whose primary objective is the retrieval of two research satellites. The major activities of the mission will include retrieval of the Japanese Space Flyer Unit (SFU), which was launched aboard a Japanese H-2 rocket to conduct a variety of microgravity experiments. In addition, the STS-72 crew will deploy the AST-Flyer, a satellite, that will fly free of the Shuttle for about 50 hours. Four experiments on the science platform will operate autonomously before the satellite is retrieved by Endeavour’s robotic arm. Three of Endeavour’s astronauts will conduct a pair of spacewalks during the mission to test hardware and tools that will be used in the assembly of the Space Station. Video footage includes the following: prelaunch and launch activities; the crew eating breakfast; shuttle launch; retrieval of the Japanese Space Flyer Unit (SFU); sun-up and EVA-1; EVA-2; crew members performing various physical exercises; various earth views; and the night landing of the shuttle at KSC.

CASI
Space Transportation System: Endeavour (Orbiter); Physical Exercise; Microgravity; Gravitational Effects; Extravehicular Activity

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., perform a routine check of the shuttle’s flight control surfaces and reaction control system jets, wrap up work with a number of scientific investigations, and begin securing Prime Minister Jean Chretien called Gm’neau to congratulate him on the mission and the joint Canadian Space Agency and NASA experiments that were conducted.

CASI
Space Transportation System Flights: Flight Control; Jet Control; Control Surfaces

The flight crew of the STS-76 Space Shuttle Orbiter Atlantis Cmdr. Kevin P. Chilton, Pilot Richard A. Searfoss, and Mission Specialists Linda M. Godwin, Michael R. Clifford, and Ronald M. Sega present an overview of their mission. Highlights STS-76 include the first spacewalks by U.S. astronauts while the shuttle is attached to the Russian Space Station Mir, and the transfer of Shannon W. Lucid to the Mir-21 crew, the first American woman to serve as a Mir station researcher. She will remain aboard the orbiting station until Atlantis again docks with Mir in early August. Video footage includes the following: prelaunch and launch activities; shuttle launch; retrieval of the Space Flyer Unit (SFU); sun-up and EVA-1; EVA-2; crew members performing various physical exercises; various earth views; and the night landing of the orbiter.

CASI
Space Transportation System Flights: Spacecraft Docking; Mir Space Station; Extravehicular Activity

1996028571 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—1996060592; 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 and Pilot Curt Brown performed a series of thruster firings which allow Endeavor 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

STS-72 Post Flight Press Conference

Apr. 15, 1996; In English; Videotape: 22 min. playing time, in color, with sound Report No.(s): NONP-NASA—VT—96—1996060714; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The flight crew of the STS-76 Space Shuttle Orbiter Atlantis Cmdr. Kevin P. Chilton, Pilot Richard A. Searfoss, and Mission Specialists Linda M. Godwin, Michael R. Clifford, and Ronald M. Sega present an overview of their mission. Highlights STS-76 include the first spacewalks by U.S. astronauts while the shuttle is attached to the Russian Space Station Mir, and the transfer of Shannon W. Lucid to the Mir-21 crew, the first American woman to serve as a Mir station researcher. She will remain aboard the orbiting station until Atlantis again docks with Mir in early August. Video footage includes the following: prelaunch and launch activities; shuttle launch; retrieval of the Space Flyer Unit (SFU); sun-up and EVA-1; EVA-2; crew members performing various physical exercises; various earth views; and the night landing of the orbiter.

CASI
Space Transportation System: Endeavour (Orbiter); Physical Exercise; Microgravity; Gravitational Effects; Extravehicular Activity

CASI; B01, Videotape-Beta; V01, Videotape-VHS

STS-76 Post Flight Press Conference

Apr. 15, 1996; In English; Videotape: 22 min. playing time, in color, with sound Report No.(s): NONP-NASA—VT—96—1996060714; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The flight crew of the STS-76 Space Shuttle Orbiter Atlantis Cmdr. Kevin P. Chilton, Pilot Richard A. Searfoss, and Mission Specialists Linda M. Godwin, Michael R. Clifford, and Ronald M. Sega present an overview of their mission. Highlights STS-76 include the first spacewalks by U.S. astronauts while the shuttle is attached to the Russian Space Station Mir, and the transfer of Shannon W. Lucid to the Mir-21 crew, the first American woman to serve as a Mir station researcher. She will remain aboard the orbiting station until Atlantis again docks with Mir in early August. Video footage includes the following: prelaunch and launch activities; shuttle launch; retrieval of the Space Flyer Unit (SFU); sun-up and EVA-1; EVA-2; crew members performing various physical exercises; various earth views; and the night landing of the orbiter.

CASI
Space Transportation System: Endeavour (Orbiter); Physical Exercise; Microgravity; Gravitational Effects; Extravehicular Activity

CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this tenth day of the STS-77 mission, the flight crew, Cmdr. John H. Casper, Pilot Curtis L. Brown, Jr., and Mission Specialists Andrew S.W. Thomas, Ph.D., Daniel W. Bursch, Mario Runco, Jr., and Marc Garneau, Ph.D., 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 Test Unit (PMS-STU) 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 Endeavor 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: Aerodynamic Stability; Attitude (Inclination); Mir Space Station

1996028571 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—1996060592; 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 joint firings, Endeavor 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**

19960028572 NASA Johnson Space Center, Houston, TX USA

**STS-77 Flight Day 1**

May 19, 1996; In English; Videotape: 16 min. 30 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT–96–1996060590; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-77 mission, the flight crew, Cmdr. John H. Casper, pilot Curtis L. Brown, Jr., and Mission Specialists Andrew S.W. Thomas, Ph.D., Daniel W. Bursch, Mario Runco, Jr., and Marc Garneau, Ph.D., can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and out 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: Spacecrews; Launching; Ignition**

19960028575 NASA Johnson Space Center, Houston, TX USA

**STS-74 Mission Highlights Resource Tape**

Apr. 08, 1996; In English; Videotape: 59 min. 42 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT–96–1996047713; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of the STS-74 Space Shuttle Orbiter Atlantis Cmdr. Ken Cameron, pilot Jim Halsell, and Mission Specialists Chris Hadfield, Jerry Ross, and William McArthur present an overview of their flight mission, whose primary objective is the rendezvous and space docking with the Russian Mir Space Station. Video film footage includes the following: pre-launch and launch activities; shuttle launch; in-orbit rendezvous; installation of the Russian made docking module; in-orbit docking between Mir and the orbiter; general crew activities; transfer of supplies, equipment, and a crystal growth experiment to Mir; data collection from Mir thruster firing; undocking maneuvers and a Mir fly around; pre-return checkout of flight systems; and the reentry and landing of the orbiter. Earth views include horizon sunsets, atmospheric boundary layers, and a variety of geographical location footage (New Orleans; Atlanta; Jamaica 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**

19960028598 NASA Johnson Space Center, Houston, TX USA

**STS-77 Flight Day 8**

May 30, 1996; In English; Videotape: 15 min. playing time, in color, with sound

Report No.(s): NONP-NASA- VT–96–1996060597; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this eighth day of the STS-77 mission, the flight crew, Cmdr. John H. Casper, pilot Curtis L. Brown, Jr., and Mission Specialists Andrew S.W. Thomas, Ph.D., Daniel W. Bursch, Mario 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**

19960028599 NASA Johnson Space Center, Houston, TX USA

**STS-77 Flight Day 6**

May 24, 1996; In English; Videotape: 15 min. playing time, in color, with sound

Report No.(s): NONP-NASA-VT–96–1996060595; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this sixth day of the STS-77 mission, the flight crew, Cmdr. John H. Casper, pilot Curtis L. Brown, Jr., and Mission Specialists Andrew S.W. Thomas, Ph.D., Daniel W. Bursch, Mario 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 systems. 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

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

19960028600 NASA Johnson Space Center, Houston, TX USA

**STS-77 Flight Day 5**

May 23, 1996; In English; Videotape: 14 min. 49 sec. playing time, in color, with sound

Report No.(s): NONP-NASA- VT–96–1996060594; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fifth day of the STS-77 mission, the flight crew, Cmdr. John H. Casper, pilot Curtis L. Brown, Jr., and Mission Specialists Andrew S.W. Thomas, Ph.D., Daniel W. Bursch, Mario 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**

19960028601 NASA Johnson Space Center, Houston, TX USA

**STS-77 Flight Day 4**

May 22, 1996; In English; Videotape: 14 min. 58 sec. playing time, in color, with sound

Report No.(s): NONP-NASA- VT–96–1996060593; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fourth day of the STS-77 mission, the flight crew, Cmdr. John H. Casper, pilot Curtis L. Brown, Jr., and Mission Specialists Andrew S.W. Thomas, Ph.D., Daniel W. Bursch, Mario 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 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; 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 Endeavor 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 jetisoned 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. Thrisk, M.D., are shown performing a variety of scientific investigations. These include experiments investigating the effects of microgravity on the human body. Various experiments include conducting the second auxiliary middeck experiments. The host, Tom Miller, from NBC’s Nightline show, interviewed the astronauts from Charlotte, NC in 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 Flights: Space Shuttle Missions; Scientific Satellites; Deployment; Spaceborne Experiments; Checkout; Earth Observations (From Space)*

On this first day of the STS-78 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 using during their two planned spacewalks, and conducted the secondary middeck experiments. The host, Tom Miller, from NBC’s Nightline show, interviewed the astronauts from Charlotte, NC in 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 Flights: Space Transportation System Flights; Space Shuttle Missions; Endeavour (Orbiter); Flight Crews; Scientific Satellites; Deployment; Spaceborne Experiments; Checkout; Earth Observations (From Space)*

On this fourth day of the STS-72 mission, the flight crew, Cmdr. Scott Altman, Pilot Kandi A. Stowers, and Mission Specialists Frederick D. Pesico, Jr., Charles F. Hobaugh, Jr., and Michael J. Lopez, Jr., are seen communicating with two cosmonauts and fellow astronaut Shmmon Lucid on the bicycle ergometer cardiovascular system.

CASI

*Space Transportation System Flights: Physical Exercise; Ergometers; Cardiovascular System; Bones*

On this twelfth day of the STS-72 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. Thrisk, M.D., are shown communicating with two cosmonauts and fellow astronaut Shannon Lucid on Russia’s Space Station Mir. During this communication link the two crews participate 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; Spacecraft*
expenditure and pulmonary function continue throughout the day, as well as the processing of advanced semiconductor materials and alloys in the Advanced Gradient Floating Facility. In an interview with the NBC News, Mission Commander Tom Henricks is shown discussing Columbus’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

19960850035 CASI NASA Johnson Space Center, Houston, TX USA 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–96–1996058661; 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, Pd.D. and Robert B. Thirsk, M.D., continue to serve as test subjects in a series of investigations that seek to understand the effects of microgravity on the human musculoskeletal system. As they approach the half-way mark of a seven-week mission, the research 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

19960850036 CASI NASA Johnson Space Center, Houston, TX USA 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–96–1996058562; 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, Pd.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

19960850037 NASA Johnson Space Center, Houston, TX USA 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–96–1996058558; 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, Pd.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; Eye (Anatomy); Coordination; Head Movement; Microgravity; Nausea; SpaceLab

19960850038 NASA Johnson Space Center, Houston, TX USA STS–78 Flight Day 4 Jun. 23, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–96–1996058564; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fourth day of the STS-78 mission, the flight crew, Cmdr. Terence T. Henricks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Linnehan, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, Pd.D. and Robert B. Thirsk, M.D., discuss the flight during a press conference. The crew members are shown participating in tests that measure their performance.

CASI

Space Transportation System Flights; Muscles; Life Science; Microgravity; Human Body; Human Behavior; Bones

19960850039 NASA Johnson Space Center, Houston, TX USA STS–78 Flight Day 9 Jun. 28, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–96–1996058559; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this ninth day of the STS-78 mission, the flight crew, Cmdr. Terence T. Henricks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Linnehan, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, Pd.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; Eye (Anatomy); Coordination; Head Movement; Microgravity; Nausea; SpaceLab

19960850040 NASA Johnson Space Center, Houston, TX USA STS–78 Flight Day 15 Jul. 04, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–96–1996058553; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fifteenth day of the STS-78 mission, the fourth of July, 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 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

19960850041 NASA Johnson Space Center, Houston, TX USA
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.

CASI

Space Transportation System Flights: Spacelab; Microgravity; Lungs

19960508095 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, Ph.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.

CASI

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

19960508096 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, Ph.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 aerodynamic surfaces in anticipation of the planned landing at the Kennedy Space Center. Commander Tom Henricks and Pilot Kevin Kregel successfully fire Columbia’s 84 reaction control system jets and then tests the aerodynamic 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, keep the hands free to perform other tasks in the Spacelab, with the use of the Hubble Space Telescope, without placing any force on the telescope’s fragile solar arrays.

CASI

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

19960508097 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, Ph.D. and Robert B. Thirsk, M.D., can be seen preforming pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being seated in the white room’ for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Henricks shares a unique view of Columbia’s climb to orbit with flight controllers from a small camera that was mounted on the flight deck. The video follows Columbia’s flight from just before main engine start through main engine cutoff, showing the force of main engines and solid booster ignition as experienced by the astronauts.

CASI

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

19960506098 NASA Johnson Space Center, Houston, TX USA

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

On this second day of the STS-78 flight, mission controllers wake the flight crew, Cmdr. Terence T. 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., with ‘Freedom’ a song by Tom Petty. Crew members are shown working with various neurological and cardiovascular experiments inside the Spacelab.

CASI

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

199605060102 NASA Johnson Space Center, Houston, TX USA

STS–78 Flight Day 5
Jun. 24, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–96–1996085863; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fifth day of the STS-78 mission, the flight crew, Cmdr. Terence T. 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 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

199605080104 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, Ph.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

199605080105 NASA Johnson Space Center, Houston, TX USA

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

On this eighth day of the STS-78 mission, the flight crew, Cmdr. Terence T. 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 conduct
experiments primarily focusing on the effects of weightlessness on human physiology. Results from the studies of muscle activity, task performance, and sleep will help future mission planners organize crew schedules for greater efficiency and productivity. For a second consecutive day, Henrieks, Kregel, Thirsk, and Favre continue to enter responses to a battery of problem-solving tasks on the Performance Assessment Work Station, a laptop computer.

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

STS-78 Flight Day 12
July 01, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT–96–1996085856; No Copyright; Avail: CASE; B01, Videotape-Beta; V01, Videotape-VHS

On this twelfth day of the STS-78 mission, the flight crew, Cmdr. Terrence T. Henrieks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Limoneikis, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, Ph.D. and Robert B. Thirsk, M.D., are awakened by the Canadian national anthem Oh Canada!. This morning, Thirsk is shown delivering a holiday message to Prime Minister Jean Chretien and other dignitaries gathered at Parliament Hill in Ottawa. The crew is then shown celebrating Canada Day aboard the Space Shuttle. Also this morning, Mission Specialist Susan Helms discusses the progress of Columbia’s flight with WBBM Radio in Chicago.

CASI

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

STS-79 Flight Day 9
Sept. 24, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–1996093676; No Copyright; Avail: CASE; B01, Videotape-Beta; V01, Videotape-VHS

On this ninth day of the STS-79 mission, the flight crew, Cmdr. William F. Readdy, Pilot Terrence W. Wilcutt, Mission Specialists, Thomas D. Akers, Shannon Lucid, Jay Apt, and Carl E. Walz having completed five days of joint operations between the American astronauts and the Russian cosmonauts are seen flying solo once again after undocking from the Mir Space Station. As Atlantis/Mir flew over the Urals Mountains of central Asia, the docking hooks and latches that joined the vehicles together were commanded open and Atlantis drifted slowly away from Mir. Wilcutt then initiated a tail-forward fly-around of the Russian space station. After one and one-half revolutions around Mir, Atlantis’ jets were fired in a separation maneuver to enable Atlantis to break away from Mir. On board Atlantis, the six-member crew is setting back into its normal routine with a fairly light schedule for the remainder of the day. Early in the morning as Atlantis flew over the USA, the crew took time to talk with anchors for the CBS ‘Up to the Minute’ network news broadcast.

CASI

Space Transportation System Flights; Spacecraft Docking; Mir Space Station; Space Flight; Space Mission

STS-79 Flight Day 6
Sept. 21, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT–1996093680; No Copyright; Avail: CASE; B01, Videotape-Beta; V01, Videotape-VHS

On this sixth day of the STS-79 mission, the flight crew, Cmdr. William F. Readdy, Pilot Terrence W. Wilcutt, Mission Specialists, Thomas D. Akers, Shannon Lucid, Jay Apt, and Carl E. Walz, continues activities aboard Atlantis as the nine astronauts and cosmonauts work in their second full day of docked operations. The continuing transfer of logistical supplies and scientific hardware can be seen proceeding smoothly. Apt and Walz once again worked with the Active Rack Isolation System experiment to replace a broken pushrod. With that complete, Apt monitors the ARIS experiment as Ready and Korzun fire small maneuvering jets on their spacecraft to test the ability of ARIS to damp out any disturbances created by the firings. Walz also is continuing his work with the Mechanics of Granular Materials experiment in Atlantis’ double Spacehab module. The astronauts used the large format IMAX camera to conduct a photo-
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.

CASI

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

19970910560 NASA Johnson Space Center, Houston, TX USA

STS-79 Flight Day 5
Sep. 20, 1996; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1996093681; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

On this fifth day of the STS-79 mission, the flight crew, Cmdr. William F. Readdy, Pilot Terrence W. Wilcutt, Mission Specialists, Thomas D. Akers, Shannon Lucid, Jay Apt, and Carl E. Walz, in the first full day of joint Shuttle/Mir operations begin in with the transfer of a biotechnology investigation and logistical supplies from Atlantis to Mir. The Biotechnology System, an investigation that will study the long-term development of cartilage cells in microgravity, was transported to Mir early this morning. During his planned four-month stay on Mir, John Blaha will take weekly samples of the culture which may provide researchers with information on engineering cartilage cells for possible use in transplantation. They also took time out of their schedules to talk with Good Morning America’s Elizabeth Vargas in a brief interview. Prior to beginning the day’s transfer activities, all nine astronauts and cosmonauts participated in a joint planning session to outline the day’s schedule.

CASI

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

19970910587 NASA Johnson Space Center, Houston, TX USA

STS-79 Flight Day 7
Sep. 22, 1996; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1996093679; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

On this seventh day of the STS-79 mission, the flight crew, Cmdr. William F. Readdy, Pilot Terrence W. Wilcutt, Mission Specialists, Thomas D. Akers, Shannon Lucid, Jay Apt, and Carl E. Walz, share a brief video tour of the Mir Space Station with flight controllers, taking a break from the transfer activities that has occupied the astronauts’ time during three days of docked operations. Readdy and Apt floated through several of Mir’s modules and back into Atlantis’ double Spacehab module during the tour pointing out the numerous transfer items stored on both spacecraft. Readdy, Wilcutt, Lucid and Blaha are seen discussing their mission in an interview with CNN’s John Holliman.

CASI

Space Transportation System Flights: Mir Space Station; Flight Control; Space Flight; Space Missions
1997/08/5089 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 Chadee Nicollier, and Payload Specialist Umberto Guidoni, present a video overview of their mission. Images include: pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the white room for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters (SRB). Also included are views of activities inside the Firing Control Room at KSC.
CASI
Space Transportation System; Spacecrews; Flight Crews; Countdown; Video Tapes

1997/08/5032 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 overview of their space flight. Images include: pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the white room for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Following an on-time launch, the crew of Endeavor are shown setting up a variety of experiments that will operate for much of the mission.
CASI
Space Transportation System; Spacecrews; Space Flight; Space Missions; Space Shuttle Missions; Space Transportation System Flights

1997/08/5042 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. Scarry, and Mission Specialists Shannon W. Lucid, Linda M. Godwin, Michael R. Clifford, and Ronald M. Sega, present a video overview of their space flight. Images include: pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the white room for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Once in orbit, various views of the Mir Space Station can be seen as the shuttle begins its approach and docking. These several views of Godwin and Clifford as they spent six hours spacewalking in Atlantis’s cargo bay and on the exterior of the Mir’s docking module. The mission ending re-entry and landing can also be seen.
CASI
Space Transportation System; Spacecrews; Spacecraft Docking; Mir Space Station; Flight Crews; Video Tapes

1997/08/5044 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 overview of their space flight. Images include: pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the white room for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Following an on-time launch, the crew of Endeavor are shown setting up a variety of experiments that will operate for much of the mission. Also seen is the deployment and inflation of the Spartan Satellite, experiments being conducted in the Spacehab module, thruster firing to stabilize the shuttle, and the mission ending re-entry and landing of the shuttle Endeavor. The crew than answers questions from the press.
CASI
Space Transportation System; Spacecrews; Launching; Flight Crews

1997/08/5058 National Aeronautics and Space Administration. Lyndon B. Johnson Space Center–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, Marshaa S. Ivins, Peter J.K. Wisoff, and John Blaha, and the cosmonauts of the Russian Space Station Mir continue to transfer hundreds of pounds of water, supplies, and logistical items to each other’s spacecraft. More than 1,300 pounds of water have now been transferred from Atlantis to the Mir to resupply the Russian outpost, along with equipment that will be used by astronaut Jerry M. Linenger during his four-month research mission. A bioprocessing device and...
an experiment used to grow cartilage cells during astronaut John Blaha’s four month stay on the Mir is also transferred to Atlantis for the trip back to Earth. Linenger spends most of the day collecting water samples from the Mir for analysis back on Earth and Blaha continues to exercise on a treadmill on the Mir to stay in shape for his return to Earth and a readaptation to gravity after four months of weightlessness. 

CASI
Space Transportation System Flights: Bioprocessing; Adaptation; Gravitation; Mir Space Station; Physical Exercise; Spacecrews; Supplying; Weightlessness

19970121039 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; Aval: 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, Marshsa 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,onauts and logistical supplies and experiment 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

19970121041 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; Aval: 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, Marshsa 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

19970121042 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; Aval: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fourteenth day of the STS-80 mission, the flight crew, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and E. Story Musgrave, spend this day working with tools inside the crew cabin. The astronauts answer questions on the status of their mission from reporters at the Johnson Space Center in Houston and the Kennedy Space Center in Florida during a news conference.

CASI
Space Transportation System Flights; Astronauts; Space Exploration; Space Flight; Space Missions

19970121043 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; Aval: 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, Marshsa 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

19970121048 National Aeronautics and Space Administration. Lyndon B. Johnson Space Center, Houston, TX USA
STS–80 Post Flight Presentation
Dec. 05, 1996; In English; Videotape: 40 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–97–1997021172; No Copyright; Aval: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Theflight 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

19970121049 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; Aval: 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, Jey Apt, and Carl E. Walz can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the ‘white room’ for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. STS-79 is the second Shuttle-Mir mission to carry a SPACEHAB module on board, and the first to carry a double module. The forward portion of the double module will house experiments conducted by the crew before, during and after Atlantis is docked to the Russian space station. The aft portion of the double module primarily houses the logistics equipment to be transferred to the Russian space station. Logistics include food, clothing, experiment supplies, and spare equipment for Mir.

CASI
Space Transportation System Flights; Supplying; Space Missions; Mir Space Station; Spacecrews; Logistics; Launching

19970121050 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; Aval: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this second day of the STS-80 mission, the flight crew, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave, complete the first major objective of the mission with the deployment of the Orbiting Retrievable Far and Extreme Ultraviolet Spectrometer (ORFEUS) on the reusable Shuttle Pallet Satellite. Release of ORFEUS from Columbia's robot arm came at 8 hours 15 minutes mission elapsed time. Three hours after the release, ground controllers inform the crew that the instrument package appears to be working properly. This begins two weeks of gathering data on the origin and makeup of stars.

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

1997012051 National Aeronautics and Space Administration. Lyndon B. Johnson Space Center, Houston, TX USA

STS-80 Flight Day 3
Nov. 22, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA–VT–97–1997021168; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

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

CASI Space Transportation System Flights: Spacecrews: Space Exploration: Space Flight: Space Missions

1997012052 National Aeronautics and Space Administration. Lyndon B. Johnson Space Center, Houston, TX USA

STS-80 Flight Day 12
Dec. 01, 1996; In English; Videotape: 13 min. playing time, in color, with sound Report No.(s): NONP-NASA–VT–97–1997021159; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this twelfth day of the STS-80 mission, the flight crew, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave, spend the day discussing the failed hatch with ground controllers. The failure of the hatch to properly open causes the cancellation of the second planned spacewalk by Jernigan and Jones. NASA engineers and managers continue to collect and analyze data on what may be causing the failure. The leading candidate is a misalignment of the hatch against the airlock seal.

CASI Space Transportation System Flights: Misalignment: Hatches: Failure: Air Locks

1997012053 National Aeronautics and Space Administration. Lyndon B. Johnson Space Center, Houston, TX USA

STS-80 Flight Day 13
Dec. 02, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA–VT–97–199721158; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this thirteenth day of the STS-80 mission, the flight crew, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave, are notified that the remaining spacewalks for the mission are to be canceled following extensive ground analysis and testing of the airlock hatch. Mission managers could not conclusively identify the problem that was causing the hatch to jam, and decided not to risk unnecessary damage to the hatch or seals.

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

1997012054 National Aeronautics and Space Administration. Lyndon B. Johnson Space Center, Houston, TX USA

STS-80 Flight Day 14
Dec. 03, 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 fourteenth day of the STS-80 mission, the flight crew, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave, are seen performing routine mission operations including monitoring experiments and discussing their mission

1997012055 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. Michael A. Baker, Pilot Brent W. Jett, Mission Specialists, John M. Grunsfeld, Marsha S. Ivins, Peter J.K. Wisoff, and John Blaha, prepare for the return back to earth. The shuttle's key flight control systems are checked for entry and landing phase of the mission. Commander Mike Baker and Pilot Brent Jett activate one of Atlantis' three hydraulic power units to test the shuttle's aerosurfaces. Baker and Jett fire Atlantis' steering jets in a routine prelanding checkout. The astronauts also test a medical restraint system in the Spacelab module, placing two crewmembers in the device. Crewmembers then begin to stow items away in the crew cabin, initiate the scheduled deactivation of Spacelab systems and associated hardware.

CASI Space Transportation System Flights: Spacecrews: Landing

1997012056 National Aeronautics and Space Administration. Lyndon B. Johnson Space Center, Houston, TX USA

Galileo Science Update Europa Unveiled
Jan. 17, 1997; In English; Videotape: 49 min. 48 sec. playing time, in color, with sound Report No.(s): NONP-NASA–VT–97–1997021170; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A five person panel discuss newly imaged photographs of the surface of Jupiter's satellite Europa. In the discussion the topics that are covered are: surface features, ice and water formation, erosion, volcanism, thermal dissipation, crustal spreading, plate tectonics, impact sites, exobiology, and life. The run time on this video is 49:48 the air date is 1/17/97.

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

1997012057 National Aeronautics and Space Administration. Lyndon B. Johnson Space Center, Houston, TX USA

STS-80 Flight Day 9
Nov. 28, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA–VT–97–1997021162; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, 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 prebreath pure oxygen before beginning the spacewalk. The first spacewalk will allow the astronauts to evaluate assembly and maintenance techniques that will be used for construction of the International Space Station.

CASI Space Transportation System Flights: International Space Station: Pressure Reduction

1997012058 National Aeronautics and Space Administration. Lyndon B. Johnson Space Center, Houston, TX USA

STS-80 Flight Day 10
Jan. 18, 1997; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA–VT–97–1997021175; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this tenth day of the STS-80 mission, the flight crew, Cmdr. Michael A. Baker, Pilot Brent W. Jett, Mission Specialists, John M. Grunsfeld, Marsha S. Ivins, Peter J.K. Wisoff, and John Blaha, prepare for the return back to earth. The shuttle's key flight control systems are checked for entry and landing phase of the mission. Commander Mike Baker and Pilot Brent Jett activate one of Atlantis' three hydraulic power units to test the shuttle's aerosurfaces. Baker and Jett fire Atlantis' steering jets in a routine prelanding checkout. The astronauts also test a medical restraint system in the Spacelab module, placing two crewmembers in the device. Crewmembers then begin to stow items away in the crew cabin, initiate the scheduled deactivation of Spacelab systems and associated hardware.

CASI Space Transportation System Flights: Spacecrews: Landing
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; VHS tape: 20 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–97–1997021181; No Copyright; Avail: CASI; B02, VHS tape; V02, VHS tape
On this fourth day of the STS-81 mission, the flight crew, Commander Michael A. Baker, Pilot Brent W. Jett, Mission Specialists, John M. Grunsfeld, Martha S. Ivins, Peter J.K. Wisoff, and Jerry M. Linenger, prepare for the fifth linkup of the Space Shuttle and the Mir Space Station. The Atlantis docks with Mir at a point 210 nautical miles above the Earth’s surface, culminating a three-day rendezvous. Two hours after docking, the hatch between Atlantis and Mir are opened and Baker and Mir 2 Commanders 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; VHS tape: 13 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–97–1997021167; No Copyright; Avail: CASI; B01, VHS tape; V01, VHS tape
On this fourth day of the STS-80 mission, the flight crew, Commander Kenneth D. Cochrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Ermishina, 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 satellite battery back and forth around the cargo bay.

CASI
Space Transportation System Flights; Spacecrews; Extravehicular Activity; International Space Station

1997012101 National Aeronautics and Space Administration. Lyndon B. Johnson Space Center, Houston, TX USA
STS–81 Flight Day 8
Jan. 19, 1997; In English; VHS tape: 15 min. 51 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–97–1997021178; No Copyright; Avail: CASI; B02, VHS tape; V02, VHS tape
On this eighth day of the STS-81 mission, the flight crew, Commander Michael A. Baker, Pilot Brent W. Jett, Mission Specialists, John M. Grunsfeld, Martha 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, Martha Ivins and John Blaha say goodbye to Mir 22 Commander Valery Korzun, Flight Engineer Alexander Kaleri and the newest Mir crewmember, astronaut Jerry Linenger. The hatches on the two spacecraft are closed.

CASI
Space Transportation System Flights; Spacecrews; Space Flight; Space Missions
days. Cockrell flawlessly takes the shuttle to within 35 feet of the satellite and Jones latches the mechanical arm onto the Wake Shield, as the shuttle flies 220 miles above South America.

CASI

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

1997012107 National Aeronautics and Space Administration. Lyndon B. Johnson Space Center, Houston, TX USA

STS-80 Flight Day 6 Nov. 25, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA-VE-97--1997021165; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this sixth day of the STS-80 mission, the flight crew, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave, are awakened to news from Mission Control that the ORFEUS-SPAS astronomy satellite may be closing in on the Wake Shield Facility satellite slightly faster than originally predicted. The Orbiting and Retractable 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-CAPI 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-VE-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-CAPI) experiment. Later in the day Musgrave is interviewed by CBS News.

CASI

Space Transportation System Flights; Supplying; Spacecrews; Microgravity; Gravitational Effects

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

STS-81 Flight Day 1 Jan. 12, 1997; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA-VE-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, Mmbasa S. Ivins, Peter J.K. Wisoff, and Jerry M. Linenger, performing pre-launch activities such as eating the traditional breakfast, being suit-ed 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-VE-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, Mmbasa 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 Biocrack multipurpose facility which is designed to investigate the effects of microgravity and radiation on plant tissue, cell and filament growth. Mission Specialists Jeff Wisoff and John Grunsfeld spend much of their work day setting up and performing initial work in the experiment’s glove box.

CASI

Space Transportation System Flights; Spacelab Payloads; Mir Space Station; Spacecrews; Exobiology

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

STS-81 Flight Day 9 Jan. 20, 1997; In English; Videotape: 15 min. 35 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VE-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, Mmbasa S. Ivins, Peter J.K. Wisoff, and John Blaha, are flying on their own after undocking the Mir Space Station. Following the separation Pilot Brent Jett initiates a two-revolution flyaround of the Russian complex at a distance of about 560 feet, Jett fires maneuvering jets to separate Atlantis from Mir for the final time until May, when the shuttle will return on STS-84 to deliver astronaut Mike Foale to the outpost as Jerry M. Linenger’s replacement.

CASI

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

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

STS-80 Flight Day 1 Nov. 20, 1996; In English; Videotape: 15 min. 40 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VE-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 suit-ed 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

1997017668 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-VE-97--199702655; 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 suit-ed up, and riding out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is readied in the ‘white room’ for their mission. After the closing of the hatch and
arm retraction, launch activities are shown including the countdown, engine igni-
tion, launch, and the separation of the Solid Rocket Boosters (SRB) from the
shuttle. The crew completes the first major objective of the mission with the
deployment of the Orbiting Retrievable Far and Extreme Ultraviolet Spectrom-
eter (ORFEUS) on the reusable Shuttle pallet satellite. The crew then begins
final preparations for the release of Space Shield. Jones powers up the shuttle’s
Canadian-built robot arm and grapples the satellite, while Jernigan powers up
the Orbiter Space Vision System, which will be used to track precisely the Space
Shield’s location. Cockrell places Columbia in a gravity gradient attitude to mini-
mize disturbances during the release. Jones uses the robot arm to hold Space
Shield in position for a two-and-a-half hour cleansing by atomic oxygen mole-
cules before moving the unit to the deploy position. The failure of the hatch to
properly open causes the cancellation of all EVA's planned for this mission by
Jernigan and Jones. The mission ends with the shuttle landing at the Kennedy
Space Center.

CASI
Space Transportation System Flights: Space Shuttle Missions: Space Shuttle
Payloads: Spaceviews: Flight Crews; Far Ultraviolet Radiation: Extravehicular
Activity: Deployment

STS-82 Day 06 Highlights
Feb. 15, 1997; In English; Videotape: 19 min. playing time, in color, with sound
Report No.(s): NONP NASA–VT–1997020606; 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
Insulation

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–1997020601; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
The seventh day of the STS-82 mission begins with the crew, Commander
Kenneth D. Bowersox, Pilot Scott J. Horowitz, Payload Commander Mark C. Lee,
and Mission Specialists Gregory J. Harbaugh, Steven L. Smith, Joseph R. Tanner,
and Steven A. Hawley performing their third spacewalk of the mission by
emerging from Discovery's airlock. Their first task is the replacement of a Solar
Array Drive Electronics package which is used to control the positioning of
Hubble’s solar arrays. Harbaugh and Tanner next ventured to the top of the telescope
where they replaced covers over Hubble's magnetometers, which are used to sense
the telescope’s position in relation to the Earth through data acquired from the
Earth’s magnetic field. The spacewalking astronauts then place thermal blankets
of multi-layer material over two areas of degraded insulation around the light shield
portion of the telescope just below the top of the astronomical observatory.

CASI
Space Transportation System: Astronomical Observatories: Geomagnetism:
Magnetometers: Solar Arrays: Thermal Insulation: Spaceviews: Hubble Space
Telescope

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–1997020600; 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 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-
nearing and Science Tape Recorder with a new digital Solid State Recorder
(SSR) that allows 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: Spaceviews: Reaction Wheels
Kenneth D. Bowersox, Pilot Scott J. Horowitz, Payload Commander Mark C. Lee, and Mission Specialists Gregory J. Harbaugh, Steven L. Smith, Joseph R. Tanner, and Steven A. Hawley checking out Discovery’s flight control systems in preparations for returning to Earth. The seven astronauts flew equipment and prepared 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 Flights; Space Shuttle Missions; Space Transportation System Flights

19970117672 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–1997026605; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The first day of the STS-82 mission begins with the crew, Commander Kenneth D. Bowersox, Pilot Scott J. Horowitz, Payload Commander Mark C. Lee, and Mission Specialists Gregory J. Harbaugh, Steven L. Smith, Joseph R. Tanner, and Steven A. Hawley performing pre-launch activities such as eating the traditional breakfast, being suited up, and riding out to the launch pad. Also included are various panoramic views of the shuttle on the pad. The crew is seated in the ‘white room’ for their mission. After the closing of the hatch, and arm retraction, launch activities are shown including the countdown, engine ignition, launch, shuttle roll maneuver, and then the separation of the Solid Rocket Boosters (SRB) from the shuttle. Once in orbit the cargo bay doors are seen opening.
CASI
Space Transportation System Flights; Space Shuttle Missions; Space Shuttle Payloads; Countdown; Spacecrews; Launching; Ignition

19970117673 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–1997026606; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On the second day of the STS-82 mission, the crew Commander Kenneth D. Bowersox, Pilot Scott J. Horowitz, Payload Commander Mark C. Lee, and Mission Specialists Gregory J. Harbaugh, Steven L. Smith, Joseph R. Tanner, and Steven A. Hawley survey the payload bay with the Shuttle’s 50-foot remote manipulator system (RMS). Hawley puts the arm through its paces to verify it’s ability to capture the Hubble Space Telescope (HST). To prepare for the upcoming spacewalks, the astronauts assemble on the middeck to checkout tools they will use while servicing the telescope.
CASI
Space Transportation System Flights; Space Shuttle Payloads; Spacecrews; Remote Manipulator System; Hubble Space Telescope

19970117674 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–1997026605; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The third day of the STS-82 mission begins with the crew, Commander Kenneth D. Bowersox, Pilot Scott J. Horowitz, Payload Commander Mark C. Lee, and Mission Specialists Gregory J. Harbaugh, Steven L. Smith, Joseph R. Tanner, and Steven A. Hawley successfully retrieving the Hubble Space Telescope. Hawley then lowers the 12-ton observatory onto the Flight Support System berthing platform in Discovery’s cargo bay, where it is latched in place for servicing. The astronauts are then seen in the mid-deck preparing for the first of four spacewalks designed to service and upgrade the scientific capabilities of the Hubble Space Telescope.
CASI
Space Shuttle Missions; Space Transportation System Flights; Hubble Space Telescope; Spacecrews; Space Flight

19970117683 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–1997026656; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
The STS-82 crew, Commander Kenneth D. Bowersox, Pilot Scott J. Horowitz, Payload Commander Mark C. Lee, and Mission Specialists Gregory J. Harbaugh, Steven L. Smith, Joseph R. Tanner, and Steven A. Hawley present a video and still picture overview of their mission. Included in the presentation are the following: the pre-launch activities such as eating the traditional breakfast, being suited up, and riding out to the launch pad, various panoramic views of the shuttle on the pad, the countdown, engine ignition, launch, shuttle roll maneuver, separation of the Solid Rocket Boosters (SRB) from the shuttle, survey of the payload bay with the Shuttle’s 50-foot remote manipulator system (RMS), the successful retrieval of the Hubble Space Telescope (HST), EVA’s to repair HST, release of HST, and the shuttle’s landing.
CASI
Space Shuttle Payloads; Space Transportation System Flights; Space Shuttle Missions; Spacecrews; Flight Crews; Hubble Space Telescope; Extravehicular Activity
STS-82 Mission Highlight Presentation
Jun. 02, 1997; In English; Videotape: 59 min. 31 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1997032904; No Copyright; Avail: CASI; B03, Videotape-Beta: V03, Videotape-VHS

The STS-82 is the second in a series of planned service missions to the Hubble Space Telescope (HST). The flight crew of STS-82, Cmdr. Kenneth D. Bowersox, Pilot Scott J. Horowitz, Mission specialists, Mark C. Lee, Steven A. Hawley, Gregory J. Harbaugh, Steven L. Smith, and Joseph R. Tanner can be seen performing pre-launch activities preparing for the night launch. The crew meets the press for pre-launch photos before being transported to the launch pad.

Several views can be seen of the final inspection team on the O level and the crew being excised in the 'white room'. Launch activities such as the oxygen vent, hood retraction, liftoff, SRB separation, and personnel activities in the Houston Integrated Mission Control room are viewed. Subsequent footage is provided of the crew's activities during the HST rendezvous and docking. Extravehicular Activities (EVA's) preparation and EVA numbers 1, 3 and 5. During the first EVA the earth can be seen clearly in a reflection off of HST's offshoroid during its 60th orbit crossing the equator. The HST deployment and views of the Hale-Bopp comet are clearly seen before Discovery's reentry and landing. After reentry a beautiful view of Discovery moving at 10,400 mph can be seen looking east from Mission Control. The usual twin sonic boom precedes Discovery's touchdown on runway 15 at Kennedy Space Center. This second HST service mission orbited Earth 150 times and traveled 1.4 million miles.

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

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--1997047959; 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, Marshi S. Ivans, Peter J.K. Wisoff, and John M. Linzenger 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 Day 02
Jul. 02, 1997; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1997047945; No Copyright; Avail: CASI; B01, Videotape-Beta: V01, Videotape-VHS

On this second day of the STS-83 mission, the flight crew, Cmdrs. James D. Halsell, Jr. Pilot Susan L. Still, Payload Crew, Janice E. Voss, Mission Specialists Michael L. Gernhardt and Donald A. Thomas, and Payload Specialists Gregory T. Lintzler 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 Spacelab science module in Columbia'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 Lintzler continues the activation of Protein Crystal Growth experiments.

CASI

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

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

CASI
Hulsell, 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 complete science work aboard Spacelab module and begin deactivating experiments in preparations for an early return to Earth.

CASI

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

19970027236 NASA Johnson Space Center, Houston, TX USA
STS-83 Day 03
Jul. 03, 1997; In English; Videotape: 15 min. playing time, in color, with sound Report No. (s): NONP--NASA--VT--1997047946; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this third day of the STS-83 mission, the flight crew, Cmdr. James D. Hulsell 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; Space Processing; Spacelab Payloads; Spaceborne Experiments

19970027237 NASA Johnson Space Center, Houston, TX USA
STS-83 Day 01
Jul. 01, 1997; In English; Videotape: 21 min. playing time, in color, with sound Report No. (s): NONP--NASA--VT--1997047944; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-83 mission, the flight crew, Cmdr. James D. Hulsell 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 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: Spaceship Launching; Spacelab; Spaceborne Experiments; Astronauts; Space Processing; PreFlight Operations

19970027679 NASA Johnson Space Center, Houston, TX USA
STS-84 Day 03 Highlights
May 23, 1995; In English; Videotape: 15 min. playing time, in color, with sound Report No. (s): NONP--NASA--VT--1997053793; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this 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) complete 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: Spaceship; Space Stations; Payloads; Astronauts

19970027680 NASA Johnson Space Center, Houston, TX USA
STS-84 Post Flight Presentation
May 24, 1995; In English; Videotape: 55 min. 11 sec. playing time, in color, with sound Report No. (s): NONP--NASA--VT--1997053794; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The STS-84 mission flight crew, 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, present a post flight analysis of their mission through the use of color slides and video footage. Pre-launch and launch activities are shown and briefly discussed. The astronauts take turns talking about different aspects of their specific roles during the mission.

CASI

Space Transportation System Flights: Spaceship; PostFlight Analysis; Payloads; Astronauts

19970027685 NASA Johnson Space Center, Houston, TX USA
STS-84 Day 05 Highlights
May 10, 1995; In English; Videotape: 16 min. 30 sec. playing time, in color, with sound Report No. (s): NONP--NASA--VT--1997053789; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fifth day of the STS-84 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Eileen M. Collins, Payload 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: Spaceship; Space Stations; Payloads; Astronauts

19970027686 NASA Johnson Space Center, Houston, TX USA
STS-84 Day 06 Highlights
May 20, 1995; In English; Videotape: 15 min. playing time, in color, with sound Report No. (s): NONP--NASA--VT--1997053790; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this sixth day of the STS-84 mission, the flight crew, 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 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: Spaceship; 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 Vasily Tsibliev came moments before the hatches between Atlantis and Mir swung shut.

CASI

Space Transportation System Flights; Spacecrews; Payloads; Astronauts

1997/04/27/01 NASA Johnson Space Center, Houston, TX USA
STS-84 Day 02 Highlights
May 22, 1995; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA–VT–1997053792; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

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

CASI

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

1997/04/27/02 NASA Johnson Space Center, Houston, TX USA
STS-84 Day 04 Highlights
May 18, 1995; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA–VT–1997053788; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fourth day of the STS-84 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Eileen M. Collins, Payload Cmdr. Jean-Francois Clervoy (ESA), Mission Specialists Edward T. Lu, Carlos I. Noriega, Elena V. Kondakova, Jerry M. Linenger (download), and C. Michael Foale (upload) 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 Bioreack facility and transferred items to and from the Mir Space Station. In an interview with CBS News, Precourt and Tsibliev praise the athit joint docking mission between the U.S. and Russia, indicating it is serving as a worthwhile 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

1997/04/27/16 NASA Johnson Space Center, Houston, TX USA
STS-84 Day 05 Highlights
May 17, 1995; In English; Videotape: 18 min. playing time, in color, with sound Report No.(s): NONP-NASA–VT–1997053787; No Copyright; Avail: CASI; 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 greets 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 give Tsibliev and Flight Engineer Alexander Larutkin 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

1997/04/27/17 NASA Johnson Space Center, Houston, TX USA
STS-84 Day 02 Highlights
May 16, 1995; In English; Videotape: 18 min. playing time, in color, with sound Report No.(s): NONP-NASA–VT–1997053786; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this second day of the STS-84 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Eileen M. Collins, Payload Cmdr. Jean-Francois Clervoy (ESA), Mission Specialists Edward T. Lu, Carlos I. Noriega, Elena V. Kondakova, Jerry M. Linenger (download), and C. Michael Foale (upload) 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

1997/04/27/18 NASA Johnson Space Center, Houston, TX USA
STS-84 Day 01 Highlights
May 15, 1995; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP-NASA–VT–1997053785; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this first 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) 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; Payloads; Launching; Ignition; Spacecrews

1997/05/02/13 NASA Johnson Space Center, Houston, TX USA
STS-94 Day 02 Highlights
Jul. 02, 1995; In English; Videotape: 14 min. playing time, in color, with sound Report No.(s): NONP-NASA–VT–1997051162; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this eighth day of the STS-94 mission, the flight crew, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists Michael L. Gernhardt and Donald A. Thomas, and Payload Specialists Gregory T. Linternis and Roger K. Crouch conduct status checks and perform video documentation of some of the Microgravity Science Laboratory experiments and activities in the Spacehab. The first part of Pilot Susan Still’s day involves monitoring orbiter systems and working an in-flight maintenance procedure with the Shuttle Amateur Radio Experiment (SAREX).

CASI

Space Transportation System Flights; Spaceborne Experiments; Spacehab; Microgravity

1997/05/02/14 NASA Johnson Space Center, Houston, TX USA
STS-94 Day 03 Highlights
Jul. 02, 1995; In English; Videotape: 14 min. playing time, in color, with sound Report No.(s): NONP-NASA–VT–1997051163; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this ninth day of the STS-94 mission, the flight crew, Cmdrs. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists Michael L. Gernhardt and Donald A. Thomas, and Payload Specialists Gregory T. Linternis and Roger K. Crouch are seen continuing the payload activ-
tion process, as the research efforts of the Microgravity Science Laboratory (MSL) mission get into full swing.

**Space Transportation System Flights: Spacecrews: Payloads**

1997028440 NASA Johnson Space Center, Houston, TX USA

STS-94 Day 03 Highlights
Jul. 03, 1995; In English; Videotape: 12 min. playing time, in color, with sound
Report No.(s): NONP-NASA—VT—1997051157; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this third day of the STS-94 mission, the flight crew, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload 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.

**Space Transportation System Flights: Spacecrews: Space Shuttles: Payloads**

1997028441 NASA Johnson Space Center, Houston, TX USA

STS-94 Day 04 Highlights
Jul. 04, 1995; In English; Videotape: 10 min. playing time, in color, with sound
Report No.(s): NONP-NASA—VT—1997051158; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fourth day of the STS-94 mission, the flight crew, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists 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.

**Space Transportation System Flights: Payloads: Spacecrews**

1997028442 NASA Johnson Space Center, Houston, TX USA

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 Specialist Gregory T. Linteris and Roger K. Crouch continue their around-the-clock work with the Microgravity Science Laboratory experiments. During the morning period, Thomas works with the Large Isothermal Furnace experiment and the Glovebox unit. Columbia’s systems continue to operate properly, providing a stable platform for microgravity science operations.

**Space Transportation System Flights: Spacecrews: Payloads: Gravitational Effects**

1997028458 NASA Johnson Space Center, Houston, TX USA

STS-94 Day 08 Highlights
Jul. 08, 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


**Space Transportation System Flights: Space Shuttles: Payloads: Space Flight: Space Shuttles**

1997028466 NASA Johnson Space Center, Houston, TX USA

STS-94 Day 14 Highlights
Jul. 14, 1995; In English; Videotape: 14 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP-NASA—VT—1997051167; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this sixteenth day of the STS-94 mission, the flight crew, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists 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 Coarsening in Solid-Liquid Mixtures experiment.

**Space Transportation System Flights: Space Shuttle Boosters: Launching; Booster Rocket Engines**

1997028467 NASA Johnson Space Center, Houston, TX USA

STS-94 Day 09 Highlights
Jul. 09, 1995; In English; Videotape: 13 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP-NASA—VT—1997051163; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this ninth day of the STS-94 mission, the flight crew, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists Micheal L. Gemhardt and Donald A. Thomas, and Payload Specialists Gregory T. Linteris and Roger K. Crouch spend their morning in the Spacelab module working on several experiments. Thomas has been working with the Large Isothermal Furnace (LIF), a vacuum-heating furnace designed to heat large samples uniformly; the Maldeck Glovebox (MGBox) unit; and the Internal Flows in a Free Drop Experiment (IFFD). The IFFD experiment involves containerless processing of materials using acoustic positioning techniques.

**Space Transportation System Flights: Spacelab: Spacecrews: Payloads: Aeronautic Levitation**

1997028468 NASA Johnson Space Center, Houston, TX USA

STS-94 Day 12 Highlights
Jul. 12, 1995; In English; Videotape: 16 min. playing time, in color, with sound
Report No.(s): NONP-NASA—VT—1997051166; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this twelfth day of the STS-94 mission, the flight crew, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists 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 - provide on-orbit assistance to
ground controllers throughout the mission conducting these, and as many as 30
other, experiments in the Spacelab pressurized module. The goal is to emulate
what laboratory work will be like on the future International Space Station.
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 Cmdr. Janice E. Voss, Mission
Specialists Michael L. Gernhardt and Donald A. Thomas, and Payload Specialist
Gregory T. Linteris and Roger K. Crouch conduct an interview with CBS’ Up to
the Minute” program during which they discuss the activities and progress that
has been made so far on the flight.

CASI

Space Transportation System Flights: Spacecrews; 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 Cmdr. Janice E. Voss, Mission
Specialists Michael L. Gernhardt and Donald A. Thomas, and Payload Specialists
Gregory T. Linteris and Roger K. Crouch are more than one week into mission.
The seven crewmembers aboard Columbia are continuing their around-the-clock
science investigations in the Spacelab module, focusing on how various mate-
rials and liquids change and behave in a microgravity environment.

CASI

Space Transportation System Flights: Spacecrews; Spacelab; Microgravity

19970128507 NASA Johnson Space Center, Houston, TX USA

STS–85 Day 07 Highlights
Jul. 07, 1997; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997070716; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

On this seventh day of the STS-85 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 continue their around-the-clock
scientific effort to examine how various materials and liquids change and behave
in the weightless environment of space. With Columbia providing a stable plat-
form for scientific activity, the seven-member crew has been able to devote its
full attention to the more than 30 Microgravity Science Laboratory (MSL) exper-
iments on board.

CASI

Space Transportation System Flights: Spacecrews; Payloads; Microgravity

19970128512 NASA Johnson Space Center, Houston, TX USA

STS–85 Day 15 Highlights
Jul. 15, 1997; 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-85 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 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

19970828513 NASA Johnson Space Center, Houston, TX USA

STS–94 Day 16 Highlights
Jul. 16, 1995; In English; Videotape: 12 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997051169; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

On this sixteenth day of the STS-94 mission, the flight crew, Cmdr. James
D. Halsell, Jr., Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission
Specialists Michael L. Gernhardt and Donald A. Thomas, and Payload 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

19970829326 NASA Johnson Space Center, Houston, TX USA

STS–85 Day 01 Highlights
Aug. 07, 1997; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997070719; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

On this first day of the STS-85 mission, the flight crew, Cmdr. Curtis L.
Brown, Jr., Pilot Kent V. Rominger, Payload Cmdr. N. Jan Davis (Ph.D.), Mission
Specialist Robert L. Curbeam, Jr., and Stephen K. Robinson (Ph.D.), and
Payload Specialist Bjarni V. Tryggvason can be seen performing pre-launch
activities such as eating the traditional breakfast, crew suit-up, and the ride out
to the launch pad. Also, included are various panoramic views of the shuttle on
the pad. The crew can be seen being readied in the ‘white room’ for their mission.
After the closing of the hatch and arm retraction, launch activities are shown
including countdown, engine ignition, launch, and the separation of the Solid
Rocket Boosters.

CASI

Space Transportation System Flights: Spacecrews; Countdown; Launching;
Space Exploration; Space Flight

19970830546 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–1997070718; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

On this sixth day of the STS-85 mission, the flight crew, Cmdr. Curtis L.
Brown, Jr., Pilot Kent V. Rominger, Payload Cmdr. N. Jan Davis (Ph.D.), Mission
Specialists Robert L. Curbeam, Jr. and Stephen K. Robinson (Ph.D.), and
Payload Specialist Bjarni V. Tryggvason today continue their work with the
Bioreactor Demonstration System designed to perform cell biology experiments
under controlled conditions. Tryggvason, today continues his work with the
Microgravity Vibration Isolation Mount which uses magnets to levitate a plat-
form and protect sensitive microgravity processing experiments from vibrations.

CASI

Space Transportation System Flights: Space Transportation System;
Microgravity; Bioreactors

19970835047 NASA Johnson Space Center, Houston, TX USA

STS–85 Day 08 Highlights
Aug. 11, 1997; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997070717; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

On this fifth day of the STS-85 mission, the flight crew, Cmdr. Curtis L.
Brown, Jr., Pilot Kent V. Rominger, Payload Cmdr. N. Jan Davis (Ph.D.), Mission
Specialists Robert L. Curbeam, Jr. and Stephen K. Robinson (Ph.D.), and
Payload Specialist Bjarni V. Tryggvason once again test the small robotic m_n
once again test the small robotic m_n
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 continue to conduct and monitor experiments designed to perform cell biology experiments under controlled conditions. Tryggvason spent part of his time troubleshooting a computer hard drive system that supports the Microgravity Vibration Isolation Mount experiment.

CASI
Space Transportation System Flights: Space Transportation System: Bioreactors: Microgravity: Gravitational Effects

Payload Satellites: Robot Arms: Manipulators: International Space Station: Astronauts

19970835957 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. Linteris and Roger K. Crouch can be seen preparing for 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

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

Report No.(s): NONP--NASA--VT--1997047842; No Copyright; Avail: CASI; B01, Videotape-Beta: V01, Videotape-VHS

On this second day of the STS-85 mission, the flight crew, Cmdr. Curtis L. Brown, Jr., Pilot Kent V. Rominger, Payload Cmdr. N. Jan Davis (Ph.D.), Mission Specialists Robert L. Curbeam, Jr. and Stephen K. Robinson (Ph.D.), and Payload Specialist Bjarni V. Tryggvason activated instruments of the Technology Applications and Science (TAS), including the Shuttle Laser Altimeter, the Infrared Spectral Imaging Radiometer (ISIR), the Cryogenic On-Orbit Long Life Active Refrigerator (COOLAR), Two Phase Flow (TPF), Critical Viscosity of 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 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 WTVD-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 and 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 (NASDA), 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 (NASDA), 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 spacewalks, 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 Transportation System Flights: Space Station; Robot Engines; Space Station; Robot Arm Systems; Transportation Systems; Manipulators; Spacecrafts: Flight Tests; Space Station; Robots
STS-72 Mission Update Flight Day 8

On this fifth day of the STS-72 mission, the flight crew, Cmdr. Brian Duffy, Pilot Brent W. Jett, and Mission Specialists Leroy Chiao, Daniel T. Berry, Winston E. Scott, and Koichi Wakata (NASDA), awakened to music from the television show, "Star Trek: The Next Generation". Chiao and Barry are shown suiting 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

STS-72 Flight Day 6

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 third day of the STS-72 mission, the flight crew, Cmdr. James D. Wetherbee, Jr., Pilot Michael J. Bloomfield, Mission Specialists Scott E. Parazynski, Jean-Loup Chretien, Vladimir G. Titov, Wendy B. Lawrence and David A. Wolf can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the "white room" for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters.

CASI
Space Transportation System; Space Transportation System Flights; Space Shuttle Missions; Endeavour (Orbiter); Media; Television Systems

STS-72 Flight Day 5

Jan. 14, 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 music from the television show, "Star Trek: The Next Generation". Chiao and Barry are shown suiting 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

STS-72 Mission Update Flight Day 9

On this first day of the STS-86 mission, the flight crew, Cmdr. James D. Wetherbee, Jr., Pilot Michael J. Bloomfield, Mission Specialist Scott E. Parazynski, Jean-Loup Chretien, Vladimir G. Titov, Wendy B. Lawrence and David A. Wolf can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the "white room" for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters.

CASI
Space Transportation System; Space Transportation System Flights; Space Shuttle Missions; Endeavour (Orbiter); Media; Television Systems

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 space walk was almost seven hours long. Wakata conducted an interview with and answered questions from six graders from a Japanese school in Houston, Texas.

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

STS-86 Day 02 Highlights

Sep. 26, 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 B. 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; Space Shuttle Missions; Endeavour (Orbiter); Media; Television Systems

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 B. Lawrence and David A. Wolf conduct a series of engine firings that are designed to refine Atlantis' approach to Mir. With its crewmates providing range rate and closure data obtained from a variety of sensors 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 to greet each other in the airlock. Wetherbee hands Solovyev a new computer for the Mir which was brought into orbit by Atlantis for installation following the docking phase of the mission. The ten crewmembers spend a few minutes greeting one another at the start of their joint work which will involve the transfer of some four tons of supplies and water from Atlantis to the Mir.

CASI

Space Transportation System Flights; Space Transportation System; Spacecraft Docking; Spacecrews

1998006564 NASA Johnson Space Center, Houston, TX USA
STS–86 Day 04 Highlights
Sep. 28, 1997; In English; Videotape: 21 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997077155; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this forth day of the STS-86 mission, the flight crew, Cmdr. James D. Wetherbee, Jr., Pilot Michael J. Bloomfield, Mission Specialists Scott E. Parazynski, Jean-Loup Chretien, Vladimir G. Titov, Wendy B. Lawrence and David A. Wolf spend their first full day aboard the Atlantis-Mir space complex. The ten astronauts and cosmonauts begin the transfer of more than four tons of supplies. With that transfer, Mike Foale will conclude 134 days as a Mir crew member and board Atlantis as a member of the STS-86 crew. Foale spends time with Wolf, acquainting him with his new home and showing him the location of experiments and hardware.

CASI

Space Transportation System; Space Transportation System Flights; Spacecrews; Supplying; Payload Delivery (STS); Space Shuttle Main Engine; Space Shuttle Missions; Space Shuttle Orbiters; Space Shuttle Payloads

1998006565 NASA Johnson Space Center, Houston, TX USA
STS–86 Day 05 Highlights
Sep. 29, 1997; In English; Videotape: 17 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997077157; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fifth day of the STS-86 mission, the flight crew, Cmdr. James D. Wetherbee, Jr., Pilot Michael J. Bloomfield, Mission Specialist Scott E. Parazynski, Jean-Loup Chretien, Vladimir G. Titov, Wendy B. Lawrence and Mike Foale continue their transfer activities today; moving more supplies and water to the Russian outpost as U.S. astronaut Dave Wolf settles in for his four-month mission on the space station.

CASI

Space Transportation System; Space Transportation System Flights; Spacecrews; Supplying; Space Stations; Payload Retrieval (STS)

1998006566 NASA Johnson Space Center, Houston, TX USA
STS–86 Day 07 Highlights
Oct. 01, 1997; In English; Videotape: 21 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997077158; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this seventh day of the STS-86 mission, the flight crew, Cmdr. James D. Wetherbee, Jr., Pilot Michael J. Bloomfield, Mission Specialists Scott E. Parazynski, Jean-Loup Chretien, Vladimir G. Titov, Wendy B. Lawrence and Mike Foale are seen in preparations for a planned five-hour spacewalk to retrieve four experiment packages and to test tools and techniques for construction of the International Space Station. Parazynski and Titov are seen floating out of a hatch on Atlantis' tunnel adapter in front of the Orbiter Docking System to begin their spacewalk. They then affix a 121-pound instrument called a Solar Array Cap to the Docking Module for future use by Russian cosmonauts to seal off a suspected breach in the hull of the Spektor Module.

CASI

International Space Station; Solar Arrays; Space Transportation System; Space Transportation System Flights; Spacecraft Docking; Spacecrews

1998006567 NASA Johnson Space Center, Houston, TX USA
STS–86 Day 08 Highlights
Oct. 02, 1997; In English; Videotape: 23 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997077159; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eighth day of the STS-86 mission, the flight crew, Cmdr. James D. Wetherbee, Jr., Pilot Michael J. Bloomfield, Mission Specialists Scott E. Parazynski, Jean-Loup Chretien, Vladimir G. Titov, Wendy B. Lawrence and Mike Foale and the Mir crew take a break from their busy schedules to hold a news conference. They talk with media assembled in the USA, Russia and France.

CASI

Space Transportation System; Space Transportation System Flights; Spacecrews; Remote Manipulator System; Space Shuttle Main Engine; Space Shuttle Missions; Space Shuttle Orbiters; Space Shuttle Payloads

1998006568 NASA Johnson Space Center, Houston, TX USA
STS–86 Day 10 Highlights
Oct. 04, 1997; In English; Videotape: 23 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997077161; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this tenth day of the STS-86 mission, the flight crew, Cmdr. James D. Wetherbee, Jr., Pilot Michael J. Bloomfield, Mission Specialist Scott E. Parazynski, Jean-Loup Chretien, Vladimir G. Titov, Wendy B. Lawrence and Mike Foale are seen talking with four test subjects in an advance life support test underway at the Johnson Space Center in Houston. The test team entered a closed chamber in Houston September 19 and will remain sealed inside until late December evaluating the effectiveness of regenerative life support systems that could be used for extended space missions.

CASI

Space Missions; Space Transportation System; Space Transportation System Flights; Spacecrews; Payload Integration Plan; Space Shuttle Main Engine

1998006569 NASA Johnson Space Center, Houston, TX USA
STS–86 Day 11 Highlights
Oct. 05, 1997; In English; Videotape: 18 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997077160; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eleventh day of the STS-86 mission, the flight crew, Cmdr. James D. Wetherbee, Jr., Pilot Michael J. Bloomfield, Mission Specialist Scott E. Parazynski, Jean-Loup Chretien, Vladimir G. Titov, Wendy B. Lawrence and Mike Foale are seen undocking from the Mir. There are various external views of the two vehicles as they fly over southeastern Russia just north of Mongolia.

CASI

Space Transportation System; Space Transportation System Flights; Spacecrews; Space Shuttle Main Engine; Space Shuttle Missions; Space Shuttle Orbiters; Space Shuttles

1998006570 NASA Johnson Space Center, Houston, TX USA
STS–86 Day 12 Highlights
Oct. 06, 1997; In English; Videotape: 23 min. 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 twelfth day of the STS-86 mission, the flight crew, Cmdr. James D. Wetherbee, Jr., Pilot Michael J. Bloomfield, Mission Specialist Scott E. Parazynski, Jean-Loup Chretien, Vladimir G. Titov, Wendy B. Lawrence and Mike Foale are seen discussing their mission objectives in an interview with CNN, PBS and the Russian media.

CASI

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

1998006571 NASA Johnson Space Center, Houston, TX USA
STS–87 Day 02 Highlights
Nov. 29, 1997; In English; Videotape: 11 min. 11 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997125962; No Copyright; Avail: CASI;
B01. Videotape-Beta; V01, Videotape-VHS

On this second day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk 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.

CASI

Space Transportation System; Space Transportation System Flights; Spacecrafts; Space Shuttle Payloads; Space Shuttles; Space Shuttle Missions; Space Shuttle Orbiters; Weightlessness

1998/09/09788 NASA Johnson Space Center, Houston, TX USA
STS–87 Day 03 Highlights
Nov. 21, 1997; In English; Videotape: 12 min. 22 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997125963; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

On this third day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk deploy the Spartan satellite with the shuttle’s robot arm.

CASI

Space Transportation System; Space Transportation System Flights; Orbital Servicing; Payload Assist Module; Remote Manipulator System; Space Shuttle Main Engine; Space Shuttle Orbiters; Space Shuttle Missions

1998/09/09789 NASA Johnson Space Center, Houston, TX USA
STS–87 Day 05 Highlights
Nov. 23, 1997; In English; Videotape: 12 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997125965; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS


CASI

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

1998/09/09790 NASA Johnson Space Center, Houston, TX USA
STS–87 Day 08 Highlights
Nov. 26, 1997; In English; Videotape: 14 min. 12 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997125968; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

On this eighth day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk take time out from their duties to be interviewed by CNN. As they reach the one week mark in their 16-day flight, the STS-87 crew shift the focus of their efforts towards the variety of science experiments flying on this mission.

CASI

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

1998/09/09826 NASA Johnson Space Center, Houston, TX USA
STS–87 Day 04 Highlights
Nov. 22, 1997; In English; Videotape: 15 min. 11 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997125964; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

On this fourth day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk check out the 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.

CASI

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

1998/09/09827 NASA Johnson Space Center, Houston, TX USA
STS–87 Day 15 Highlights
Dec. 03, 1997; In English; Videotape: 14 min. 3 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997125960; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

On this fifteenth day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk spend a good part of their day checking out the important space craft systems that are needed to support reentry.

CASI

Space Transportation System; Space Transportation System Flights; Spacecrafts; Space Shuttles

1998/09/09830 NASA Johnson Space Center, Houston, TX USA
STS–86 Mission Highlights Resources Tape
Nov. 21, 1997; In English; Videotape: 1 hr. 56 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997093224; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

The flight crew of the STS-86 mission, Cmdrs. James D. Wetherbee, Jr., Pilot Michael J. Bloomfield, Mission Specialists Scott E. Parazynski, Jean-Loup Chretien, Vladimir G. Titov, Wendy B. Lawrence and Mike Foale present an overview of their mission, whose primary objective is the rendezvous and space docking with the Russian Space Station Mir. Video film footage includes: prelaunch and launch activities; 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.

CASI

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

1998/09/09908 NASA Johnson Space Center, Houston, TX USA
STS–87 Day 01 Highlights
Nov. 18, 1997; In English; Videotape: 15 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997125961; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

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, suit-up, and the ride out to the launch pad. Aller the closing of the hatch and ear:rm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters.

CASI

Space Shuttle Boosters; Space Transportation System; Space Transportation System Flights; Spacecr...
On this fourteenth day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk, focus on completion of hands-on sample processing in the microgravity glovebox facility. They also prepare the spacesuits and tools that will be used for the EVA by Scott and Doi. The crew take time out from their schedule to discuss the mission with reporters from the U.S., Japan and the Ukraine during the traditional in-flight news conference.

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

19980109910 NASA Johnson Space Center, Houston, TX USA
STS-87 Day 12 Highlights
Nov. 30, 1997; In English; Videotape: 13 min. 47 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997125957; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this twelfth day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk continue to look at how plant growth and composite materials are affected by microgravity. The astronauts use the glovebox facility to process samples for the Particle Entrainment and Pushing by a Solid/Liquid Interface experiment. CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Vegetation Growth

19980109911 NASA Johnson Space Center, Houston, TX USA
STS-87 Day 11 Highlights
Nov. 29, 1997; In English; Videotape: 9 min. 31 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997125956; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this eleventh day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk continue to look at how plant growth and composite materials are affected by microgravity. The astronauts use the glovebox facility to process samples for the Particle Entrainment and Pushing by a Solid/Liquid Interface experiment. CASI
Microgravity; Space Transportation System; Space Transportation System Flights; Spacecrews; Vegetation Growth

19980109912 NASA Johnson Space Center, Houston, TX USA
STS-87 Day 10 Highlights
Nov. 28, 1997; In English; Videotape: 15 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997125955; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this tenth day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk continue work in the mini laboratory called the microgravity glovebox facility. This facility allows crew members to interactively work with two different experiments today studying the formation of composite materials in an attempt to accurately map the roles of gravity-induced convection and sedimentation in the process by removing the gravity from the equation. CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Space Shuttle Main Engine; Space Shuttle

1998014807 NASA Johnson Space Center, Houston, TX USA
STS-87 Day 09 Highlights
Nov. 27, 1997; In English; Videotape: 14 min. 47 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997125954; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this ninth day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk continue work with the microgravity science investigations in a special glovebox facility on the middeck. The autonomous operations with the mission’s prime payload continue in the payload bay of Columbia with no interaction by the crew. CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Space Shuttle Flights; Space Shuttle Orbits; Space Shuttle Missions

19980158955 NASA Johnson Space Center, Houston, TX USA
STS-87 Day 08 Highlights
Nov. 25, 1997; In English; Videotape: 8 min. 38 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997125967; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this seventh day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk turn their attention to a variety of experiments inside the Shuttle’s cabin. These experiments include the processing of several samples of materials in the glovebox facility in Columbia’s middeck; the experiment called PEP, which involves heating samples and then recording the mixture as it resolidifies; and the study of plant growth in space. CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Space Shuttle Flights; Space Shuttles

19980158996 NASA Johnson Space Center, Houston, TX USA
STS-87 Day 07 Highlights
Nov. 24, 1997; In English; Videotape: 18 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997125966; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this sixth day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk begin the final preparations for the EVA by Scott and Doi. They are to manually capture the SPARTAN Satellite. After this is accomplished they are to test tools and techniques that will be required for the assembly of the International Space Station. CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Crew Procedures (Inflight); Space Shuttles; Space Flight

19980158997 NASA Johnson Space Center, Houston, TX USA
STS-87 Day 13 Highlights
Dec. 01, 1997; In English; Videotape: 15 min. 4 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997125958; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this thirteenth day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk continue work 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)

19980132333 NASA Johnson Space Center, Houston, TX USA
STS-89 Day 01 Highlights
Jan. 23, 1998; In English; Videotape: 15 min. 7 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998074671; No Copyright; Avail: CASI;
On this first day of the STS-89 mission, the flight crew, Cmdr. Terrence W. Wilcutt, Pilot Frank Edwards, and Mission Specialists Michael P. Anderson, James F. Reilly, Bonnie J. Dunbar, Salizhan Shakirovich Sharipov, David A. Wolf and Andrew S.W. Thomas, can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad.

The crew is readied in the ‘white room’ for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters.

CASI

Space Transportation System Flights; Spacecrafts; Launching; Booster Rocket Engines; Space Flight; Space Missions; Space Shuttles

19980832959 NASA Johnson Space Center, Houston, TX USA

STS–89 Day 09 Highlights
Jan. 30, 1998; In English; Videotape: 13 min. 31 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1998074670; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

On this ninth day of the STS-89 mission, the flight crew, Cmdr. Terrence W. Wilcutt, Pilot Frank Edwards, and Mission Specialist Michael P. Anderson, James F. Reilly, Bonnie J. Dunbar, Salizhan Shakirovich Sharipov, David A. Wolf and Andrew S.W. Thomas, prepare for the reentry phase of their mission. Bonnie Dunbar then gives a tour of the space shuttle.

CASI

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

B02, Videotape-Beta; V02, Videotape-VHS

19980832960 NASA Johnson Space Center, Houston, TX USA

STS–89 Day 03 Highlights
Jan. 24, 1998; In English; Videotape: 19 min. 5 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1998074673; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

On this third day of the STS-89 mission, the flight crew, Cmdr. Terrence W. Wilcutt, Pilot Frank Edwards, and Mission Specialist Michael P. Anderson, James F. Reilly, Bonnie J. Dunbar, Salizhan Shakirovich Sharipov, David A. Wolf and Andrew S.W. Thomas, can be seen performing a flawless docking with the Mir. The linkup occurred while the two spaceships flew over southeastern Russia, west of Kazakhstan. After the docking the two crews open the entry hatch and great each other.

CASI

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

19980833342 NASA Johnson Space Center, Houston, TX USA

STS–85 Mission Highlights Resources Tape
Nov. 12, 1997; In English; Videotape: 57 min. 13 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1997087432; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of STS-85, Cmdr. Curtis L. Brown, Jr., Pilot Kent V. Rominger, Payload Cmdr. N. Jan Davis (Ph.D.), Mission Specialists Robert L. Curbeam, Jr. and Stephen K. Robinson (Ph.D.), and Payload Specialist Bjarni V. Tryggvason, present an overview of their mission. During the pre-launch activities the shuttle is shown being mated to the external tank and Solid Rocket Boosters (SRBs). Also included is the arrival of the crew at the Kennedy Space Center (KSC), their suit-up, the crew being transported to the pad, being strapped in, and launch control activities. The launch includes the count down, main engine start-up, SRB start-up, the launch, the roll maneuver and SRB separation. Once the crew is in orbit, they deploy the CRISTA-SPAS payload and conduct various micro-gravity experiments. In the last part of the video the crew is seen preparing for the landing phase of the mission.

CASI

Space Shuttle Missions; Space Shuttle Orbiters; Space Transportation System Flights; Solid Propellant Rocket Engines; Payload Retrieval (STS); Payload Delivery (STS)

19980833343 NASA Johnson Space Center, Houston, TX USA

STS–85 Postflight Presentation
Sep. 20, 1997; In English; Videotape: 52 min. 30 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1997058833; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of STS-85, Cmdr. Curtis L. Brown, Jr., Pilot Kent V. Rominger, Payload Cmdr. N. Jan Davis (Ph.D.), Mission Specialists Robert L. Curbeam, Jr. and Stephen K. Robinson (Ph.D.), and Payload Specialist Bjarni V. Tryggvason, present an overview of their mission. Events shown include pre-launch preparations, launch activities, on orbit activation of various experiments, and the return and landing of the shuttle at Kennedy Space Center (KSC). In the second part of the presentation the astronauts describe the still pictures that were taken during the mission.

CASI

Space Shuttle Missions; Space Shuttle Orbiters; Space Transportation System Flights; Space Shuttle Payloads; Space Transportation System Flights

19980833933 NASA Johnson Space Center, Houston, TX USA

STS–89 Day 08 Highlights
Jan. 29, 1998; In English; Videotape: 12 min. 48 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1998074669; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

On this eighth day of the STS-89 mission, the flight crew, Cmdr. Terrence W. Wilcutt, Pilot Frank Edwards, and Mission Specialist Michael P. Anderson, James F. Reilly, Bonnie J. Dunbar, Salizhan Shakirovich Sharipov, David A. Wolf and Andrew S.W. Thomas, prepare to conclude their joint mission with the crew of the Mir. Endavour separates from the Russian Space Station with a gentle push from springs in the docking mechanism attaching it to the Space Station. Following a flyaround of the station to gather additional photography of the outpost, Pilot Joe Edwards conducts a final separation maneuver to allow Endeavour to drift away from the Mir.

CASI

Space Transportation System Flights; Spacecraft Docking; Spacecrafts; Space Shuttle Missions; Mir Space Station; Earth Observations (From Space)

19980834852 NASA Johnson Space Center, Houston, TX USA

STS–89 Day 02 Highlights
Jan. 23, 1998; In English; Videotape: 14 min. 5 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1998074672; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

On this second day of the STS-89 mission, the flight crew, Cmdr. Terrence W. Wilcutt, Pilot Frank Edwards, and Mission Specialist Michael P. Anderson, James F. Reilly, Bonnie J. Dunbar, Salizhan Shakirovich Sharipov, David A. Wolf and Andrew S.W. Thomas, take time from their schedule to discuss with radio station KNX of Los Angeles the STS-89 mission and Thomas’ transfer to the Mir Space Station.

CASI

Space Transportation System Flights; Mir Space Station; Space Flight; Spacecrafts; Orbital Maneuvers; Orbital Rendezvous

199808973213 NASA Johnson Space Center, Houston, TX USA

STS–89 Day 04 Highlights
Jan. 25, 1998; In English; Videotape: 19 min. 16 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1998074674; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

On this fourth day of the STS-89 mission, the flight crew, Cmdr. Terrence W. Wilcutt, Pilot Frank Edwards, and Mission Specialist Michael P. Anderson, James F. Reilly, Bonnie J. Dunbar, Salizhan Shakirovich Sharipov, David A. Wolf and Andrew S.W. Thomas, are interviewed by an unnamed news agency. Most of the questions are directed at Wolf and his experiences on Mir.

CASI

Space Transportation System Flights; Space Transportation System; Mir Space Station; Space Flight; Space Mechanics; Space Missions; Space Rendezvous; Orbital Mechanics; Orbital Maneuvers

70
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 Delivery; Orbital Rendezvous; Crew Procedures (Inflight); Mir Space Station; Spacecraft Docking

On this sixth day of the STS-89 mission, the flight crew, Cmdr. Terrence W. Wilcutt, Pilot Frank Edwards, and Mission Specialists Michael P. Anderson, James F. Reilly, Bonnie J. Dunbar, Salizhan Shakirovich Sharipov, David A. Wolf and Andrew S.W. Thomas, are interviewed by John Holoman of Cable News Network (CNN) and Russian news media. The crew discuss the progress of the mission and activities that lie ahead for Mir crew member Andy Thomas.

CASI
Space Transportation System Flights; Mir Space Station; Spacecraft Docking; Space Stations; Space Rendezvous; Orbital Rendezvous; News Media; Spacecraft

On this seventh day of the STS-89 mission, the flight crew, Cmdr. Terrence Wilcutt, Pilot Frank Edwards, and Mission Specialists Michael P. Anderson, James F. Reilly, Bonnie J. Dunbar, Salizhan Shakirovich Sharipov, David A. Wolf and Andrew S.W. Thomas, are interviewed by John Holoman of Cable News Network (CNN) and Russian news media. The crew discuss the progress of the mission and activities that lie ahead for Mir crew member Andy Thomas.

CASI
Space Transportation System Flights; Mir Space Station; Spacecraft Docking; Space Stations; Space Rendezvous; Orbital Rendezvous; News Media; Spacecraft

On this eighth day of the STS-89 mission, the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Daifydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk once again take part in a variety of human microgravity 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; Spacecrafts; Microgravity; Lower Body Negative Pressure; Cardiovascular System; Autonomic Nervous System

The flight crew of the STS-89 Space Shuttle Orbiter Endeavour, Cmdr. Terrence W. Wilcutt, Pilot Frank Edwards, and Mission Specialists Michael P. Anderson, James F. Reilly, Bonnie J. Dunbar, Salizhan Shakirovich Sharipov, David A. Wolf, and Andrew S.W. Thomas, present an overview of their mission. 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; Endeavour (Orbiter); Mir Space Station; Space Shuttle Orbiters; Spacecraft Docking; Spacecrafts
STS-90 Day 07 Highlights
Apr. 20, 1998; In English; Videotape: 17 min. 13 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998348210; No Copyright; Avail: CASI; B02, Videotape-Beta: V02, Videotape-VHS

On this seventh day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk continue to operate the 26 individual experiments designed to provide insight into the operation of the nervous system, the most complex and least well-known part of the human body. The STS-90 crew members have used themselves as test subjects in a variety of experiments associated with studying functions such as blood pressure regulation, balance, coordination and sleep patterns. They also have studied a variety of animals to gain additional insight into the effects of the weightless environment of space on the development and performance of the nervous system.

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

STS-90 Day 06 Highlights
Jun. 08, 1998; In English; Videotape: 22 min. 1 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998358189; No Copyright; Avail: CASI; B02, Videotape-Beta: V02, Videotape-VHS

On this eighth day of the STS-90 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Dominic L. Pudwill Gorie and Mission Specialists Wendy B. Lawrence, Franklin R. Chang-Diaz, Janet L. Kavandi, and Valery Victorovitch Ryumin awaken to 'Manic Monday' performed by The Bangles, played the crew by Mission Control in honor of an historic Monday for the U.S. and Russian space programs. Today’s schedule includes television feed from the Mir of a final crew farewell and hatch closing. After undocking, the shuttle backs away from the Mir until it reaches a distance of approximately 240 feet below the station. Pilot Dom Gorie then performs a nose forward flyaround of Mir.

CASI
Space Transportation System: Space Transportation System Flights; Scientists

STS-90 Post Flight Presentation
Aug. 18, 1998; In English; Videotape: 18 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998359751; No Copyright; Avail: CASI; B02, Videotape-Beta: V02, Videotape-VHS

The flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialist 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

CASI
Space Transportation System: Space Transportation System Flights; Cosmonauts
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; Spacecrafts; Booster Rocket Engines; Flight Crews; Space Flight; Space Missions

19980218917 NASA Johnson Space Center, Houston, TX USA

STS-91 Day 04 Highlights

Jun. 05, 1998; In English; Videotape: 4 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–1998358184; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fourth day of the STS-91 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Dominick L. Pavlidis, and Mission Specialists Wendy B. Lawrence, Franklin R. Chang-Diaz, Janet L. Kavandi, and Valery Victorovitch Ryumin are awakened to the sounds of ‘South Australia,’ honoring Thomas who is a native of Adelaide in South Australia. The 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; Spacecrafts; 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–1998358183; 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 Dominick L. Pavlidis, and Mission Specialists Wendy B. Lawrence, Franklin R. Chang-Diaz, Janet L. Kavandi, and Valery Victorovitch Ryumin prepare for docking with the Mir Space Station and a reunion with U.S. Astronaut Andy Thomas, who is about to conclude his more-than-four-month mission to the Russian outpost. After the docking the two crews open the entry hatch and greet each other. The astronauts and cosmonauts transfer supplies from the shuttle to Mir.

CASI

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

19980218920 NASA Johnson Space Center, Houston, TX USA

STS-91 Mission Highlights Resource Tape

Jun. 03, 1998; In English; Videotape: 1 hour 14 min. 46 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998357051; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The crew STS-91 mission, Cmdr. Charles J. Precourt, Pilot Dominick L. Pavlidis, and Mission Specialists Wendy B. Lawrence, Franklin R. Chang-Diaz, Janet L. Kavandi, and Valery Victorovitch Ryumin can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is raised in the ‘white room’ for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Once in orbit, there are various views of the Mir Space Station as the shuttle begins its approach and docks. After the docking the two crews open the entry hatch and greet each other. The astronauts and cosmonauts transfer supplies from the shuttle to Mir. The astronauts prepare for the reentry phase of their mission. The Shuttle separates from the Russian Space Station with a gentle push from springs in the docking mechanism that attaches it to the Space Station. The final view shows the crews’ preparations for reentry and landing.

CASI

Space Transportation System; Spacecraft Docking; Space Stations; Space Shuttle Boosters; Solid Propellant Rocket Engines; Mir Space Station; Launching: Booster Rocket Engines

19980218921 NASA Johnson Space Center, Houston, TX USA

STS-90 Post Flight Presentation

Apr. 14, 1998; In English; Videotape: 17 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998357050; No Copyright; Avail: CASI; B02, Videotape-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. Buckley and James A. Pawelzcyk 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 raised 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. Buckley and James A. Pawelzcyk turn its attention to dexterity tests and dissections of rats neurons and the ball-catch experiment. Mission Specialists Rick Linnehan and Dave Williams and Payload Specialist Jim Pawelzcyk 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 payloads crew members will perform the ball-catch experiment. This experiment studies the ability of the central nervous system to accept and interpret new stimuli in space. The astronauts have performed this test at various points in the mission so scientists can compare their responses as their bodies adapt to weightlessness.

CASI

Space Transportation System; Space Transportation System Flights; Astronauts; Crews

19980218926 NASA Johnson Space Center, Houston, TX USA

STS-90 Day 14 Highlights

Apr. 26, 1998; In English; Videotape: 11 min. 26 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998348938; No Copyright; Avail: CASI; B01, Videotape-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. Buckley and James A. Pawelzcyk focus on the efforts of Neurolab’s special experiment – Mission Specialist Rick Linnehan and Dave Williams and Payload Specialist Jim Pawelzcyk 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 perform the ball-catch experiment. This experiment studies the ability of the central nervous system to accept and interpret new stimuli in space. The astronauts have performed this test at various points in the mission so scientists can compare their responses as their bodies adapt to weightlessness.

CASI

Space Transportation System; Space Transportation System Flights; Astronauts; Crews
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 Neuro lab scientists.

CASI
Space Transportation System Flights; Space Transportation System; Neurophysiology; Nervous System

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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. Searsfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafyld 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

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STS-90 Day 12 Highlights

Apr. 24, 1998; In English; Videotape: 21 min. 17 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--1998348935; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this twelfth day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searsfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafyld Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk continue their investigations into how the human nervous system adapts to the weightlessness of space. Buckey and Pawelczyk take part in a variety of autonomic experiments designed to examine blood pressure regulation in microgravity. The test uses a special device resembling a hi-tech sack to place a stress on the cardiovascular system similar to that experienced when standing in Earth’s gravity.

CASI
Space Transportation System Flights; Space Transportation System; Microgravity; Cardiovascular System; Autonomic Nervous System

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STS-90 Day 10 Highlights

Apr. 22, 1998; In English; Videotape: 20 min. 7 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--348934; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this tenth day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searsfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafyld 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

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STS-90 Day 04 Highlights

Apr. 17, 1998; In English; Videotape: 23 min. 31 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--1998348926; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fourth day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searsfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafyld Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk continue work with the Escal Staircase Behavior Testing of Adult Rats experiment. This is the first of two behavior testing sessions with the adult rats being used for this experiment. The rats will have a ‘hyper drive’ unit placed on their head which has recording electrodes made of microscopic wires that are positioned in the brain to record activity in the hippocampus. The hippocampus is that portion of the brain used to develop spatial maps to help us navigate from one place to the other. With the ‘hyper drive’ unit in place, the rats will then be put through a maze or on a track. While the rat is maneuvering on the maze or track, the cell activity of the hippocampus will be measured and recorded.

CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Space Exploration; Space Flight

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STS-90 Day 03 Highlights

Apr. 16, 1998; In English; Videotape: 19 min. 47 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--1998348925; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this third day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searsfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafyld Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk continue to conduct both human and animal research experiments in the Spacelab module. During the morning, the payload crew members Linnehan, Williams, Buckey and Pawelczyk perform transfer activities with the Animal Enclosure Module, setting up the General Purpose Work Station (GPWS) and operations with the ball catch experiment. In the afternoon, their attention will be on injections and dissections of some of the research animals and an objects recognition test.

CASI
Space Transportation System Flights: Spacelab; Space Flight; Space Exploration; Spacecrews

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STS-90 Day 02 Highlights

Apr. 15, 1998; In English; Videotape: 19 min. 55 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--1998348922; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this second day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searsfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafyld Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk activate the Bioreactor Demonstration Experiment, an investigation that grows cell tissue cultures in weightlessness. The device, making its fourth shuttle flight, has the capability to grow more perfect tissue samples in weightlessness than can be achieved on Earth. Cell samples in the bioreactor experiment aboard Columbia include renal tissue and bone marrow, both samples being evaluated for the ability to produce substances useful in a variety of medical treatments on Earth.

CASI
Space Transportation System Flights: Spacecrews; Space Transportation System

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STS-90 Mission Highlights Resource Tape

Jun. 11, 1998; In English; Videotape: 1 hour 31 min. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--1998348208; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
The flight crew of the STS-90 mission, Cmdr. Richard A. Lefoss, 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 solidifies; 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.4; NONP; NASA-NAVT-1998032739; 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. Lefoss, 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 Shuttles; Payload Delivery (STS)**

19990808745 NASA Johnson Space Center, Houston, TX USA

**STS-95 Day 99 Highlights**

Nov. 07, 1998; In English; Videotape: 24 min. 35 sec. playing time, in color, with sound

Report No.6: NONP; NASA-NAVT-1998040700; 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 Chisaki 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 began the flight control system checkout by powering up one auxiliary power unit and evaluating the performance of aerodynamic surfaces and flight controls. The flight crew conducts a reaction control system hot fire, followed by a test of the communications system.

CASI

**Space Transportation System Flights; Space Transportation System; Spacecraft; 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.6: NONP; NASA-NAVT-1998041600; 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 Chisaki Mukai and John H. Glenn, again test the Orbiter Space Vision System. OSVS uses special markings on Spartan and the shuttle cargo bay to provide an alignment aid for the arm's operator using shuttle television images. It will be used extensively on the next Space Shuttle flight in December as an aid in using the arm to join together the first two modules of the International Space Station. Specialist John Glenn will complete a daily back-pain questionnaire by as part of a study of how the muscle, intervertebral discs and bone marrow change after exposure to microgravity.

CASI

**International Space Station; Space Transportation System Flights; Space Transportation System; Space Shuttle Orbiters; Spacecraft; Systen (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.6: NONP; NASA-NAVT-1998041598; 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 Chisaki Mukai and John H. Glenn, test a device called the Video Guidance Sensor, a component of an automated docking system being prepared for use on the International Space Station. As Discovery closes in on Spartan, the astronauts will use a laser system that provides precise measurements of how far away the shuttle is from a target and how fast it is moving toward or away from the target.

CASI

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

75
On this 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 preparing a glovebox device in the middeck area of the Spartan satellite.

On this fifth day of the STS-95 mission, the flight crew, Cmdr. Curtis L. Brown, Pilot Steven W. Lindsey, Mission Specialists Scott E. Parazynski, Stephen K. Robinson, and Pedro Duque, and Payload Specialists Chiaki Mukai and John H. Glenn, check the status of components of the Hubble Space Telescope (HST) payload, which provides an on-orbit test bed for hardware that will be used during the third Hubble servicing mission. Then Parazynski and Pilot Steve Lindsey set up some of the tools that will be used during the rendezvous and subsequent capture and reberthing of the Spartan satellite.

On this fourth day of the STS-95 mission, the flight crew, Cmdr. Curtis L. Brown, Pilot Steven W. Lindsey, Mission Specialists Scott E. Parazynski, Stephen K. Robinson, and Pedro Duque, and Payload Specialists Chiaki Mukai and John H. Glenn, are seen completing 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; Spacecraft Launching; Spacecrew; Crew Observation Stations; Crew Experiment Stations

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 the Spartan satellite.

The crew then participates in a press interview with KNX Radio in Los Angeles and 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; Space Shuttle Boosters; Launching; Countdown; Booster Rocket Engines; Spacecrew
On this seventh day of the STS-88 mission, the flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev are seen preparing for a 6-1/2 hour space walk. During this walk Newman and Ross install two box-like antennas on the outside of the Unity module. In addition they remove launch restraints over four hatchways, install insulating covers on the trunnion pins, and free one of two bulky antennas on Zarya’s backup rendezvous navigation system.

Report No.(s): NONP-NASA-VT-1998435150; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eleventh day of the STS-88 mission, the flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev are awakened with the song “Goodnight, Sweetheart, Goodnight”. Pilot Rick Sturckow undocks Endeavour from the station and backs the shuttle away to a distance of 450 feet above the station before beginning a nose-forward fly-around. Later Cabana, Sturckow and Ross deploy the SAC-A satellite from Endeavour’s payload bay. SAC-A is a small, self-contained, non-recoverable satellite built by the Argentinean National Commission of Space Activities. The cube-shaped, 590-pound satellite will test and characterize the performance of new equipment and technologies that may be used in future scientific or operational missions. The payload includes a differential global positioning system, a magnetometer, silicon solar cells, a charge-coupled device Earth camera and a whale tracker experiment.

Report No.(s): NONP-NASA-VT-1998435149; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

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, then relocated on Unity’s upper mating adapter and one on its lower adapter, to relieve tension on the lines. The space walkers also will check an insulation cover on one cable connection on the lower Pressurized Mating Adapter (PMA 2) to make sure it is fully installed. Near the end of the space walk, the astronauts conduct a detailed photographic survey of the space station from top to bottom. Finally, each astronaut 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 detached.

Report No.(s): NONP-NASA-VT-1998435145; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this third day of the STS-88 mission, the flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev 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.

Report No.(s): NONP-NASA-VT-1998435143; Copyright; Avail: CASI; B06, Videotape-Beta; V06, Videotape-VHS

On this day of the STS-88 mission, the flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev are awakened with the song “Goodnight, Sweetheart, Goodnight.” Pilot Rick Sturckow undocks Endeavour from the station 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. Cabana uses the robotic arm to capture the module. She then positions Zarya above Unity’s docking mechanism.

Report No.(s): NONP-NASA-VT-1998435142; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this sixth day of the STS-88 mission, the flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev are awakened with the song “Goodnight, Sweetheart, Goodnight.” Pilot Rick Sturckow undocks Endeavour from the station and backs the shuttle away to a distance of 450 feet above the station before beginning a nose-forward fly-around. Later Cabana, Sturckow and Ross deploy the SAC-A satellite from Endeavour’s payload bay. SAC-A is a small, self-contained, non-recoverable satellite built by the Argentinean National Commission of Space Activities. The cube-shaped, 590-pound satellite will test and characterize the performance of new equipment and technologies that may be used in future scientific or operational missions. The payload includes a differential global positioning system, a magnetometer, silicon solar cells, a charge-coupled device Earth camera and a whale tracker experiment.

Report No.(s): NONP-NASA-VT-1998435141; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fifth day of the STS-88 mission, the flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev are awakened with the 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.

Report No.(s): NONP-NASA-VT-1998435140; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this day of the STS-88 mission, the flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev are awakened with the song “Goodnight, Sweetheart, Goodnight.” Pilot Rick Sturckow undocks Endeavour from the station and backs the shuttle away to a distance of 450 feet above the station before beginning a nose-forward fly-around. Later Cabana, Sturckow and Ross deploy the SAC-A satellite from Endeavour’s payload bay. SAC-A is a small, self-contained, non-recoverable satellite built by the Argentinean National Commission of Space Activities. The cube-shaped, 590-pound satellite will test and characterize the performance of new equipment and technologies that may be used in future scientific or operational missions. The payload includes a differential global positioning system, a magnetometer, silicon solar cells, a charge-coupled device Earth camera and a whale tracker experiment.

Report No.(s): NONP-NASA-VT-1998435139; Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fourth day of the STS-88 mission, the flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev are awakened with the sound 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, then relocated on Unity’s upper mating adapter and one on its lower adapter, to relieve tension on the lines. The space walkers also will check an insulation cover on one cable connection on the lower Pressurized Mating Adapter (PMA 2) to make sure it is fully installed. Near the end of the space walk, the astronauts conduct a detailed photographic survey of the space station from top to bottom. Finally, each astronaut 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 detached.

Report No.(s): NONP-NASA-VT-1998435138; Copyright; Avail: CASI; B06, Videotape-Beta; V06, Videotape-VHS

On this second day of the STS-88 mission, the flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev are awakened with the song “Goodnight, Sweetheart, Goodnight.” Pilot Rick Sturckow undocks Endeavour from the station and backs the shuttle away to a distance of 450 feet above the station before beginning a nose-forward fly-around. Later Cabana, Sturckow and Ross deploy the SAC-A satellite from Endeavour’s payload bay. SAC-A is a small, self-contained, non-recoverable satellite built by the Argentinean National Commission of Space Activities. The cube-shaped, 590-pound satellite will test and characterize the performance of new equipment and technologies that may be used in future scientific or operational missions. The payload includes a differential global positioning system, a magnetometer, silicon solar cells, a charge-coupled device Earth camera and a whale tracker experiment.

Report No.(s): NONP-NASA-VT-1998435137; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this first day of the STS-88 mission, the flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev are awakened with the sound 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, then relocated on Unity’s upper mating adapter and one on its lower adapter, to relieve tension on the lines. The space walkers also will check an insulation cover on one cable connection on the lower Pressurized Mating Adapter (PMA 2) to make sure it is fully installed. Near the end of the space walk, the astronauts conduct a detailed photographic survey of the space station from top to bottom. Finally, each astronaut 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 detached.
various tools they will use during the three scheduled spacewalks to be conducted later in the flight. They then begin an early set-up of the Shuttle’s aerial dock in preparation for that first spacewalk. Newman and Russian cosmonaut Sergei Krikalev take part in an on-line interview by the New York Times. Currie is seen placing Unity just inches above the extended outer ring on Endeavour’s docking mechanism, enabling Commander Bob Cabana to fire downward maneuvering jets to lock the shuttle’s docking system to one of two Pressurized Mating Adapters (PMA’s) attached to Unity.

UNCH 0:14494 NASA Johnson Space Center, Houston, TX USA
STS-88 Day 09 Highlights
Dec. 12, 1998; In English; Videotape: 24 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--1998435143; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this ninth day of the STS-88 mission, the flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev are awakened by "The Nutcracker" in honor of cosmonaut and Mission Specialist Sergei Krikalev. Currie and Krikalev continue their work removing access panels inside Unity and unstowing hardware that will be used by visiting astronauts on future assembly missions.

CASI
Space Transportation System Flights; Unity Connecting Module; Spacecraft Docking; Zarya Control Module; Maneuvers; Adapters; Air Locks; Space Rendezvous; Orbital Rendezvous

1999814495 NASA Johnson Space Center, Houston, TX USA
STS-88 Day 02 Highlights
Dec. 05, 1998; In English; Videotape: 21 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--1998435142; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this second day of the STS-88 mission, the flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev are awakened with the song "Get Ready" by the Temptations. Ross and Newman perform a checkout of the SAFER or Simplified Aid for EVA Rescue unit. SAFER is a mini maneuvering system that can provide self-rescue capability for a spacewalker if they inadvertently become separated from the spacecraft during a spacewalk. The crew then downloads video taken inside the crew cabin during their ascent to orbit.

CASI
Space Transportation System Flights; Spacecrews; Extravehicular Activity; Aerospace Environments; Manned Maneuvering Units; Space Shuttles; Space Flight

1999814496 NASA Johnson Space Center, Houston, TX USA
STS-88 Day 12 Highlights
Dec. 15, 1998; In English; Videotape: 15 min. 38 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--1998435141; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this twelfth day of the STS-88 mission, the flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev are awakened by the sounds of James Brown’s “I Got You (I Feel Good)”. Crew members focus their attention today preparing for their scheduled return to the Kennedy Space Center. Cabana and Sturckow spend a good part of the day checking out spacecraft systems for entry and landing.

CASI
Space Transportation System Flights; Endeavour (Orbiter); International Space Station; Zarya Control Module; Unity Connecting Module; Space Flight

1999814497 NASA Johnson Space Center, Houston, TX USA
STS-88 Day 01 Highlights
Dec. 05, 1998; In English; Videotape: 19 min. 29 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--1998435140; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this first day of the STS-88 mission, the flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is readied in the "white room" for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters.

CASI
Space Transportation System Flights; Space Transportation System; Space Shuttle Launchers; Launching; Ignition; Countdown

1999982555 NASA Johnson Space Center, Houston, TX USA
STS-90 Day 1 Highlights
Apr. 14, 1998; In English; Videotape: 18 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1998166380; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this first day of the STS-90 mission, the flight crew, Cmdr. Richard A. Scarefoot, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckley and James A. Pewelry, can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is readied in the white room for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. The shuttle’s payload bay doors are then opened in anticipation of the 16-day scientific mission. The astronauts then are seen readying the Spacelab module for various experiments.

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

19999814498 NASA Johnson Space Center, Houston, TX USA
STS-91 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--1999016019; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
The flight crew of the STS-91 mission, Commander Michael A. Baker, Pilot Brent W. Jett Jr, and Mission Specialists John M. Grunsfeld, Marsha S. Ivins, Peter J.K. Wisoff, and Jerry M. Linenger present a video mission overview of their space flight. Images include prelaunch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the "white room" for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. During the presentation the astronauts take turns discussing aspects of the mission including the SPACEHAB double module that provides additional middeck locker space for secondary experiments. During the five days of docked operations with MIR, the crews are seen transferring water and supplies from one spacecraft to the other. .

CASI
Space Transportation System Flights; Space Shuttles; Space Shuttle Payloads; Space Shuttle Orbiters; Space Shuttle Missions; Payload Retrieval (STS); Booster Rocket Engines; Flight Crews; Spacecraft Modules; Spacecrews
The STS-95 flight crew, Cmdr. Curtis L. Brown, Pilot Steven W. Lindsey, Mission Specialists Scott E. Parazynski, Stephen K. Robinson, and Pedro Duque, and Payload Specialist Chinkisuk Maki and John H. Glenn present a video mission overview of their space flight. Images include prelaunch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the "white room" for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. The primary objectives, which include the conducting of a variety of science experiments in the pressurized SPACEHAB module, the deployment and retrieval of the Spartan free-flyer payload, and operations with the HST Orbiting Systems Test (HOST) and the International Extreme Ultraviolet Hitchhiker (IEH) payloads are discussed in both the video and still photo presentation.

Space Transportation System Flights; Spacecraft Construction Materials; Payloads; Microgravity: Gravitational Effects; Free Molecular Flow; Extravehicular Activity: Bays (Structural Units): Cargo

The flight crew of the STS-88 mission, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, Jerry L. Ross, James H. Newman, and Sergei K. Krikalev present a video mission overview of their space flight. Images include prelaunch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the "white room" for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Once the seven-day mission begins, the astronauts comment on the mating of the U.S.-built Node 1 station element to the Functional Energy Block (FGB) which was already in orbit, and two EVAs that were planned to connect power and data transmission cables between the Node and the FGB. The crew can also be seen conducting a series of rendezvous maneuvers similar to those conducted on other Shuttle missions to reach the orbiting FGB.

Space Shuttle Missions: Spacecraft; Extravehicular Activity: Astronauts
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

19990125628 NASA Johnson Space Center, Houston, TX USA
STS-88 Crew Interview: Robert Cabana
Dec. 17, 1998; In English; Videotape: 37 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--1999011627; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Commander Robert D. Cabana discusses the seven-day mission that will be highlighted by the mating of the U.S.-built Node 1 station element to the Functional Energy Block (FGB) which will already be in orbit, and two spacewalks to connect power and data transmission cables between the Node and the FGB. Node 1 will be the first Space Station hardware delivered by the Space Shuttle. He also discusses the assembly sequence. The crew will conduct a series of rendezvous maneuvers similar to those conducted on other Shuttle missions to reach the orbiting FGB. Once the two elements are docked, Ross and Newman will conduct two scheduled spacewalks to connect power and data cables between the Node, PMAs and the FGB. The day following the spacewalks, Endeavour will undock from the two components, completing the first Space Station assembly mission.

CASI Space Shuttle Missions; Space Shuttles; International Space Station; Unity Connecting Module; Zarya Control Module; Large Space Structures; International Cooperation

19990125629 NASA Johnson Space Center, Houston, TX USA
STS-88 Crew Interview: Jim Newman
Dec. 17, 1998; In English; Videotape: 42 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--1999011626; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Jim Newman discusses the seven-day mission that will be highlighted by the mating of the U.S.-built Node 1 station element to the Functional Energy Block (FGB) which will already be in orbit, and two spacewalks to connect power and data transmission cables between the Node and the FGB. Node 1 will be the first Space Station hardware delivered by the Space Shuttle. He also discusses the assembly sequence. The crew will conduct a series of rendezvous maneuvers similar to those conducted on other Shuttle missions to reach the orbiting FGB. Once the two elements are docked, Ross and Newman will conduct two scheduled spacewalks to connect power and data cables between the Node, PMAs and the FGB. The day following the spacewalks, Endeavour will undock from the two components, completing the first Space Station assembly mission.

CASI Space Shuttle Missions; Space Shuttles; International Space Station; Unity Connecting Module; Zarya Control Module; Large Space Structures; International Cooperation

19990125630 NASA Johnson Space Center, Houston, TX USA
STS-88 Crew Interview: Jerry Ross
Dec. 17, 1998; In English; Videotape: 54 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--1999011625; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Jerry Ross discusses the seven-day mission that will be highlighted by the mating of the U.S.-built Node 1 station element to the Functional Energy Block (FGB) which will already be in orbit, and two spacewalks to connect power and data transmission cables between the Node and the FGB. Node 1 will be the first Space Station hardware delivered by the Space Shuttle. He also discusses the assembly sequence. The crew will conduct a series of rendezvous maneuvers similar to those conducted on other Shuttle missions to reach the orbiting FGB. Once the two elements are docked, Ross and Newman will conduct two scheduled spacewalks to connect power and data cables between the Node, PMAs and the FGB. The day following the spacewalks, Endeavour will undock from the two components, completing the first Space Station assembly mission.

CASI Space Shuttle Missions; Space Shuttles; International Space Station; Unity Connecting Module; Zarya Control Module; Large Space Structures; Orbital Workshops; Unity Connecting Module; Zarya Control Module

19990125761 NASA Johnson Space Center, Houston, TX USA
STS-85 Mission Highlights Resources Tape
Jun. 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-85 flight crew, Commander Curtis L. Brown, Pilot Steven W. Lindsey, Mission Specialists Scott E. Parazynski, Stephen K. Robinson, and Pedro Duque, and Payload Specialists Chakri Mekkal and John H. Glenn present a video overview of their space flight. They are seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is 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 SPACEXAB 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 (IEH) 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 Discovery (Orbiter); Space Flight; Space Shuttle Boosters; Space Transportation System Flights; Hubble Space Telescope; Payload Retrieval (STS)

19990132584 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

19990132585 NASA Johnson Space Center, Houston, TX USA
STS-88 Mission Highlights Resources Tape, Tape B
Feb. 26, 1999; In English; Videotape: 1 hour 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA--VT--1999037062; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The STS-88 flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev present a video overview of their space flight. Tape two of three includes the installation of an S-Band to help monitor the UNITY Connecting Module, the opening of UNITY's hatch, the opening of the main compartment hatch to ZARYA Control Module, and the repair of the inflight maintenance system.

CASI Endeavour (Orbiter); Space Flight; Space Transportation System Flights; Manned Space Flight; International Space Station
STS-86 Mission Highlights Resources Tape, Tape A
Report No. (s): NONP–NASA–VT–1999032586; No Copyright; Avail: CASI; B03, Videotape–Beta; V03, Videotape–VHS
The STS-86 flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev present a video overview of their space flight. This is the first of three videos which show the highlights of the Endeavour mission. Important visual images include pre-launch activities such as the eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also included are various panoramic views of the shuttle on the pad. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Once on-orbit crew members are seen delivering and connecting the UNITY Module to the ZARYA Control Module.
CASI
Endeavour (Orbiter); Space Flight; Space Shuttle Boosters; Space Transportation System Flights; Manned Space Flight

STS-98 Mission Highlights Resources Tape, Tape B
Report No. (s): NONP–NASA–VT–1999035812; No Copyright; Avail: CASI; B02, Videotape–Beta; V02, Videotape–VHS
On this first day of the STS-91 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Dominic L. Purifoye, and Mission Specialist Franklin R. Chang-Diaz, Janet Lynn Kavandi, Wendy B. Lawrence, Valery Victorovich Ryumin and Andrew S. W. Thomas, can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also included are various panoramic views of the shuttle on the pad. The crew is reaclhed in the "white room" for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters.
CASI
Booster Rocket Engines; Space Transportation System Flights; Spacecrafts; Launching; Space Flight; Space Missions; Space Shuttle; Countdown

STS-91 Flight Day 1 Highlights and Crew Activities Report
Jan. 03, 1998; In English; Videotape: 20 min. 45 sec. playing time, in color, with sound
Report No. (s): NONP–NASA–VT–1999035812; No Copyright; Avail: CASI; B02, Videotape–Beta; V02, Videotape–VHS
On this first day of the STS-91 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 present a video overview of their space flight. This is the first of three videos which show the highlights of the Endeavour mission. Important visual images include pre-launch activities such as the eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also included are various panoramic views of the shuttle on the pad. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Once on-orbit crew members are seen delivering and connecting the UNITY Module to the ZARYA Control Module.
CASI
Endeavour (Orbiter); Space Flight; Space Shuttle Boosters; Space Transportation System Flights; Manned Space Flight

STS-96 Mission Highlights Resources Tape, Tape A
Report No. (s): NONP–NASA–VT–1999035498; No Copyright; Avail: CASI; B01, Videotape–Beta; V01, Videotape–VHS
The training for the crew members of the STS-96 Discovery Shuttle is presented. Crew members are Kent Rominger, Commander; Rick Husband, Pilot; Mission Specialists, Tamara Jernigan, Ellen Ochoa, and Daniel Barry; Julie Payette, Mission Specialist (CSA); and Valery Ivanovich Tokarev, Mission Specialist (RSA). Scenes show the crew sitting and talking about the Electrical Power System; actively taking part in virtual training in the EVA Training VR (Virtual Reality) Lab; using the Orbit Space Vision Training System; being dropped in water as a part of the Bail–Out Training Program; and taking part in the crew photo session.
CASI
Astronaut Training; Training Simulators; In-Flight Simulation

STS-96 Mission Highlights Resources Tape, Tape B
Report No. (s): NONP–NASA–VT–1999035498; No Copyright; Avail: CASI; B02, Videotape–Beta; V02, Videotape–VHS
This is the second of three videos which show the highlights of the STS-96 Discovery mission, the flight crew, Commander Kent R. Rominger, Pilot Rick D. Husband, and Mission Specialists Ellen Ochoa, Tamara J. Jernigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev present a video overview of their space flight. The video includes 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.
CASI
Endeavour (Orbiter); Space Flight; Space Shuttle Boosters; Space Transportation System Flights; Manned Space Flight

STS-96 Post Flight Presentation
Mar. 22, 1999; In English; Videotape: 19 min. 22 sec. playing time, in color, with sound
Report No. (s): NONP–NASA–VT–1999036400; No Copyright; Avail: CASI; B02, Videotape–Beta; V02, Videotape–VHS
The Crew of STS-86 Atlantis Shuttle, Commander James D. Wetherbee, Pilot Michael J. Bloomfield, Mission Specialists Vladimir G. Titov, Scott E. Parazynski, Jean-Loup J. M. Chretien, Wendy Lawrence, and David Wolf, narrate the footage of their mission to the Mir International Space Station. Scenes include crew suit up, walk out to the transfer vehicle, strap-in to the shuttle, start of the main engine, ignition of the rocket boosters, and separation of the solid rocket boosters. The crew of Atlantis participated in an exchange of gifts with the members of Mir, and a space walk to recover experiments outside the Mir Space Station. A beautiful panoramic view of Mir above South America is seen. Scenes also depict the closing of Mir’s hatch, Atlantis’ separation from Mir, and the reentry of the Atlantis Space Shuttle into the Earth’s atmosphere.
CASI
Atlantis (Orbiter); Manned Space Flight; Spacecrafts; Mir Space Station; International Space Station

STS-95 FD Highlights and Crew Activities Report: Flight Day 05
May 19, 1999; In English; Videotape: 24 min. 19 sec. playing time, in color, with sound
Report No. (s): NONP–NASA–VT–1999036295; No Copyright; Avail: CASI; B02, Videotape–Beta; V02, Videotape–VHS
On this fifth day of the STS-96 Discovery mission, the flight crew, Commander Kent R. Rominger, Pilot Rick D. Husband, and Mission Specialists Ellen Ochoa, Tamara J. Jernigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev present a video overview of their space flight. 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 fins inside Zarya. Jernigan and Husband install shelving in 2 small stowage racks. Husband and Barry troubleshoot and perform maintenance activities on the Early Communication System. Also on this day, Rominger, Jernigan, Barry discussed the progress of the mission with NBC’s “Today,” CBS “This Morning,” and CNN.
CASI
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 crates, 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; 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 hatch leading to the SPACEHAB module in the payload bay. Payette and Tokarev place equipment in the module to create space in Discovery’s cabin. Jernigan, Barry, Payette and Husband test three 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; SPACEHAB 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
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

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 preparations for their return to Earth. Rominger, Husband, and Ochoa checkout the flight control systems, perform hot-fried tests and verify the performance of Discovery’s small steering jets. Jernigan and Tokarev stow all the equipment used in the mission. Payette deploys a small student-built payload called STARSHINE. The crew also tests all the communications channels.

CASI

Discovery (Orbiter); Spacecrafts; Manned Space Flight; Crew Procedures (Inflight); Return to Earth Space Flight

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; Return to Earth Space Flight; Crew Procedures (Inflight)

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 Oceaneering 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 - HEEDS Technology Demonstration (IVHM HTD). The traditional pre-launch breakfast, being suited up, entry into the Shuttle, and views of the lift-off from several different vantage points are shown. In-flight footage includes views from the robot arm conducting a television survey of Discovery’s payload bay and the flawless docking of the Unity module with the International Space Station. During the docking, camera views from both the ISS and Discovery are presented. These activities make up the first three Flight Days of STS-96.

CASI

Discovery (Orbiter); Space Shuttle Missions; International Space Station; Spacecraft Docking; Spacecrafts

STS--96 Mission Highlights, Part 2

Jul. 07, 1999; In English; Videotape: 55 min. 51 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--1999087307; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

In this second part of a three-part video mission-highlights set, on-orbit spacecraft activities performed on the STS-96 Space Shuttle Orbiter Discovery and the International Space Station are reviewed. The flight crew consists of Kent V. Rominger, Commander; Rick D. Husband, Pilot; and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette (Canadian), and Valery Ivanovich Tokarev (Russian). The primary goals of this mission were to work on logistics and resupply the International Space Station. This second part in the mission series features video from Flight Day 4-7 (FD 4-7). FD 4 of STS-96 presents astronauts Tammy Jernigan and Dan Barry completing the second longest space walk in shuttle history. Footage includes Jernigan and Barry transferring and installing two cranes from the shuttle’s payload bay to locations on the outside of the station. The astronauts enter the International Space Station delivering supplies and prepare the outpost to receive its first resident crew, scheduled to arrive in early 2000 on FD 5. The video also captures the crew involved in logistics transfer activities within the Discovery/ISS orbiting complex. FD 6 includes footage of Valery Tokarev and Canadian astronaut Julie Payette charging out the final six battery recharge controller units for two of (CAD)/Computer Aided Engineering (CAE) systems. These systems include computer aided drafting, computerized solid models, virtual product development (VPD) systems, networked VPD systems, and knowledge enriched networked VPD systems. In part four, the last part, the Administrator talks about the need for revolutionary changes in communication and networking areas of a system. According to the administrator, the four major areas that need cultural changes in the creativity process are human-centered computing, an infrastructure for distributed collaboration, rapid synthesis and simulation tools, and life-cycle integration and validation. Mr. Goldin concludes his presentation with the following maxim “Collaborate, Integrate, Innovate or Stagnate and Evaporate.” He also answers some questions after the presentation.

CASI

Conferences; NASA Programs; Mission Planning; Technological Forecasting; Systems Engineering; Aerospace Sciences; Space Exploration
Zarya’s power-producing batteries and all crew members’ involvement in logistics transfer activities from the SPACEHAB module to designated locations in the International Space Station. With the transfer work of FD 6 all but complete, the astronauts conduct some additional work, installing parts of a wireless strain gauge system that will help engineers track the effects of adding modules to the station throughout its assembly. Moving the few remaining items from Discovery to the ISS, then closing a series of hatches within the station’s modules leading back to the shuttle are the primary activities contained in FD 7. Final coverage features Discovery’s astronauts finishing their work inside the International Space Station, closing all of the hatches and readying the shuttle’s small thrusters to be fired to raise the entire complex’s orbit in preparation for the undocking and departure set for FD 8.

**CASI**

*Discovery (Orbiter); Space Shuttle Missions; International Space Station; Spacecrews; Spacecraft Maintenance; Extravehicular Activity; Spacecraft Modules; Space Shuttle Payloads*

19990854656  NASA Johnson Space Center, Houston, TX USA

**STS-96 Mission Highlights, Part 3**

Jul. 07, 1999; In English; Videotape: 41 min. 58 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1999087308; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

In this third part of a three-part video mission highlights set, space crew operations between the STS-96 Space Shuttle Orbiter Discovery and the International Space Station, as well as STS reentry and landing is reviewed. The flight crew consists of Kent V. Rominger, Commander; Rick D. Husband, Pilot; and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette (Canadian), and Valery Ivanovich Tokarev (Russian). The primary goals of this mission were to work on logistics and resupply the International Space Station. This third part of the three-part series includes footage from Flight Days 8-11 (FD 8-11) of the mission. FD 8 includes the crew members moving the last items from Discovery into the International Space Station (ISS), closing the final hatch on the orbiting outpost and commanding a series of 17 pulses of Discovery’s reaction control system jets to boost the station’s orbit. Discovery undocks from the station, performs a 2 1/2 lap flyaround of the station, before Husband fires Discovery’s jets in a final burst to move Discovery away from the station, concluding six days of docked operations. After the flyaround, Husband fires Discovery’s jets to depart the station’s vicinity. Beginning FD 9, as Discovery deports from the station, Mission Specialists Tammy Jernigan and Dan Barry pack away the space suit gear they used during their spacewalks early in the mission, while Commander Kent Rominger and Pilot Rick Husband practice landings on a laptop computer program. Mission Specialists Julie Payette and Valery Tokarev help to stow gear and 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 Tracked Atmospheric Research Satellite for Heuristic International Networking Equipment). In and around landing preparations and the STARSHINE deployment, 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 (Orbiter); Space Shuttle Missions; International Space Station; Spacecrews; Spacecraft Landing; Spacecraft Reentry*

19990854914  NASA Johnson Space Center, Houston, TX USA

**STS–93 Crew Interview**

Jul. 23, 1999; In English; Videotape: 60 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1999080466; 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 (Orbiter); Manned Spacecraft; Spacecrews; Space Transportation System Flights*

19990856554  NASA Johnson Space Center, Houston, TX USA

**STS–93 Flight Day 3 Highlights and Crew Activities**

Jul. 24, 1999; 22p; In English; Videotape: 22 min. 21 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1999088231; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Commander Eileen Collins, Pilot Jeff Ashby, and Mission Specialists 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 the Moon’s and Jupiter’s reflectance and its primary reaction control system jets. Collins also conducted a conversation with students at the Harbor View Elementary School in Corona Del Mar, California using the Shuttle Amateur Radio Experiment (SAREX) system. She also checked experiments associated with the Cell Culture Module (CCM) and the Biological Research in Canister (BRIC) payloads.

**CASI**

*Space Transportation System; Spacecrews; Imaging Techniques; Manned Spacecraft; Spaceborne Experiments; Space Transportation System Flights*

19990856555  NASA Johnson Space Center, Houston, TX USA

**STS–93 Flight Day 2 Highlights and Crew Activities**

Jul. 24, 1999; In English; Videotape: 18 min. 4 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1999088230; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Following an eight hour sleep period, the five member flight crew, Commander Eileen Collins, Pilot Jeff Ashby, and Mission Specialists 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 Crews; Space Transportation System; Space Transportation System Flights; Imaging Techniques; Payloads; Manned Spacecraft

1999095688 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--1999088233; No Copyright; Avail: CASI; B02: Videotape-Beta: V02: Videotape-VHS

Columbia’s crew began packing up experiments and preparing to return to Earth tomorrow with a touchdown planned for Kennedy Space Center at 10:20 p.m. CDT. Commander Eileen Collins and Pilot Jeff Ashby checked out the cockpit instruments, displays and flight control systems. They also test fired the 38 small steering jets. Everything was in good shape and ready for the trip back to Earth. Also, Collins and Ashby were joined by the rest of the crew for a press conference, fielding questions from reporters in Houston, Florida and Massachusetts.

CASI

Space Transportation System; Spacecraft; Space Transportation System Flights; Touchdown; Manned Spacecraft

1999095689 NASA Johnson Space Center, Houston, TX USA

STS-93 Flight Day 4 Highlights and Crew Activities

Jul. 25, 1999; In English; Videotape: 20 min. 48 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--1999088232; No Copyright; Avail: CASI; B02, Videotape-Beta: V02, Videotape-VHS

The five astronauts aboard the Space Shuttle Columbia began their fourth flight day preparing to make additional celestial observations through the shuttle’s windows and continue work with a variety of instruments. Pilot Jeff Ashby and Mission Specialists Steve Hawley and Michael Tognini set up an exercise treadmill and the Treadmill Vibration Information System (TVIS) which measures vibrations and changes in microgravity levels caused by on-orbit workouts. Astronaut Hawley again made observations of Venus, Jupiter and the Moon with the Southwest Ultraviolet Imaging System (SWUIS) as Commander Eileen Collins and Pilot Jeff Ashby put the shuttle in the proper orientation for his observations. Tognini and Coleman checked the biprocessing 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; Spacecraft

1999095798 NASA Johnson Space Center, Houston, TX USA

STS-96 Post Flight Presentation

Sep. 08, 1999; In English; Videotape: 15 min. 31 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--1999129646; No Copyright; Avail: CASI; B02, Videotape-Beta: V02, Videotape-VHS

The Crew of STS-96 Discovery Shuttle, Commander Kent Rominger, Pilot Rick D. Husband, Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev, are shown narrating the mission highlights. Scenes include walk out to the transfer vehicle, and launch of the shuttle. Also presented are scenes of the start of the main engine, ignition of the solid rocket boosters, and the separation of the solid rocket boosters. Footage of Payette preparing the on-board camera equipment, while Barry and Jernigan perform routine checks of the equipment is shown. Also presented are various pictures of the shuttle in its orbit, the docking of the shuttle with the Mir International Space Station, and crewmembers during their space walk. Beautiful panoramic views of the Great Lake, Houston, and a combined view of Italy and Turkey are seen. The crew of Discovery is shown performing a spacewalk experiment, tumbeling, undocking, performing transfer operations, and deploying the STAIRSHINE 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

19991116268 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; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

An overview of Flight STS-93 is presented. The primary objective of the STS-93 mission was to deploy the Advanced X-Ray Astrophysics Facility (AXAF), also known as the Chandra X-ray Observatory. The mission flew on the Columbia Shuttle, on July 22, 1999. This facility is the most sophisticated X-ray observatory ever built. Other payloads on STS-93 were: (1) the Midcourse Space Experiment (MSX), (2) Shuttle Ionospheric Modification with Pulsed Local Exhaust (SIMPLEX), (3) Southwest Ultraviolet Imaging System (SWUIS), (4) Gelation of Sol's 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 launch and a night landing at the Kennedy Space Center.

CASI

Space Transportation System; X Ray Astrophysics Facility; Space Shuttle Missions; Crew Procedures (Inflight)

19991116476 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; Avail: CASI; B02, Videotape-Beta: V02, Videotape-VHS

The Hubble Space Telescope (HST) team is preparing for NASA’s third scheduled service call to Hubble. This mission, STS-103, will launch from Kennedy Space Center aboard the Space Shuttle Discovery. The seven flight crew members are Commander Curtis L. Brown, Pilot Scott J. Kelly; European Space Agency (ESA) astronaut Jean-Francois Clervoy who will join space walkers Steven L. Smith, C. Michael Foale, John M. Grunsfeld, and ESA astronaut Claude Nicollier. The objectives of the HST Third Servicing Mission (SM3A) are to replace the telescope’s six gyroscopes, a Fine-Guidance Sensor, an S-Band Single Access Transmitter, a spare solid-state recorder and a high-voltage/temperature kit for protecting the batteries from overheating. In addition, the crew plans to install an advanced computer that is 20 times faster and has six times the memory of the current Hubble Space Telescope computer, to prepare for these extravehicular activities (EVAs), the SM3A astronauts participated in Crew Familiarization sessions with the actual SM3A flight hardware. During these sessions the crew spent long hours rehearsing their space walks in the Guidance Navigation Simulator and 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 Bay Doors Simulator. They also trained and verified the flight Orbital Replacement Unit Carrier
Astronauts lainine, Hubble Space Telescope: Discovery (Orbiter); Space Transportation System: Extravehicular Activity; Space Maintenance: Flight Crews

STS-41G TCDT
Sep. 15, 1984; In English; Videotape: 20 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1992079006; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The Crew of STS-41G Challenger Shuttle, Pilot Jon A. McBride, Mission Specialists Kathryn D. Sullivan, Sally K. Ride and David C. Leestma, and Payload Specialists Marc Garneau, and Paul D. Scully-Power are seen driving in the Astro-van to pick up the Commander of the mission Robert L. Crippen. Footage of the crew arriving at the launch pad, departing the Astro-van and boarding the shuttle to perform a trial countdown demonstration test are shown. Members of the Challenger team are seen exiting the shuttle, and answering questions from reporters. Live footage of the flight control room, and several panoramic views of the shuttle on the launch pad are also seen.

CASI
Checkout; Prefiring Tests; Prelaunch Tests; Ground Tests; Test Firing; Space Shuttle Mission 41-G: Challenger (Orbiter); Space Transportation System; Space Transportation System Flights

STS-26 SRB 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--1992079111; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage of a system inspection done in the development of the STS-26 Space Transportation System spacecraft is seen. The engineering team performs the inspection by lowering a member of the team into the center segment joint. The team member wore an oxygen mask while carrying out the process.

CASI
Inspection; Checkout; Space Transportation System

STS-51C Launch and Landing
Jan. 27, 1985; In English; Videotape: 50 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1992079223; 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. Shriver, Pilot; Ellison S. Onizuka, Mission Specialist; James F. Buchli, Mission Specialist; and Gary E. Payton, Payload Specialist. The launch video is presented from several different vantage points and covers the countdown from the launch pad, main engine ignition, liftoff, and solid rocket booster separation. The landing footage contains final descent and approach, landing gear deployment, and touchdown, which was also captured from different locations including a helicopter. STS-51C carried the DoD 85-1 payload and was the first mission dedicated to the Department of Defense.

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

STS-26/Discovery Preparations for Launch
September 1988; In English; Videotape: 2 hr. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1992079255; 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 Transports of Organic Solids (PVTOS); Protein Crystal Growth (PCG); Infrared Communications Flight Experiment (IRCEF); Aggregation of Red Blood Cells (ARC); Isotopic Focusing Experiment (IEF); Mesoscale Lightning Experiment (MLE); Phase Partitioning Experiment (PPE); Earth-Limb Radiance Experiment (ELRAD); Automated Directional Solidification Furnace (ADSF) and two Shuttle Student Involvement Program (SSIP) experiments. Launch preparation footage includes flight crew arrival at KSC, rollout of Discovery to Pad B, OV-103 Discovery power-up, main engine unpacking and installation, solid rocket boosters’ arrival prep and stacking, and all skirt to lift segment mating.

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

STS-31A: Mission Highlights
Nov. 1984; In English; Videotape: 60 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1992079092; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The crew (Commander Frederick H. Hauck, Pilot David M. Walker, Mission Specialists Anna L. Fisher, Dale A. Gardner, and Joseph P. Allen) prepares for the 14th shuttle mission. The Canadian communications satellite TELESAT H (ANIK) is attached to Payload Assist Module-D (PAM-D) and deployed into geosynchronous orbit on flight day two. Defense communications satellite SYNCOM IV-1 is deployed on day three. 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

STS-26: O-Ring Installation and Inspection
Apr. 15, 1988; In English; Videotape: 5 min. playing time, in color, no sound
Report No.(s): NONP--NASA--VT--1992079093; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

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

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

STS-41C: Mission Highlights
Oct. 31, 1984; In English; Videotape: 50 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1992079095; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

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

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

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--1992079094; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The STS-93 flight crew, Commander Eileen M. Collins, Pilot Jeffrey S. Ashby, and Mission Specialists Steven A. Hawley, Catherine G. Coleman, and Michel Tognini are seen performing pre-launch activities such as crew suit-up, and ride out to the launch pad for an early morning launch. Also, included are various panoramic views of the shuttle on the pad. The crew is suited in the
White Room for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Once on-orbit the primary objective is to deploy the Advanced X-ray Astrophysics Facility. Throughout the presentation, the astronauts take turns narrating particular aspects of the mission with which they are involved. Coleman and Tognini command Chandra to spring-eject from its cradle in the payload bay. The crew then work on the various experiments being carried out in flight. They successfully set up the first observatory using the Southwest Ultraviolet Imaging System (SWUIS). The SWUIS is used to image planets and other solar system bodies in order to explore their atmospheres and surfaces in the ultraviolet (UV) region of the spectrum. Tognini conducts a ham radio conversation with Jean-Pierre Haignere on the Mir Space Station. Towards the end of the mission Ashby, Hawley and Tognini set up an exercise treadmill and the Treadmill Vibration Information System (TVIS). The live footage ends with the reentry of Columbia into the Earth’s Atmosphere. The night landing includes touchdown, deployment of the drag chute and crew departure from the vehicle.

CASI

Columbia (Orbiter); Manned Space Flight; Space Transportation System; Space Transportation System Flights; X Ray Astrophysics Facility; Spaceborne Astronomy; X Ray Astronomy; Solar System

2000000253 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-51B Launch and Landing
May 6, 1985; In English; Videotape: 20 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1999207907; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Live footage of various isolated launch views is seen. Views of the Space Shuttle Challenger are shown from different camera sites such as the VAB (Vehicle Assembly Building) roof, Pad Perimeter, Helicopter, Convoy, and Midfield. Also shown from different cameras is the re-entry and landing of the shuttle at Kennedy Space Center (KSC). Footage also includes the ground recovery crew as they travel to the spacecraft. Challenger crew, Commander Robert C. O’Regan, Pilot Frederick D. Gregory, Mission Specialist 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

2000000427 NASA Kennedy Space Center, Cocoa Beach, FL USA
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 Baudisch, Baudisch, and Sultan Salah Al Saeed are seen performing pre-launch activities such as eating of the traditional breakfast, ride out to the launch pad, and crew suit-up for an early morning launch. Also, included are various panoramic views of Discovery on the pad. The main objective of this mission is to deploy three communication satellites. The satellites being deployed are MORE LOS-A, for Mexico; ARABSAT-A, for the Arab Satellite Communications Organization; and TELSTAR-3D, for AT&T. The crew also remove the SPARTAN-1 satellite. Scenes include the crew in the mess deck via video link with Mission Control Center in celebration of the 160th American in space. Al Saeed also spoke with his father in Saudi Arabia via video link. Views of certain experiments are also seen. Al Saeed is seen conducting the postural experiment, and Baudisch is seen conducting the equilibrium experiments. Panoramic views of the Hawaiian Island Archipelago, and Wadi Habbah, 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

2000000427 NASA Johnson Space Center, Houston, TX USA
STS--103 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--1999213427; 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-François 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; Spacecraft; Crew Procedures (Inflight)

2000000428 NASA Johnson Space Center, Houston, TX USA
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--1999213441; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, 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-François Clervoy are seen executing various activities including suit-up, walkout to the Astro-Van, and strap-in to 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

20000004510 NASA Johnson Space Center, Houston, TX USA
STS--103 Crew Interviews: Jean-François 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-François 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)
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–1999213437; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Live footage of a preflight interview with Pilot Scott J. Kelly is seen. The interview addresses many different questions including why Kelly became an astronaut, the events that led to his interest, any role models that he had, and his inspiration. Other interesting information that this one-on-one interview discusses is an explanation of the why this required mission to service the Hubble Space Telescope must take place at such an early date, replacement of the gyroscopes, transistors, and computers. Also discussed are the Chandra X Ray Astrophysics Facility, and a brief touch on Kelly’s responsibility during any of the given four space walks scheduled for this mission.

CASI

Hubble Space Telescope: Replacing; Gyroscopes; Transistors; Computers; Discussion; Spacecrafts; 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–1999208158; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Live footage of a preflight interview with Mission Specialist John M. Grunsfeld is seen. The interview addresses many different questions including why Grunsfeld became an astronaut, and the events that led to his interest. Other interesting information that this one-on-one interview discusses is an explanation of the why this required mission to service the Hubble Space Telescope must take place at such an early date, and a brief touch on Grunsfeld’s responsibility during any of the four space walks scheduled for this mission.

CASI

Hubble Space Telescope: Space Maintenance; Crew Procedures (Inflight); Spacecrafts; 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–1999207915; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Preparations for launch of STS-26 are shown. They include: (1) VAB to OPR high bay rollover; (2) Main engine unpacking and installation; (3) OMS pod installation; (4) Crew hatch removal; (5) Modified crew hatch installation; (6) Nose cap installation; (7) 17 inch disconnect work; (8) Ku-band antenna stow and deploy; (9) Tile work; (10) Oasis payload installation; (11) Solid rocket boosters arrival, props and stacking; (12) Modified SRB segments: Arrival via train at KSC RSFS; (13) AFT segment rotation to vertical in RSFS; (14) AFT skirt to AFT segment mating; (16) SRB grain inspection; (17) Lift AFT segment; and (18) Lift and mate external tank.

CASI

Space Transportation System: Launching; Solid Propellant Rocket Engines; Space Shuttle Boosters; Payloads; Inspection

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. Hartsfield, STS 41-D mission by listing the following firsts: (a) first Discovery flight; (b) first flight for a commercial payload specialist; (c) first SYNCOM satellite deployed from an orbiter; and (d.) first to deploy 3 satellites. This was also the heaviest stack at lift-off and the heaviest payload. The footage concludes with a film of the mission highlights.

CASI

Conferences: Discovery (Orbiter); Space Transportation System; Spacecrafts
Live footage of a preflight interview with Mission Commander Kevin R. Kregel seen. The interview addresses many different questions including why Kregel became an astronaut, 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), 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

Aug. 05, 1999; In English; Videotape: 14 min. 18 sec. playing time, in color, with sound
Report No. (s): NONP--NASA--VT--1999020898; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Live footage of a preflight interview with Mission Specialist 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; Radar Maps; Radar Imagery: Earth Surface

Aug. 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

Dec. 25, 1999; In English; Videotape: 25 min., 19 sec. playing time, in color, with sound
Report No. (s): NONP--NASA--VT--2000001111; 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-Francois Clervoy, John M. Grunsfeld, Michael Foale, and Claude Nicollier. The main purpose of the mission was to service the Hubble Space Telescope (HST). The primary objective of the mission was to replace all six of the gyroscopes that make up the three Rate Sensor Units. In addition the astronauts installed a new computer. During the 5th day Michael Foale and Claude Nicollier performed the servicing of the HST in an 8 hour 10 minute Extravehicular Activity (EVA). The servicing included the removal 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

Aug. 08, 1999; In English; Videotape: 20 min., 20 sec. playing time, in color, with sound
Report No. (s): NONP--NASA--VT--1999020810; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Live footage of a preflight interview with Mission Specialist Mamoru Mohri 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), 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

Aug. 04, 1999; In English; Videotape: 20 min., 20 sec. playing time, in color, with sound
Report No. (s): NONP--NASA--VT--2000008215; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Included in this short NASA KSC video release are three different views of the STS-103 Hubble Mission 3 Payload at Launch Complex 39B at Kennedy Space Center.

CASI
Cape Kennedy Launch Complex: Space Shuttle Payloads
while the shuttle heads to Australia, and some beautiful panoramic views of the Earth are also seen.

CASI
Crew Procedures (Inflight); Spacecrafts; Firing (Igniting); Orbital Maneuvers; Orbital Space Tests

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–200001112; 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 shown taking pictures, and putting away the equipment.

CASI
Crew Procedures (Inflight); Spacecrafts; Hubble Space Telescope; Electric Batteries; Remote Sensors; Spacecraft Maintenance

NASA Johnson Space Center, Houston, TX USA
STS-99 Crew Interviews: Gorie
Aug. 04, 1999; In English; Videotape: 21 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–200000826; No Copyright; Avail: CASI;
B01, Videotape-Beta; V02, Videotape-VHS

Live footage of a preflight interview with Pilot Dominic L. Pudwell Gorie is seen. The interview addresses many different questions including why Gorie became an astronaut, the events that led to his interest, and his career path. Other interesting information that this one-on-one interview discloses is the purpose for the Shuttle Rad Topography Mission (SRTM). The main interest is on the importance of this SRTM flight, the knowledge we will learn gain from the 3D topographic map of the Earth, and the possible similarity to the tethered Satellite System Flight. The two antennas that will be taking the pictures, the involvement of the National Imagery and Mapping Agency (NIMA), mass deployment and retraction, gravity gradient force, flight cast maneuvers, EARTHCAM, a student-controlled camera on the Endeavour Orbiter, and Gorie’s responsibility during this 24 hour mission.

CASI
 Shuttle Imaging Radar; Infrared Radar; Radar Imagery; Topography; Relief Maps; Earth Surf ace

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–200000813; 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 launch by a period of 24 hrs is presented. According to Ron Dittemore, Space Shuttle Program Manager, the STS-103 team delayed the launch because they need extra time to check one vendor’s manufacturing processes, after an x-ray inspection revealed that an improper weld rod was used to weld one of the pressuring lines (called NPS lines) in the ET (external tank). Mr. Dittemore explained that since it is in the ET (not a major load carrying structure and rebuild after each flight), it did not pose any danger to the STS-103 flight. However, the same vendor also manufactured some parts of the orbiter and the team wanted to make sure that the quality of the vendor’s manufacturing processes is robust before launching the orbiter to space. He also answered some reporters’ questions.

CASI
Discovery (Orbiter); Spacecraft Launching; Spacecraft Maintenance; Spacecraft Structures
Involvement of the International partners, mass deployment and retraction, is on the importance of this SRTM flight, the knowledge we will gain from the 3D Radar Imaging. Other interesting information that this one-on-one interview discusses is Thiele's responsibility during this 24 hour mission are also discussed.

CASI chilling Imaging Radar; Radar Imagery; Radar Maps; Topography; Relief Maps; Earth Surface

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

Live footage of the fully assembled Discovery Orbiter transported from the OPF (Orbiter Processing Facility) to the VAB (Vehicle Assembly Building) is shown.

CASI Discovery (Orbiter); Ground Handling; Transportation

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

Live footage shows the astronauts after breakfast getting into spacesuits, walking out to board the bus, and boarding the bus prior to launch.

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

Live footage of a preflight interview with Mission Specialist Janice E. Voss is shown. The interview addresses many different questions including why Voss' 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 a preflight interview with Mission Specialist Gerhard P.J. Thiele is shown. The interview addresses many different questions including why Thiele's responsibility during this 24 hour mission are also discussed.

CASI Space Transportation System; X Ray Astrophysics Facility; Space Shuttle Payloads; Preflight Operations; Protective Clothing

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 Cody Coleman, Steve Hawley and Michel Tognini from the Centre National d’Etudes Spatiales (CNES). This video tape shows the astronauts after breakfast getting into spacesuits, walking out to board the bus, and boarding the bus prior to launch.
STS-93 CEII 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--2000008267; 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.

CASI

STS-103 Hubble Inspection with Astronauts at Payload Hazardous Servicing Facility (PHSF)
Sep. 03, 1999; In English; Videotape: 24 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000008213; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Live footage of the inspection of several different parts needed for STS-103 is presented. Some of the things inspected include a latch, and Velcro materials for stability. The astronauts turn the latch on a small door, opened the door then closed it again.

CASI

STS-96 Crew Interview: Rick Husband
Mar. 17, 1999; In English; Videotape: 33 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000010536; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Pilot Rick D. Husband is seen. The interview addresses many different questions including why Husband became an astronaut, the events that led to his interest, and his career path as a pilot. Other interesting information that this one-on-one interview discusses is this logistics and outfitting mission, why it is important to send equipment to the International Space Station (ISS), and the Integrated Cargo Carrier (ICC). Husband mentions Discovery’s anticipated docking with the ICC, her role during the scheduled space walk with Tamara E. Jernigan and Daniel T. Barry, and plans for the supply and equipment transfers. Husband 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

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

Live footage of a preflight interview with Mission Specialist Ellen Ochoa is seen. The interview addresses many different questions including why Ochoa became an astronaut, the events that led to her interest, and her career path through research and engineering. Other interesting information that this one-on-one interview discusses is the logistics and supply mission, why it is important to send equipment to the International Space Station (ISS), and the Integrated Cargo Carrier (ICC). Ochoa mentions Discovery’s anticipated docking with the ISS, her role during the scheduled space walk with Tamara E. Jernigan and Daniel T. Barry, and plans for the supply and equipment transfers. Ochoa also discusses her involvement in a Volatile Removal Assembly (VRA) experiment to remove contaminants from the water, the undocking of the spacecraft from the ISS, and a fly-around maneuver to take pictures of the ISS.

CASI

STS-96 Crew Interview: Tamara Jernigan
Mar. 17, 1999; In English; Videotape: 25 min. 32 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1999213309; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

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

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

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 Delucchi (Univ. Alabama-Birmingham, Center for Macromolecular Crystallography), Chris Podsiadly (3-M Co., Marshall Space Flight Center) and Ed Valentine (MFS’s) present discussions of the science and commercial development that surround the Physical Vapor Transport of Organic Solids-2 (PVTOS-2) payload. Their presentations are followed by a question and answer period for journalists from scientific journals.

CASI

Space Shuttle Payloads: Proteins Crystal Growth

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

Live footage of a preflight interview with Mission Specialist Daniel T. Barry is seen. The interview addresses many different questions including why...
Barry became an astronaut, 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 schedule of events with Tamara E. Jemigan, plans for the supply and equipment transfers, and his responsibility during this transfer. A fly-around maneuver to take pictures of the ISS, and the deployment of the Student Tracked Atmospheric Research Satellite for Heuristic International Networking Equipment (STARSHINE) are also discussed.

CASI
International Space Station: Space Logistics; Transferring; Materials Handling

STS-96 Crew Interview: Julie Payette
Mar. 18, 1999; In English; Videotape: 28 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–1999213302; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

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 Tamara E. Jemigan, and Daniel T. Barry and her responsibility as IV (intra-vehicular) crew-member. She also mentions plans for the supply and equipment transfers, the change out of battery chargers, her involvement in the installation of mufflers, the Canadian Space Vision Systems, and the future automatic docking of the Service Module to the Zarya Module of the ISS. A fly-around mission, and the deployment of the Student Tracked Atmospheric Research Satellite for Heuristic International 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

STS-26 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 US space programs, and space shuttles. He mentions the logistics and supply mission, plans for the supply and equipment transfers, his involvement with the installation of mufflers, and the undocking 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

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 Rick D. Husband, and Mission Specialists Ellen Ochoa, Tamara E. Jemigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev) arrive via fighter jets and assemble. A brief speech about the crew’s duties during their mission is given by Commander Rominger.

CASI
Spacecrafts: Space Transportation System: Space Missions
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

20900812424 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-1999075901; 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, (Frederic 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 part of the video includes watch actor 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); Spacecruis

20900912426 NASA Kennedy Space Center, Cocoa Beach, FL USA STS-91: Flight Crew Meets with Family and Friends at Launch Complex J9A Jun. 01, 1998; In English; Videotape: 3 min. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-2000010562; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The crew (Commander Charles J. Precourt, Pilot Dominic L. Pudwill, Gorie, Mission Specialist Wendy B. Lawrence, Franklin R. Chang-Diaz, Janet L. Kavanti and Valery Victorovich Ryumin) take time from their busy schedule to chat with friends and family, at a distance. They also pose for group and single pictures.

CASI
Spacecruis; Space Transportation System Flights: Space Shuttle Missions: Conversation

20900912855 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-2000008276; 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 enroute the space shuttle Columbia. The mission was led by Commander Eileen Collins. The crew was Pilot Jeff Ashby and Mission Specialists Cady Coleman, Steve Hawley and Michel Tognini from the Centre National d’Etudes Spatiales (CNES). This videotape shows the astronauts getting into spacesuits, and inspecting the equipment.

CASI
Astronauts; Space Suits; Spacecruis

20900912859 NASA Kennedy Space Center, Cocoa Beach, FL USA Atlas Centaur/GOES-J News Conference, Part 3 of 3 May 18, 1995; In English; Videotape: 1 hr. 2 min. 28 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-1999000038; 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. Floyd 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, discussed the launch window, 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 anvil clouds and thunderstorms, and question and answer session is presented. Immediately following this conference is the NOAA/GOES-J News Briefing. Live coverage of the presentation with participants Gary Davis, Director, Satellite Operations; Dr. James Pardom, Chief Regional and Mesoscale Meteorology; Frederick Osbhy, Director, National Severe Storms Forecast Center; and Steven Kirkner, GOES System Acquisition Manager is shown. Gary discusses 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 pictographic comparisons between GOES-8 and GOES-7, the GOES-8 Imaging 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 Radar Network. This Abstract describes the content of tape 1 of 2, tape 2 has a Report number of NONP-NASA-VT-1999009992.

CASI
Atlas Centaur Launch Vehicle; GOES-9; GOES-8; GOES 7; Synchronous Platforms; Geosynchronous Orbits; Conferences

20900912868 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-1999028163; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage of a preflight interview with Pilot Jeffrey S. Ashby is presented. The interview addresses many different questions including why Ashby wanted to be an astronaut, how he feels about being the rookie on this launch, and what he expects to feel when he lifts off. Other interesting information that this one-on-one interview discusses is the deployment of the Chandra satellite, why people care about x ray energy, whether or not Chandra will complement the other X Ray Observatories currently in operation, and his responsibilities during the major events of this mission. The Southwest Research Ultraviolet Imaging System (SWUIS) on board Columbia, and the two observatories presently in orbit (Gamma Ray Observatory; and Hubble Space Telescope) are also discussed.

CASI
Deployment: X Ray Astrophysics Facility: Spaceborne Astronomy; X Ray Astronomy: Gamma Ray Observatory; Hubble Space Telescope

20900912869 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-1999028162; 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
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 National d'Etudes Spatiales (CNES) Astronaut). Subjects discussed include early influences that made Michel want to be a pilot and astronaut, his experience as a French military pilot and his flying history. Also discussed were French participation in building the International Space Station (ISS), the STS-93 primary mission objective, X-ray observation using the Advanced X-ray Astrophysics Facility (AXAF), and failure scenarios associated with AXAF deployment. The STS-93 mission objective was to deploy the Advanced X-ray Astrophysics Facility (AXAF), later renamed the Chandra X-Ray Observatory, in honor of the late Indian-American Nobel Laureate Subrahmanyan Chandrasekhar.

CASI
Space Shuttle Missions; Space Transportation System Flights; X Ray Astrophysics Facility; Deployment

2000012871 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–26 Preflight Press Briefing: 5 Man Crew, Part 2 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–199207912; 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 D. Hauck, and the introductions of crew members, Richard O. Covey, Pilot, and mission specialists, John M. Lounge, George D. Nelson, and David C. Hilmers. Some of the questions posed by scientific journalists addressed the following subjects: launch preparation in the month prior to flight, astronaut family anxieties in light of the Challenger accident, extent of safety measures made prior to flight, flight readiness firing, the crew escape system, civilians in space, conservative mission design, astronaut selection, mission turnaround and launch rate, and the ability to maintain a high level of scrutiny regarding safety on future missions.

CASI
Space Transportation System Flights; Space Shuttle Missions; Safety Management; Mission Planning; Astronauts

2000012872 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–11/41–B Post Flight Press Conference
Feb. 21, 1984; In English; Videotape: 1 hr., 2 min., 24 sec., playing time, in color, with sound
Report No.(s): NONP–NASA–VT–199207910; 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-1 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. 

CASI
Space Transportation System Flights; Space Shuttle Missions; Simulation Training; Astronauts; Preflight Training

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 M. Chretien, Wendy B. Lawrence, and David A. Wolf) are shown speaking to the press as they board a small plane for departure after their return from the space mission.

CASI
Space Missions; Spacecrews; Space Transportation System Flights

2000012948 NASA Johnson Space Center, Houston, TX USA
STS–99 Crew Training
Jan. 19, 2000; In English; Videotape: 38 min. 54 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000010586; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Live footage of the STS-99 crew members shows Commander Kevin R. Kregel, Pilot Dominic L. Padwill 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, SRTM (Shuttle Radar Topography Mission) Deploy and Mapping Activities, HDTV (High Definition Television) Camera Training, and Ascent Simulation. Footage also includes the six-member crew participating in a photo session.

CASI
Spacecrews; Astronaut Training; Ejection Training; Bailout; Training Simulations

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–2000010624; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The crew (Commander Eileen M. Collins, Pilot Jeffrey S. Ashby, Mission Specialists Steven A. Hawley, Catherine G. Coleman, and Michael Tognini) are dressed in cleanroom suits while overseeing the solar panel installation.

CASI
Space Transportation System: Spacecrews; Solar Reflectors

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 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 Pilots 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 arriving 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 spacecrafts, and then their crew into the orbiter.

CASI
Spacecrews; Crew Procedures (Preflight); Astronauts; Preflight Operations
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), Cinaki Mukai (NASDA) Payload Specialist, and Michel Tognini, standing in front of an M-113 armored personnel carrier vehicle, and posing for photographs. Footage also includes the crew inside the vehicle getting quick instructions on how to operate the vehicle. They are also seen setting up and walking out to the Astro Van from the Operations and Checkout (O&C) Building.

**CASI**

*X Ray Astrophysics Facility; Panels*

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The STS-95 crew (Commander Robert D. Cabana, Pilot Frederick C. Haise, and Mission Specialists Steven A. Hawley, Catherine G. Coleman, and Michel Tognini, watching the installation of Chandra's Solar Panel on the Vertical Processing Facility (VPF) at Kennedy Space Center. Crewmembers ask the engineers questions about different components in order to familiarize themselves.

**CASI**

*Installing; X Ray Astrophysics Facility; Panels*

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The STS-95 crew (Commander Robert D. Cabana, Pilot Frederick C. Haise, and Mission Specialists Steven A. Hawley, Catherine G. Coleman, and Michel Tognini, watching the installation of Chandra's Solar Panel on the Vertical Processing Facility (VPF) at Kennedy Space Center. Crewmembers ask the engineers questions about different components in order to familiarize themselves.

**CASI**

*Installing; X Ray Astrophysics Facility; Panels*

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The STS-95 crew (Commander Robert D. Cabana, Pilot Frederick C. Haise, and Mission Specialists Steven A. Hawley, Catherine G. Coleman, and Michel Tognini, watching the installation of Chandra's Solar Panel on the Vertical Processing Facility (VPF) at Kennedy Space Center. Crewmembers ask the engineers questions about different components in order to familiarize themselves.

**CASI**

*Installing; X Ray Astrophysics Facility; Panels*

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The STS-95 crew (Commander Robert D. Cabana, Pilot Frederick C. Haise, and Mission Specialists Steven A. Hawley, Catherine G. Coleman, and Michel Tognini, watching the installation of Chandra's Solar Panel on the Vertical Processing Facility (VPF) at Kennedy Space Center. Crewmembers ask the engineers questions about different components in order to familiarize themselves.

**CASI**

*Installing; X Ray Astrophysics Facility; Panels*

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The STS-95 crew (Commander Robert D. Cabana, Pilot Frederick C. Haise, and Mission Specialists Steven A. Hawley, Catherine G. Coleman, and Michel Tognini, watching the installation of Chandra's Solar Panel on the Vertical Processing Facility (VPF) at Kennedy Space Center. Crewmembers ask the engineers questions about different components in order to familiarize themselves.

**CASI**

*Installing; X Ray Astrophysics Facility; Panels*

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The STS-95 crew (Commander Robert D. Cabana, Pilot Frederick C. Haise, and Mission Specialists Steven A. Hawley, Catherine G. Coleman, and Michel Tognini, watching the installation of Chandra's Solar Panel on the Vertical Processing Facility (VPF) at Kennedy Space Center. Crewmembers ask the engineers questions about different components in order to familiarize themselves.

**CASI**

*Installing; X Ray Astrophysics Facility; Panels*
Asteroid Missions; Space Shuttle Payloads; X Ray Astrophysics Facility: Microgravity

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--20000010558; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the crew members of the STS-93 mission, Commander Kent V. Rominger, Pilot Rick D. Husband, Mission Specialists Julie Payette, 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

STS-96: Space Shuttle Double MOD/ICC Going into the Payload Bay
Feb. 21, 1999; In English; Videotape: 20 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--20000010527; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This videotape consists of six different segments. The first segment is a close-up shot from Near-Earth Asteroid Rendezvous (NEAR) of the asteroid EROS. The second presents close-up shots of the Chandra telescope in the clean room. The third segment is an animated film showing the deployment of the Chandra telescope from the shuttle payload bay; and views of the elliptical orbit patterns that the telescope is planned to take. The fourth segment shows TRW Executive Vice President & General Manager, Systems & Information Technology Group, Donald Winter announcing the delivery of the Chandra Telescope to NASA. The fifth part was announced on the tape as an interview of Carolyn Griner, the Deputy Director of Marshall Space Flight Center, but this is not on the tape. The sixth segment shows views of the fourth USA Microgravity Payload (USMP-4) experiments. After shots of the STS-87 lift-off, 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

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--20000008275; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the members of the STS-95 mission, Commander Kent V. Rominger, Pilot Rick D. Husband, Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev, showing them in the node of the vehicle at the Space Station Processing Facility (SSPF). Scenes include the engineer explaining and the crew asking questions as to what certain labels mean. Footage also includes the crew observing the nose of the vehicle.

CASI

Flight Crews; Crew Procedures (Preflight); Astronaut Training

STS-93: Columbia/Chandra Crew Press Conference
Jan. 21, 1999; In English; Videotape: 20 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--20000010527; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This videotape consists of six different segments. The first segment is a close-up shot from Near-Earth Asteroid Rendezvous (NEAR) of the asteroid EROS. The second presents close-up shots of the Chandra telescope in the clean room. The third segment is an animated film showing the deployment of the Chandra telescope from the shuttle payload bay; and views of the elliptical orbit patterns that the telescope is planned to take. The fourth segment shows TRW Executive Vice President & General Manager, Systems & Information Technology Group, Donald Winter announcing the delivery of the Chandra Telescope to NASA. The fifth part was announced on the tape as an interview of Carolyn Griner, the Deputy Director of Marshall Space Flight Center, but this is not on the tape. The sixth segment shows views of the fourth USA Microgravity Payload (USMP-4) experiments. After shots of the STS-87 lift-off, 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

STS-93: CEIF 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--20000008279; 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

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

STS-95: Space Transportation System: Spacecrafts: Inspection

STS-96: Space Transportation System: Landing; Lectures

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--200000010556; 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

Spacecrafts: Astronaut Training: Spacecraft Modules

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--20000010631; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
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 Office 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

CASI
Reviewing: Training Evaluation: Astronaut Training: Spacecraft Modules

CASI
Astronaut Training: Space Shuttle Missions: Astronauts: Spacecress

CASI
Apollo 12 Mission Summary and Splashdown

CASI
Apollo 12 Flight: Lunar Flight

CASI
Astronauts: Spacecress: Crew Procedures (Preflight)

CASI
STS-103: Post Flight Crew Presentation

CASI
Space Transportation System Flights: Space Shuttle Missions: Astronauts: Spacecress

CASI
Space Transportation System Flights: Space Shuttle Missions: Astronauts: Spacecress

CASI
STS-99 Post-flight Crew Press Conference, Part 2

CASI
STS-37 Post-flight Crew Press Conference, Part 2

CASI
STS-37 Post-flight Crew Press Conference, Part 2

CASI
STS-93: Chandra Crew Arrival

CASI
STS-99 Flight Day Highlights and Crew Activities Report

CASI
STS-99 Flight Day Highlights and Crew Activities Report

CASI
STS-99 Flight Day Highlights and Crew Activities Report

CASI
STS-99 Flight Day Highlights and Crew Activities Report
Astronauts, Voss and Gorie are seen participating in a news conference with correspondents from NBC and CNN. The Red Team (first of the dual shift crew), Kevin R. Kregel, Junto L. Kavandi and Gerhard P.J. Thiele, relieves the Blue Team and are seen continuing the mapping operations for this around the clock Shuttle Radar Topography Mission (SRTM). Commander Kregel is shown performing beam (mass) durability tests, calibrating the EarthCam Payload, and speaking with the Launch Control Center (LCC) about trouble shooting a bracket for better camera angle.

CASI
Shuttle Imaging Radar; Earth Observations (From Space); Radar Imagery; Radar Maps; Topography; Earth Surface

STS-95 Crew Activities Report/Flight Day 1 Highlights
Feb. 11, 2000; In English; Videotape: 20 min. 29 sec. playing time, in color, with sound
Report No.(s): NONP—NASA—VT—20000015185; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows the crew, 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, seated in the dining room with the traditional cake. The crew is seen performing various pre-launch activities including suit-up, walk out to the Astrovan, and strap-in into the vehicle. Also seen are the retraction of the orbiter access arm and the gaseous oxygen mist hood, main engine start, booster ignition, liftoff, and separation of the solid rocket boosters. The Red Team (first of the dual shift crew) includes Kregel, Kavandi, and Thiele, who are shown conducting jet thruster firings, activating radar instruments, and deploying the boom (mass).

CASI
Countdown; Spacecrafts; Crew Procedures (Preflight); Liftoff (Launching); Stage Separation; Space Shuttle Boosters

STS-95 CEIT in the OPF-2 and the MPPF
Sep. 02, 1998; In English; Videotape: 12 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP—NASA—VT—20000010626; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the crewmembers of STS-95, Commander Curtis L. Brown, Pilot Steven W. Lindsey, Mission Specialists Scott E. Parazynski, Stephen K. Robinson, Pedro Duque, Payload Specialists Chiaki Mukai and John H. Glenn in a training room talking. Scenes also show the crew in the simulation spacecraft. Crewmembers are seen in the Orbiter Processing Facility Bay 2 (OPF-2) and the Multi-Payload Processing Facility (MPPF) looking over equipment during the Crew Equipment Interface Test (CEIT) for their mission. The CEIT gives astronauts an opportunity for a hands-on look at the payloads and equipment with which they will be working on orbit.

CASI
Astronaut Training; Training Simulators; Flight Simulation; Flight Training; Spacecraft Equipment

STS-93 / Columbia Flight Crew Photo Op & QA at Pad for TCDT
Jun. 25, 1999; In English; Videotape: 35 min. playing time, in color, with sound
Report No.(s): NONP—NASA–VT—2000008132; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

The primary objective of the STS-93 mission was to deploy the Advanced X-ray Astrophysical Facility, which had been renamed the Chandra X-ray Observatory in honor of the late Indian-American Nobel Laureate Subrahmanyan Chandrasekhar. The mission was launched at 12:31 on July 23, 1999 onboard the space shuttle Columbia. The mission was led by Commander Eileen Collins. The crew was Pilot Jeff Ashby and Mission Specialists Cady Coleman, Steve Hawley and Michel Tognoni from the Centre National d’Etudes Spatiales (CNES). This videotape shows a pre-flight press conference. Prior to the astronauts’ arrival at the hanger area in front of the launch pad, the narrator discusses some of the training that the astronauts are scheduled to have prior to the launch, particularly the emergency egress procedures. Commander Collins introduces the crew and fields questions from the assembled press. Many questions are asked about the experiences of Commander Collins, and Mission Specialist Coleman as women in NASA. The press conference takes place outside in front of the Shuttle Columbia on the launch pad.

CASI
Females; Spacecrafts; Crew Procedures (Preflight); Preflight Operations

STS-99 Flight Day Highlights 03 and Crew Activities Report
Feb. 13, 2000; In English; Videotape: 18 min. 18 sec. playing time, in color, with sound
Report No.(s): NONP—NASA—VT—20000015186; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

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

CASI
Mapping; Topography; Relief Maps; Earth Surface; Maintenance; Antennas

STS-96 Flight Crew Press Q & A at KSCNF for TCDT
Apr. 26, 1999; In English; Videotape: 27 min. playing time, in color, with sound
Report No.(s): NONP—NASA—VT—20000010627; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

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

CASI
Conferences; Discussion; Flight Crews; Crew Procedures (Preflight)

STS-37 Breakfast / Ingress / Launch & ISO Camera Views
Apr. 05, 1991; In English; Videotape: 25 min. playing time, mostly in color, with sound, some black and white footage included
Report No.(s): NONP—NASA—VT—2000013427; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

The primary objective of the STS-37 mission was to deploy the Gamma Ray Observatory. The mission was launched at 9:22:44 am on April 5, 1991, onboard the space shuttle Atlantis. The mission was led by Commander Steven Nagel. The crew was Pilot Kenneth Cameron and Mission Specialists Jerry Ross, Jay Apt, and Linda Godwin. This videotape shows the crew having breakfast on the launch day, with the narrator introducing them. It then shows the crew’s final preparations and the entry into the shuttle, while the narrator gives information about each of the crew members. The countdown and launch is shown including the shuttle separation from the solid rocket boosters. The launch is reshown from 17 different camera views. Some of the other camera views were in black and white.

CASI
Space Transportation System; Spacecrafts; Space Shuttle Boosters; Prelaunch Summaries; 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; 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 R. Nagel. The crew was Pilot Kenneth D. Cameron and Mission Specialists Jerry...
The video shows the shuttle being rolled out to the launch pad.

**Space Shuttles; Space Transportation System; Preflight Operations; Launching Pads**

2000020768 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99: Flight Day 01 Highlights and Crew Activities Report
Feb. 11, 2000; In English; Video: 8 min. 24 sec. playing time, color, sound
Report No.(s): NONP-NASA-VT-2000020768; No Copyright; Avail: CASI; B01, VHS

This videotape shows the crewmembers of STS-99, 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**

2000020769 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-37 Mission Overview: Lead Flight Director Briefing
Feb. 12, 1999; In English; Video: 1 hr. 2 min. 34 sec. playing time, color, sound
Report No.(s): NONP-NASA-VT-2000020769; No Copyright; Avail: CASI; B04, 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 NASA centers. Questions include topics involving EVA safety, emergency EVAs, and what determines the day of primary payload deployment.

**Space Transportation System Flights; Gamma Ray Observatory; Extravehicular Activity**

2000020775 NASA Johnson Space Center, Houston, TX USA
STS-93: Flight Day 05 Highlights and Crew Activities Report
Feb. 15, 2000; In English; Video: 22 min. 44 sec. playing time, color, sound
Report No.(s): NONP-NASA-VT-2000020775; No Copyright; Avail: CASI; B02, VHS

During day 5 Endeavour gathers data four times faster than its advanced data communications system can send it to Earth. Pilot Dom Gorie and Mission Specialists Janice Voss and Mamoru Mohri transmit television coverage of Voss using an inflatable globe to explain the mapping of Earth land surfaces. Mohri is shown taking photos out the commander's window, while Gorie is changing tape on a payload high rate recorder. Mapping operations continued smoothly, with both radar and orbiter systems working flawlessly.

**Space Transportation System; Data Transmission; Television Systems; Spacecraft**

2000020777 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-96 Crew Training, Mission Animation, Crew Interviews, STARSHINE, Discovery Rollout and Repair of Heat Damage
May 21, 1999; In English; Video: 1 hr. 5 min playing time, color, sound
Report No.(s): NONP-NASA-VT-2000020777; No Copyright; Avail: CASI; B04, 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 for the SIRTF satellite. Live footage also includes students from St. Michael the Archangel School wearing bunny suits and entering the clean room for the SIRTF satellite. Live footage also includes students from St. Michael the Archangel School wearing bunny suits and entering the clean room for the SIRTF satellite.

**Crew Training; Training Simulators; Flight Simulation; Flight Landing; Ejection Training; Bailout; Virtual Reality; Computerized Simulation; Extravehicular Activity; International Space Station**

2000020779 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-37 Mission Overview: Lead Flight Director Briefing
Feb. 25, 1991; In English; Video: 1 hr. 2 min. 34 sec. playing time, color, sound
Report No.(s): NONP-NASA-VT-2000020779; No Copyright; Avail: CASI; B04, 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 NASA centers. Questions include topics involving EVA safety, emergency EVAs, and what determines the day of primary payload deployment.

**Space Transportation System Flights; Gamma Ray Observatory; Extravehicular Activity**

2000021102 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta Fuselage 2nd Stage Erection at Launch Complex 17A
Jun. 07, 1999; In English; Video: 4 min. 50 sec. playing time, color, sound
Report No.(s): NONP-NASA-VT-2000021102; No Copyright; Avail: CASI; B01, VHS

Live footage shows workers removing the protective covering from the second stage fuse. Scene shows the lifting to the fuse onto the launch complex.

**Construction; Aircraft Production; Production Engineering**

2000021106 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99 Crew Activities Report / Flight Day 11 Highlights
Feb. 21, 2000; In English; Video: 19 min. 6 sec. playing time, color, sound
Report No.(s): NONP-NASA-VT-2000021106; No Copyright; Avail: CASI; B02, 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 unraveled 5-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). 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 antenna during the mapping operation. The video 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 remained as 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**
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 on board the space shuttle Endeavour. The mission was led by Commander Kevin Kregel. The crew was Pilot Dominic L. Padwiltl 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. By the end of day six, the mission to map 32 million square miles of the Earth's surface was about 67.2 percent complete. On this video tape there is discussion about the attempts to conserve propellant, to allow for the completion of the planned mapping. There is discussion by Mamoru Mohri about the mission, and Gerhard Thiele answers questions from the German Press about the mission. New radar images from the SRTM of the Kamchatka Peninsula and northwestern Mongolia are shown. There are shots of Endeavour's 200-foot mast, which required troubleshooting due to a bulky small thruster.

CASI Endeavour (Orbiter); Radar Imagery; Shuttle Imaging Radar; Topography; Earth Observations (From Space); Spacecrews.

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. 16 sec. playing time, in color, with sound Report No.: 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. Padwili 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: TCDT--Press Q & A at KSCNF Auditorium
Nov. 05, 1998; In English; Videotape: 45 min. 12 sec. playing time, in color, with sound Report No.: NONP--NASA--VT-2000008136; No Copyright; Avail.: CASI; B03, Videotape-Beta: V03, Videotape-VHS
Live footage of the (Terminal Countdown Demonstration Test) TCDT shows the crew of STS-88, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Curry, Jerry L. Ross, James H. Newman, and Sergei K. Krikalev, 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 turns 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.

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.: 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 scientists 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.: 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; Spacecrews; 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.: 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. Pudvill Gorie and Mission Specialists Janet L. Kavardii, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). This tape shows the astronauts boarding jet planes at the Shuttle Landing Facility after the Terminal Countdown Demonstration Test.

CASI

Astronauts: Spacecrews; Jet Aircraft: Preflight Operations

STS-99 Crew departs SLC after TCDT
Jan. 17, 2000; In English; Videotape: 7 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000027984; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth's Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour, and led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudvill Gorie and Mission Specialists Janet L. Kavardii, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). This tape shows the astronauts boarding jet planes at the Shuttle Landing Facility after the Terminal Countdown Demonstration Test.

CASI

Astronauts: Spacecrews; Jet Aircraft: Preflight Operations

STS-99 Rollover from OIF-2 to VAB
Dec. 02, 1999; In English; Videotape: 4 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000027983; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth's Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour, and led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudville Gorie and Mission Specialists Janet L. Kavardii, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). This tape shows the astronauts boarding jet planes at the Shuttle Landing Facility after the Terminal Countdown Demonstration Test.

CASI

Astronauts: Spacecrews; Jet Aircraft: Preflight Operations

STS-99 Rollout to SRMT 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. Pudville Gorie and Mission Specialists Janet L. Kavardii, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). This tape shows the astronauts boarding jet planes at the Shuttle Landing Facility after the Terminal Countdown Demonstration Test.

CASI

Astronauts: Spacecrews; Jet Aircraft: Preflight Operations

STS-99 Rollout from SLF to VAB
Dec. 14, 1999; In English; Videotape: 5 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000027981; 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. Pudville Gorie and Mission Specialists Janet L. Kavardii, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). This tape shows the astronauts boarding jet planes at the Shuttle Landing Facility after the Terminal Countdown Demonstration Test.

CASI

Astronauts: Spacecrews; Jet Aircraft: Preflight Operations

STS-99 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. Pudvill Gorie and Mission Specialists Janet L. Kavardii, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). This tape shows the astronauts boarding jet planes at the Shuttle Landing Facility after the Terminal Countdown Demonstration Test.

CASI

Astronauts: Spacecrews; Jet Aircraft: Preflight Operations

STS-99 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. Pudville Gorie and Mission Specialists Janet L. Kavardii, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). This tape shows the astronauts boarding jet planes at the Shuttle Landing Facility after the Terminal Countdown Demonstration Test.

CASI

Astronauts: Spacecrews; Jet Aircraft: Preflight Operations

STS-99 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. Pudville Gorie and Mission Specialists Janet L. Kavardii, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). This tape shows the astronauts boarding jet planes at the Shuttle Landing Facility after the Terminal Countdown Demonstration Test.

CASI

Astronauts: Spacecrews; Jet Aircraft: Preflight Operations

STS-99 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. Pudville Gorie and Mission Specialists Janet L. Kavardii, 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
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, unwarped, 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 and Mission Specialists Janet L. Kawradi, 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 video tape 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
Brains (Supports); Clean Rooms; Shuttle Imaging Radar
where they will practice emergency exit procedures as part of the Terminal Countdown Demonstration Test (TCDT), a dress rehearsal for launch.

CASI

Space Transportation System: Spacecrews; Preflight Operations; Crew Procedures ( Preflight); Prelaunch Tests; Astronauts

20000025450 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99 Crew Activities Report / Flight Day 09 Highlights
Feb. 20, 2000; In English; Videotape: 28 min. 52 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000022263; No Copyright; 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 (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. Padwill 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 tenth 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, Moloka‘i, Lanai and west Maui, Hawaii; Dallas, Texas; Salalah, Oman; and Tasmania, Australia. Animations showing the topography around Hokkaido, Japan and Brazil are also shown.

CASI
High Resolution Shuttle Imaging Radar; Space Transportation System; Spacecrews; Topography

20000025466 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99 Crew Arrives for Second Launch Attempt, SRTM Mission, Endeavour
Feb. 07, 2000; In English; Videotape: 5 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000027995; No Copyright; Aval: 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. Padwill 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, Moloka‘i, Lanai and west Maui, Hawaii; Dallas, Texas; Salalah, Oman; and Tasmania, Australia. Animations showing the topography around Hokkaido, Japan and Brazil are also shown.

CASI

Space Transportation System; Spacecrews; Topography

20000025467 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99 Commander and Pilot for the SRTM Mission, Practice Flight in the Shuttle Training Aircraft
Feb. 09, 2000; In English; Videotape: 5 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000027978; No Copyright; Aval: 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. Padwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). This tape shows Commander Kregel and Pilot Gorie getting on board the Shuttle Training Aircraft and practicing approaches for the shuttle landing.

CASI

Space Transportation System: Spacecrews; Preflight Operations; Crew Procedures (Preflight); Horizontal Spacecraft Landing

20000025543 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99 SRTM Moved from the SSPF to the OPF #2
Jul. 21, 1999; In English; Videotape: 10 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000027994; No Copyright; Aval: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the move of the Shuttle Radar Topography Mission (SRTM) system from the Space Station Processing Facility (SSPF) to the Orbiter Processing Facility (OPF).

CASI

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

20000025544 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99 Lift and Mate to External Tank in VAB, Endeavour, SRTM Mission
Dec. 03, 1999; In English; Videotape: 9 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000027992; No Copyright; Aval: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the lifting of the external tank to the Endeavour orbiter system of STS-99 in the Vehicle Assembly Building (VAB).

CASI

Space Transportation System; Space Transportation System Flights; Endeavour (Orbiter)

20000025577 NASA Kennedy Space Center, Cocoa Beach, FL USA
TCDT STS-99 Crew at FSS/White Room
Jan. 14, 2000; In English; Videotape: 11 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000027991; No Copyright; Aval: CASI; B01, Videotape-Beta; V01, Videotape-VHS


CASI

Astronaut Training; Ingress (Spacecraft Passageways); Spacecrews; Crew Procedures (Preflight)

20000025657 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-99 Countdown Status Briefing
Feb. 08, 2000; In English; Videotape: 23 min., 26 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000027977; No Copyright; 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 (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. He reviewed the work that had to be done and the timeline for completion. Scott Higginbotham reported that there were no problems with the SRTM. Ed Priselac reported on favorable weather conditions.
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

2000026827 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 discussing the status of the STS-99 flight. The panelists consist of NASA's test Director Steve Altmon, the STS-99 Payload Manager Scott Higginbotham, and the Shuttle Weather Officer Ed Priselac. The panelists discuss the problems with the left hand ignition cable, the potential change of the GPS receiver, payload status, and favorable weather conditions. The panel members also answered questions from members of the audience. Also shown are various shots of the Shuttle on the launch pad.

CASI
Conferences: Countdown; Spacecraft Launching: Checkout; Spacecraft Maintenance: Ignition; Cables (Ropes); Global Positioning System; Receivers; Weather

2000027576 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 Goric, Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri, and Gerhard P.J. Thiele, participating in the SRTM Instrumentation and equipment. The footage also shows the rollback of Discovery to the OPF (Orbiter Processing Facility) High Bay 2, Discovery ET Disconnect Door Hinges (Cracks), Discovery ET Disconnect Door Hinges (Edited) and Discovery in the VAB.

CASI
Discovery (Orbiter); Space Transportation System: Space Transportation System Flights; Spacecraft Maintenance

2000027588 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 Goric, Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri, and Gerhard P.J. Thiele, participating in a press conference. The crew answer questions from U.S. and Japanese reporters at various NASA Centers, and Headquarters. Discussions include the nitrogen gas line problem, the deployment of the mass, and what would happen if the mass has to be jettisoned. Thiele, 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

2000028629 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 Goric, Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri, and Gerhard P.J. Thiele, participating in a press conference. The crew answer questions from U.S. and Japanese reporters at various NASA Centers, and Headquarters. Discussions include the nitrogen gas line problem, the deployment of the mass, and what would happen if the mass has to be jettisoned. Thiele, 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
The primary objective of the SIS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth's Surface. This videotape shows a science press briefing. The panel members are Michael Kobrick, the SRTM Project Scientist at JPL; Thomas Henning, SRTM Project Manager at the National Imagery and Mapping Agency; Diane Evans, the Director of the Earth Sciences Program at NASA; and Marian Werner, XSAR Project Manager for the DLR, Deutschem Zentrum fur Luft- und Raumfahrt, Germany's National Aerospace Research Center. Michael Kobrick explained the mechanics of interferometric measurements of the Earth. He explained and demonstrated with a scale model the deployable mast's use. He also explained the importance of the attitude and orbit determination algorithms. A brief animated video showing how four beams would give a 225 km wide swath of the Earth topography was viewed. Thomas Henning discussed some of the usage of the digital terrain elevation data for flood relief planning, cell phone station placement, military planning for command and control centers, and flight simulation. He explained that public access to the most precise data would be limited. Diane Evans described data usage in flood prediction, earthquake fault identification and archeology. Marian Werner described the German and Italian input to the project. The questions from the press concerned the time to process this data, and the reasons for the limited access to the most precise data.

CASI

Endeavour (Orbiter) Launching: Shuttle Imaging Radar: Space Transportation System
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 DeNicolò, 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 De Nicolò 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

200000277671 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 Higgensbom (STS-99 Payload Manager), and Ed Preselc (Shuttle Weather Officer) proceed with the countdown status briefing. They expressed that the opening countdown was proceeding well and servicing of the cryotanks was completed. The launch pad closeouts continued and the tanking process was in 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

20000277706 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--2000036503; 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-François 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 rendezvous in the White Room for their mission. After the closing of the hatch and arm extension, 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 sensors 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--2000036503.

CASI Space Transportation System; Space Transportation System Flights; Discovery (Orbiter); Maintenance; Hubble Space Telescope

20000028408 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 down crew from Mir-18 Noman E. Thagard, Vladimir Dzhezhurov, and Gennady Steckalov, are also seen leaving the craft. Included is a phone conversation between President Clinton and the crew.

CASI Spacecraft Landing; Touchdown; Retendency; Descent; Landing Chutes

20000028409 NASA Johnson Space Center, Houston, TX USA STS--30 Post Flight Press Conference May 18, 1989; In English; Videotape: 58 min. playing time, in color, with sound Report No.(s): NONP--NASA--VT--2000036554; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows the crewmembers of STS-30, Commander David M. Walker, Pilot Ronald J. Grabe, Mission Specialists Norman E. Thagard, Mary Cleave, and Mark C. Lee, participating in the Post Flight Press Conference. The astronauts took turns narrating the footage taken from the inside of the cockpit during lift-off. The crew answer questions from the audience as well as some of the NASA Centers. Included are various stills of Magellan, and some ground shots of the Florida Peninsula, Bahamas, North West Nicaragua, California, the Himalayan Mountains, the Canary Islands, Houston, Dust Storms across the Sahara, and some waves in the South China Seas.

CASI Conferences; Postflight Analysis; Spacecraft Launching; Magellan Ultraviolet Astronomy Satellite; Spaceborne Astronomy; Lift-off (Launch)

20000029611 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. Kavandi, Janace E. Voss, Manoru Mohri, and Gerhard P.J. Thiele) are shown in a live news conference presenting the mission objectives of STS-99. The main objective is to obtain the most
complete high-resolution digital topographic database of Earth. This project is named the Shuttle Radar Topography Mission (SRTM).

CASI

Spacecraft; Conferences; Space Shuttle Missions

20000031615 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-31: Hubble Space Telescope Lift to Vertical
Oct. 09, 1989; In English; Videotape: 10 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000039777; No Copyright; Avail: CASI; B01; Videotape-Beta; V01; Videotape-VHS

The footage shows the lifting of the Hubble Space Telescope (HST) to a vertical position in the Kennedy Space Center. HST is a 2.4-meter reflecting telescope that will be deployed in low-Earth orbit (600 kilometers) by the crew of the space shuttle Discovery (STS-31) on 25 April 1990.

CASI

Hubble Space Telescope; Space Shuttle Payloads; Ground Handling; Discovery (Orbiter)
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.

**Astronaut Training: Ejection Training: Bailout: Virtual Reality: Spacecraft Cabins: Training Simulators**

**STS-101 Crew Interview / Scott Horowitz**
Mar. 20, 2000; In English; Videotape: 38 min. 22 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000039860; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Pilot Scott J. Horowitz is seen. The interview addresses many different questions including why Horowitz became an astronaut, the events that led to his interest, any role models that he had, and his inspiration. Other interesting information that this one-on-one interview discusses is the reaction and reasons for the splitting-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.

**Crew Procedures (Preflight): Space Transportation System: Space Transportation System Flights**

**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.

**Crew Procedures (Preflight): Spacecrews**

**STS-34 Galileo PCR at Pad & Galileo in Atlantis**
Sep. 12, 1989; In English; Videotape: 7 min. 50 sec. playing time, in color, no sound except background noise
Report No.(s): NONP--NASA--VT--2000039781; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-34 mission was the deployment of the Galileo spacecraft and the attached Inertial Upper Stage. This videotape shows the Galileo in the Payload Clean Room in preparation for the six year trip to Jupiter. There are also views of the spacecraft in the Atlantis Payload Bay.

**Clean Rooms: Galileo-Spacecraft: Space Transportation System**

**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.


**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 Elet 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 astrophysics telescopes. The HST is the first of these "Great Observatories." After the presentation, questions from the press were answered.


**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 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.


**STS-101: Crew Interview / James S. Voss**
Mar. 23, 2000; In English; Videotape: 31 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000039855; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Mission Specialist James S. Voss is seen. The interview addresses many different questions including why Voss became an astronaut, the individuals who influenced him, and the events that led to his interest. Other interesting information that this one-on-one interview discusses is his reaction to and the reasons for the change of the mission objectives. Voss also mentions the scheduled space-walk that he will perform with Jeffrey N. Williams, docking with the International Space Station (ISS), the
repairs of equipment, and the change of the batteries. Voss explains why himself, Susan J. Helms, and Yuri Vladimirovich Usachev are the perfect choice for this mission because of their certification from Russia to work on the Zarya Control Module.

CASI

Space Transportation System; Space Transportation System Flights; Atlantis (Orbiter); Crew Procedures (Preflight); Spacecrews; Talking

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, 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 Susan J. Helms is seen. The interview addresses many different questions including why Helms became an astronaut, the individuals who influenced her, and the events that led to her interest. Other interesting information that this one-on-one interview discusses is his reaction to and the reasons for the change of the mission objectives. Susan also mentions the docking with the International Space Station (ISS), the repairs of equipment, the change of the batteries, and the transfer of equipment. Susan explains why she, James S. Voss, and Yuri Vladimirovich Usachev are the perfect choice for this mission because of their experience with the ISS modules. She also discusses what the ISS means to her as well as to the human efforts to explore space.

CASI

Space Transportation System; Space Transportation System Flights; Atlantis (Orbiter); Crew Procedures (Preflight); Spacecrews; Talking

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–2000039784; No Copyright; Avail: CASI;

B01, Videotape-Beta; V01, Videotape-VHS

This videotape shows the Hubble Space Telescope being moved in the clean room Vertical Processing Facility (VPF) to the work platform. The Hubble Space Telescope was deployed on April 25, 1990 from the space shuttle Discovery during STS-31.

CASI

Clean Rooms; Hubble Space Telescope: Controlled Atmospheres; Assembling

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

Astronauts: 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 Durrance, and Ronald Parise. This videotape shows the astronauts leaving the Kennedy Space Center after one of the attempts to launch the mission was scrubbed due to hydrogen leaks aboard the shuttle Columbia.

CASI

Astronauts: Spacecrews; Preflight Operations

20000032538 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS–31: Hubble Discovery Payload Doors Closing

Apr. 08, 1990; In English; Videotape: 2 min. 20 sec. playing time, in color, no sound

Report No.(s): NONP–NASA–VT–2000039774; No Copyright; Avail: CASI;

B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of mission STS-31 was to deploy the Hubble Space Telescope. The videotape shows the Hubble Space Telescope in Discovery’s payload bay in the Vertical Assembly Building (VAB) clean room, while the payload bay’s doors slowly close.

CASI

Hubble Space Telescope: Payloads; Discovery (Orbiter)

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, with sound

Report No.(s): NONP–NASA–VT–2000043333; No Copyright; Avail: CASI;

B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows the question and answer session of the Post Launch News Conference. The panelists address questions from NASA Centers such as Goddard Space Flight Center and Kennedy Space Center (KSC), and from various audience participants. The status of the launch of STS-35 is discussed. Also discussed are the liquid oxygen malfunctions, helium leakage, and photographic optical tracking during the daytime.

CASI

Conferences; Postlaunch Reports; Space Transportation System; Space Transportation System Flights; Columbia (Orbiter)
Jeffrey N. Williams, his feeling once he steps into the International Space Station one-on-one interview discusses is his reaction and integration into STS-101 him, and the events that led to his interest. Other interesting information includes why Usachev became a cosmonaut, the individuals who influenced providing Usachev is seen. The interview addresses running different questions.

Report No.(s): NONP NASA VT 20000032785 NASA Johnson Space Center, Houston, TX USA
STS-99: Post Flight Presentation Apr. 03, 2000; In English; Videotape: 15 min. 13 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000044399; 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 James E. Bagian, James E. Voss, Janice E. Voss, Mamoru Mohri, and Gerhard R. J. Thiele, arriving at Kennedy Space Center (KSC) in the T-38 aircraft. Crewmembers are seen speaking to the welcoming crowd at KSC, boarding up, walking out to the Astrovan, being strapped in the shuttle, and performing various activities while in orbit. Scenes include the astronaut training process, main engine ignition, liftoff, solid rocket booster separation, and the changing of the batteries.

CASI

20000032749 NASA Johnson Space Center, Houston, TX USA
STS-99: Post Flight Presentation Apr. 03, 2000; In English; Videotape: 15 min. 13 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000044399; 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 James E. Bagian, James E. Voss, Mamoru Mohri, and Gerhard R.J. Thiele, arriving at Kennedy Space Center (KSC) in the T-38 aircraft. Crewmembers are seen speaking to the welcoming crowd at KSC, boarding up, walking out to the Astrovan, being strapped in the shuttle, and performing various activities while in orbit. Scenes include the astronaut training process, main engine ignition, liftoff, solid rocket booster separation, and the changing of the batteries.

Live footage shows the crewmembers of STS-99, Commander Kevin R. Kregel, Pilot Dominic L. Pudwill Gorie, and Mission Specialists James E. Bagian, James E. Voss, Mamoru Mohri, and Gerhard R. J. Thiele, arriving at Kennedy Space Center (KSC) in the T-38 aircraft. Crewmembers are seen speaking to the welcoming crowd at KSC, boarding up, walking out to the Astrovan, being strapped in the shuttle, and performing various activities while in orbit. Scenes include the astronaut training process, main engine ignition, liftoff, solid rocket booster separation, and the changing of the batteries.

CASI
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 crew members 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, lift-off, and shell and engine skirt separation. The most important images are those of the moon landing and astronauts walk on the moon. Also shown are the parachute landing of the shuttle and the celebration of the world.

CASI

Apollo 11 Flight: Lunar Exploration; Lunar Flight; Lunar Landing

20000033784 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-33: At Pad B – IEA Removal; STS-32: In the VAB HB1 – IEA Removal
Nov. 14, 1989; In English; Videotape: 4 min. 6 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2000039788; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
The STS-33 at Pad B Integrated Electronic Assembly (I.E.A.) is shown. The STS-32 I.E.A. removal in the Vehicle Assembly Building (VAB) High Bay 1 (HB1) is also presented. The change out of the abort they found in boosters is the purpose for the video.
CASI
Space Transportation System: Spacecraft Electronic Equipment

20000033785 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-33: Removal of the I.E.A. at Pad B and Inspection at the AFR
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

20000033819 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-35: ASTRO-1 Assembly at O&C
Apr. 03, 1989; In English; Videotape: 5 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-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

20000033833 NASA Dryden Flight Research Center, Edwards, CA USA
X-43 Composite Tape, March 99 - March 99
Dec. 16, 1999; In English; Videotape: 7 min. 26 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2000045251; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Live footage shows Project Manager Joel Sitz participating in an interview about the X-43 project. Sitz mentions several tests that will be performed on the X-43. He also mentions that the main objective of this project is to validate the design code for hypersonic air breathing vehicles. He discusses the projected data collection to prove that the predictions that were made in the laboratories and wind tunnels are correct. Scenes include the roll of the X-43 and an animation of the flight.
CASI
X-43 Vehicle: Hypersonic Flight; Air Breathing Boosters: Air Breathing Engines: Airframes

20000033861 NASA Dryden Flight Research Center, Edwards, CA USA
X-33, X-34, X-37 Press Conference ( Tape 2)
Aug. 24, 1999; In English; Videotape: 34 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2000043974; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
Live footage shows Project Managers Susan Turner, MSFC and David Manley, Boeing Co. participating in the X-37 Briefing. NASA's Public Affairs 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

200000334043 NASA Kennedy Space Center, Lompoc, CA USA
STS-34: Mission Overview Briefing
Sep. 05, 1989; In English; Videotape: 43 min. 21 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2000039782; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
Live footage shows Milt Heflin, 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. Heflin also mentions the Shuttle Solar Backscatter Ultraviolet secondary payload, and several experiments. These experiments include Growth Hormone Crystal Distribution (Plants), Polymer Morphology, Sensor Technology Experiment, Mesoscale Lightning Experiment, Shuttle Student Involvement Program “Ice Crystals”, and the Air Force Maui Optical Site.
CASI
Space Transportation System: Space Transportation System Flights: Atlantis (Orbiter)

200000334044 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-31: Mission Highlights, Part 2
Jun. 21, 1990; In English; Videotape: 27 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2000039776; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
Live footage shows the crewmembers of STS-31, Commander Loren J. Shriver, Pilot Charles F. Bolden, Jr., and Mission Specialists Steven A. Hawley, Bruce McCandless II, and Kathryn D. Sullivan, participating in a press conference. The crew is seen answering questions about the Hubble Space Telescope from participating audience as well as from various NASA Centers.
CASI
Space Transportation System: Space Transportation System Flights: Discovery (Orbiter); Teleconferencing; Telecommunication: Conferences

200000334072 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-35/Astro-1: Editors Work Tape
May 25, 1990; 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 OPF, the STS-35/Asiro rollout to Pad-A, Broad Band X-Ray Telescope (BBXRT) Servicing, and crew arrival for the Terminal Countdown Demonstration Tests (TCDT). The crewmembers of STS-35, Commander Vance D. Brand, Pilot Gary S. Gardner, and Mission Specialists Jeffrey A. Hoffman, John M. Lounge, Robert A. Parker, Samuel T. 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); Spacelab Payloads**

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**2000034073** NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS-35: Astro-1: Launch T–20 with Orbit with Replays (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**

Lauching Bases: Communicating; Spacelab Payloads; Astro Missions (STS); Spacelab Astronomy

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**2000034088** NASA Johnson Space Center, Houston, TX USA

**STS-35: Mission Highlights Resource Tape**

Feb. 27, 1995; In English; Videotape: 1 hr. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000043350; No Copyright; Avail: CASI;

B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows the crewmembers of STS-35, Commander Vance D. Brand, Pilot Guy S. Gardner, Mission Specialists Jeffrey A. Hoffman, John M. Lounge, and Robert A. Parker, and Payload Specialists Samuel T. Durrance, and Ronald A. Parise, participating in the traditional breakfast prior to launch. The crew is seen suiting up, and walking out to the Astro-Van for their 1 a.m. launch.

Also shown are some beautiful panoramic shots of the shuttle on the launch pad, main engine start, ignition, liftoff, and various shots of the Launch Control Center (LCC). The crew is also shown during flight performing some routine functions such as operating the trash compactor, eating, and getting into and out of their sleeping quarters. The crew is seen taking part in a conversation with the Secretary of State, and the Foreign Minister of the Soviet Union. Footage also includes the landing of Columbia, its rollout on the runway, and its crew as they depart from the vehicle.

**CASI**

Space Transportation System; Space Transportation System Flights; Columbia (Orbiter); Astro Missions (STS); Spacelab Astronomy; Spacelab Payloads

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**2000034099** NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS-34: Galileo TCDT, 13-15 Sep. 1989**

Sep. 15, 1989; In English; Videotape: 38 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000039773; No Copyright; Avail: CASI;

B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows the crewmembers of STS-34, Commander Donald E. Williams, Pilot Michael J. McCulley, and Mission Specialists Franklin R. Chang-Diaz, Shannon W. Lucid, and Ellen S. Baker, participating in the Terminal 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)

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**2000034105** NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS-30: Mission Highlights Reel**

Mar. 22, 1990; In English; Videotape: 58 min. 42 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000036555; No Copyright; Avail: CASI;

B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows the crewmember of STS-30, Commander David M. Walker, Pilot Ronald J. Grabe, and Mission Specialists Norman E. Thagard, Mary L. Cleave, and Mark C. Lee, participating in the traditional breakfast, suiting up and walking out to the Astro-van. Scenes include the retraction of the orbiter access arm, main engine start, ignition, and liftoff. The crew is also shown doing in-flight procedures such as experiments and equipment changes. The landing of Atlantis at Edwards Air Force Base is also seen.

**CASI**

Crew Procedures (Inflight); Crew Procedures (Preflight); Spaceborne Experiments; Maintenance

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**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

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**2000037725** NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS-36: Breakfast / Suit-Up / C-7 Ex / Launch and Landing at Edwards**

Mar. 05, 1990; In English; Videotape: 58 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000043344; No Copyright; Avail: CASI;

B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows the crew members of STS-36, Commander John O. Creighton, Pilot John H. Casper, and Mission Specialists Richard M. Mullane, David C. Hilmers, and Pierre J. Thuot, having the traditional breakfast, suiting up, and walking out to the Astro-Van. Scenes include panoramic views of the shuttle on the pad, main engine start, ignition, liftoff, and booster separation. The landing of Atlantis at Edwards Air Force Base is also seen. Several playback views from different cameras of both the launch and landing are also presented.

**CASI**

Space Transportation System; Space Transportation System Flights; Atlantis (Orbiter)

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**2000037771** NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS-31: Hubble Space Telescope Post Launch Press Conference from Kennedy Space Center**

Apr. 24, 1990; In English; Videotape: 17 min. 34 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000039778; No Copyright; Avail: CASI;

B02, Videotape-Beta; V02, Videotape-VHS

This video presents a post-launch press conference on the STS-31 Hubble Space Telescope. Dick Young, Kennedy Space Center Public Affairs, introduces the panel. The panel consists of Robert Steck, Kennedy Space Center Launch Director, and George T. SAsSen, Director Shuttle Engineering. 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
20000037772 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 Gerpheide, participating in a panel discussion. They discuss the objectives of the Magellan Project, the way in which Magellan will gather images, the Venus Orbiting Imaging Radar, and STS-30. Gerpheide presents an animation of Venus and discussed its variation to that of the Earth. Both Heflin and Gerpheide took turns answering the questions from the audience as well as those from NASA Headquarters, and Kennedy Space Center.
CASI

20000037773 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

20000038065 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
Lightning: Space Transportation System: Mir Space Station

20000038067 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, 1990; 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 Durrance, and Ronald Parise. This videotape opens with a view of the shuttle on the pad at night in preparation for a night launch. The astronauts are introduced as they finish their pre-launch breakfast. The next shots are of those of the astronauts getting into their spacesuits, and boarding the bus to be taken to the pad. The astronauts are next shown climbing into the shuttle. The launch of the shuttle is shown from 17 different camera angles.
CASI
Launching: Spacecraft: Columbia (Orbiter)

200000383348 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-35/ASTRO-1: Day–1 Down-links
Dec. 02, 1990; 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-links

20000038344 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-37: Downlinks M. E. T.
Apr. 05, 1991; In English; Videotape: 34 min. 34 sec. playing time, in color, with sound
Report No.(s): 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
Downlinking: Communication Satellites: Ground Stations: Space Transportation System: Space Transportation System Flights: Atlantis (Orbiter)

20000039290 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–2000039776; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
Live footage shows panelists answering questions from various NASA Centers. The panelists take turns fielding questions from NASA Headquarters, Goddard Space Flight Center, and Kennedy Space Center.
CASI
Conferences: Postflight Analysis

20000039309 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 is 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

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The primary mission objective for 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 Interview – Jim Halsell
Mar. 24, 2000; In English; Videotape: 36 min. 9 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–2000039861; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The objective of STS-101 will be the servicing of the International Space Station, to ensure that it will be ready to receive a crew later in 2000. The crew, commanded by James D. Halsell, will include Pilot Scott J. Horowitz, Mission Specialists Mary Ellen Weber, Jeffrey N. Williams, James S. Voss, Susan J. Helms and Yuri V. Usachev. This videotape provides live coverage of an interview with the mission commander Jim Halsell. He describes the influences on his life that led him to become a NASA astronaut, and the importance of the mission. He discusses the new glass cockpit design. He describes the flight plan and the docking maneuver. An important feature of this mission is the replacement of electric components, voltage and current regulators on the space station. Commander Halsell also describes the role of each crew member during the re-supply and refitting of the Space Station and reviews the priorities.

International Space Station: Space Transportation System: Spacecraft Docking; Orbital Rendezvous: Spacecraft Maintenance; Replacing: Space Station Power Supplies

STS–101 Crew Activity Report Flight Day 02 Highlights
May 20, 2000; In English; Videotape: 13 min., 51 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000065770; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary mission objective for STS-101 was to deliver supplies to the International Space Station, perform a space walk, and reboost the station from 230 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 second day of the flight. On this day the shuttle crew checked the equipment in preparation for rendezvous with the International Space Station. This video shows the astronauts entering the Spacelab, where the supplies bound for the space station are stored. There are also views of the robotic arm, which will be used during the spacewalk to maneuver Williams and Voss between Atlantis and the station.

International Space Station: Robot Arms: Space Shuttle Orbiters: Space Transportation System

STS–101: CAR / Flight Day 03 Highlights
May 21, 2000; In English; Videotape: 12 min. 32 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000065772; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary mission objective for STS-101 was to deliver supplies to the International Space Station, perform a space walk, and 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

CASI

Flyby Missions; Mars (Planet); Mars Global Surveyor; Mars Missions; Surveyor Project; Mars Surface
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.

CASI

International Space Station: Orbital Rendezvous: Space Transportation System: Spacecraft Docking

2000052456 NASA Johnson Space Center, Houston, TX USA

STS–101: Flight Day Highlights / CAR

May 19, 2000; In English; Videotape: 17 min. 12 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000065771; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

The primary mission objective for STS-101 was to deliver supplies to the International Space Station, perform a space walk, and reboost the station from 230 statute miles to 250 statute miles. The commander of this mission was, James D. Halsell. The crew was Scott J. Horowitz, the pilot, and mission specialists 230 statute miles to 250 statute miles. The commander of this mission was, James B02, Videotape-Beta; V02, Videotape-VHS

Report No.(s): NONP NASA VT 2000068740; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

The Atlantis Space Shuttle crew (Mission Commander James D. Halsell, Jeoffrey N. Horowitz, and Mission Specialists 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.

CASI

Conference: Magellan Ultraviolet Astronomy Satellite: Spaceborne Astronomy: Magellan Project (NASA)

2000055625 NASA Johnson Space Center, Houston, TX USA

Crew Activity Report / Flight Day 6

May 24, 2000; In English; Videotape: 16 min. 40 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000068740; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

The primary mission objective for STS-101 was to deliver supplies to the International Space Station, perform a space walk, and reboost the station from 230 statute miles to 250 statute miles. The commander of this mission was, James D. Halsell. The crew was Scott J. Horowitz, the pilot, and mission specialists Mary Ellen Weber, Jeffrey N. Williams, James S. Voss, Susan J. Helms, and Yuri Vladimirovich Usachev. This videotape shows the activities of the fifth day of the mission. The day’s activities started with the opening of the hatch to the space station. Helms and Usachev then opened the hatch to the station’s Unity Connecting Module. The crew also placed ducting throughout the Zarya Control Module to improve air circulation and prevent problems with stale air. Helms and Usachev are shown replacing two of six batteries to be replaced in this mission in the Zarya module. The crew began moving supplies into the space station. There are several shots of the interior of the space station.

CASI

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

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, and Yuri Vladimirovich Usachev are seen closing up the hatch 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; Hatch: Closing

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

DELA/ 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—2000073815; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows the participants in the Pre Launch Press Conference discussing the status of the Delta/Wind flight. The panelists consists of Jim Womack NASA Launch Manager from KSC (Kennedy Space Center), Dan Miller NASA Delta Launch Vehicle Manager from GSFC (Goddard Space Flight Center), Bill Huddleston NASA Wind Program Manager from NASA HQ (Headquarter), and Joel Turnbulo Launch Weather Officer from USAF (US 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

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—2000073816; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This NASA Kennedy Space Center (KSC) video release presents live footage of the successful Delta II/WIND spacecraft launch from Pad 17B at the Eastern Test Range, Cape Canaveral Air Station, FL. Footage of engineering activity from launch control as well as narrative information concerning spacecraft configuration, equipment, instruments and objectives is also presented. WIND is the first of two NASA spacecraft in the Global Geospace Science initiative and part of the ISTP Project. WIND is positioned in a sunward, multiple double-lunar swingby orbit with a maximum apogee of 250Re during the first two years of operation. This will be followed by a halo orbit at the Earth-Sun L1 point. The main scientific objectives of the WIND mission are to provide complete plasma, energetic particle, and magnetic field input for magnetospheric and solar wind studies. The WIND spacecraft includes KONUS, the first Russian instrument to fly on an American satellite since civil space cooperation between the U.S. and Russia was resumed in 1987.

**CASI**

Delta Launch Vehicle: Launch Vehicle Configurations; Payloads; Liftoff (Launching); Rocket Launching

Delta/Wind Launch with Isolated Cameras from Continuous Recording

Nov. 01, 1994; In English; Videotape: 18 min. playing time, in color, with sound

Report No.(s): NONP—NASA—VT—2000073817; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The Wind spacecraft represents one of NASA’s contributions to the International Solar Terrestrial Program (ISTP), an international effort to quantify the International Space Station, perform a space walk, and reboost the station from 230 statute miles to 255 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 Heilemann, 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. Heilemann answered questions from the press after he completed the briefing.

**CASI**

Extravehicular Activity; International Space Station: Space Transportation System; Spacecrafts; Space Maintenance

DELA/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—2000073815; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows the participants in the Pre Launch Press Conference discussing the status of the Delta/Wind flight. The panelists consists of Jim Womack NASA Launch Manager from KSC (Kennedy Space Center), Dan Miller NASA Delta Launch Vehicle Manager from GSFC (Goddard Space Flight Center), Bill Huddleston NASA Wind Program Manager from NASA HQ (Headquarter), and Joel Turnbulo Launch Weather Officer from USAF (US 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

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—2000073816; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This NASA Kennedy Space Center (KSC) video release presents live footage of the successful Delta II/WIND spacecraft launch from Pad 17B at the Eastern Test Range, Cape Canaveral Air Station, FL. Footage of engineering activity from launch control as well as narrative information concerning spacecraft configuration, equipment, instruments and objectives is also presented. WIND is the first of two NASA spacecraft in the Global Geospace Science initiative and part of the ISTP Project. WIND is positioned in a sunward, multiple double-lunar swingby orbit with a maximum apogee of 250Re during the first two years of operation. This will be followed by a halo orbit at the Earth-Sun L1 point. The main scientific objectives of the WIND mission are to provide complete plasma, energetic particle, and magnetic field input for magnetospheric and solar wind studies. The WIND spacecraft includes KONUS, the first Russian instrument to fly on an American satellite since civil space cooperation between the U.S. and Russia was resumed in 1987.

**CASI**

Delta Launch Vehicle: Launch Vehicle Configurations; Payloads; Liftoff (Launching); Rocket Launching
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 sequence of the Wind spacecraft aboard a Delta 7925 on November 1, 1994. After the countdown and launch, the tape shows the activity in the Telemetry Room at Kennedy Space Center, where people are following the progress of the spacecraft. Following the activity in the telemetry room, there are four different replays of the launch from different locations. After showing the replays of the launch, the video returns to the Telemetry Room when an important stage in the launch and flight is achieved.

CASI

Solar Wind: Liftoff (Launching); Countdown

20000057515 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-101: Atlantis Orbiter Upgrade Briefing
Mar. 27, 2000; In English; Videotape: 54 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000076142; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows panelists, Manager of the Space Shuttle Program Development, Elric McHenry, and the Associate Program Manager for Space Shuttle Upgrades, Andy Allen, giving an overview of the new upgrades on the STS-101 Orbiter. McHenry and Allen speak about the changes and modernization of Atlantis. The panelists mention 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 launch testing and installation on the launcher. The footage returns to "live" coverage and resumes the countdown to launch.

CASI

Spacecraft Launching; Load Tests; Microwave Antennas; Radarsat; Launchers

20000063511 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 Vladimirovich Usachev) describe the highlights of the STS 101 Mission. The primary scenes reviewed include the spacewalk, incremental assembly/upgrade, space station rendezvous, suit testing, critical replacement and repairs to suspect batteries, and reboosting the station from 230 statute miles to 250 statute miles.

CASI

Space Transportation System Flights; Spacecrews; Space Stations; Space Transportation System

200000888114 NASA Johnson Space Center, Houston, TX USA

STS-186 Crew Interviews: Scott D. Altman
Jul. 19, 2000; In English; Videotape: 30 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000011953; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage of a preflight interview with Pilot Scott D. Altman is seen. The interview addresses many different questions including why Altman became a pilot, the events that led to his interest, his 14 year career path through the Johnson Space Center (JSC) as an engineer before finally getting selected into the astronaut program. Other interesting information discussed in this one-on-one interview includes his main goal of the STS-106 mission, and its scheduled docking with the new International Space Station (ISS) since the arrival and connection of the Zvezda Service Module. Altman also mentions his responsibility during the much-anticipated docking and scheduled space-walk.

CASI

Crew Procedures (Preflight); Spacecrews; Astronauts; Talking

20000080135 NASA Johnson Space Center, Houston, TX USA

STS-186 Crew Interviews: Richard A. Mastracchio
Jul. 20, 2000; In English; Videotape: 2 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000011954; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage of a preflight interview with Mission Specialist Richard A. Mastracchio 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 includes the main goal of the STS-106 mission, and its scheduled docking with the new International Space Station (ISS) since the arrival and connection of the Zvezda Service Module. Mastracchio also mentions his responsibility during the much-anticipated docking and scheduled space-walk.

CASI

Crew Procedures (Preflight); Spacecrews; Talking

20000080206 NASA Johnson Space Center, Houston, TX USA

STS-186 Crew Interviews: Yuri Malenchenko
Jul. 20, 2000; In English; Videotape: 1 hr. 5 min. 9 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000011957; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This NASA Johnson Space Center (JSC) video production presents an STS-106 pre-launch interview with Russian Cosmonaut/Mission Specialist Yuri Malenchenko, Col. Russian Air Force. Among other topics, Malenchenko discusses his 125-day space mission on Russian Space Station MIR in 1994, and his planned spacewalk to complete the connection between the Russian service module Zvezda 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

20000080201 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 Boris Morukov, M.D., Ph.D. Among other topics, Morukov discusses his background in studying weightlessness at the Russian Institute for Biomedical Problems and how his experiences prepared him to become a Cosmonaut candidate. STS-106 is International Space Station assembly flight ISS-2A.2b and will
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

20000108166 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

200001080369 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-40/SL-8-1: Lift to Cargo Bay
Mar. 24, 1991; In English; Videotape: 11 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000118115; 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

200001080370 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--2000118117; 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)

200001080371 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--2000118126; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The brief footage shows the visual inspection of the bay door by 2 technicians. They inspect the layers between the panels for structural defects, and the door, joints, and hinges for wear, cracks, stress, and damage from flight.
CASI

Doors: Hinges: Inspection: Panels

200001080384 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--2000116650; 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


200001080388 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--200011956; 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 spacewalk with Yuri Ivanovich Malenchenko. Lu also discusses the use of the Robotic Arm during his spacewalk, installation of a magnetometer on the Zvezda Module, and work that will have to take place inside the Service Module.
CASI


200001080451 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--200011959; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Commander Bill Shepherd is seen. The interview addresses many different questions including why Shepherd became interested in the space program, the events that led to his interest, the transition from the navy to his selection in the astronaut program. Other interesting information that this one-on-one interview discusses are the main goals of the first Expedition Crew, their scheduled docking with the International Space Station (ISS), making the ISS ready for human inhabitation, and all the specifics that will make his living arrangements difficult. Shepherd mentions his responsibilities during the much-anticipated two-day flight to the ISS, as well as the scheduled spacewalk. Shepherd also discusses the crew's first tasks upon entrance including other scheduled tasks for the first week, docking from cargo ships, and spacecraft delivery 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


200001080452 NASA Kennedy Space Center, Cocoa Beach, FL USA
Orbiter Umbilical Hinge Door Problem
Feb. 19, 1991; In English; Videotape: 4 min. 14 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000113527; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

During processing work on the orbiter Discovery at Pad A, significant cracks were found on all four lug hinges on the external tank umbilical drive mechanisms. NASA managers opted to roll back the vehicle to the Vehicle Assembly Building (VAB) on March 7, and then to the Orbiter Processing Facility (OPF) for repair. Hinges were replaced with units taken from orbiter
COLUMBIA, and reinforced. Discovery returned to the pad on April 1. Shown are the cracked orbiter umbilical door hinges.

CASI
Spacecraft Maintenance: Prelaunch Problems: External Tanks; Cracks; Doors; Hinges

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; B01, Videotape-Beta; V01, Videotape-VHS

The very brief footage shows the tightening of bolts by technicians. They are aided in their efforts by a diagram that shows the torque sequence and amount of torque needed for each bolt.

CASI
Bolts: Space Transportation System: Torque

STS-38: Post Landing News Conference

Nov. 20, 1990; In English; Videotape: 22 min. 37 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000113534; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows the STS-38 Post Landing News Conference. Dick Young of NASA Public Affairs office is seen introducing the panel members. The panelists include: Forrest McCartney, Kennedy Space Center’s (KSC) Director; William B. Lemoir, Associate Administrator Space Flight; and Robert B. Sieck, Space Shuttle Processing Director. Atlantis lands at KSC, which marks the first landing since 1985 to this location. The panelists mention the status of the landing, the success of the flight, and the historic implication that this landing carries. They also answer questions from the participating audience.

CASI
Conferences: Postflight Analysis: Spacecraft Landing

STS-39: OMS Pod Thruster Removal/Replace

Feb. 04, 1991; In English; Videotape: 5 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000113535; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Shown is the removal and replacement of the Discovery’s orbital maneuvering systems (OMS) pod thruster. The OMS engine was used to propel Discovery north, off of its previous orbital groundtrack, without changing the spacecraft’s altitude. A burn with this lateral effect is known as “out-of-plane.”

CASI

STS-39: Landing at KSC

May 06, 1991; In English; Videotape: 55 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000113808; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The Space Shuttle Discovery landed on May 6, 1991, 2:55:35 p.m. EDT at the Shuttle Landing Facility after traveling more than 3,500,000 miles on a successful eight-day mission. Rollout distance and time were 9,235 feet and 56 secs respectively. The landing weight was 211,512 lbs. Landing was diverted to KSC because of unacceptably high winds at the planned landing site, Edwards Air Force Base, California. Absent were: Commander Michael L. Conti; Pilot L. Blaine Hammond, Jr.; and Mission Specialists Guion S. Bluford Jr., Gregory J. Harbaugh, Richard J. Hieb, Donald R. McMonagle, and Charles L. Van Ch. This was the 40th flight in the Space Shuttle program and the 12th for the orbiter Discovery. The landing was the 7th Shuttle landing in Florida. After landing at the Shuttle Landing Facility, the STS-39 crew posed for a photo in front of Discovery.

CASI
Discovery (Orbiter); Spacecraft Landing: Space Transportation System Flights: Space Missions

STS-39: Payloads in Canister at VPF

Feb. 05, 1991; In English; Videotape: 8 min. 17 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000118023; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Discovery spent about 15 weeks in the processing facility undergoing about 22 modifications and routine testing. Shown are STS-39 primary payloads installed in Discovery’s payload bay in the Orbiter Processing Facility (OPF). Payloads installed in the OPF include the Critical Ionization Velocity payload and the Chemical Release Observatory.

CASI
Space Shuttle Payloads: Discovery (Orbiter): Spacecraft Maintenance: Preflight Operations

STS-39 Discovery in the VAB and Columbia Tow From IB-2

Feb. 09, 1991; In English; Videotape: 8 min. 15 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000118016; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The orbiter Discovery sits inside the Vehicle Assembly Building (VAB) after its rollover from the Orbiter Processing Facility (OPF). In the VAB, Discovery will be mated with an external tank and solid rocket boosters for its launch. Shown also is Columbia orbiter being towed from the High Bay 2.

CASI
Discovery (Orbiter); Ground Handling: Spacecraft Maintenance: Columbia (Orbiter): Astfied Surface Movements

STS-39 Discovery Rollback to the OPF High Bay #2 (Shots of Doors)

Mar. 14, 1991; In English; Videotape: 4 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000118014; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Shown is Discovery rolling back to the Orbiter Processing Facility (OPF) High Bay 2 for repair. High Bay 2, located west of the Vehicle Assembly Building (VAB), is used for external tank (ET) checkout and storage and as a contingency storage area for orbiters.

CASI
Discovery (Orbiter); Spacecraft Maintenance: Ground Handling

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–2000116000; 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

2000081373 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--2000111856; 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 habitation, 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--2000118119; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the crew of STS-40, Commander Bryan D. O’Connor, Pilot Sidney M. Gutierrez, Mission Specialists James P. Bagian, Tamara E. Jernigan, M. Rhea Seddon, and Payload Specialists F. Drew Gaffney, and Millie-Hughes Fullford, as they arrive at Kennedy Space Center (KSC). The crew arrives on t-38 jets for Terminal Countdown Demonstration Tests (TCDT) 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 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, orbiter stability, and the effects of cosmic rays on floppy disks. Also shown is a video release of the STS-40/MLS-1 mission. The STS-40 crew, Commander Bryan D. O’Connor, Pilot Sidney M. Gutierrez, Mission Specialists James P. Bagian, Tamara E. Jernigan, M. Rhea Seddon, and Payload Specialists F. Drew Gaffney, and Millie-Hughes Fullford, are seen while they exercise and perform their experiments.

CASI
Space Transportation System: Columbia (Orbiter); Get Away Specials (NTS); Spaceborne Experiments; Spacelab Payloads

2000081875 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-40/MLS-1 Breakfast/Suit-up/Depart O&C/Ingress/launch with isolated Views
Jun. 05, 1991; In English; Videotape: 27 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000118120; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows the crew members, Commander Bryan D. O’Connor, Pilot Sidney M. Gutierrez, Mission Specialists James P. Bagian, Tamara E. Jernigan, M. Rhea Seddon, and Payload Specialists F. Drew Gaffney, and Millie-Hughes Fullford, sitting down at the traditional breakfast table. The crew is also seen suit-up, entering the elevator, leaving the Operations and Checkout Building (O&C), and getting into the Astro-van. Scenes also show the crew members entering the vehicle as well as various isolated morning launch views, and some beautiful panoramic shots of the shuttle on the launch pad.

CASI
Space Transportation System: Spacecrews; Crew Procedures (Preflight); Space Suits

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 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

2000083563 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/MLS--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
Live footage shows the SLS-1 (Spacehab 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 shows Commander Terrence W. Wilcutt, Pilot Scott D. Altman, Mission Specialists Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov going through various training activities. These activities include Spacehab Training at Kennedy Space Center (KSC), EVA Pre-Post Operations, Post Launch Operations, Rendezvous, Bailout, and Post Landing Egress Training at Johnson Space Center (JSC). The crew is also seen participating in a group photograph session.

**CASI**

**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 seen eating breakfast, suit-up, walking out to the Astronaut Van, putting on life vests in the ‘White Room’ area, and entering the crew module of the Discovery Orbiter. Footage also includes the deployment of the Ulysses satellite. The Discovery spacecraft is seen as it approaches and lands at Edwards Air Force Base. Also shown are several scenes from different cameras of both launching and landing of the STS-41 spacecraft.

**CASI**

**Ulysses Mission; Deployment; Payload Delivery (STS); Space Transportation System; Space Transportation System Flights; Discovery (Orbiter)**

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 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 of the day of their flight. The crew are seen eating breakfast, suit-up, walking out to the Astronaut Van, putting on life vests in the ‘White Room’ area, and entering the crew module of the Discovery Orbiter. Footage also includes preparation of the Ulysses Payload. Engineers are seen loading Ulysses to the upper stage, transferring Discovery to an upright position, bolting Discovery to the external tank, rolling Discovery out to the launch pad, and finally installing the Ulysses Payload inside Discovery. Also shown are both morning and noon 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-41/Ulysses Camcorder Footage Replay of Ulysses Deploy on 10/06/90

Oct. 08, 1990; In English; Videotape: 5 min. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2000118125; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage of the STS-41 deployment of the European Space Agency’s Ulysses probe is presented. Richard N. Richards, Commander, Robert D. Cabana, Pilot, Mission Specialists William M. Shepherd, Bruce E. Melnick and Thomas D. Akers are shown aboard the Space Shuttle.

**CASI**

**Deployment; Space Probes; Space Transportation System; Ulysses Mission**

STS-106 Crew Activity Report / Flight Day Highlights Day 2

Sep. 09, 2000; In English; Videotape: 13 min. 51 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2000131282; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

STS-106 was launched on Sept 8, 2000 at 8:45 a.m. The crew was commanded by Terrence W. Wilcutt, the pilot was Scott D. Altman. The mission specialists were Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov. During the 11-day mission, the crew spent a week inside the International Space Station (ISS) unloading supplies from both 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; Supplying; Crew Procedures (Inflight)**

STS-106 Crew Activity Report/Flight Day 1 Highlights

Sep. 08, 2000; In English; Videotape: 17 min. 36 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2000131281; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-106 Atlantis mission, the flight crew, Commander Terrence W. Wilcutt, Pilot Scott D. Altman, and Mission Specialists Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov are seen performing pre-launch activities. They are shown sitting around the breakfast table with the traditional cake, suit-up, and riding out to the launch pad. The final inspection team is seen as they conduct their final check of the space shuttle on the launch complex. Also, included are various panoramic views of the shuttle on the pad. The crew is 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

Spacecraft Launching; Atlantis (Orbiter); Manned Space Flight; Space Transportation System; Space Transportation System Flights

STS--106 Crew Activities Report/Flight Day 3 Highlights
Sep. 10, 2000; In English; Videotape: 18 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000131280; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this third day of the STS-106 Atlantis mission, the flight crew, Commander Terrence W. Wilcutt, Pilot Scott D. Altman, and Mission Specialists Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov are seen as they approach the International Space Station (ISS). Also shown are views of the rendezvous taken from both the Zarya Control Module and the Atlantis spacecraft. Final preparation for the docking includes checking of tools and equipment needed to support the rendezvous and docking, as well as equipment for the scheduled space walk. After docking over Western Kazakhstan, the Zarya and Zvezda Service Module is seen from the external cameras of Atlantis. Also shown is footage of the crew before and during the rendezvous.

CASI

Space Transportation System; Space Transportation System Flights; International Space Station

STS--106 Crew Activities Report/Flight Day 4 Highlights
Sep. 11, 2000; In English; Videotape: 20 min., 55 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000131582; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fourth day of the STS-106 Atlantis mission, the flight crew, Commander Commander Terrence W. Wilcutt, Pilot Scott D. Altman, and Mission Specialists Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov are seen preparing for the scheduled space walk. Lu and Malenchenko are seen coming through the hatch of the International Space Station (ISS). Also shown are Lu and Malenchenko attaching a magnetometer and boom to Zvezda. Mastracchio operates the robot arm moving the extravehicular activity (EVA) crew outside of the ISS.

CASI

International Space Station; Service Module (Iss); Space Transportation System; Space Transportation System Flights; Manned Space Flight; Atlantis (Orbiter)

STS--106 Crew Activities Report/Flight Day 5 Highlights
Sep. 12, 2000; In English; Videotape: 22 min., 24 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--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 Specialists Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov are seen participating in several activities. Malenchenko and Wilcutt are seen opening the hatches of the Zvezda Service Module and the Zarya Control Module, and finally, the transfer chamber of Zvezda. Burbank and Mastracchio are seen transferring food and equipment, and removing the manual docking system of Zarya. Lu, Burbank and Malenchenko are also seen checking the hatch interfaces. Footage also shows the entire interior of the International Space Station (ISS) complex.

CASI

International Space Station; Service Module (Iss); Zarya Control Module; Space Transportation System; Space Transportation System Flights

STS--106 Crew Activities Report/Flight Day 6 Highlights
Sep. 13, 2000; In English; Videotape: 20 min., 8 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000136607; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this sixth day of the STS-106 Atlantis mission, the flight crew, Commander Commander Terrence W. Wilcutt, Pilot Scott D. Altman, and Mission Specialists Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov are seen participating in several outfitting and transferring activities. Burbank and Morukov replace batteries in Zarya, while Lu and Malenchenko install three batteries and electrical equipment inside the Zvezda Service Module. Footage of Wilcutt participating in an interview concludes the events of the day.

CASI

International Space Station; Zarya Control Module; Service Module (Iss)

STS--106 Crew Activities Report/Flight Day 7 Highlights
Sep. 14, 2000; In English; Videotape: 21 min., 6 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000136103; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this seventh day of the STS-106 Atlantis mission, the flight crew, Commander Commander Terrence W. Wilcutt, Pilot Scott D. Altman, and Mission Specialists Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov are seen participating in several outfitting activities. Burbank and Morukov remove and replace a fourth battery in Zarya. Lu and Malenchenko finish installing the third and final battery and other electrical equipment inside the Zvezda Service Module. While Altman and Wilcutt perform a series of jet firings, Altman is shown as he narrates a tour of the Zvezda Service Module. Scenes also include Lu and Malenchenko unpacking the Russian-made Orlan space suits, Burbank and Wilcutt participating in an interview, and a beautiful night shot of the International Space Station (ISS) and Atlantis complex above the Earth.

CASI

International Space Station; Zarya Control Module; Service Module (Iss)

STS--92 Flight Day Highlights and Crew Activities: Day 9
Oct. 20, 2000; In English; Videotape: 21 min., 44 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000157382; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this ninth day of the STS-92 mission, the flight crew, Commander Brian Duffy, Pilot Pamela A. Melroy, and Mission Specialists Koschi Wakata, Leroy Chiao, Peter J.K. Wisoff, Michael E. Lopez-Alegria, and William S. McArthur
participate in an audio interview while scenes are shown of the International Space Station (ISS) and the Earth.

CASI

*International Space Station: Discovery (Orbiter); Service Module (Iss); Unity Connecting Module: Zarya Control Module*

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2000112958 NASA Johnson Space Center, Houston, TX USA

**STS-92 Crew Interview/W. McArthur**

Sep. 14, 2000; In English; Videotape: 55 min. 31 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000138906; No Copyright; Avail: CASI; B03, Videotape-Beta: V03, Videotape-VHS

The STS-92 Mission Specialist William S. McArthur is seen being interviewed. He answers questions about his inspiration to become an astronaut and gives details on the mission, including overviews of the Z1 truss, the third pressurized meeting adapter (PMA-3), and his spacewalks. He shares his thoughts on the international collaboration of space exploration, the contributions of the Russians, the role of STS-92 in preparing the International Space Station (ISS) for its first resident crew, and the importance of the ISS and the Space Shuttle in the future.

CASI

*International Space Station: Astronauts; Prelaunch Summaries*

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2000112965 NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS-43 IUS Lift to Workstand at the VPF**

Apr. 29, 1991; In English; Videotape: 9 min., 13 sec. playing time, in color, without sound

Report No.(s): NONP–NASA–VT–2000140872; No Copyright; Avail: CASI; B01, Videotape-Beta: V01, Videotape-VHS

Footage filmed at the Vertical Processing Facility (VPF) shows the inertial upper stage (IUS) being lifted to the workstand.

CASI

*Inertial Upper Stage: Space Transportation System*

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2000112966 NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS-46 TC/DT Slideware Training and Photo Session**

Jun. 15, 1992; In English; Videotape: 22 min., 26 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000148079; No Copyright; Avail: CASI; B02, Videotape-Beta: V02, Videotape-VHS

The crew of STS-46, Commander Loren J. Shriver, Pilot Andrew M. Allen, Payload Specialist Franco Malerba, Mission Specialists Jeffrey A. Hoffman, Franklin R. Chang-Diaz, Claude Nicollier, and Marsha S. Ivins are seen introducing themselves and discussing the mission during a photo session. The crew then answers questions from the press.

CASI

*Atlantis (Orbiter); Prelaunch Summaries: Crew Procedures (Preflight)*

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2000112967 NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS-47 Mission Overview**

Aug. 10, 1992; In English; Videotape: 42 min., 18 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000152239; No Copyright; Avail: CASI; B03, Videotape-Beta: V03, Videotape-VHS

Flight Director Milt Heflin gives an overview of the goals of the Space Shuttle Endeavour. He describes the crew, the role of the orbiter, the planned experiments, and the timeline of activities on board. Mission Commander Andrew King introduces the Spacelab-J mission. He discusses the planned experiments and Japanese involvement in development. Heflin and King then take questions from the press.

CASI

*Endeavour (Orbiter); Spacelab; Prelaunch Summaries; Spaceborne Experiments*

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2000112968 NASA Johnson Space Center, Houston, TX USA

**STS-92 Crew Activity Report/Flight Day 11 Highlights**

Oct. 22, 2000; In English; Videotape: 16 min. 37 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000159448; No Copyright; Avail: CASI; B02, Videotape-Beta: V02, Videotape-VHS

On this eleventh day of the STS-92 mission, the flight crew, Commander Brian Duffy, Pilot Pamela A. Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter J.K. Wisoff, Michael E. Lopez-Alegria, and William S. McArthur participate in an audio interview while footage of the Earth is seen.

CASI

*International Space Station: Discovery (Orbiter); Service Module (Iss); Unity Connecting Module: Zarya Control Module*

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2000112969 NASA Johnson Space Center, Houston, TX USA

**STS-92 Crew Activity Report/Flight Day 10 Highlights**

Oct. 21, 2000; In English; Videotape: 17 min. 50 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000157386; No Copyright; Avail: CASI; B02, Videotape-Beta: V02, Videotape-VHS

On this tenth day of the STS-92 mission, the flight crew, Commander Brian Duffy, Pilot Pamela A. Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter J.K. Wisoff, Michael E. Lopez-Alegria, and William S. McArthur prepare for the unlocking of Discovery from the International Space Station (ISS) as Lopez-Alegria is seen closing the hatch on the Unity Module. A slow sweep of the outside of the ISS shows the space station in detail against the backdrop of a dark Earth where the lights of a city shine. Lopez-Alegria closes the outer hatch and Discovery undocks from the ISS. As the two separate, the ISS is seen orbiting across a beautiful dark blue Earth.

CASI

*International Space Station: Discovery (Orbiter); Service Module (Iss)*

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2000112970 NASA Johnson Space Center, Houston, TX USA

**STS-92 Crew Activity Report/Flight Day 8 Highlights**

Oct. 19, 2000; In English; Videotape: 18 min. 32 sec. playing time, in color, with sound; No Copyright; Avail: CASI; B02, Videotape-Beta: V02, Videotape-VHS

On this eighth day of the STS-92 mission, the flight crew, Commander Brian Duffy, Pilot Pamela A. Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter J.K. Wisoff, Michael E. Lopez-Alegria, and William S. McArthur prepare for the fourth and final spacewalk of the mission. Scenes are shown of Lopez-Alegria and Wisoff during their 6 hour 56 minute spacewalk against a backdrop of the Earth. Central America and Florida are easily seen and North Carolina can be identified through flae clouds. Lopez-Alegria closes the hatch assembly that will later hold the solar array truss while Wakata operates the arm.

CASI

*International Space Station: Service Module (Iss); Discovery (Orbiter)*

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2000112971 NASA Johnson Space Center, Houston, TX USA

**Crew Activity Report/Flight Day 6 Highlights**

Oct. 17, 2000; In English; Videotape: 18 min. 9 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000157383; No Copyright; Avail: CASI; B02, Videotape-Beta: V02, Videotape-VHS

On this sixth day of the STS-92 mission, the flight crew, Commander Brian Duffy, Pilot Pamela A. Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter J.K. Wisoff, Michael E. Lopez-Alegria, and William S. McArthur continue working on the exterior of the International Space Station (ISS) to prepare the station for its first resident crew. Lopez-Alegria and Wisoff perform the second of four spacewalks to maneuver the third pressurized mating adapter (PMA-3) into its new location on the Unity module.

CASI

*International Space Station: Service Module (Iss); Discovery (Orbiter); Unity Connecting Module: Zarya Control Module*
Prelaunch Problems; Countdown; Prelaunch Summaries; Spacecraft Launching; Prelaunch Tests; Prelaunch Problems

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

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 of the day's accomplishments.

CASI
International Space Station; Discovery (Orbiter); Service Module (ISS); Unity Connecting Module; Zarya Control Module

On this fourth 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

The crew of STS-50, 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 F-38 aircraft at Kennedy Space Center for a terminal countdown and demonstration test. They are introduced 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)

The crew of STS-47 and Sieck gives an overview of the problems solved before launch. Shaw and Sieck also answer questions from the press.

CASI
Prelaunch Problems; Spacecraft Launching; Endeavour (Orbiter); Postlaunch Reports

The STS-46 solar arrays are deployed. The unfolding takes place against a backdrop of Earth and the Persian Gulf. The solar arrays can be identified.

CASI
Deployment: EURECA (ESA); Solar Arrays

The crew of STS-44, Commander Frederick D. Gregory, Pilot Terence T. Henricks, Mission Specialists F. Story Musgrave, Mario Runco Jr., and James S. Voss are seen landing T-38 aircraft at Kennedy Space Center in a terminal countdown and demonstration test (TCDT). Footage of the crew (including Payload Specialist Thomas J. Heni) during various phases of flight training is shown, including training on the use of gas masks and other emergency equipment and suiting up preparatory to liftoff. A brief introduction of the crew is Presented by Gregory.

CASI
Prelaunch Summaries: Crew Procedures (Preflight); Astronaut Training

The STS-92 Commander Brian Duffy is shown being interviewed. He makes a brief introductory statement about his or her expectations for the upcoming Columbia mission.

CASI
Prelaunch Problems; Spacecraft Launching; Prelaunch Summaries; Crew Procedures (Preflight); Astronaut Training
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), and his spacewalks. He shares his thoughts on Russia’s
contributions to the International Space Station (ISS), the role of STS-92 in
preparing the ISS for its first resident crew, and the importance of the ISS in the
future.
CASI

*International Space Station: Astronauts: Prelaunch Summaries*

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--2000138907; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
The STS-92 Mission Specialist Peter J.K. Wisoff is seen being interviewed.
He answers questions about his inspiration to become an astronaut and gives
details on the mission, including overviews of the Z1 truss, the third pressurized
meeting adaptor (PMA-3), and his spacewalks. He shares his thoughts on the
international collaboration of space exploration, Russia’s contributions, the role of
STS-92 in preparing the International Space Station (ISS) for its first resident crew,
and the importance of the ISS and the Space Shuttle in the future.
CASI

*International Space Station: Astronauts: Prelaunch Summaries*

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: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
The STS-92 Pilot Pamela A. Melroy is shown being interviewed. She
answers questions about her inspiration to become an astronaut and gives
details on the mission, including overviews of the Z1 truss, the third pressurized
meeting adaptor (PMA-3), and the spacewalks. She shares her thoughts on the interna-
tional collaboration of space exploration, Russia’s contributions, the role of
STS-92 in preparing the International Space Station (ISS) for its first resident crew,
and the importance of the ISS and the Space Shuttle in the future.
CASI

*International Space Station: Astronauts: Prelaunch Summaries*

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: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
On this eighth day of the STS-106 Atlantis mission, the flight crew, Commander Terrence W. Wilcutt, Pilot Scott T. Altman, and Mission Specialists Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov move into the second half of preparing the International Space Station (ISS) for its first resident crew. Lu and Malenchenko are seen installing the power converters in the Zvezda module and components of the primary oxygen generation system. Mastracchio and Wilcutt move supplies and logistics from the payload of Atlantis to the ISS. Wilcutt and Altman participate in several interviews and the crew wishes the Olympics in Sydney
good luck in their endeavors. Scenes also include external views of the ISS and images of Earth, including Sydney, Australia.
CASI

*International Space Station: Space Transportation System; Service Module (ISS); Space Transportation System Flights; Spacecraft Maintenance*
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.

CASI
Crystallography; Protein Crystal Growth; Crystals; Spaceborne Experiments

STS-46 Post Launch News Conference

Report No.(s): NONP NASA VT-2000152229; No Copyright; Avail: CASI;
B02, Videotape-Beta: V02, Videotape-VHS

Dick Young introduces Brewster Shaw, Deputy Director of the Space Shuttle Program, and Robert B. Sieck, Launch Director of Kennedy Space Center. Shaw and Young give an overview of the launch of the spaceship Atlantis and answer questions from the press.

CASI
Atlantis (Orbiter): Prelaunch Summaries; Spacecraft Launching

STS-46 Crew Training

Report No.(s): NONP–NASA–VT–2000152242; No Copyright; Avail: CASI;
B02, Videotape-Beta: V02, Videotape-VHS

The crew of STS-46, Commander Loren J. Shriver, Pilot Andrew M. Allen, and Mission Specialists Franklin R. Chang-Diaz, Jeffrey A. Hoffman, Claude Nicollier, Marsha S. Ivins, and Franco Malerba are seen at various stages of their training. Footage includes firefighting training, helmet fit and T-38 checkout, bailout training in the weightless environment training facility, and remote manipulator training. The crew uses a computer simulation and the shuttle engineering simulator to practice using the tethered satellite system.

CASI
Spacecrews; Astronaut Training; Crew Procedures (Prelaunch)

STS-92 Crew Activity Report/Flight Day 7 Highlights

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 walkout while they install two DC-DC converter units and attach a second tool storage box on the Z1 truss.

CASI
International Space Station; Service Module (ISS); Discovery (Orbiter); Spacecraft Maintenance

STS-43 Atlantis/Breakfast & Suit-Up, Depart O&C, Ingress, Launch with Isolated Views, TDRS-F Deploy, and Landing with Isolated Views

Report No.(s): NONP–NASA–VT–2000129917; No Copyright; Avail: CASI;
B01, Videotape-Beta: V01, Videotape-VHS

Footage of various stages of the STS-43 Atlantis launch is shown, including shots of the crew at breakfast, getting suited up, and departing to board the Orbiter. The launch is shown from many vantage points, as is the landing. Atlantis is shown from space and the deployment of the fifth Tracking and Data Relay Satellite (TDRS-E) is also shown.

CASI
Deployment; Spacecraft Launching; Spacecraft Landing; Crew Procedures (Prelaunch)

STS-42 Discovery/Breakfast, Suit-Up, Depart O&C, Ingress, Launch, On-Orbit, and Landing

Report No.(s): NONP–NASA–VT–2000129914; No Copyright; Avail: CASI;
B03, Videotape-Beta: V03, Videotape-VHS

Footage of various stages of the Discovery mission is shown, including shots of the crew at breakfast, getting suited up, and departing to board the orbiter. The launch is shown from many vantage points, as is the landing. The crew is shown performing various micro-gravity experiments while in orbit.

CASI
Spacecraft Launching; Microgravity; Spaceborne Experiments; Prelaunch Summaries; Crew Procedures (Prelaunch); Spacecraft Landing

STS-42 Preflight Background Briefing Life Sciences (MSFC)

Report No.(s): NONP–NASA–VT–2000129909; No Copyright; Avail: CASI;
B04, Videotape-Beta: V04, Videotape-VHS

A panel of scientists give an overview of the experiments that are to take place on-board the STS-42 Discovery mission. Ronald J. White, International Microgravity Laboratory (IML) Program Scientist, gives a general description of why going into space with IML is so important. Robert Snyder, IML Mission Scientist, describes other aspects of the microgravity environment. Millard
At/ant_is' (Orbiter;i; Postmission Analysis
Crew Procedures (Preflight); Tetkened Satellites
Deployment; EURECA (ESA); Spacecraft
Launch; Crew Procedures; Orbiter Training; Atlantis
and Discovery (Orbiters)

Reschke, Principal Investigator (PI) Microgravity
Vestibular Investigation (MVI), explains what MVI is and the effects of space on the vestibular system. David Heathcoat, 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 Brillion, Program Scientist of the BioRack Facility, gives an overview of the BioRack equipment and experiment. Alan Mortimer, Chief Life Sciences for the Canadian Space Agency (CSA), describes the on-board experiments for the long- and short-term effects of microgravity on humans and biotechnology (cell separation techniques). The men then answer questions from the press and NASA centers.

CASI
Gravitational Effects: Gravitational Physiology; Life Sciences: Microgravity;
Postflight Summaries: Spaceborne Experiments

STS-47 Spacelab-J Landing at KSC SLF
Sep. 20, 1992; In English; Videotape: 32 min. 19 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2000152214; No Copyright; Avid: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Footage is shown of the landing of the Spacelab-J into the payload on the runway. The crew of Atlantis gets out of the cockpit and is introduced by Commander Charles F. Bolden to the press. The crew is also shown learning about the Atlas-01 module beforesuiting up to board Atlantis.

CASI
Spacelab: Endeavour (Orbiter): Spacecraft Landing

STS-43 Atlantis Main Engine #3 Computer Controller Removal and Replacement
Jul. 27, 1991; In English; Videotape: 4 min. 37 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP-NASA-VT-2000148102; No Copyright; Avid: CASI;
B01, Videotape-Beta; V02, Videotape-VHS

Footage is shown of the removal of Atlantis’ main engine number three. The new engine is then lifted into place.

CASI
Spacecraft Components: Atlantis (Orbiter): Replacing: Engines

STS-45/Atlas-1 Post-Landing Science Briefing from MSFC
Apr. 02, 1992; In English; Videotape: 24 min. 4 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2000148101; No Copyright; Avid: CASI;
B01, Videotape-Beta; V02, Videotape-VHS

De Torre gives an overview of the scientific goals of the Atlantis mission and the instruments on board, including Atlas-1. She summarizes the accomplishments of the mission and answers questions from the press.

CASI
Atlantis (Orbiter): Postflight Analysis (Spacecraft); Postflight Analysis

STS-46 Mission Highlights Resource Tape
Jul. 01, 1992; In English; Videotape: 50 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2000148098; No Copyright; Avid: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Scenes of the mission highlights for the STS-46 Atlantis mission are shown. Footage shows the pre-launch activities (crew breakfast and suit-up) and launch of Atlantis. The European Retrievable Carrier’s (EURECA) and the Tethered Satellite System’s (TSS) pre-deploy and deployment are shown. Shots of the crew’s activities and the Earth are shown, including footage taken over the Red Sea and central South America. Atlantis’ landing is also shown.

CASI
Deployment: EURECA (ESA); Spacecraft Launching; Spacecraft Landing;
Crew Procedures (Preflight); Tethered Satellites

STS-47 Spacelab-J Installation into Payload Bay of Endeavour OFF HB-3
Jul. 14, 1992; In English; Videotape: 7 min. 5 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP-NASA-VT-2000148097; No Copyright; Avid: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the lowering of Spacelab-J into the payload of Endavour in a clean room.

CASI
Installing: Spacelab: Endeavour (Orbiter)

STS-45/Atlas-1 TCDT Activities
Feb. 01, 1992; In English; Videotape: 21 min. 38 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2000148091; No Copyright; Avid: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Footage shows three T-38 aircraft coming in for landing at Kennedy Space Center (KSC) and jetting on the runway. The crew of Atlantis gets out of the cockpit and is introduced by Commander Charles F. Bolden to the press. The crew is also shown learning about the Atlas-01 module beforesuiting up to board Atlantis.

CASI
T-38 Aircraft: Crew Procedures (Preflight): Astronaut Training: Atlantis (Orbiter)

STS-46/Eureka Guidance Installation/Astronaut Inspection
Dec. 06, 1991; In English; Videotape: 13 min. 49 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2000148090; No Copyright; Avid: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Footage shows EURECA-II being lifted and maneuvered into place. The crew of STS-46 Atlantis then inspects the module.

CASI
Installing: EURECA (ESA); Atlantis (Orbiter)

STS-97 Crew Training
Nov. 09, 2000; In English; Videotape: 12 min. 38 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2000167004; No Copyright; Avid: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The crew of STS-97, Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Turner, Carlos I. Noriega, and Marc Gameau are shown during various stages of their training. Footage shows them during a food tasting, during emergency bailout training, spacewalk training, and de-orbit preparation.

CASI
Spacecraft: Bailout: Astronaut Training: Crew Procedures (Preflight)

STS-92 Crew Activity Report/Flight Day 1 Highlights
Oct. 12, 2000; In English; Videotape: 18 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2000157388; No Copyright; Avid: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-92 mission, the flight crew, Commander Brian Duffy, Pilot Pamela A. Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter J.K. Wisoff, Michael E. Lopez-Alegría, and William S. McArthur are shown during their pre-launch activities. Footage shows the crew at breakfast, getting suited up, leaving for the launch pad, and boarding Discovery. The launch is also shown.

CASI
Spacecraft Launching: Crew Procedures (Preflight); Discovery (Orbiter)
Footage of various stages of the STS-45 Atlantis launch is shown, including shots of the crew at breakfast, getting suited up, and departing to board the Orbiter. The launch is shown from many vantage points, as is the landing. Atlantis is shown orbiting Earth and the crew gives an overview of the experiments that will take place during the mission.

CASI
Launching; Atlantis (Orbiter); Spacecraft Launching; Spacecraft Landing; Crew Procedures (Preflight); Spaceborne Experiments

STS-106 Crew Activities Report/Flight Day 9 Highlights
Sep. 17, 2000; In English; Videotape: 18 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP—NASA—VT—2000136104; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this tenth day of the STS-106 Atlantis mission, the flight crew, Commander Commander Terrence W. Wilcutt, Pilot Scott D. Altman, and Mission Specialists Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov are shown preparing for their departure from the International Space Station (ISS). Crewmembers are shown closing the hatches of the Zarya, Unity and Zvezda modules. They are also shown packing up trash and packing materials into the Russian Progress ship.

CASI
Spacecrews; Crew Procedures (Inflight); Spacecraft Docking; Closing; Hatches

STS-47/Vice President Dan Quayle's Visit to KSC for Launch
Sep. 17, 1992; In English; Videotape: 45 min. 19 sec. playing time, in color, with sound
Report No.(s): NONP—NASA—VT—2000118116; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Footage shows the arrival of Vice President Dan Quayle to the Kennedy Space Center (KSC) for the launch of Endeavour. He is shown greeting the crew on the runway and later, in the control room, thanking the KSC employees for all their hard work. He also wishes the Endeavour crew good luck shortly before the launch.

CASI
Integrated Mission Control Center; Personnel; Ground Based Control

STS-48 Temperature Probe and MDM
May 22, 1991; In English; Videotape: 2 min. 14 sec. playing time, in color, with sound
Report No.(s): NONP—NASA—VT—2000118114; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows close-up shots of the temperature probe for the Columbia orbiter.

CASI
Columbia (Orbiter): Temperature Probes

STS-38 Rollback from Pad A to VAB
Aug. 09, 1990; In English; Videotape: 13 min. 46 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP—NASA—VT—2000113523; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

STS-43 Astronaut Arrival for TCDT
Jul. 01, 1991; In English; Videotape: 3 min. 8 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP—NASA—VT—2000118262; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

STS-43 TCDT
Jul. 03, 1990; In English; Videotape: 62 min. 26 sec. playing time, in color, with sound
Report No.(s): NONP—NASA—VT—2000122920; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Footage is seen of the simulated ignition of Atlantis’ main engines up until about 30 seconds before ignition. The crew’s activities of the days before are seen, including emerging from two T-38 aircraft cockpits, 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)
Footage is shown of the slow roll-out of Atlantis, travelling from pad A to the Vehicle Assembly Building (VAB).

CASI
Atlantis (Orbiter): Space Shuttles

STS-38 Atlantis Crew Arrival
Nov. 13, 1990; In English; Videotape: 18 min. 14 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT-2000113531; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Footage shows the Atlantis crew maneuvering and landing five T-38 aircrafts at Kennedy Space Center and greeting the crowd on the runway.

CASI
Atlantis (Orbiter): Crew Procedures (Preflight); T-38 Aircraft

STS-38 Rollout to Pad A
Jun. 18, 1990; In English; Videotape: 5 min. 11 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT-2000113528; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage is shown of the slow rollout of Atlantis on pad A. Different close-up and panoramic shots of the orbiter are shown against a backdrop of the sunset.

CASI
Atlantis (Orbiter): Prelaunch Tests

STS-97 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 influenced 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-97 Crew Interview: Carlos Noriega, MS3
Nov. 03, 2000; In English; Videotape: 45 min. 53 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT-2000165430; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The STS-97 Mission Specialist Carlos Noriega is seen being interviewed. He answers questions about his inspiration to become an astronaut, his career path, and his training. He gives details on the mission’s goals and significance, its payload, the rendezvous with the International Space Station (ISS), and what it will be like to work knowing there is already a crew on board the ISS.

CASI
International Space Station: Astronauts; Prelaunch Summaries
path, and his training. He gives details on the mission’s goals and significance, its payload, the rendezvous with the International Space Station (ISS), and what it will be like to work knowing there is already a crew on board the ISS. CASI

Preface Summaries: International Space Station; Astronauts

20010001525 NASA Johnson Space Center, Houston, TX USA
STS-97 Crew Activity Report/Flight Day 3 Highlights
Dec. 03, 2000; In English; Videotape: 22 min. 3 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–2000177365; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this third day of the STS-97 mission, Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Tanner, Carlos I. Noriega, and Marc Garneau continue to approach the International Space Station (ISS) in the Endeavour Orbiter. Footage shows the docking of Endeavour with the ISS and the solar array truss on the robotic arm against a backdrop of Earth. CASI

Endeavour (Orbiter); International Space Station; Solar Arrays; Spacecraft Docking

20010001526 NASA Johnson Space Center, Houston, TX USA
STS-97 Crew Activity Report/Flight Day 4 Highlights
Dec. 04, 2000; In English; Videotape: 29 min. 33 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–2000177364; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fourth day of the STS-97 Endeavour mission, Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Tanner, Carlos I. Noriega, and Marc Garneau remain docked with the International Space Station (ISS) as Noriega and Tanner are seen during their spacewalk. The astronauts help Jett guide the P6 solar array truss into place in the ISS. Footage shows the deployment of the ISS’s solar wings. CASI

International Space Station; Deployment; Solar Arrays; Crew Procedures (Inflight); Installing; Extravehicular Activity

20010001527 NASA Johnson Space Center, Houston, TX USA
STS-97 Crew Activity Report/Flight Day 1 Highlights
Dec. 04, 2000; In English; Videotape: 19 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–2000177363; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-97 mission, Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Tanner, Carlos I. Noriega, and Marc Garneau are seen at breakfast and while suiting up. The launch of the Endeavour Orbiter is shown. CASI

Endeavour (Orbiter); Crew Procedures (Preflight); Spacecraft Launching

20010001528 NASA Johnson Space Center, Houston, TX USA
STS-97 Crew Activity Report/Flight Day 2 Highlights
Dec. 02, 2000; In English; Videotape: 14 min. 33 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–2000177362; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this second day of the STS-97 mission, Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Tanner, Carlos I. Noriega, and Marc Garneau continue to approach the International Space Station (ISS) in the Endeavour Orbiter. External views of Endeavour are seen against a backdrop of Earth, and the camera installed on the robotic arm pans of the payload bay. Tanner and Noriega are shown in the airlock inspecting their spacecrafts. CASI

Endeavour (Orbiter); Air Locks; Payloads; Crew Procedures (Inflight)

20010001529 NASA Johnson Space Center, Houston, TX USA
STS-97 Crew Activity Report/Flight Day 5 Highlights
Dec. 05, 2000; In English; Videotape: 24 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–2000177361; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fifth day of the STS-97 mission, Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Tanner, Carlos I. Noriega, and Marc Garneau are seen answering questions about the mission and accomplishments thus far. Footage shows the International Space Station’s (ISS) solar wing being deployed. Exterior views of the ISS are shown against a backdrop of Earth. CASI

International Space Station; Deployment; Crew Procedures (Inflight); Solar Cells

20010001553 NASA Johnson Space Center, Houston, TX USA
STS-97 Crew Activity Report/Flight Day 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 good-bye to the International Space Station’s (ISS) resident crew (Commander Bill Shepherd, Pilot Yuri Gidzenko and Flight Engineer Sergei Krikalev) and sealing the hatches between the Endeavour Orbiter and the ISS. Footage shows the ISS against a rotating Earth as it passes over China. CASI

International Space Station; Spacewalks; Crew Procedures (Inflight)

20010001554 NASA Johnson Space Center, Houston, TX USA
STS-97 Crew Activity Report/Flight Day 7 Highlights
Dec. 06, 2000; In English; Videotape: 20 min. 19 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–2000179198; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this seventh day of the STS-97 mission, Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Tanner, Carlos I. Noriega, and Marc Garneau answer questions about the mission and accomplishments. 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 6 Highlights
Dec. 06, 2000; In English; Videotape: 23 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–2000179197; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this sixth day of the STS-97 mission, Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Tanner, Carlos I. Noriega, and Marc Garneau remained docked with the International Space Station (ISS) on the Endeavour Orbiter. Tanner and Noriega are seen during their spacewalks, studying the solar wing and moving the S-band antenna assembly. CASI

Extravehicular Activity; International Space Station

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: Space Debris


CASI

Endeavour (Orbiter): Prelaunch Summaries

2001091188

NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-56 Atlas-2/Orbiter, 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-2001001568; 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

2001091186

NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-55 Crew Arrival

Mar. 17, 1993; In English; Videotape: 6 min. 46 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-2001001577; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The crew of STS-55, Pilot Terence T. Henricks, Mission Specialists Jerry L. Ross, Charles J. Precourt, and Dr. Bernard A. Harris Jr., and Payload Specialists Dr. Ulrich Walter and Hans Schlegel are introduced by Commander Steven R. Nagel, who comments on the mission and the lift-off delay. Each of the crew-members gives a brief statement about their role and expectations for the mission.

CASI

Spacecraft Launching: Crew Procedures (Preflight); Prelaunch Problems

2001091122

NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-56 Astronaut Crew Arrival at KSC for Launch

Apr. 02, 1993; In English; Videotape: 11 min. 56 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-2001001567; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The crew of STS-56, Commander Kenneth D. Cameron, Pilot Stephen S. Oswald, and Mission Specialists C. Michael Foale Ph.D., Kenneth D. Cockrell, and Ellen Ochoa, is seen arriving and disembarking from T-38 aircraft. Commander Cameron introduces the crew and each member gives a brief statement about the mission.

CASI

Spacecraft Procedures (Preflight); Prelaunch Summaries

2001091113

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-2001001571; 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
STS-55 Mission Overview, Preflight Briefing from JSC
Feb. 02, 1992; In English; Videotape: 30 min. 9 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001001574; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

CASA overview of the mission activities, objectives, 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. Dodek, D-2 Mission Manager, discusses Germany's contributions to the mission and describes the German aeronautics facilities. They then answer questions from the press.

CASI

Columbia (Orbiter); Prelaunch Summaries

STS-56 Launch Attempt Press Conference
Apr. 06, 1993; In English; Videotape: 7 min. 9 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001001578; No Copyright; Avail: CASI; B01, 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-56 Preflight Briefs/Mission Overview from MSC
Mar. 19, 1993; In English; Videotape: 46 min. 42 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001001579; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Chuck Shaw, Lead Flight Director, and Teresa Vanhooser, Mission Manager, each give an overview of the STS-56 Discovery mission's objectives, activities, payloads (ATLAS-2, SPARTAN-201, etc.), and experiments. They then answer questions from the press.

CASI

Prelaunch Summaries; Spaceborne Experiments

STS-46 TSS-I
Feb. 02, 1993; In English; Videotape: 4 min. 3 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000152235; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

An overview of the Tethered Satellite System (TSS) is given. Simulations show the deployment and operation of TSS from the Atlantis Orbiter. The experimental applications and objectives are explained.

CASI

Atlantis (Orbiter); Deployment; Simulation; Tethered Satellites

STS-49 Endeavour Landing
May 16, 1992; In English; Videotape: 51 min. 7 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000152227; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Footage shows the landing of the Endeavour Orbiter from various vantage points, including the deployment of the drag chute, which is used for the first time. The crew of STS-49, Commander Daniel C. Brandenstein, Pilot Kevin P. Chilton, and Mission Specialists Pierre J. Thuot, Kathryn C. Thornton, Richard J. Hieb, Thomas D. Akers, and Bruce E. Melnick, are seen exiting the Orbiter. Footage of the landing taken with the infrared camera is seen.

CASI

Endeavour (Orbiter); Drag Chute; Spacecraft Landing

STS-49 Endeavour/Removal of Engine 2 at Pad B
Apr. 14, 1992; In English; Videotape: 5 min. 35 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP--NASA--VT--2000152225; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the removal of Engine 2 from the Dendavour Orbiter at Pad B.

CASI

Endeavour (Orbiter); Spacecraft Equipment; Spacecraft Power Supplies; Removal

STS-49 Endeavour/Compiled Video for Editors
May 01, 1992; In English; Videotape: 40 min. 6 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000152222; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Compiled footage includes shots taken of the rollout of Endeavour at Palmdale, CA, the departure and arrival of Endeavour for Kennedy Space Center (KSC), main engine three installation, solid rocket booster (SRB) segment lift and stack at the Vehicle Assembly Building (VAB), external tank mate to SRB, Inertial rotation at the Vertical Processing Facility (VBF), Endavour 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

135
and Demonstration Test (TCDT) training activities, at breakfast, suiting up, and exiting the Operations and Checkout (O&C) Building.

CASI

Endeavour (Orbiter); Checkout: Prelaunch Tests; Crew Procedures (Preflight)

20010011180 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

20010011186 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS–47 Astronaut Crew at Pad B for TCDT, Emergency Egress Training, and Photo Opportunity

Aug. 26, 1992; In English; Videotape: 37 min. 8 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000152218; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The crew of STS-47, Commander Robert L. Gibson, Pilot Curtis L. Brown, Payload Commander Mark C. Lee, Mission Specialists N. Jan Davis, Jay Apl, and Mae C. Jamison, and Payload Specialist Marjorie Mohr 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)

20010011187 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


CASI

Astronauts: Crew Procedures (Preflight); Prelaunch Summaries

20010011188 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–49 Endeavour launch is shown, including shots of the crew at breakfast, getting suited up, and departing to board the Orbiter. The launch is seen from many vantage points, as is the landing. On-orbit activities are shown, such as the Intelsat rescue and deployment on flight day 7, and some of the Space Station assembly techniques.

CASI

Endeavour (Orbiter); Intelsat Satellites; Spacecraft Launching; Rescue Operations; Crew Procedures (Preflight); Crew Procedures (Inflight)

20010011189 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS–46 Eureka/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)

20010011190 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS–43 Crew Briefing

Jun. 26, 1992; 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

20010011191 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)

20010011192 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS–44 Astronaut Crew Briefing

Oct. 28, 1993; In English; Videotape: 27 min. 59 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000148085; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Commander Frederick D. Gregory introduces the crew of STS–44, Pilot Terence T. Henricks, Mission Specialist F. Story Musgrave, Marco Runco Jr., and James S. Voss, and Payload Specialists Thomas J. Hennin, 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

20010011193 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).

**CASI**

**TDR Satellites: Inspection**

20010511198 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–2001001580; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Close-up shots are seen of Atlas-2 and Spartan-201, the payload for the Discovery Orbiter.

CASI

**Spartan Satellites: Payloads**

20010111199 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–2001001591; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The crew of STS-56, Commander Kenneth D. Cameron, Pilot Stephen S. Oswald, and Mission Specialists C. Michael Foale Ph.D., Kenneth D. Cockrell, and Ellen Ochoa are seen exiting the Operations and Checkout (O&C) Building on their way to the press.

CASI

**Crew Procedures (Preflight); Spacecrafts: Space Transportation System Flights**

20010511200 NASA Kennedy Space Center, Cocoa Bench, FL USA

**STS-55 Columbia Rollover from OPF to VAB**

Feb. 02, 1993; In English; Videotape: 8 min. 9 sec. playing time, in color, with sound (no narration)

Report No.(s): NONP–NASA–VT–2001001582; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The Columbia Orbiter is seen during the rollover from the Orbiter Processing Facility (OPF) to the Vehicle Assembly Building (VAB).

CASI

**Columbia (Orbiter): Transferring**

20010111201 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–2001001584; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

The landing of the Discovery Orbiter at Kennedy Space Center (KSC) is shown from many different vantage points, including footage of the landing taken with infrared cameras.

CASI

**Discovery (Orbiter): Spacecraft Landing**

20010111202 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–2001001585; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

The crew of STS-55, Commander Steven R. Nagel, Pilot Terence T. Henricks, Mission Specialists Jerry L. Ross, Charles J. Precourt, and Dr. Bernard A. Harris Jr., and Payload Specialists Dr. Ulrich Walter and Hans Schlegel are seen during emergency egress training. Then Commander Nagel introduces the members of the crew and they each give a brief statement about the mission and answer questions from the press.

CASI

**Astronaut Training; Prelaunch Summaries; Crew Procedures (Preflight)**

2001011263 NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS-55 Downline Waste Water Tank Problem**

Apr. 27, 1993; In English; Videotape: 11 min. 34 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001001586; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Onboard, in-flight close-up shots show the buckling of the waste water tank. Details are given on the problem.

CASI

**Buckling: Tanks (Containers); Spacecraft Equipment**

20010111853 NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS-92 Z-1 Truss Overview**

Sep. 26, 2000; In English; Videotape: 45 min. 11 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001007189; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Robert Galvez, Launch Package Manager, gives an overview of the launch package of the STS-92 Discovery mission (Z-1 Truss, PMA-3, DDCU, etc.), and gives details on the configuration and equipment positioning on the Z-1 Truss.

Simulation shows the installation of the DDCU (DC to DC power converter) and the S-band antenna.

CASI

**Simulation: Trusses; Prelaunch Summaries; Spacecraft Equipment**

20010111854 NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS–97 Countdown Status**

Nov. 29, 2000; In English; Videotape: 17 min. 8 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001006468; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Joel Wells, NASA Public Affairs, introduces Steve Altemus, NASA Test Director, David Flowers, P-6 Truss Integration Engineer, and Ed Priselac, Shuttle Weather Officer. Mr. Altemus 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**

20010111855 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. Mr. Spaulding discusses the Shuttle status, successful countdown, and preflight preparations. Mr. Priselac describes a good weather forecast for the upcoming STS-97 Endeavour launch. The men then answer questions from the press.

CASI

**Countdown; Prelaunch Summaries; Spacecraft Launching**

20010111856 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 Arti Sea in central Asia and fires in Mongolia. Mr. Un then answers questions from the press. 

**ST5–92 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–2001006608; 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, SMM-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.

**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–2001006607; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS.


**STS–92 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).
Bernard A. Harris Jr., and Payload Specialists Dr. Ulrich Walter and Hans Schlegel. Each crew member gives an overview of the mission objectives, activities, spaceborne experiments, payload (Spacelab-D2, SAREX-II), and his role in the mission. They then answer questions from the press. The video ends during the questions and continues on 'STS-55 Crew Briefing, Part 2 of 2' (internal processing ID 2001001575).

CASI
Payloads: Spaceborne Experiments; Prelaunch Summaries

2001011955 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-41 Activity/Rollover Preparations/Lift Preparations in VAB/Mated
Aug. 28, 1990; In English; Videotape: 8 min. 54 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP–NASA–VT–2001011365; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows preparations for the Discovery Orbiter rollover to the Vehicle Assembly Building (VAB), the lift from the transport, and the mating of Discovery to the External Tank (ET).

CASI
Discovery (Orbiter); External Tanks

20010012036 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-92 Preflight Briefings Video Feed and International Space Station Overview
Sep. 26, 2000; In English; Videotape: 71 min. 2 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001007190; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The first half of this video is a collection of video feeds from various preflight conferences and simulations showing the payload bay and payload equipment. The International Space Station’s (ISS) structure is seen, as are close-up shots of the Z-1 truss. Footage shows extravehicular activity (EVA) underwater training. The second half of the video is a preflight conference on the mission objectives concerning the ISS. Tommy Hallway, Manager, ISS Program, and Robert Cabana, ISS Manager for International Operations, discuss the STS-92 mission in terms of the ISS and the role of ISS hardware. The men then answer questions from the press.

CASI
International Space Station: Payloads; Prelaunch Summaries

20010012037 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-92 Crew News Conference
Sep. 26, 2000; In English; Videotape: 56 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001007191; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Commander Brian Duffy introduces the crew of STS-92, Pilot Pamela A. Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter J.K. Wisoff, Michael E. Lopez-Alegria, and William S. McArthur. They discuss the activities for each flight day and give details on the payload (PMA-3, Z-1 truss, etc.). They then answer questions from the press.

CASI
Payloads: Spacecrews; Prelaunch Summaries

20010012056 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-39 Activities in Orbiter Bay
Jan. 17, 1991; In English; Videotape: 3 min. 5 sec. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–2000118022; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows people working in the payload of the Discovery Orbiter in the Orbiter Bay.

CASI
Discovery (Orbiter); Payloads

20010012057 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-46 Special Events Resource Tape, Part 2 of 2
Nov. 17, 1992; In English; Videotape: 45 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000148074; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of 'STS-46 Special Events Resource Tape, Part 1 of 2', the STS-46 Atlantis in-flight crew interviews proceed. Claude Nicollier is interviewed (in French) during a European Space Agency (ESA) VIP call and ESA press conference. The entire crew answers questions (in English) in an in-flight press conference about the mission.

CASI
Postlaunch Reports: Atlantis (Orbiter)

20010012058 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-46 Post Launch Press Conference
Dec. 18, 1991; In English; Videotape: 6 min. 28 sec. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–2000148075; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Dick Young, NASA Public Affairs, introduces Bob Sieck, Launch Director, Kennedy Space Center, who gives an overview of the successful countdown and launch of the STS-45 Atlantis mission. He then answers questions from the press.

CASI
Spacecraft Launching; Countdown; Postlaunch Reports

20010012059 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-46 Tethered Satellite System Mate to Deployer
Mar. 23, 1992; In English; Videotape: 16 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000148076; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Dick Young, NASA Public Affairs, introduces Bob Sieck, Launch Director, Kennedy Space Center, who gives an overview of the successful countdown and launch of the STS-45 Atlantis mission. He then answers questions from the press.

CASI
Tethered Satellites: Spacecraft Equipment

20010012068 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-92 Mission Overview
Sep. 26, 2000; In English; Videotape: 55 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001006467; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Chuck Shaw, STS-92 Lead Flight Director, and Sally Davis, International Space Station (ISS) Lead Flight Director, give an overview of the STS-92 Discovery mission in this preflight conference. The mission objectives and activities are discussed, including details on the launch, Discovery rendezvous and docking with the ISS, the crew, spacewalks, and payload (IMAX, Z-1 Truss, PMA-3, DDCU, etc.). Prelight activities are described and information on the ISS is given. Mr. Shaw and Ms. Davis then answer questions from the press.

CASI
Prelaunch Summaries: Discovery (Orbiter); Payloads

20010012100 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-56 Post Launch Press Conference
Apr. 08, 1993; In English; Videotape: 26 min. 13 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001001573; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Dick Young, NASA Public Affairs, introduces Beverley Shaw, Deputy Program Manager Space Shuttle, and Bob Sieck, Launch Director, Kennedy Space Center, who give an overview of the successful countdown and launch of the STS-56 Discovery Orbiter. They then answer questions from the press.

CASI
Countdown; Spacecraft Launching; Postlaunch Reports
Flights

The STS-98 Mission Specialist Bob Curbeam is seen being interviewed. He discusses his role in the mission's spacewalks and activities.

STS-98 Crew Interview: Bob Curbeam
Jan. 04, 2001; In English; Videotape: 20 min. 15 sec. playing time, in color, with sound

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.

STS-98 Crew Interview: Ken Cockrell
Jan. 04, 2001; In English; Videotape: 48 min. 39 sec. playing time, in color, with sound

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.

STS-98 Crew Interview: Tom Jones
Jan. 04, 2001; In English; Videotape: 51 min. 29 sec. playing time, in color, with sound

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.

STS-98 Crew Interview: Marsha Ivins
Jan. 04, 2001; In English; Videotape: 29 min. 46 sec. playing time, in color, with sound

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.

Ivins

Astronaut Training: Prelaunch Summaries; Crew Procedures (Inflight); Payloads; Extravehicular Activity

CASI

Spacecraft Landing: Countdown; Spacecraft Launching; Postlaunch Reports

Astronaut Training: Prelaunch Summaries; Crew Procedures (Inflight); Payloads; Extravehicular Activity

CASI

Spacecraft Landing: Postmission Analysis (Spacecraft); Postflight Analysis

STS-98 Post Launch Press Conference
Apr. 17, 1993; In English; Videotape: 20 min. 15 sec. playing time, in color, with sound

Report No.(s): NONP NASA VT-2001001569; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Dick Young, NASA Public Affairs, introduces Brewster Shaw, Deputy Program Manager Space Shuttle, and Bob Sieck, Launch Director, Kennedy Space Center, who give brief statements about the successful STS-56 Discovery mission and landing. They then answer questions from the press.

CASI

STS-98 Post Landing Press Conference
Apr. 07, 1991; In English; Videotape: 20 min. 35 sec. playing time, in color, with sound

Report No.(s): NONP NASA VT-2001001569; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Dick Young, NASA Public Affairs, introduces Brewster Shaw, Deputy Program Manager Space Shuttle, Professor Heinz Stoewer, D-2 Program Manager German Space Agency, and Bob Sieck, Launch Director, Kennedy Space Center, who give an overview of the mission and the launch countdown. They then answer questions from the press.

CASI

STS-56 Post Landing Press Conference
Mar. 24, 1992; In English; Videotape: 20 min. 15 sec. playing time, in color, with sound

Report No.(s): NONP NASA VT-2000148087; 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 participates in a Costa Rican VIP call (spoken in Spanish). See also ‘STS-46 Special Events Resource Tape, Part 2 of 2’.

CASI

STS-46 Post Launch Press Conference
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; 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

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

Dick Young, NASA Public Affairs, introduces Admiral Richard Truly, who makes a brief statement about the STS-46 Atlantis Orbiter launch and answers questions from the press.

CASI

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-2000148087; 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 participates in a Costa Rican VIP call (spoken in Spanish). See also ‘STS-46 Special Events Resource Tape, Part 2 of 2’.

CASI

STS-49 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-56 Discovery mission and landing. They then answer questions from the press.

CASI

STS-49 Endavour/Intelsat Briefing
Apr. 07, 1991; In English; Videotape: 29 min. 30 sec. playing time, in color, with sound

Report No.(s): NONP NASA VT-2000148096; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Mr. Curbeam discusses his role in the mission's spacewalks and activities.

CASI

Astronaut Training: Prelaunch Summaries; Crew Procedures (Inflight); Payloads; Extravehicular Activity

CASI

Spacecraft Landing: Postmission Analysis (Spacecraft); Postflight Analysis

STS-56 Post Landing Press Conference
Mar. 24, 1992; In English; Videotape: 19 min. 15 sec. playing time, in color, with sound

Report No.(s): NONP NASA VT-2000148096; 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

STS-45 Post Launch Press Conference
Mar. 24, 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 Virdree of Intelsat, summarizes Intelsat's role in the STS-49 Endeavour mission. He discusses the reboost hardware, giving details on the capture arm and

CASI
training. He gives details on the mission’s goals and significance, and the payload (ORU, PDGF) and hardware it brings to the International Space Station (ISS). Mr. Polansky discusses his role in the mission’s spacewalks and activities.

CASI

Payloads; Crew Procedures (Preflight): Prelaunch Summaries; Astronaut Training

20010013127 NASA Johnson Space Center, Houston, TX USA

STS–99 Mission Highlights Resource Tape, Part 1 of 2

Oct. 04, 2000; In English; Videotape: 87 min. 35 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000157334; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

An overview of the STS-99 Endeavour mission is given through footage of each flight day. Scenes from flight days one through ten show activities such as astronaut prelaunch procedures (breakfast, suit-up, and boarding Endeavour), launch, and on-orbit activities such as the deployment of the Shuttle Radar Topography Mission (SRTM) instrument. Crewmembers are seen during such everyday activities as brushing their teeth, exercising (bicycle), and emerging from their sleeping bunks. One of the crewmembers shows the contents of the onboard medical kit. See ‘STS-99 Mission Highlights Resource Tape, Part 2 of 2’ for the activities of flight days 11–12 and the landing of Endeavour.

CASI

Crew Procedures (Preflight); Crew Procedures (Inflight); Endeavour (Orbiter); Earth Observations (From Space): Spacecraft Launching

20010013128 NASA Johnson Space Center, Houston, TX USA

STS–99 Mission Highlights Resource Tape, Part 2 of 2

Oct. 04, 2000; In English; Videotape: 26 min. 13 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000157333; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

A continuation of ‘STS-99 Mission Highlights Resource Tape, Part 1 of 2’, footage shows the activities of flight days 11 and 12. The retraction of the Shuttle Radar Topography Mission (SRTM) is seen, and the landing of Endeavour is seen from several vantage points.

CASI

Crew Procedures (Inflight); Earth Observations (From Space): Endeavour (Orbiter); Spacecraft Landing

20010013129 NASA Johnson Space Center, Houston, TX USA

STS–101 Mission Highlights Resource Tape, Part 2 of 3

Sep. 19, 2000; In English; Videotape: 50 min. 7 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000142672; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of ‘STS-101 Mission Highlights Resource Tape, Part 1 of 3’, footage shows the activities of flight days five through ten. The crew of STS-101 (Commander James D. Halsell, Jr. and Mission Specialists Mary Ellen Weber, Jeffrey N. Williams, James S. Voss, Susan J. Helms, and Yuri Vladimirovich Usachev) are seen during ingress between the Atlantis Orbiter and the International Space Station (ISS) and as they transfer equipment from Atlantis to the ISS. The crew is shown working in the Zarya module and leaving ISS just before resuming the connecting hatches. Footage shows the successful undocking of Atlantis. The activities of flight day 11 and landing can be seen on ‘STS-101 Mission Highlights Resource Tape, Part 3 of 3’.

CASI

Atlantis (Orbiter); International Space Station; Crew Procedures (Inflight); Orbital Assembly: Spacecraft Docking

20010013130 NASA Johnson Space Center, Houston, TX USA

STS–101 Mission Highlights Resource Tape, Part 3 of 3

Sep. 19, 2000; In English; Videotape: 17 min. 55 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000142666ar3; 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 docked at the International Space Station (ISS) and performed a number of crew procedures including undocking Atlantis, (under crew command), and docking with the Zarya module.
(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)

200100131331 NASA Johnson Space Center, Houston, TX USA
STS-101 Mission Highlights Resource Tape, Part 1 of 3
Sep. 19, 2000; In English; Videotape: 56 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2000142665rt1; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

An overview of the STS-101 Atlantis mission is given through footage of each flight day. Scenes from flight days one through four show activities such as astronaut prelaunch procedures (breakfast, suit-up, and boarding Atlantis), launch, and on-orbit activities including the robotic arm checkout, docking with the International Space Station, and Mission Specialists Jim Voss’ and Jeff Williams’ spacewalks. See ‘STS-101 Mission Highlights Resource Tape, Part 2 of 3’ and ‘STS-101 Mission Highlights Resource Tape, Part 3 of 3’ for the activities of flight days 5 through 11.

CASI Spacecraft Docking: International Space Station; Atlantis (Orbiter): Spacecraft Launching; Crew Procedures (Preflight); Crew Procedures (Inflight)

20010013150 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-45 Atlas–1 Compiled Processing Footage
Feb. 20, 1992; In English; Videotape: 30 min. 53 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2001013662; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Compiled footage shows shots of the Atmospheric Laboratory for Applications and Sciences (Atlas-1’s) move to the test stand at the Operations and Checkout (O&C) Building, the sharp edge inspection, and the Atlas-1 press showing. The STS-45 Atlantis rollover to the Vehicle Assembly Building (VAB) and subsequent rolloff to Pad A are seen.

CASI Checkout: Inspection: Atlantis (Orbiter): Preparation

20010018389 NASA Johnson Space Center, Houston, TX USA
STS–102 Crew Interview/Paul Richards
Jan. 24, 2001; In English; Videotape: 32 min. 47 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001021777; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-102 Mission Specialist Paul Richards is seen being interviewed. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission’s goals and significance, its payload (ISS-07/5A1 (MPLM-1)), and spacewalks. Richards discusses the upcoming transfer of the International Space Station’s (ISS) crew Expedition 1 and Expedition 2 and the role of the Mir Space Station in the evolution and success of the ISS.

CASI Spacecrews; Crew Procedures (Inflight); Prelaunch Summaries

20010018391 NASA Johnson Space Center, Houston, TX USA
STS–106 Post Flight Presentation
Jan. 25, 2001; In English; Videotape: 23 min. 3 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001021820; No Copyright; Avail: 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.

CASI International Space Station: Spacecraft Docking; Spacecraft Launching; Spacecraft Landing; Crew Procedures (Inflight)

20010018392 NASA Johnson Space Center, Houston, TX USA
STS–102 Crew Interview/Jim Wetherbee
Jan. 24, 2001; In English; Videotape: 62 min. 22 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001021823; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

STS-102 Commander Jim Wetherbee is seen being interviewed. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission’s goals and significance, its payload (ISS-07/5A1 (MPLM-1)), and spacewalks. Wetherbee discusses the upcoming transfer of the International Space Station’s (ISS) crew Expedition 1 and Expedition 2 and the role of the Mir Space Station in the evolution and success of the ISS.

CASI Spacecrews; Crew Procedures (Inflight); Prelaunch Summaries; International Space Station

20010018393 NASA Johnson Space Center, Houston, TX USA
STS–97 Post Flight Presentation
Feb. 02, 2001; In English; Videotape: 17 min. 54 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001021822; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Various shots highlight the STS-97 Endeavour mission. Footage shows the crew suiting up and leaving the Operations and Checkout (O&C) Building, the launch, and landing. Various on-orbit activities are seen, such as docking with the International Space Station (ISS), the spacewalks (installing the PV Module P6), array deployment, meeting the Expedition 1 crew, eating, and undocking. Shots show the northern lights and a meteorite entering Earth’s atmosphere from above. The Andes can be seen from the Orbiter while the P6 arrays are deploying.

CASI Endeavour (Orbiter): International Space Station; Deployment: Spacecraft Docking; Spacecraft Launching; Crew Procedures (Inflight)

20010018399 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–63 Commander Wetherbee Explains Five Minute Window and Mir Rendezvous
Jan. 26, 1995; In English; Videotape: 3 min. 18 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001016067; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

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; Mir–Space Station; Prelaunch Summaries

20010018415 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–52 Post Launch Press Conference
Oct. 22, 1992; In English; Videotape: 35 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001017558; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Dick Young, NASA Public Affairs, introduces Brewster Shaw, Deputy Program Manager Space Shuttle, and Bob Sieck, Launch Director, Kennedy Space Center, who give brief statements about the countdown and launch of the STS-52 Columbia Orbiter. The problems encountered during countdown are discussed, including details on the hydrogen leak in the ground umbilical carrier tank, the 100% exceedance of load on the external tank, and the reasons why the
flight rule for an upper limit of cross winds was waived. The men then answered questions from the press.

CASI

Columbia (Orbiter); Countdown; Leakages; Loads (Openings); Spacecraft Launching; Prelaunch Summaries

200101018416 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–52 Astronaut Crew Activities for TCDT
Oct. 02, 1992; In English; Videotape: 10 min. 11 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001017556; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Footage shows scenes of the Terminal Countdown and Demonstration Test (TCDT) activities for the STS-52 Columbia mission, including shots of emergency egress training and the flight of T-38 aircraft. Commander James B. Wetherbee introduces Pilot Michael A. Baker and Mission Specialists Charles L. Veach, William M. Shepherd, Tamara E. Jernigan, and Steven G. Maclean, and gives a brief overview of the mission. The crew then answers questions from the press.

CASI
Spacecrews; Egress; Emergencies; Astronaut Training; Prelaunch Summaries; Crew Procedures (Preflight)

200101018417 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–52 Launch/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 1 and Expedition 2 and the role of the Mir Space Station in the evolution and success of the ISS.

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
B01, Videotape-Beta; V01, Videotape-VHS
Footage shows the rollover of the Endeavour Orbiter to the Vehicle Assembly Building (VAB).

Endeavour (Orbiter); Spacecraft Maneuvers

20010118498 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-59 Endeavour RSS Rollback, Edited for Media
Apr. 07, 1994; In English; Videotape: 2 min. 9 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20010123112; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Footage shows the rollback of the Endeavour Orbiter at the launch pad.

CASI
Endeavour (Orbiter); Launching Sites

20010118559 NASA Johnson Space Center, Houston, TX USA
Expedition 2 Crew Interview: Susan Helms
Jan. 24, 2001; In English; Videotape: 63 min. 32 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20010121819; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS
Expedition 2 (the second resident crew of the International Space Station) Flight Engineer Susan Helms is seen being interviewed. She answers questions about her inspiration to become an astronaut and her career path. She gives details on the Space Shuttle mission and goals, including information on the spacewalks and transfer of Expedition crews, and discusses her upcoming stay on the International Space Station (ISS). Helms gives her thoughts on the international cooperation needed to successfully construct the ISS and some of the scientific experiments that will take place on the station.

CASI
Space Transportation System Flights; Crew Procedures (Inflight); Prelaunch Summaries

20010118564 NASA Johnson Space Center, Houston, TX USA
Expedition 2 Crew Interview: Yury Usachev
Jan. 24, 2001; In English; Videotape: 53 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20010121778; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
Expedition 2 (the second resident crew of the International Space Station) Commander Yury Usachev is seen being interviewed. He answers questions about his inspiration to become a cosmonaut and his career path. He gives details on the Space Shuttle mission and goals, including information on the spacewalks and transfer of Expedition crews, and discusses his upcoming stay on the International Space Station (ISS). Usachev gives his thoughts on the international cooperation needed to successfully construct the ISS and some of the scientific experiments that will take place on the station.

CASI
International Space Station; Prelaunch Summaries; Crew Procedures (Inflight)

20010118565 NASA Johnson Space Center, Houston, TX USA
STS–106 Expedition 2 Crew Interview: Jim Voss
Jan. 24, 2001; In English; Videotape: 57 min. 26 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20010121776; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
Expedition 2 (the second resident crew of the International Space Station) Flight Engineer Jim Voss is seen being interviewed. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the Space Shuttle mission and goals, including information on the spacewalks and transfer of Expedition crews, and discusses his upcoming stay on the International Space Station (ISS). Voss gives his thoughts on the international cooperation needed to successfully construct the ISS and some of the scientific experiments that will take place on the station.

CASI
International Space Station; Prelaunch Summaries; Crew Procedures (Inflight)

20010118578 NASA Kennedy Space Center, Cocoa Beach, FL USA
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–20010123257; No Copyright; Avail: 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
Countdown; Spacecraft Launching

20010118587 NASA Kennedy Space Center, Cocoa Beach, FL USA
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–20010123240; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
George Diller, NASA Public Affairs, introduces Steve Altemus, NASA Test Director, Scott Higgenbotham, Kennedy Space Center Payload Manager, and Ed Prisec, 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; Prelaunch Summaries; Prelaunch Tests; Payloads; Weather Forecasting

20010118603 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–106 Crew News Conference
Sep. 18, 2000; In English; Videotape: 57 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20010123239; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

CASI
Service Module (Iss); Spacecrews; Crew Procedures (Inflight)

20010118666 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–53 TCDT Training and Press Q&A at Pad A
Nov. 12, 1992; In English; Videotape: 13 min. 59 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20010123164; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Footage shows the training activities for the crew of STS-53 (Commander David M. Walker, Pilot Robert D. Cabana, and Mission Specialists Guion S. Bluford, James S. Voss, and Michael R. Clifford), including Emergency Egress Training. Commander Walker introduces the crew and they answer questions from the press.

CASI
Spacecrews; Crew Procedures (Preflight); Astronaut Training; Emergencies; Prelaunch Summaries

20010118681 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–57 Landing at KSC
Jul. 01, 1993; In English; Videotape: 16 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20010166099; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
Footage shows the landing of STS-57 Endeavour at Kennedy Space Center (KSC) and the ground crew meeting the orbiter on the runway.

CASI
Endeavour (Orbiter); Spacecraft Landing
A series of excerpts from various articles and reports:

1. **STS-54 Video Update Day 10:**
   - Crew Press Conference and View of California Fires
   - Oct. 27, 1993
   - In English; Videotape: 21 min. 56 sec. playing time, in color, with sound
   - Report No.: NONP--NASA--VT--2001016665
   - Footage shows the activities of the STS-54 mission during an in-flight press conference.
   - CASI

2. **STS-60 Video Update Day 10:**
   - Crew Press Conference and View of California Fires
   - Oct. 27, 1993
   - In English; Videotape: 21 min. 56 sec. playing time, in color, with sound
   - Report No.: NONP--NASA--VT--2001016665
   - Footage shows the activities of the STS-54 mission during an in-flight press conference.
   - CASI

3. **STS-54 Video Update Day 10:**
   - Crew Press Conference and View of California Fires
   - Oct. 27, 1993
   - In English; Videotape: 21 min. 56 sec. playing time, in color, with sound
   - Report No.: NONP--NASA--VT--2001016665
   - Footage shows the activities of the STS-54 mission during an in-flight press conference.
   - CASI

4. **STS-60 Video Update Day 10:**
   - Crew Press Conference and View of California Fires
   - Oct. 27, 1993
   - In English; Videotape: 21 min. 56 sec. playing time, in color, with sound
   - Report No.: NONP--NASA--VT--2001016665
   - Footage shows the activities of the STS-54 mission during an in-flight press conference.
   - CASI

5. **STS-60 Video Update Day 10:**
   - Crew Press Conference and View of California Fires
   - Oct. 27, 1993
   - In English; Videotape: 21 min. 56 sec. playing time, in color, with sound
   - Report No.: NONP--NASA--VT--2001016665
   - Footage shows the activities of the STS-54 mission during an in-flight press conference.
   - CASI

6. **STS-54 Launch and Landing:**
   - Dec. 09, 1992
   - In English; Videotape: 53 min. 42 sec. playing time, in color, with sound
   - Report No.: NONP--NASA--VT--2001016664
   - Footage shows the crew performing several medical experiments, such as taking a picture of the retina and measuring the pressure on the eyeball. A crewmember demonstrates how to use the rowing machine in an anti-gravity environment.
   - CASI

7. **STS-54 Launch and Landing:**
   - Dec. 09, 1992
   - In English; Videotape: 53 min. 42 sec. playing time, in color, with sound
   - Report No.: NONP--NASA--VT--2001016664
   - Footage shows the crew performing several medical experiments, such as taking a picture of the retina and measuring the pressure on the eyeball. A crewmember demonstrates how to use the rowing machine in an anti-gravity environment.
   - CASI

8. **STS-54 Launch and Landing:**
   - Dec. 09, 1992
   - In English; Videotape: 53 min. 42 sec. playing time, in color, with sound
   - Report No.: NONP--NASA--VT--2001016664
   - Footage shows the crew performing several medical experiments, such as taking a picture of the retina and measuring the pressure on the eyeball. A crewmember demonstrates how to use the rowing machine in an anti-gravity environment.
   - CASI

9. **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.: NONP--NASA--VT--2001016661
   - Footage shows the removal of the Inertial Upper Stage (IUS) from the canister to the test cell at the Vertical Processing Facility (VPF).
   - CASI

10. **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.: NONP--NASA--VT--2001016661
    - Footage shows the removal of the Inertial Upper Stage (IUS) from the canister to the test cell at the Vertical Processing Facility (VPF).
    - CASI

11. **STS-54 Diffuse X-Ray Spectrometer:**
    - Jan. 06, 1993
    - In English; Videotape: 37 min. 20 sec. playing time, in color, with sound
    - Report No.: NONP--NASA--VT--2001016662
    - Footage shows the installation of the Space Radar Lab 1 Antenna onto the Endeavour Orbiter.
    - CASI

12. **STS-54 Tracking and Data Relay Satellite:**
    - Jan. 06, 1993
    - In English; Videotape: 27 min. 59 sec. playing time, in color, with sound
    - Report No.: NONP--NASA--VT--2001016661
    - Footage shows the installation of the Space Radar Lab 1 Antenna onto the Endeavour Orbiter.
    - CASI

13. **STS-54 Tracking and Data Relay Satellite:**
    - Jan. 06, 1993
    - In English; Videotape: 27 min. 59 sec. playing time, in color, with sound
    - Report No.: NONP--NASA--VT--2001016661
    - Footage shows the installation of the Space Radar Lab 1 Antenna onto the Endeavour Orbiter.
    - CASI

14. **STS-54 Tracking and Data Relay Satellite:**
    - Jan. 06, 1993
    - In English; Videotape: 27 min. 59 sec. playing time, in color, with sound
    - Report No.: NONP--NASA--VT--2001016661
    - Footage shows the installation of the Space Radar Lab 1 Antenna onto the Endeavour Orbiter.
    - CASI

15. **STS-60 Mission Update:**
    - Feb. 07, 1994
    - In English; Videotape: 18 min. 15 sec. playing time, in color, with sound
    - Report No.: NONP--NASA--VT--2001016664
    - 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

STS-48 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

The crewmembers of STS-48, Commander Daniel C. Brandenstein, Pilot Kevin P. Chilton, and Mission Specialists Pierre J. Thiot, Kathryn C. Thornton, Richard J. Hieb, Thomas D. Akers, and Bruce E. Melnick putting equipment away in compartments in the payload bay of the Endeavour Orbiter. The launch is seen from many vantage points, as is the landing.

CASI

Compartments: Astronauts; 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); Departure Reports

20010018726 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-48 UARS at PIFSF

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 to the Payload Hazardous Servicing Facility (PHSF).

CASI

Upper Atmosphere Research Satellite (UARS); Payloads

20010018754 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-54 TDRS-F in Cargo Bay at Pad B

Jan. 10, 1992; In English; Videotape: 5 min. 12 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2001023167; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Footage shows close-up shots of the Tracking and Data Relay Satellite (TDRS) in the Endeavour Orbiter’s cargo bay at Launch Pad B.

CASI

TDRS Satellites; Cargo

20010018756 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-48 UARS Edited Flow Tape

Sep. 13, 1991; In English; Videotape: 12 min. 23 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2001023176; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the Upper Atmosphere Research Satellite being lifted into place in the payload bay of the Discovery Orbiter.

CASI

Discovery (Orbiter); Upper Atmosphere Research Satellite (UARS)

20010018871 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 shows 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 Tracking; Spacecraft Landing; Spaceborne Experiments

20010018872 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-62 Columbia/Breakfast, Suit-up, Depart O&C, Launch, On-Orbit, Landing

Mar. 18, 1994; In English; Videotape: 62 min. 22 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2001016602; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

Footage shows various stages of the STS-62 Columbia launch 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

2001019005 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-51 ACTS/TOS and SPAS Deploy
Sep. 13, 1993; In English; Videotape: 62 min. 31 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001023182; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS
Footage shows the deployment of the Advanced Communications Technology Satellite/Transfer Orbit Station (ACTS/TOS) and the Shuttle Pallet Satellite (SPAS) as seen from the Discovery Orbiter.
CASI
ACTS: Shuttle Pallet Satellites; Deployment

2001019006 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 shows various stages of the STS-48 Discovery launch is shown, including shots of the crew at breakfast, getting suited up, and departing to board the Orbiter. The launch is seen from many vantage points.
CASI
Crew Procedures (Preflight); Spacecraft Launching

2001019007 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-54 Astronaut Crew 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 Egress Training.
CASI
Astronaut Training: Crew Procedures (Preflight); Prelaunch Summaries

2001019008 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

2001019009 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 Mumoru Mohri, is seen during various parts of their training, including SAREX training in the Full Fuselage Trainer (FFT), firefighting training; A familiarization flight in the KC-135, a food tasting, photo training in the Crew Compartment Trainer, and bailout training in the Weightless Environment Training Facility (WETF) are also shown.
CASI
Astronaut Training: Bailout: Fire Fighting; Training Devices

2001019010 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-69 TCDT/Crew 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

2001019011 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-69 Launch/Composite of Breakfast, Suiting, and Firing Room Activities
Sep. 07, 1995; In English; Videotape: 11 min. 44 sec. playing time, in color, no sound
Report No.(s): NONP--NASA--VT--2001023127; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
The crew of STS-69, Commander David M. Walker, Pilot Kenneth D. Cockrell, Payload Commander James S. Voss, and Mission Specialists James H. Newman and Michael L. Gernhardt, is seen at breakfast and suiting up in preparation for the launch of Endeavour. Footage shows Firing Room activities shortly before launch.
CASI
Crew Procedures (Preflight); Ground Based Control

2001019012 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-60 Discovery/Composite of Breakfast, Suit-up, Depart O&C, Launch, On-Orbit, Landing
Feb. 11, 1994; In English; Videotape: 53 min. 21 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001023126; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
Footage of various stages of the STS-60 Discovery launch is shown, including shots of the crew at breakfast, getting suited up, and departing to board the Orbiter. The launch is seen from many vantage points, 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

2001019013 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

2001019020 NASA Kennedy Space Center, Cocoa Beach, FL USA
A New Beginning
Feb. 01, 1990; Videotape: 14 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001021125; No Copyright; Avail: CASI;
An overview of the Space Shuttle program is given, including scenes from the assembly, transfer, equipping, rollout, launch, and landing of the Space Shuttle. On-orbit activities are seen, such as satellite deployment and retrieval and spacewalks.

CASI

Space Shuttles: Spacecraft Launching; Spacecraft Landing

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

SOHO Mate Spacecraft to Payloads
Nov. 09, 1995; In English; Videotape: 19 min. 37 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP-NASA-VT-2001023113; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Footage shows close-up shots of the SOHO spacecraft in the Spacecraft Assembly and Encapsulation Facility (SAEF-2).

CASI

Assembling; Spacecraft Modules

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 Vaneck, 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

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

STS-59 Endeavour Arrival and Move to MDD
May 02, 1994; In English; Videotape: 16 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

STS-105 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-2001025215; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Dwayne Brown, NASA Public Affairs, introduces Bob Cabana of NASA, Mikhail Sinelnikov of PKA, Vasily Titiev of GCTC, Steve Moses of CSA, Jan Pryke of ESA, and Massaki Komatsu of NASA. Each man gives an overview of the status of the International Space Station (ISS), including details on the current configuration, future missions and what they will bring to the ISS, and each space agency's contribution to the ISS. They then answer questions from the press.

CASI

International Space Station; Prelaunch Summaries

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

STS-98 Crew Activity Report/Flight Day 1 Highlights
Feb. 08, 2001; In English; Videotape: 16 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2001024842; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-98 mission, the crew of Atlantis, Commander Kenneth D. Cockrell, Pilot Mark L. Polansky, and Mission Specialists Robert L. Curbeam, Thomas D. Jones, and Martha S. Ivins, are seen during various prelaunch activities. Scenes include the crew at breakfast, suiting up, and leaving the Operations and Checkout (O&C) Building. The launch of Atlantis is also shown.

CASI

Spacecraft Launching; Crew Procedures (Preflight)

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-200108489; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Footage shows the in-flight and landing activities of the STS-49 Endeavour crew, Commander Daniel C. Brandenstein, Pilot Kevin P. Chilton, and Mission Specialists Pierre J. Thuot, Kathryn C. Thornton, Richard J. Hieb, Thomas D. Akers, and Bruce E. Melnick. Thornton and Akers are seen during their spacewalks as they begin assembly on the Space Station Freedom in the payload bay of Endeavour. The crew is shown during de-orbit preparations (such as suiting up and closing the payload bay doors) and Endeavour is seen landing. Shots of
Earth from the Orbiter show the southern Atlantic Ocean, southern African continent, and Indian Ocean. The moon is seen above Earth's atmosphere and a storm is seen on the night side as lighting illuminates the clouds.

CASI

Crew Procedures (Inflight): Spacecraft Landing: Assembling

2001011919851 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-98 Crew Press Conference, Part 1 of 2

Apr. 08, 1992; In English; Videotape: 62 min. 25 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2000152224; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The crew of STS-49, Commander Daniel C. Brandenstein, Pilot Kevin P. Chilton, Mission Specialists Pierre J. Thout, Kathryn C. Thornton, Richard J. Hieb, Thomas D. Akers, and Bruce E. Melnick each give an overview of his or her part in the mission. Questions from the press are answered. This is part one of two videos.

CASI

Endeavour (Orbiter); Prelaunch Summaries: Crew Procedures (Preflight)

2001011919852 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-98 Prelaunch Status Report

Nov. 30, 1992; In English; Videotape: 18 min. 1 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2001023157; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

George Diller, NASA Public Affairs, introduces Mike Leinbach, Shuttle Test Director, and Ed Prussell, Shuttle Weather Officer, USAF. They give a summary of the countdown for the launch of STS-95 Discovery and information on the weather for the launch time. They then answer questions from the press.

CASI

Countdown; Weather Forecasting; Prelaunch Summaries

2001011919855 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS-98 Countdown Status Briefing

Sep. 24, 1992; In English; Videotape: 44 min. 4 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2001017547; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Commander James B. Wolfbee introduces the crew of STS-95: Commander Kenneth D. Cockrell, Pilot Mark L. Polansky, and Mission Specialists Robert L. Curbeam, Thomas D. Jones, and Marsha S. Ivins. The Expedition 1 crew (James S. Voss, Susan J. Helms, and Yury V. Usachev), are introduced by Commander Kenneth D. Cockrell and Mission Specialist Tom Jones. The Expedition 2 crew (William M. Shepherd, Yuri P. Gidzenko, and Sergei K. Krikalev), and the Expedition 2 crew (James S. Voss, Susan J. Helms, and Yury V. Usachev) are seen opening and entering the Destiny Laboratory Module.

CASI

International Space Station: Destiny Laboratory Module

2001012019859 NASA Johnson Space Center, Houston, TX USA

STS-98 Crew Activity Report/Flight Day 5 Highlights

Feb. 12, 2001; In English; Videotape: 15 min. 11 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--20001024844; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fifth day of the STS-98 mission, the crew of Atlantis (Commander Kenneth D. Cockrell, Pilot Mark L. Polansky, and Mission Specialists Robert L. Curbeam, Thomas D. Jones, and Marshall S. Ivins), the Expedition 1 crew (William M. Shepherd, Yuri P. Gidzenko, and Sergei K. Krikalev), and the Expedition 2 crew (James S. Voss, Susan J. Helms, and Yury V. Usachev) are seen opening and entering the Destiny Laboratory Module.

CASI

International Space Station: Destiny Laboratory Module

2001012019860 NASA Johnson Space Center, Houston, TX USA

STS-98 Crew Activity Report/Flight Day 2 Highlights

Feb. 09, 2001; In English; Videotape: 24 min. 59 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--20001024840; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this second day of the STS-98 mission, Atlantis continues to pursue the International Space Station (ISS). The unmanned Progress resupply spacecraft, loaded with trash, is sent into an orbit that will eventually drop the spacecraft into Earth's atmosphere, which will burn it up. Commander Cockrell and Mission Specialist Tom Jones are seen answering questions about the Destiny Laboratory Module and the mission.

CASI

Atlantis (Orbiter); Crew Procedures (Inflight); Destiny Laboratory Module

2001012019869 NASA Johnson Space Center, Houston, TX USA

STS-98 Crew Activity Report/Flight Day 10 Highlights

Feb. 17, 2001; In English; Videotape: 15 min. 12 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--20001028020; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS


CASI

Spacecraft Docking; Crew Procedures (Inflight); International Space Station; Atlantis (Orbiter)

2001012019870 NASA Johnson Space Center, Houston, TX USA

STS-98 Crew Activity Report/Flight Day 11 Highlights

Feb. 18, 2001; In English; Videotape: 15 min. 37 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--20001028019; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eleventh day of the STS-98 mission, Commander Kenneth D. Cockrell, Pilot Mark L. Polansky, and Mission Specialists Robert L. Curbeam, Thomas D. Jones, and Marshall S. Ivins answer questions about their mission. Footage shows the undocking of Atlantis from the International Space Station (ISS), which took place the day before. The coastline of South America along the Andes Mountains is seen from space.

CASI

Crew Procedures (Inflight); Spacecraft Docking

2001012019871 NASA Johnson Space Center, Houston, TX USA

STS-98 Crew Activity Report/Flight Day 9 Highlights

Feb. 16, 2001; In English; Videotape: 19 min. 25 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--20001028017; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this ninth day of the STS-98 mission, Expedition 1 crewmember Bill Shepherd gives a tour of the Destiny Laboratory Module, describing the equipment and functions. Mission Specialists Bob Curbeam and Tom Jones answer questions about their spacewalks and the Destiny Module. The rest of the Atlantis
crew (Commander Kenneth D. Cockey, Pilot Mark L. Polansky, and Mission Specialist Martha S. Ivins) and the Expedition 1 crew (William M. Shepherd, Yuri P. Gidzenko, and Sergi K. Krikalev) join Curbeam and Jones to answer questions about the mission.

CASI

**Crew Procedures (Inflight): Destiny Laboratory Module; Extravehicular Activity**

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**20010920032** 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**

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**20010910281** 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 Kenedy 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 20010920082). 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 20010920083).

CASI

**Endeavour (Orbiter); Countdown; Spacecraft Launching; Crew Procedures (Preflight); Crew Procedures (Inflight)**

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**20010920082** 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 20010020281), 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 20010020283).

CASI

**Endeavour (Orbiter); International Space Station; Deployment; Crew Procedures (Preflight); Extravehicular Activity**

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**20010920083** 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 20010020281) and 'STS-97 Mission Highlights Resource Tape, Part 2 of 3' (document ID 20010020282), 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/Orbital Debris Shield removal, the spaceswalks performed by Mission Specialists Joseph Tanner and Carl J. 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**

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**20010920087** 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–2001028707; 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 Martha 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**

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**20010920088** 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–2001028677; 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)**

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**200109201196** 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**

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**200109201485** 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/blow-around training in the GNS (Navigation Simulator); (3) crew equipment interface test; (4) Remote Manipulator System (RMS) training in the GNS; and (5) docking training in the GNS.

CASI

**Astronaut Training: Crew Procedures (Preflight); Remote Manipulator System; Simulation**
STS–102 Crew Activity Report/Flight Day 1 Highlights
Mar. 9, 2001; In English; Videotape: 20 min. 1 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20001031588; 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–20001031587; 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; Hatches; Spacecraft Docking; Crew Procedures (Preflight)

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–20001031586; 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. 54 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20001032302; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Footage shows STS-102 Mission Specialists Andrew Thomas and Paul Richards preparing for and performing their spacewalks. The cameras in Discovery’s payload bay show Discovery and the robotic arm against a backdrop of Earth.

CASI
Discovery (Orbiter); International Space Station; Extravehicular Activity; Crew Procedures (Inflight)

STS–102 Crew Activity Report/Flight Day 5 Highlights
Mar. 13, 2001; In English; Videotape: 16 min. 27 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20001032301; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

External shots of Discovery and its payload show the robotic arm lifting and maneuvering the Leonardo Module into place on the Destiny Laboratory Module, which is part of the International Space Station (ISS). Footage shows Expedition 1 Commander Bill Shepherd opening the hatch between Destiny and Leonardo.

CASI
Destiny Laboratory Module; International Space Station; Discovery (Orbiter); Payloads

STS–102 Crew Activity Report/Flight Day 6 Highlights
Mar. 14, 2001; In English; Videotape: 20 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20001038753; 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 7 Highlights
Mar. 15, 2001; In English; Videotape: 19 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–20001038754; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eighth day of the STS-102 mission, Discovery Pilot James Kelly and Mission Specialist Andrew Thomas are seen in the Leonardo Module. The Expedition 2 crew (James Voss, Susan Helms, and Yuriy Usachev) work to set up the robotic workstations for the robotic arm. STS-102 Commander Jim Wetherbee, Pilot Kelly, and the Expedition 1 crew (William M. Shepherd, Yuri P. Gidzenko, and Sergei K. Krikalev) answer questions about the mission in an in-flight interview.

CASI
International Space Station; Crew Procedures (Inflight)
STS–102 Crew Activity Report/Flight Day 10 Highlights
Mar. 17, 2001; In English; Videotape: 17 min. 32 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001038755; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this 10th day of the STS-102 mission, Pilot James Kelly and Mission Specialists Andrew Thomas and Paul Richards are seen in the Destiny Laboratory Module as they answer questions about the mission in an in-flight interview. CASI
Destiny Laboratory Module; International Space Station; Crew Procedures (Inflight)

STS–102 Crew Activity Report/Flight Day 11 Highlights
Mar. 18, 2001; In English; Videotape: 17 min. 58 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001038756; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this 11th day of the STS-102 mission, Discovery Mission Specialist Andrew Thomas and Expedition 1 Commander Bill Shepherd are seen closing the hatch of the Leonardo Module. External shots show the Leonardo Module undocking from the International Space Station (ISS) and being moved via robotic arm into the payload bay of Discovery. CASI
International Space Station: Hatches; Space Station Modules: (Space Procedures (Inflight)

STS–102 Crew Activity Report/Flight Day 12 Highlights
Mar. 19, 2001; In English; Videotape: 20 min. 13 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001038758; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this 12th day of the STS-102 mission, the crews of STS-102 (Commander James Wetherbee, Pilot James Kelly, and Mission Specialists Andrew Thomas and Paul Richards), Expedition 1 (William Shepherd, Yuri Gitdzenko, and Sergei Krikalev), and Expedition 2 (James Voss, Susan Helms, and Yuriy Usachev) are seen during the in-flight ceremony where Commander Shepherd transfers control of the International Space Station (ISS) to Commander Usachev. The hatch between the ISS and the Discovery Orbiter is closed, and Discovery is seen undocking from the ISS. External views of the ISS are shown against a backdrop of Earth. The Great Lakes area and Chicago are seen from space during night, when lights outline the city. CASI
Discovery (Orbiter); International Space Station; Crew Procedures (Inflight); Hatches; Spacecraft Docking

STS–102 Crew Activity Report/Flight Day 13 Highlights
Mar. 20, 2001; In English; Videotape: 15 min. 58 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001038757; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this 13th day of the STS-102 mission, the Expedition 1 crew, William Shepherd, Yuri Gitdzenko, and Sergei Krikalev, answers questions about their extended mission and the International Space Station (ISS). CASI
International Space Station: Hatches; Space Station Modules: (Space Procedures (Inflight)

STS–100 Crew Interview: Jeff Ashby
Apr. 03, 2001; In English; Videotape: 18 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001047827; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
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 Rafaello Logistics Module. Ashby then discusses his views about space exploration as it becomes an international collaboration. CASI
Extravehicular Activity; Prelaunch Summaries; Antennas; Installing; Orbital Rendezvous; Robot Arms; Spacecraft Docking

STS–100 Crew Interview: John Phillips
Apr. 03, 2001; In English; Videotape: 23 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001047825; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
STS-100 Commander 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

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–2001047826; 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
installation and capabilities of the Space Station robotic arm, UHF antenna, and Rafaello Logistics Module. Ashby then discusses his views about space exploration as it becomes an international collaboration.

CAS1
Extravehicular Activity; Prelaunch Summaries; Installing; Orbital Rendezvous; Robot Arms; Spacecraft Docking

2001/03/3314 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: CAS1; B03, Videotape-Beta; V03, Videotape-VHS
STS–100 Mission Specialist Scott Parazynski is seen being interviewed. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission’s goals and significance, the rendezvous and docking of Endeavour with the International Space Station (ISS), the mission’s spacewalks, and installation and capabilities of the Space Station robotic arm, UHF antenna, and Rafaello Logistics Module. Parazynski then discusses his views about space exploration as it becomes an international collaboration.

CAS1
Extravehicular Activity; Prelaunch Summaries; Antennas; Installing; Orbital Rendezvous; Robot Arms; Spacecraft Docking

2001/03/3315 NASA Kennedy Space Center, Cocoa Beach, FL USA
Multi-Purpose Logistics Module Briefing
Feb 28, 2001; In English; Videotape: 23 min. 49 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001047878; No Copyright; Avail: CAS1; B02, Videotape-Beta; V02, Videotape-VHS
Silvanna Rabbi, MPLM Program Manager, Italian Space Agency, gives an overview of the Multi-Purpose Logistics Module (MPLM) in a prelaunch press conference. She describes the objectives, construction, specifications, and purpose of the three Italian-built modules, Leonardo, Rafalillo, and Donatello. Ms. Rabbi then answers questions from the press.

CAS1
Construction; Logistics; Space Station Modules; Specifications; Prelaunch Summaries

2001/03/3316 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: CAS1; B02, Videotape-Beta; V02, Videotape-VHS
STS–100 Mission Specialist Yuri Lonchakov is seen being interviewed. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission’s goals and significance, the rendezvous and docking of Endeavour with the International Space Station (ISS), the mission’s spacewalks, and installation and capabilities of the Space Station robotic arm, UHF antenna, and Rafaello Logistics Module. Lonchakov then discusses his views about space exploration as it becomes an international collaboration.

CAS1
Extravehicular Activity; Prelaunch Summaries; Antennas; Installing; Orbital Rendezvous; Robot Arms; Spacecraft Docking

2001/03/3317 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: CAS1; 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

2001/03/3319 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: CAS1; B04, Videotape-Beta; V04, Videotape-VHS
John Shannon, STS–102 Lead Flight Director, Berestine Dickey, STS–102 Launch Package 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. Dickey 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. Ms. 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

2001/03/35849 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: CAS1; 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 the 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 fascimile or ‘phantom torso’). Ms. Woodard gives an overview of Marshall Flight Center’s role in the mission. Computerized simulations show the installation of the Space Station Remote Manipulator System (SSRMS) onto the ISS and the installation
of the airlock using SSRMS. Live footage shows the interior of the ISS, including crew living quarters, the Progress Module, and the Destiny Laboratory. The three then answer questions from the press.

**CASI International Space Station: Microgravity; Spaceborne Experiments; Prelaunch Summaries: Aerospace Sciences; Earth Sciences; Life Sciences**

**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–2001048991; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Expedition 2 crewmembers Commander Yuri Usachev and Flight Engineers James Voss and Susan Helm are introduced in this prelaunch press conference. They answer questions from the press about their expectations and activities for the upcoming mission on the International Space Station.

**CASI International Space Station: Spacecrews; Prelaunch Summaries: Crew Procedures (Inflight)**

**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 Captian 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 Chinn, 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 time holds, launch window, Discovery launch, and the landing. Mr. Chinn 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.


**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 Chinn, 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**

**2001036658** NASA Kennedy Space Center, Cocoa Beach, FL USA

STS–102 Flight Crew Post–Landing Press Conference
Mar. 21, 2001; In English; Videotape: 24 min. 45 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001052177; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS


**CASI Astronaut Performance: Postlaunch Reports**

**2001036749** NASA Kennedy Space Center, Cocoa Beach, FL USA

STS–102 Extravehicular Activities Briefing
Feb. 28, 2001; In English; Videotape: 25 min. 15 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001052181; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Keith Johnston, STS–102 Lead Extravehicular Activities Officer, gives an overview of the mission’s spacewalks in this prelaunch press conference. He describes the activities, objectives, and timeline of the spacewalks during the STS–102 mission. Computerized animations show the move of the Third Pressurized Mating Adapter (PM4) and the retrieval of the rigid umbilicals from the payload bay of Discovery. Mr. Johnston then answers questions from the press.

**CASI Extravehicular Activity: Prelaunch Summaries: Crew Procedures (Inflight)**

**2001036756** NASA Kennedy Space Center, Cocoa Beach, FL USA

STS–106 TCDT Photo Opportunity
Aug. 17, 2000; In English; Videotape: 19 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001065219; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

STS–106 crewmembers Commander Terrence W. Wilcutt, Pilot Scott D. Altman, and Mission Specialists Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov are seen during the Terminal Countdown and Demonstration Test (TCDT) activity of meeting the press. Each crewmember introduces himself and then they answer questions from the press about the upcoming mission.

**CASI Spacecrews: Crew Procedures (Preflight)**

**2001036768** NASA Kennedy Space Center, Cocoa Beach, FL USA

STS–101 Mission Overview Briefing
Mar. 29, 2000; In English; Videotape: 53 min. 45 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000076141; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Phil Englehart, STS–101 Lead Flight Director, Paul Hill, STS–101 ISS Lead Flight Director, and Sharon Castle, STS–101 Package Manager, give an overview of the objectives and activities of the upcoming mission in this preflight press conference. Computerized animations show the configuration of the payload bay and the docking and flyaround of Atlantis and the International Space Station (ISS). Mr. Englehart, Mr. Hill, and Ms. Castle then answer questions from the press.

**CASI International Space Station: Spacecraft Docking: Crew Procedures (Inflight): Prelaunch Summaries**
Astronaut Training; Extravehicular Activity (Preflight): Astronaut Performance; Egress; Astronaut Performance

Astronauts perform extravehicular activity (EVA) large tool training, EVA procedures (Preflight); Astronaut Training; Crew Procedures (Preflight); Extravehicular Activity; Egress; Astronaut Performance.

On this eighth day of the STS-100 Endeavour mission, Mission Specialists Chris Hadfield, Scott Parazynski, John Phillips, Umberto Guidoni, and Yuri Valentinoich Lonchakov are seen during various prelaunch activities, 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 EVA training.

CASI

Mission Highlights Resource Tape, Part 2 of 3

April 25, 2001; In English; Videotape: 23 min. 24 sec. playing time, in color, with sound

Report No.(s): NONP-NASA–VT–2001059991; No Copyright; Avail: CASI; B02, Videotape-VHS

This video gives an overview 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 Valentinoich Lonchakov) are seen during preparations for the upcoming spacewalk, installation of the Canadian Robot Arm, and the docking of Endeavour with the International Space Station (ISS). The docking is shown, and Endeavour is seen against a backdrop of Earth as it passes over the Pacific Ocean while it approaches the southern tip of South America.

CASI

Spacecraft Docking: Endeavour (Orbiter); International Space Station; Crew Procedures (Inflight)

Astronauts perform extravehicular activity (EVA) large tool training, EVA procedures (Preflight); Astronaut Training; Crew Procedures (Preflight); Extravehicular Activity; Egress; Astronaut Performance.

On this first day of the STS-100 mission, the crewmembers of Endeavour, Commander Kent Rominger, Pilot Jeffrey Ashby, and Mission Specialists Chris Hadfield, Scott Parazynski, John Phillips, Umberto Guidoni, and Yuri Valentinoich Lonchakov, are seen during various prelaunch activities, including the ceremonial breakfast, suit-up, departure from the Operations and Checkout (O&C) Building, and boarding Endeavour. The launch of the orbiter is shown.

CASI

Check-out: Endeavour (Orbiter); Crew Procedures (Preflight); Spacecraft Launching

Astronauts perform extravehicular activity (EVA) large tool training, EVA procedures (Preflight); Astronaut Training; Crew Procedures (Preflight); Extravehicular Activity; Egress; Astronaut Performance.

On this eighth day of the STS-100 Endeavour mission, Mission Specialists Chris Hadfield and Scott Parazynski are seen preparing for and performing their spacewalks as they check the connections between the Destiny Laboratory and construction of the Space Shuttle to its launch, on-orbit performance, and landing.

CASI

Space Shuttles; Specifications; Spacecraft Propulsion

On this first day of the STS-100 mission, the crewmembers of Endeavour, Commander Kent Rominger, Pilot Jeffrey Ashby, and Mission Specialists Chris Hadfield, Scott Parazynski, John Phillips, Umberto Guidoni, and Yuri Valentinoich Lonchakov, are seen during various prelaunch activities, including the ceremonial breakfast, suit-up, departure from the Operations and Checkout (O&C) Building, and boarding Endeavour. The launch of the orbiter is shown.

CASI

Check-out: Endeavour (Orbiter); Crew Procedures (Preflight); Spacecraft Launching

Astronauts perform extravehicular activity (EVA) large tool training, EVA procedures (Preflight); Astronaut Training; Crew Procedures (Preflight); Extravehicular Activity; Egress; Astronaut Performance.

On this eighth day of the STS-100 Endeavour mission, Mission Specialists Chris Hadfield and Scott Parazynski are seen preparing for and performing their spacewalks as they check the connections between the Destiny Laboratory and construction of the Space Shuttle to its launch, on-orbit performance, and landing.

CASI

Space Shuttles; Specifications; Spacecraft Propulsion

Successful launches are shown.

CASI

Space Shuttles; Specifications; Spacecraft Propulsion

Successful launches are shown.

CASI

Space Shuttles; Specifications; Spacecraft Propulsion

Successful launches are shown.

CASI

Space Shuttles; Specifications; Spacecraft Propulsion

Successful launches are shown.

CASI

Space Shuttles; Specifications; Spacecraft Propulsion

Successful launches are shown.

CASI

Space Shuttles; Specifications; Spacecraft Propulsion

Successful launches are shown.

CASI

Space Shuttles; Specifications; Spacecraft Propulsion

Successful launches are shown.

CASI

Space Shuttles; Specifications; Spacecraft Propulsion

Successful launches are shown.

CASI

Space Shuttles; Specifications; Spacecraft Propulsion

Successful launches are shown.

CASI

Space Shuttles; Specifications; Spacecraft Propulsion

Successful launches are shown.

CASI

Space Shuttles; Specifications; Spacecraft Propulsion

Successful launches are shown.

CASI

Space Shuttles; Specifications; Spacecraft Propulsion

Successful launches are shown.
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

20010038999 NASA Johnson Space Center, Houston, TX USA STS-104 Crew Activity Report: Flight Day 5 Highlights Apr 24, 2001; In English; Videotape: 31 min. 03 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001059988; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On this fifth day of the STS-100 mission, the crew of Endeavour (Commander Kent Rominger, Pilot Jeffrey Ashby, and Mission Specialists Chris Hadfield, Scott Parazynski, John Phillips, Umberto Guidoni, and Yuri Valentinovich Lonchakov) and the Expedition 2 crew (Commander Yuri 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 Rafaello 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

20010039000 NASA Johnson Space Center, Houston, TX USA STS-100 Crew Activity Report: Flight Day 2 Highlights Apr 20, 2001; In English; Videotape: 19 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001059521; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this second day of the STS-100 mission, the 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 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 unfurls from the payload bay.

Author

Robot Arms; Spacecrews; Crew Procedures (Inflight); Endeavour (Orbiter)

20010047481 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 crew members of Atlantis, Commander Terrence Witsutt, 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 20001072040).

CASI

Extravehicular Activity; International Space Station; Orbital Rendezvous; Spacecraft Docking; Atlantis (Orbiter); Crew Procedures (Inflight); Crew Procedures (Preflight)

20010047555 NASA Johnson Space Center, Houston, TX USA STS–100 Flight Day 12 Highlights May 04, 2001; In English; Videotape: 25 min. 32 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001064667; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this twelfth day of the STS-100 mission, the crewmembers of Atlantis, Commander Kent Rominger, Pilot Jeffrey Ashby, and Mission Specialists Chris Hadfield, Scott Parazynski, John Phillips, Umberto Guidoni, and Yuri Valentinovich Lonchakov, are seen in an on-orbit press conference as they answer questions from the press. Also shown is the approach and dock of the Russian Soyuz spacecraft to the International Space Station (ISS). The Expedition 2 crew, Commander Yuri Usachev and Flight Engineers James Voss and Susan Helms, and the Soyuz crew greet each other and welcome space tourist Dennis Tito to the ISS.

CASI

Soyuz spacecraft; International Space Station; Crew Procedures (Inflight); Spacecrews

20010047588 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

20010047589 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

20010047590 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
Flight Day 7 Highlights

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 Onufriev performed joint airlock and external tasks, and the use of the newly installed Canadian Robotic Arm (installed by STS-100 crew). Lindsey describes his role in the rendezvous, docking, undocking, and flyaround of the Atlantis Orbiter and the International Space Station (ISS) and discusses the mission's planned spacewalks.

CASI
Air Locks; External Tasks; Extravehicular Activity; Spacecraft Docking; Prelaunch Summaries

Flight Day 8 Highlights

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 Onufriev performed joint airlock and external tasks, and the use of the newly installed Canadian Robotic Arm (installed by STS-100 crew). Lindsey describes his role in the rendezvous, docking, undocking, and flyaround of the Atlantis Orbiter and the International Space Station (ISS) and discusses the mission's planned spacewalks.

CASI
Air Locks; External Tasks; Extravehicular Activity; Spacecraft Docking; Prelaunch Summaries

Flight Day 9 Highlights

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 Yuri 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 Raffaello 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; Flight Day 9 Highlights; Astronaut Performance; Space Station Modules

Flight Day 10 Highlights

On this tenth day of the STS-100 mission, the computer glitch that delayed tests on the Canadian Robotic Arm are discussed between the Atlantis and Mission Ground Control. The Canadian robotic arm is seen after it lifts Spacelab from the pallet on Atlantis and moves to meet the Space Shuttle's robotic arm as it "hands over" Spacelab to the smaller robotic arm. The Canadian robotic arm with Spacelab are seen against a backdrop of Earth as the Space Shuttle and International Space Station pass to the northeast of Australia.

CASI
International Space Station; Flight Day 10 Highlights; Astronaut Performance; Space Station Modules
This video gives an overview of the first four flight days of the STS-102 mission through a compilation of footage from each day. The crew of STS-102 (Commander James Wetherbee, Pilot James Kelly, and Mission Specialists Andrew Thomas and Paul Richards) and the Expedition 2 crew (Commander Yuri Usachev and Flight Engineers James Voss and Susan Helms) are seen during the ceremonial breakfast, suitup, and as they board Discovery. The orbiter’s launch is seen from several different viewpoints, and various in-flight activities are shown, such as the opening of Discovery’s payload bay doors, Helms preparing for the ‘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 (EVA crew William Shepherd, Yuri Gidzenko, and Sergei Krikalev) are seen in the Destiny Laboratory Module. Activities for flight day five can be seen on ‘STS-102 Mission Highlight Resource Tape, Part 1 of 2’, ‘STS-102 Mission Highlight Resource Tape, Part 2 of 2’, and ‘STS-102 Mission Highlight Resource Tape, Part 2 of 2’. Activities for flight day six can be seen on ‘STS-102 Mission Highlight Resource Tape, Part 1 of 2’, ‘STS-102 Mission Highlight Resource Tape, Part 2 of 2’, and ‘STS-102 Mission Highlight Resource Tape, Part 2 of 2’. Activities for flight day seven can be seen on ‘STS-102 Mission Highlight Resource Tape, Part 1 of 2’, ‘STS-102 Mission Highlight Resource Tape, Part 2 of 2’, and ‘STS-102 Mission Highlight Resource Tape, Part 2 of 2’.

CASI

Space Shuttle: The Orbiter

STS–102 Mission Highlights Resource Tape, Part 2 of 2, Tape 1 of 4, Part A

Jun. 21, 2001; In English; Videotape: 1 hr. 30 min. 9 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001096942; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

This video gives an overview of the first four flight days of the STS-102 mission through a compilation of footage from each day. The crew of STS-102 (Commander James Wetherbee, Pilot James Kelly, and Mission Specialists Andrew Thomas and Paul Richards) and the Expedition 2 crew (Commander 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 (EVA crew William Shepherd, Yuri Gidzenko, and Sergei Krikalev) are seen in the Destiny Laboratory Module. Activities for flight day five can be seen on ‘STS-102 Mission Highlight Resource Tape, Part 1 of 2’, ‘STS-102 Mission Highlight Resource Tape, Part 2 of 2’, and ‘STS-102 Mission Highlight Resource Tape, Part 2 of 2’. Activities for flight day six can be seen on ‘STS-102 Mission Highlight Resource Tape, Part 1 of 2’, ‘STS-102 Mission Highlight Resource Tape, Part 2 of 2’, and ‘STS-102 Mission Highlight Resource Tape, Part 2 of 2’. Activities for flight day seven can be seen on ‘STS-102 Mission Highlight Resource Tape, Part 1 of 2’, ‘STS-102 Mission Highlight Resource Tape, Part 2 of 2’, and ‘STS-102 Mission Highlight Resource Tape, Part 2 of 2’.

CASI

International Space Station: Orbital Rendezvous; Spacecraft Docking; Spacecraft Launching; Crew Procedures (Preflight); Crew Procedures (Inflight); Spacecraft Docking; Spacecraft Launching

STS–102 Mission Highlight Resource Tape, Tape 3 of 4, Part A

Jun. 21, 2001; In English; Videotape: 1 hr. 32 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001096943; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

This video gives an overview of the first four flight days of the STS-102 mission through a compilation of footage from each day. The crew of STS-102 (Commander James Wetherbee, Pilot James Kelly, and Mission Specialists Andrew Thomas and Paul Richards) and the Expedition 2 crew (Commander Yuri Usachev and Flight Engineers James Voss and Susan Helms) are seen during the ceremonial breakfast, suitup, and as they board Discovery. The orbiter’s launch is seen from several different viewpoints, and various in-flight activities are shown, such as the opening of Discovery’s payload bay doors, Helms preparing for the ‘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 (EVA crew William Shepherd, Yuri Gidzenko, and Sergei Krikalev) are seen in the Destiny Laboratory Module. Activities for flight day five can be seen on ‘STS-102 Mission Highlight Resource Tape, Part 1 of 2’, ‘STS-102 Mission Highlight Resource Tape, Part 2 of 2’, and ‘STS-102 Mission Highlight Resource Tape, Part 2 of 2’. Activities for flight day six can be seen on ‘STS-102 Mission Highlight Resource Tape, Part 1 of 2’, ‘STS-102 Mission Highlight Resource Tape, Part 2 of 2’, and ‘STS-102 Mission Highlight Resource Tape, Part 2 of 2’. Activities for flight day seven can be seen on ‘STS-102 Mission Highlight Resource Tape, Part 1 of 2’, ‘STS-102 Mission Highlight Resource Tape, Part 2 of 2’, and ‘STS-102 Mission Highlight Resource Tape, Part 2 of 2’.

CASI

International Space Station: Orbital Rendezvous; Spacecraft Docking; Spacecraft Launching; Crew Procedures (Preflight); Crew Procedures (Inflight); Spacecraft Docking

STS–102 Mission Highlight Resource Tape, Tape 4 of 4, Part B

Jun. 21, 2001; In English; Videotape: 15 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001096940; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video gives an overview of the first four flight days of the STS-102 mission through a compilation of footage from each day. The crew of STS-102 (Commander James Wetherbee, Pilot James Kelly, and Mission Specialists Andrew Thomas and Paul Richards) and the Expedition 1 crew (William Shepherd, Yuri Gidzenko, and Sergei Krikalev) are seen in the Destiny Laboratory Module. Activities for flight day five can be seen on ‘STS-102 Mission Highlight Resource Tape, Part 1 of 2’, ‘STS-102 Mission Highlight Resource Tape, Part 1 of 2’, and ‘STS-102 Mission Highlight Resource Tape, Part 2 of 2’. This video shows the activities of flight days 6-14 of the STS-102 mission. Various on-orbit activities are seen, such as STS-102 Mission Specialists Andrew Thomas and Paul Richards suitup and performing their spacewalks, Thomas in the Leonardo Multipurpose Logistics Module preparing for the unloading activities, the change of command from the International Space Station’s (ISS’s) Expedition 1 crew (William Shepherd, Yuri Gidzenko, and Sergei Krikalev) to the Expedition 2 crew (Yuriy 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 seen on ‘STS-102 Mission Highlight Resource Tape, Part 2 of 2’, ‘STS-102 Mission Highlight Resource Tape, Part 2 of 2’, and ‘STS-102 Mission Highlight Resource Tape, Part 2 of 2’.

CASI

Extravehicular Activity: Unloading; Crew Procedures (Inflight); Spacecraft Docking

STS–92 Post-Flight Presentation

Dec. 06, 2000; In English; Videotape: 20 min. 23 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001101178; No Copyright; Avail: CASI;
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 Lopez-Alegria, and William McArthur, narrate as footage of the launch, preflight activities (including rendezvous and docking with the International Space Station (ISS), the mission’s four spacewalks, unflight maintenance, undocking, and the crew playing in a zero-gravity environment), and the landing of Discovery are seen. This video gives an overview of the STS-92 mission. The crew of the Discovery Orbiter, Commander Brian Duffy, Pilot Pam Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter Wisoff, Michael Lopez-Alegria, and William McArthur, narrate as footage of the launch, preflight activities (including rendezvous and docking with the International Space Station (ISS), the mission’s four spacewalks, unflight maintenance, undocking, and the crew playing in a zero-gravity environment), and the landing of Discovery are seen. This video gives an overview of the STS-92 mission. The crew of the Discovery Orbiter, Commander Brian Duffy, Pilot Pam Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter Wisoff, Michael Lopez-Alegria, and William McArthur, narrate as footage of the launch, preflight activities (including rendezvous and docking with the International Space Station (ISS), the mission’s four spacewalks, unflight maintenance, undocking, and the crew playing in a zero-gravity environment), and the landing of Discovery are seen.
The crewmembers of STS-104, Commander Steven Lindsey, Pilot Charles Hobaugh, and Mission Specialists Michael Gernhardt, James Reilly, and Janet Kavandi, are seen during various stages of their training. Footage shows the following: (1) Water Survival Training at the Neutral Buoyancy Laboratory (NBL); (2) Rendezvous and Docking Training in the Shuttle Mission Simulator; (3) Training in the Space Station Airlock; (4) Training in the Virtual Reality Lab; (5) Post-insertion Operations in the Fixed Base Simulator; (6) Extravehicular Activity Training at the NBL; (7) Crew Stowage Training in the Space Station Mock-up Training Facility; and (8) Water Transfer Training in the Crew Compartment Trainer.

CASI

Extravehicular Activity; International Space Station; Orbital Rendezvous; Spacecraft Docking; Spacecraft Launching; Crew Procedures (Inflight)

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On this fourth day of the STS-104 mission, Mission Specialists Michael Gernhardt and James Reilly are seen during their spacewalks as they attach equipment to the Quest airlock before the robotic arm of the International Space Station (ISS) lifts the airlock out of Atlantis’ payload bay and moves it into position to be installed by Gernhardt and Reilly. The ceremonial cutting of the ribbon to Quest by STS-104 Commander Steven Lindsey and Expedition 2 Commander Yuriy Usachev is shown.

CASI

Air Locks; Extravehicular Activity; International Space Station; Crew Procedures (Inflight)
Expedition 3 Flight Day 5 Highlights

Jul. 16, 2001; In English; Videotape: 19 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001109807; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The crewmembers of STS-104, Commander Steven Lindsey, Pilot Charles Hobaugh, and Mission Specialists Michael Gernhardt, James Reilly, and Janet Kavandi, and Expedition 2 Flight Engineer Susan Helms are seen during an on-orbit press conference, where they answer questions about the mission.

CASI
Airlocks: Extravehicular Activity; International Space Station; Leakage; Valves: Crew Procedures (Inflight)

Expedition 3 Flight Day 6 Highlights

Jul. 17, 2001; In English; Videotape: 21 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001109806; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

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 Hobanbaugh is shown as they answer questions about some problems with a previous spacewalk. As exterior shots of the International Space Station are seen, the air leak in the Unity Modules node pressure valve is described.

CASI
Airlocks: Extravehicular Activity; International Space Station; Leakage; Valves: Crew Procedures (Inflight)

Expedition 3 Crew Interview: Mikhail Turin

Jul. 15, 2001; In English; Videotape: 41 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001109819; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Expedition 3 Flight Engineer Mikhail Turin is seen being interviewed before leaving to become part of the third resident crew on the International Space Station (ISS). He answers questions about his inspiration to become an astronaut and his career path. He discusses his expectations for life on the ISS and the experiments he will be performing while on board. Turin gives details on the spacewalks that will take place during the STS-105 mission (the mission carrying the Expedition 3 crew up to the ISS) and the unloading operations for the Multipurpose Logistics Module.

CASI
International Space Station; Spacecrews; Spaceborne Experiments; Extravehicular Activity

Expedition 3 Crew Interview: Scott Horowitz

Jul. 23, 2001; In English; Videotape: 26 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001109818; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

STS-105 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.

CASI
Astronaut Training; Education; Astronauts; Crew Procedures (Inflight)
Air Locks', Astronaut Training; Education; Astronauts; Crew Procedures (Inflight)

20010876429 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

20010876437 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

20010876483 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

20010876484 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

20010867565 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

20010876272 NASA Johnson Space Center, Houston, TX USA
STS–100 Mission Highlights Resource Tape, Part 2 of 4
Jul. 31, 2001; In English; Videotape: 59 min. 14 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001117678; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

A continuation of ‘STS-100 Mission Resource Tape, Part 1 of 4’ (internal ID 2001117677), this video shows highlights from flight days four through six, including footage of the installation of the Canadarm (ISS’ robotic arm) on the International Space Station (ISS), the spacewalks involved in this process, and the robotic arm lifting the Rafaeli Multipurpose Logistics Module from the payload bay of Endeavour. The activities of flight days 5 (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)

20010867627 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 GNS (Navigation Simulator), and Post Insertion Operations Training at FFT.

CASI

Astronaut Training; Egress; Spacecrews
Astronaut Training, Space Stations; Extravehicular Activity

STS-100 Mission Highlights Resource Tape, Part 3 of 4
July 31, 2001; In English; Videotape: 57 min. 35 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) and 'STS-100 Mission Resource Tape, Part 2 of 4' (internal ID 2001117678), this video shows footage from flight days 10-11. The undocking of Endeavour from the International Space Station is seen, and the landing of the orbiter is shown from various viewpoints.

CASI
Endeavour (Orbiter); International Space Station; Crew Procedures (Inflight); Spacecraft Docking; Spacecraft Landing

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; B04, 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 2001120374), '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 2001120377).

CASI
Extravehicular Activity; International Space Station; Trusses; Spacecraft Launching; Discovery (Orbiter); Crew Procedures (Preflight); Crew Procedures (Inflight); Extravehicular Activity

STS-100 Mission Highlights Resource Tape, Part 4 of 4
Aug. 02, 2001; In English; Videotape: 31 min. 53 sec. playing time, in color, with sound.
Report No.(s): NONP-NASA-VT-2001120375; 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 Third 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 2001120377).

CASI
Extravehicular Activity; Spacecrafts; International Space Station; Crew Procedures (Inflight)

STS-92 Mission Highlights Resource Tape, Part 4 of 4
Aug. 02, 2001; In English; Videotape: 1 hr. 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 2 of 4' (internal ID 2001120374), 'STS-92 Mission Highlights Resource Tape, Part 2 of 4' (internal ID 2001120375), 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

STS-100 Mission Highlights Resource Tape, Part 4 of 4
July 31, 2001; In English; Videotape: 55 min. 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), 'STS-100 Mission Resource Tape, Part 2 of 4' (internal ID 2001117678), and 'STS-100 Mission Resource Tape, Part 3 of 4' (internal ID 2001117679), this video shows footage from flight days 10-11. The undocking of Endeavour from the International Space Station is seen, and the landing of the orbiter is shown from various viewpoints.

CASI
Endeavour (Orbiter); International Space Station; Crew Procedures (Inflight); Spacecraft Docking; Spacecraft Landing
STS–92 Mission Highlights Resource Tape, Part 3 of 4
Aug. 02, 2001; In English; Videotape: 1 hr. 25 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001120376; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
A continuation of ‘STS–92 Mission Highlights Resource Tape, Part 1 of 4’ (internal ID 2001120375) and ‘STS–92 Mission Highlights Resource Tape, Part 2 of 4’ (internal ID 2001120373), this video shows footage from flight days 7-10 of the STS–92 mission. Scenes include the spacewalks performed by Mission Specialists Leroy Chiao and Bill McArthur to prepare the International Space Station (ISS) for the solar arrays that will be arriving with the next mission, the undocking of Discovery from the ISS, and the crewmembers (Commander Brian Duffy, Pilot Pamela Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter Wisoff, Michael Lopez-Alegría, and William McArthur) are heard as they answer questions about the mission in an on-orbit interview. Several crewmembers are also seen as they shave and then have a meal. For footage from flight days 11-14 of the mission, see “STS–92 Mission Highlights Resource Tape, Part 4 of 4” (internal ID 2001120371).

CASI
Extravehicular Activity; International Space Station; Crew Procedures (Inflight); Spacecraft Docking

STS–105 Flight Day 3 Highlights
Aug. 12, 2001; In English; Videotape: 35 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001124967; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
On this third day of the STS–105 mission, footage shows Discovery docking with the International Space Station (ISS). The Expedition 2 crewmembers, Yuriy Usachev, James Voss, and Susan Helms, are seen as they work in the Destiny Laboratory Module on the ISS. The STS–105 crew (Commander Scott Horowitz, Pilot Frederick Sturckow, and Mission Specialists Daniel Barry and Patrick Forrester), Expedition 2 crew, and Expedition 3 crew (Frank Culbertson, Jr., Mikhail Turin, and Vladimir Dezhurov) are seen as the connecting hatches are opened between the ISS and Discovery and the crews meet.

CASI
International Space Station: Spacecraft Docking; Discovery (Orbiter); Crew Procedures (Inflight)

STS–105 Flight Day 4 Highlights
Aug. 14, 2001; In English; Videotape: 38 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001125047; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
On this fourth day of the STS–105 mission, footage shows the Shuttle’s robotic arm as it moves into position to grapple the Leonardo Multipurpose Module (LMPM) out of Discovery’s payload bay and into position to be installed to the Unity Module on the International Space Station (ISS). The STS–105 crew (Commander Scott Horowitz, Pilot Frederick Sturckow, and Mission Specialists Daniel Barry and Patrick Forrester), Expedition 2 crew (Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms), and the Expedition 3 crew (Frank Culbertson, Jr., Mikhail Turin, and Vladimir Dezhurov) are seen as they unload LMPM and transfer racks to and from the Destiny Laboratory Module and the Space Shuttle.

CASI
Destiny Laboratory Module: International Space Station; Loading Operations; Crew Procedures (Inflight)

STS–105 Flight Day 5 Highlights
Aug. 15, 2001; In English; Videotape: 29 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001125050; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this fifth day of the STS–105 mission, the transfer of supplies from the Leonardo Multipurpose Logistics Module to the International Space Station (ISS) and the handover of control of the ISS from the Expedition 2 crew (Yuriy Usachev, Jim Voss, and Susan Helms) to the Expedition 3 crew (Frank Culbertson, Jr., Mikhail Turin, and Vladimir Dezhurov) continue. Commander Usachev and Culbertson answer questions about the ISS in an on-orbit interview, and the Expedition 3 crewmembers give a video tour of their new sleeping quarters on the ISS. The north Pacific Ocean and the USA Pacific northwest are seen from space.

CASI
International Space Station; Loading Operations; Crew Procedures (Inflight)

STS–105 Flight Day 6 Highlights
Aug. 16, 2001; In English; Videotape: 26 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001125052; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this sixth day of the STS–105 mission, footage shows the Station’s Command Module as it moves into position to undock and leave the International Space Station (ISS). The Expedition 3 crew (Commander Scott Horowitz, Pilot Frederick Sturckow, and Mission Specialists Daniel Barry and Patrick Forrester) and the Expedition 4 crew (Frank Culbertson, Jr., Mikhail Turin, and Vladimir Dezhurov) are seen as they participate in various on-orbit activities, including the set-up and performance of the experiment ‘Effects of Microgravity on Spinal Cord Excitability’ and maneuver the Shuttle’s robotic arm to its docking configuration. The Rocky Mountains are seen as Discovery passes over the USA.

CASI
Spaceborne Experiments: Crew Procedures (Inflight); Discovery (Orbiter)

STS–105 Flight Day 7 Highlights
Aug. 17, 2001; In English; Videotape: 24 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001125055; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this seventh day of the STS–105 mission, footage shows the crew of the Discovery Orbiter (Commander Scott Horowitz, Pilot Frederick Sturckow, and Mission Specialists Daniel Barry and Patrick Forrester) and the Expedition 3 crew (Frank Culbertson, Jr., Mikhail Turin, and Vladimir Dezhurov) seen working in the Destiny Laboratory Module. The three crews gather (STS–105 crew Commander Scott Horowitz, Pilot Fred Sturckow, and Mission Specialists Dan Barry and Pat Forrester, Expedition 2 crew Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms, and Expedition 3 crew Frank Culbertson, Jr., Mikhail Turin, and Vladimir Dezhurov) for the change of command ceremony, where the Expedition 3 crew officially takes control of the International Space Station from the Expedition 2 crew, and the three crews answer questions about the mission in an on-orbit interview. Footage shows Hawaii from space.

CASI
Countdown: Discovery (Orbiter); Crew Procedures (Preflight); Spacecraft Launching

STS–105 Flight Day 8 Highlights
Aug. 18, 2001; In English; Videotape: 22 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001125059; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this eighth day of the STS–105 mission, Expedition 2 crewmember Susan Helms and Expedition 3 crewmember Vladimir Dezhurov are seen working in the Destiny Laboratory Module. The three crews gather (STS–105 crew Commander Scott Horowitz, Pilot Fred Sturckow, and Mission Specialists Dan Barry and Pat Forrester, Expedition 2 crew Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms, and Expedition 3 crew Frank Culbertson, Jr., Mikhail Turin, and Vladimir Dezhurov) for the change of command ceremony, where the Expedition 3 crew officially takes control of the International Space Station from the Expedition 2 crew, and the three crews answer questions about the mission in an on-orbit interview. Footage shows Hawaii from space.

CASI
International Space Station; Spacecraft; Crew Procedures (Inflight)

STS–105 Flight Day 9 Highlights
Aug. 19, 2001; In English; Videotape: 25 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001125060; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this ninth day of the STS–105 mission, Mission Specialists Dan Barry
and Pat Forrester are seen during their spacewalks as they work on the exterior of the Destiny Laboratory Module, installing handrails and connecting cables.

**CASI**

**Destination: Laboratory Module; Extravehicular Activity: International Space Station; Crew Procedures (Inflight)**

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### 2001076390 NASA Johnson Space Center, Houston, TX USA

**STS–105 Flight Day 7 Highlights**

Aug. 17, 2001; In English; Videotape: 31 min. 28 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001126405; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On this seventh day of the STS-105 mission, Mission Specialists Dan Barry and Pat Forrester are seen as they perform their spacewalks to install the Early Ammonia Servicer to the International Space Station (ISS). A brief ceremony is shown as Expedition 3 crewmember Mikhail Turin and Vladimir Dezhurov commemorate the 1000th flight day anniversary of the ISS.

**CASI**

**Extravehicular Activity: International Space Station; Orbital Servicing; Crew Procedures (Inflight)**

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### 2001076472 NASA Johnson Space Center, Houston, TX USA

**STS–105 Flight Day 6 Highlights**

Aug. 16, 2001; In English; Videotape: 14 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001126406; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

In this sixth day of the STS-105 mission, Expedition 2 crewmember Susan Helms answers questions about her long-duration flight on the International Space Station (ISS) in this on-orbit interview. Footage shows portions of Canada and the northern USA from space as the orbiter flies over, including Idaho, Montana, and North Dakota.

**CASI**

**International Space Station; Crew Procedures (Inflight)**

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### 2001077940 NASA Johnson Space Center, Houston, TX USA

**STS–105 Flight Day 11 Highlights**

Aug. 21, 2001; In English; Videotape: 29 min. 30 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001130665; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this 11th day of the STS-105 mission, the three crews, Expedition 2 (Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms), Expedition 3 (Frank Culbertson, Jr, Mikhail Turin, and Vladimir Dezhurov), and STS-105 (Commander Scott Horowitz, Pilot Fred Sturckow, and Mission Specialists Dan Barry and Pat Forrester), gather to say a few words about the changeover of the control of the International Space Station (ISS). Footage shows the undocking of Discovery from the ISS. STS-105 and E2 crews answer questions about the stay on the ISS in an on-orbit interview.

**CASI**

**International Space Station; Spacecrews; Spacecraft Docking; Crew Procedures (Inflight)**

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### 20010877948 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–2001130664; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

In this 12th day of the STS-105 mission, Discovery continues to fly towards Earth after the previous day’s undocking from the International Space Station (ISS). Several on-orbit interviews are conducted, including questions to the STS-105 crew (Commander Scott Horowitz, Pilot Fred Sturckow, and Mission Specialists Dan Barry and Pat Forrester) about spaceflight, questions to the Expedition 2 crew (Commander 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.

**CASI**

**International Space Station; Space Flight; Spacecrews; Crew Procedures (Inflight)**

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### 20010886461 NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS–105 Countdown Status Briefing**

Aug. 06, 2001; In English; Videotape: 20 min. 39 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001133694; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Joe Wells, NASA Public Affairs, introduces Steve Almers, NASA Test Director, Glenn Chin, STS-105 Mission Manager, and Ed Priselac, 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.

**CASI**

**Countdown; Payloads; Weather Forecasting; Prelaunch Summaries**

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### 20010886462 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–2001133691; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

George Diller, NASA Public Affairs, introduces Bill Gerstesen, 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 status, and the weather forecast for the Shuttle launch. They then answer questions from the press.

**CASI**

**Countdown; Weather Forecasting; Prelaunch Summaries; Astronaut Performance**

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### 20010886463 NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS–104 Pre–Launch Press Conference**

Jul. 16, 2001; In English; Videotape: 35 min. 55 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001133690; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

George Diller, NASA Public Affairs, introduces Jim Halsell, Shuttle Program Launch Integration Manager, Dave King, NASA Director of Shuttle Processing, Michael Havas, Deputy Associate Administrator for ISS, and John Weema, Launch Weather Officer, in this STS-104 press conference. An overview is given of the launch and mission activities, International Space Station activities during the mission, and the weather forecast for the launch. The men then answer questions from the press.

**CASI**

**Weather Forecasting; Prelaunch Summaries**
20010880464 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-105 Countdown Status Briefing
Jul. 10, 2001; In English; Videotape: 15 min. 22 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--20011133689; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

George Diller, NASA Public Affairs, introduces Pete Nickolenko, NASA Test Director, Scott Higginbotham, STS-104 Mission Manager, and Ed Priselac, Shuttle Weather Officer, in this STS-104 launch minus two days press conference. An overview is given of the launch vehicle status, countdown procedures, payload status, and weather forecast. The men then answer questions from the press.

CASI
Countdown; Launch Vehicles; Weather Forecasting; Pre-launch Summaries

20010880465 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-104 Flight Crew Post-Landing Press Conference
Jul. 25, 2001; In English; Videotape: 19 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--20011133688; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Joel Wells, NASA Public Affairs, introduces the STS-104 crew, Commander Steven Lindsey, Pilot Charles Hobaugh, and Mission Specialists Mike Gernhardt, Jim Reilly, and Janet Kavandi, in this post-landing press conference. Commander Lindsey makes a brief statement about the mission and each crewmember’s role in the activities. The crew then answers questions from the press.

CASI
Spacecrews; Postflight Analysis; Astronaut Performance

20010880466 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-104 Countdown Status Briefing
Jul. 11, 2001; In English; Videotape: 10 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--20011133687; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

George Diller, NASA Public Affairs, introduces Jeff Spaulding, NASA Test Director, Louie Garcia, STS-104 Operations Engineer, and Ed Priselac, Shuttle Weather Officer, in this launch minus one day press conference. An overview is given of the launch vehicle status, countdown procedures, payload status, and weather forecast. The men then answer questions from the press.

CASI
Countdown; Launch Vehicles; Weather Forecasting; Pre-launch Summaries

20010880470 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-104 Countdown Status Briefing
Jul. 09, 2001; In English; Videotape: 25 min. 51 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--20011133693; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Joel Wells, NASA Public Affairs, introduces Jeff Spaulding, NASA Test Director, Gregory Horvath, STS-104 Mission Integration Engineer, and Ed Priselac, Shuttle Weather Officer, in this STS-104 prelaunch press conference. An overview is given of the launch countdown, payload status, and weather forecast. The men then answer questions from the press.

CASI
Countdown; Payloads; Weather Forecasting; Pre-launch Summaries

20010880471 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-105 Countdown Status Briefing
Aug. 08, 2001; In English; Videotape: 13 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--20011133692; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Bruce Buckingham, NASA Public Affairs, introduces Steve Altenmu, NASA Test Director, and Glenn Chin, STS-105 Mission Manager, in this STS-105 prelaunch press conference. An overview is given of the launch countdown, payload status, and weather forecast. The men then answer questions from the press.

CASI
Countdown; Payloads; Weather Forecasting; Pre-launch Summaries

20010881597 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-104 Post-Launch News Conference
Jul. 12, 2001; In English; Videotape: 5 min. 58 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--20011133695; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

George Diller, NASA Public Affairs, introduces Jim Halsell, Director of Shuttle Launch Integration, and Mike Leinbach, Shuttle Launch Director, in this STS-104 post-launch press conference. The men give an overview of the successful launch of Atlantis and answer questions from the press.

CASI
Spacecraft Launching; Postlaunch Reports

20010882629 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-105 Post-Launch Crew Press Conference
Aug. 22, 2001; In English; Videotape: 13 min. 47 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--20011137225; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Bruce Buckingham, NASA Public Affairs, introduces STS-105 Commander Scott Horowitz and Mission Specialists Dan Barry, who each make a brief statement about the mission. Then they answer questions from the press.

CASI
Spacecrews; Postflight Analysis

20010882535 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-105 Post-Launch Press Conference
Aug. 09, 2001; In English; Videotape: 16 min. 36 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--20011137227; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Lisa Malone, NASA Public Affairs, introduces Jim Halsell, Shuttle Program Launch Integration Manager, and Mike Leinbach, Shuttle Launch Director, who give an overview of the successful launch of the STS-105 Discovery Orbiter. The men then answer questions from the press.

CASI
Spacecraft Launching; Postlaunch Reports

20010882536 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS-105 Countdown Status Briefing
Aug. 07, 2001; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--20011137226; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Joel Wells, NASA Public Affairs, introduces Pete Nickolenko, NASA Test Director, Glen Chin, STS-105 Mission Manager, and Ed Priselac, Shuttle Weather Officer. They give an overview of the countdown to the STS-105 Discovery Orbiter launch, including details on prelaunch tests (activate and check on-board avionics software, payload bay closeout, prepare and clear launch pad etc.), payload bay status (Leonardo Multipurpose Logistics Module), and the weather forecast. The men then answer questions from the press.

CASI
Countdown; Spacecraft Launching; Postlaunch Tests; Weather Forecasting; Pre-launch Summaries

20010891766 NASA Johnson Space Center, Houston, TX USA
STS-104 Post Flight Presentation
Sep. 15, 2001; In English; Videotape: 18 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001150972; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

The crewmembers of STS-104, Commander Steven Lindsey, Pilot Charles Hobaugh, and Mission Specialists Mike Gernhardt, Jim Reilly, and Janet Kavandi, are heard narrating this video as footage is shown from various points...
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; Spacecraft Training; Spacecraft Training (Preflight); Spacewalks; Utilization Flight (UF-1)

STS-108 Crew Interviews: Yuri Onufrienko
Nov. 04, 2001; In English; Videotape: 26 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2001110902; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Expedition 4 Commander Yuri Onufrienko is seen during a prelaunch interview. He gives details on the mission’s goals and significance, his role in the mission, what his responsibilities will be, what the crew exchange will be like (transferring the Expedition 4 crew in place of the Expedition 3 crew on the International Space Station (ISS)), the day-to-day life on an extended stay mission, the experiments he will be conducting on board, and what the $90 truss will mean to ISS. Onufrienko ends with his thoughts on the short-term and long-term future of the International Space Station.

CASI
International Space Station; Spacecraft: Prelaunch Summaries

STS-108 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-2001119043; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Expedition 4 Flight Engineer Dan Bursch is seen during a prelaunch interview. He gives details on the mission’s goals and significance, his role in the mission, what his responsibilities will be, what the crew exchange will be like (transferring the Expedition 4 crew in place of the Expedition 3 crew on the International Space Station (ISS)), the day-to-day life on an extended stay mission, the experiments he will be conducting on board, and what the $90 truss will mean to ISS. Bursch ends with his thoughts on the short-term and long-term future of the International Space Station.

CASI
International Space Station; Spacecraft: Prelaunch Summaries

STS-108 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-2001119529; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Expedition 4 Flight Engineer Carl Walz is seen during a prelaunch interview. He gives details on the mission’s goals and significance, his role in the mission, what his responsibilities will be, what the crew exchange will be like (transferring the Expedition 4 crew in place of the Expedition 3 crew on the International Space Station (ISS)), the day-to-day life on an extended stay mission, the experiments he will be conducting on board, and what the $90 truss will mean to ISS. Walz ends with his thoughts on the short-term and long-term future of the International Space Station.

CASI
International Space Station; Spacecraft: Prelaunch Summaries

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 Onufrienko 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; Spacecraft: Prelaunch Summaries

STS-108 Crew Interviews: Mark Kelly
Nov. 11, 2001; In English; Videotape: 26 min. 29 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-20011194275; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

STS-108 Pilot Mark Kelly is seen during a prelaunch interview. He answers questions about the mission’s goals and significance, explaining the meaning of ‘utilization flight 1’ (UF-1) as opposed to an ‘assembly flight’. He gives details on the payload (Starshine Satellite, Avian Development Facility, and Raffello Multipurpose Logistics Module (MPLM)), his role in the rendezvous, docking, and undocking of the Endeavour Orbiter to the International Space Station (ISS), how he will participate in the unloading and reloading of the MPLM, and the way in which the old and new resident crews of ISS will exchanged. Kelly ends with his thoughts on the short-term and long-term future of the International Space Station.

CASI
Endeavour (Orbiter); International Space Station: Spacecraft Docking; Spacecraft: Prelaunch Summaries
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

STS-108 Crew Interviews: Dan Tani

Nov. 11, 2001; In English; Videotape: 35 min. 34 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001194274; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-108 Mission Specialist Dan Tani is seen during a prelaunch interview. He answers questions about the mission’s goals and significance, explaining the meaning of ‘utilization flight 1’ (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)), its 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

STS-108 Post-Flight

Oct. 28, 2001; In English; Videotape: 16 min. 48 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001188060; 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 rendezvous (H Reflex Experiment), the rendezvous and docking of Discovery with the International Space Station (ISS), the transfer of materials from the Multipurpose Logistics Module, extravehicular activities, and the exchange of resident ISS crews. The video ends with Discovery undocking from the ISS and the landing of the orbiter.

CASI

Extravehicular Activity; International Space Station; Spacecraft Launching; Spacecraft Docking; Spacecrews; Crew Procedures (Inflight); Discovery (Orbiter)

STS-108 Flight Day 1 Highlights: Flight Day 1

Dec. 06, 2001; In English; Videotape: 23 min. 37 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001206814; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-108 mission, the crewmembers of Endeavour, Commander Dominic Gorie, Pilot Mark Kelly, and Mission Specialists Linda Godwin and Daniel Tani, are seen during various prelaunch activities, including the ceremonial breakfast, suitup, departing the Operations and Checkout (O&C) Building, and boarding the orbiter. The launch of Endeavour is shown. The payload bay doors open once in orbit and Pilot Kelly is seen as the solid rocket boosters ignite.

CASI

Spacecraft Launching; Spacecrews; Crew Procedures (Preflight); Crew Procedures (Inflight); Endeavour (Orbiter)

STS-108 Flight Day 2 Highlights

Dec. 07, 2001; In English; Videotape: 9 min. 19 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001206813; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this second day of the STS-108, Endeavour continues to approach the International Space Station. A camera on the end of the Remote Manipulator System robotic arm scans the side of Endeavour and shows the Rafaello Multipurpose Logistics Module.

CASI

Endeavour (Orbiter); Remote Manipulator System; Crew Procedures (Inflight)

STS-108 Flight Day 7 Highlights

Dec. 13, 2001; In English; Videotape: 26 min. 50 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001216490; 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 Turin 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; Crew Procedures (Inflight); Loading Operations

STS-108 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–2001214902; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of ‘STS-104 Mission Highlights Resource Tape, Part 1 of 4’ (internal ID 2001214904), this video shows footage from flight days four through seven of the STS-104 mission. Mission Specialists Mike Gernhardt and Jim Reilly are seen during their spacewalks, Pilot Charles Holbaugh 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) through twelve can be found on the videos ‘STS-104 Mission Highlights Resource Tape, Part 3 of 4’ (internal ID 2001214906) and ‘STS-104 Mission Highlights Resource Tape, Part 4 of 4’ (internal ID 2001214905).

CASI

Air Locks; Extravehicular Activity; International Space Station; Crew Procedures (Inflight)

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–2001217633; 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)

STS-108 Flight Day 8 Highlights

Dec. 13, 2001; In English; Videotape: 22 min. 50 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001216282; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eighth day of the STS-108 mission, the STS-108 crew (Commander
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 Engineer Carl Walz and Daniel Bursch) work to reload the Raffaello Multipurpose Logistics Module. Commander Culbertson is seen on the International Space Station’s treadmill.

### International Space Station: Crew Procedures (Inflight)

**STS-108 Flight Day 4 Highlights**

Dec. 10, 2001; In English; Videotape: 33 min. 45 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2001214921; No Copyright; 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 grapple 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.

### Endeavour (Orbiter): International Space Station: Crew Procedures (Inflight)

**STS-108 Flight Day 3 Highlights**

Dec. 9, 2001; In English; Videotape: 28 min. 59 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2001214917; No Copyright; 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 Gorie, Pilot Mark Kelly, and Mission Specialists Linda Godwin and Daniel Tani) and Expedition 4 (Commander Yuri Onufrienko and Flight Engineer 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.

### Endeavour (Orbiter): International Space Station: Spacecraft Docking: Spacecrews; Crew Procedures (Inflight)

**STS-108 Flight Day 5 Highlights**

Dec. 10, 2001; In English; Videotape: 18 min. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2001214915; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fifth day of the STS-108 mission, the STS-108 crew (Commander Dominic Gorie, Pilot Mark Kelly, and Mission Specialists Linda Godwin and Daniel Tani), Expedition 3 crew (Commander Frank Culbertson, Jr. and Flight Engineers Mikhail Turin and Vladimir Dezhurov), and Expedition 4 crew (Commander Yuri Onufrienko and Flight Engineers Carl Walz and Daniel Bursch) join in an on-orbit conference to honor those who lost loved ones in the September 11th tragedy. They are also seen moving equipment from the Raffaello Multipurpose Logistics Module to the International Space Station.

### Extravehicular Activity: Valves; Crew Procedures (Inflight): International Space Station

**STS-108 Flight Day 11 Highlights**

Dec. 15, 2001; In English; Videotape: 35 min. 10 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2001220094; 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 Gernhardt, Jim Reilly, and Janet Kavandi) greet the Expedition 2 crew (Commander Yuri Usachov and Flight Engineers James Voss and Susan Helms). Footage from flight days four through twelve can be found on the following videos: ‘STS-104 Mission Highlights Resource Tape, Part 2 of 4’ (internal ID 2001214902), ‘STS-104 Mission Highlights Resource Tape, Part 3 of 4’ (internal ID 2001214906), and ‘STS-104 Mission Highlights Resource Tape, Part 4 of 4’ (internal ID 2001214905).

### Endeavour (Orbiter): International Space Station: Spacecraft Docking; Spacecraft Landing

**STS-108 Mission Highlights Resource Tape**

Dec. 12, 2001; In English; Videotape: 56 min. 16 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2001214906; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of ‘STS-104 Mission Highlights Resource Tape, Part 1 of 4’ (internal ID 2001214904) and ‘STS-104 Mission Highlights Resource Tape, Part 2 of 4’ (internal ID 2001214902), this video shows footage from flight days seven (continued from part two) through ten. Mission Specialists Mike Gernhardt and Jim Reilly are seen during their spacewalks, and Expedition 2 Flight Engineer Jim Voss and STS-104 Commander Steven Lindsey replace a leaking intermodular valve in the vestibule between the Unity Module and Quest Airlock. Voss is seen checking for further leaks the next day. Flight day ten is continued on ‘STS-104 Mission Highlights Resource Tape, Part 4 of 4’ (internal ID 2001214905), which also shows flight days eleven and twelve.

### International Space Station: Spacecrews; Crew Procedures (Inflight)

**STS-104 Mission Highlights Resource Tape, Part 1 of 4**

Dec. 11, 2001; In English; Videotape: 59 min. 16 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--2001214904; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

An overview of the STS-104 mission is given through footage of each flight.
crew and Commander Culbertson answer questions from the press in an on-orbit interview.

CASl

International Space Station: Crew Procedures (Inflight); Endeavour (Orbiter); Spacecraft Docking

STS–108 Flight Day 10 Highlights

Dec. 15, 2001; In English; Videotape: 24 min. 40 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-2001122009; 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.

CASl

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-2001121309; 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 Engineer Mikhail Turin and Vladimir Dezhurov), Expedition 4 crew (Commander Yuri Onufrienko and Flight Engineer Carl Walz and Daniel Bursch), and STS-108 crew (Commander Dominic Gorie, Pilot Mark Kelly, and Mission Specialists Linda Godwin and Daniel Tan) 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 Tan are seen on the middeck of Endeavour stowing equipment.

CASl

International Space Station: Spacecrews; 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-2001122009; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this twelfth day of the STS-108 mission, the deployment of the Starboard 3 satellite is shown. Expedition 3 Commander Frank Culbertson, STS-108 Commander Dominic Gorie, Expedition 3 Flight Engineers Mikhail Turin and Vladimir Dezhurov, and STS-108 Pilot Mark Kelly are seen in an on-orbit interview, where they answer questions about their missions. Gorie, Kelly, and STS-108 Mission Specialist Linda Godwin are seen as they stow equipment on the middeck of Endeavour.

CASl

Crew Procedures (Inflight); Spacecrews

STS–109 Crew Interviews – Altman

Feb. 04, 2002; In English; Videotape: 34 min. 3 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-2002033710; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-109 crew Commander Scott D. Altman is seen during a prelaunch interview. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission’s goals and significance, which are all related to maintenance of the Hubble Space Telescope (HST). After the Columbia Orbiter’s rendezvous with the HST, extravehicular activities (EVA) will be focused on several important tasks which include: (1) installing the Advanced Camera for Surveys; (2) installing a cooling system on NICMOS (Near Infrared Camera Multi-Object Spectrometer); (3) repairing the reaction wheel assembly; (4) installing additional solar arrays; (5) augmenting the power control unit; (6) working on the HST’s gyro. 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.

CASl

Prelaunch Summaries: Extravehicular Activity; Hubble Space Telescope; Spacecraft Maintenance: Crew Procedures (Inflight); Spacecrews

STS–109 Crew Interviews – Carey

Feb. 04, 2002; In English; Videotape: 37 min. 7 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-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 and augmentation of the HST.

CASl

Prelaunch Summaries: Spacecrews; Hubble Space Telescope; Spacecraft Maintenance: Spacecraft Docking

STS–109 Crew Interviews – Newman

Feb. 04, 2002; In English; Videotape: 45 min. 21 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-2002033712; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-109 Mission Specialist James H. Newman is seen during a prelaunch interview. He answers questions about his inspiration to become an astronaut, his career path, and his most memorable experiences. He gives details on the mission’s goals and objectives, which focus on the refurbishing of the Hubble Space Telescope, and his role in the mission. He provides a brief background on the Hubble Space Telescope, and explains the plans for the rendezvous of the Columbia Orbiter with the Hubble Space Telescope. He provides details and timelines for each of the planned Extravehicular Activities (EVAs), which include replacing the solar arrays, changing the Power Control Unit, installing the Advanced Camera for Surveys (ACS), and installing a new Cryocooler for the Near Infrared Camera and Multi-Object Spectrometer (NICMOS). He gives further explanation of each of these pieces of equipment. He also describes the break-out plan in place for these spacewalks. The interview ends with Newman explaining the details of a late addition to the mission’s tasks, which is to replace a reaction wheel on the Hubble Space Telescope.

CASl

Columbia (Orbiter); Hubble Space Telescope; Prelaunch Summaries: Spacecrews; Orbital Rendezvous; Extravehicular Activity

STS–109 Crew Interviews – Massimino

Feb. 05, 2002; In English; Videotape: 56 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 his role in the mission. He explains the plans for the rendezvous of the Columbia Orbiter with the Hubble Space Telescope. He provides details and timelines for each of the planned Extravehicular Activities (EVAs), which include replacing the solar arrays, changing the Power Control Unit, installing the Advanced Camera for Surveys (ACS), and installing a new Cryocooler for the Near Infrared Camera and Multi-Object Spectrometer (NICMOS). He also describes the
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. 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**

**STS-109 Crew Interviews – Linnehan**

Feb. 05, 2002; In English; Videotape: 44 min. 52 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002033715; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-109 Mission Specialist 3 (MS3) Richard M. Linnehan is seen during a prelaunch interview. He answers questions about his lifelong desire to become an astronaut and his career path, which included becoming a zoo veterinarian. He gives details on the Columbia Orbiter mission, which has as its main purpose the maintenance and augmentation of the Hubble Space Telescope (HST). As MS3, his primary role in the mission pertains to EVAs (Extravehicular Activities) 1, 3, and 5. During EVA 1, Linnehan and another crewmember will replace one of two flexible solar arrays on the HST with a smaller, more efficient rigid solar array. The second solar array will be replaced on EVA 2 by other crewmembers. EVA 3 will involve the replacement of the Power Control Unit (PCU), and will require the first complete powering down of HST since its deployment. The possibility of a serious problem occurring is greatest during this portion of the mission because the original PCU was not built to be replaced. In EVA 5, Linnehan and another crewmember will install a replacement cooling system on NICMOS (Near Infrared Camera Multi-Object Spectrometer), which has not been operational. Linnehan discusses his role during the mission as well as that of his crewmates, and provides an abbreviated timeline, including possible contingencies.

CASI

**Prelaunch Summaries: Crew Procedures (Inflight); Extravehicular Activity: Hubble Space Telescope: Astronauts; Columbia (Orbiter): Spacecraft Maintenance**

**STS-109 Crew Interviews – Currie**

Feb. 05, 2002; In English; Videotape: 42 min. 11 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002033714; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-109 Mission Specialist 2 Nancy Jane Currie is seen during a prelaunch interview. She answers questions about her inspiration to become an astronaut and her career path. She gives details on the Columbia Orbiter mission which has as its main tasks the maintenance and augmentation of the Hubble Space Telescope (HST). While she will do many things during the mission, the most important will be her role as the primary operator of the robotic arm, which is responsible for grasping the HST, bringing it to the Orbiter bay, and providing support for the astronauts during their EVAs (Extravehicular Activities). Additionally, the robotic arm will be responsible for transferring new and replacement equipment from the Orbiter to the HST. This equipment includes: two solar arrays, a Power Control Unit (PCU), the Advanced Camera for Surveys, and a replacement cooling system for NICMOS (Near Infrared Camera Multi-Object Spectrometer).

CASI

**Prelaunch Summaries: Crew Procedures (Inflight); Loading Operations: Spacecraft Docking: Extravehicular Activity; Columbia (Orbiter): Hubble Space Telescope: Spacecraft Maintenance: Robot Arms; Orbital Rendezvous**

**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. Scences 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: Orbital Rendezvous: Extravehicular Activity: International Space Station: Orbital Rendezvous: Spacecraft Launching: Spacecraft Docking: Crew Procedures (Inflight); Endevavour (Orbiter); Spacecraft Landing**

**STS-109 Flight Day 1 Highlights**

Mar. 01, 2002; In English; Videotape: 20 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002034979; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

While in orbit around Earth, the crew of STS-109 aboard the Columbia Orbiter will service the Hubble Space Telescope (HST) in five extravehicular activities (EVA). In this video, prelaunch activities are shown including the positioning of the astronauts in their seats prior to liftoff. Liftoff is also shown, as is the escape flight. A comment is also made concerning the announcement shortly after liftoff that there was restricted flow in one of two freon loops in the Orbiter’s radiator.

CASI

**Astronauts: Columbia (Orbiter): Spacecraft Launching: Hubble Space Telescope**
SOLAR ARRAY OF THE HST AS WELL AS THE AREA WHERE THE NEW THERMAL BLANKET WAS
RIGID SOLAR ARRAYS WITH DECREASED SURFACE AREA AND INCREASED PERFORMANCE.

THE THERMAL BLANKET PANEL WAS ALSO SHOWN BEING REPLACED BY THE ASTRONAUTS. A NEW INSULATION BLANKET PANEL WAS ALSO
INSTALLATION. MISSION SPECIALISTS JAMES NEWMAN AND MICHAEL J. MASSIMINO ARE

CAS1
EXTRAVEHICULAR ACTIVITY: COLUMBIA (ORBITER); HUBBLE SPACE TELESCOPE; CREW PROCEDURES (INFLIGHT); SPACECRAFT MAINTENANCE


CAS1
EXTRAVEHICULAR ACTIVITY: HUBBLE SPACE TELESCOPE; REACTION WHEELS; SOLAR ARRAYS; THERMAL INSULATION; SPACECRAFT MAINTENANCE
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

200203030208 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 Durren 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

200203030299 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 Engineer James Voss and Susan Helms), and Expedition 5 (Commander Frank Culbertson, Jr. and Flight Engineers Mikhail Turin and Vladimir Dezhurov), are seen during unloading operations as they transfer equipment from the MPLM to the ISS. Forrester and Barry check their equipment and suits for the next day’s spacewalks. The E2 crew shows the E3 crew around ISS. The crescent moon and the Earth are seen through patchy clouds. Footage from flight day 5 is shown during an on-orbit interview.

CASI

International Space Station; Spacecrews; Loading Operations; Crew Procedures (Inflight); Space Shuttle

200203030720 NASA Johnson Space Center, Houston, TX USA
STS-105 Mission Highlights Resource Tape: Flight Days 7–9
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 2002049551).

CASI

Extravehicular Activity; International Space Station; Orbital Servicing; Crew Procedures (Inflight)

200203030741 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)

200203030742 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 hatches 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)
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


2002030755 NASA Johnson Space Center, Houston, TX USA

STS–110 Crew Interviews: Lee Morin
Mar. 12, 2002; In English; Videotape: 42 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002049337; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS–110 Mission Specialist Lee Morin is seen during this preflight interview, where he gives a quick overview of the mission before answering questions about his inspiration to become an astronaut and his career path. Morin outlines his role in the mission in general, and specifically during the docking and extravehicular activities (EVAs). He describes the payload (SO Truss and Mobile Transporter) and the dry run installation of the SO truss that will take place the day before the EVA for the actual installation. Morin discusses the planned EVAs in detail and outlines what supplies will be left for the resident crew of the International Space Station (ISS). He ends with his thoughts on the most valuable aspect of the ISS.

CASI

Astronauts: Trusses; Crew Procedures (Inflight); Prelaunch Summaries

2002030893 NASA Johnson Space Center, Houston, TX USA

STS–110 Crew Interviews: Ellen Ochoa
Mar. 12, 2002; In English; Videotape: 27 min. 33 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002049333; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

STS–110 Mission Specialist Ellen Ochoa is seen during this preflight interview, where she gives a quick overview of the mission before answering questions about her inspiration to become an astronaut and her career path. Ochoa outlines her role in the mission in general, and specifically her use of the robotic arm during the extravehicular activities (EVAs). She describes the payload (SO Truss and Mobile Transporter) and the dry run installation of the SO truss that will take place the day before the EVA for the actual installation. Ochoa discusses the planned EVAs in detail and outlines what supplies will be left for the resident crew of the International Space Station (ISS). She ends with thoughts on the most valuable aspect of the ISS.

CASI

Astronauts: Robot Arms; Prelaunch Summaries

2002030894 NASA Johnson Space Center, Houston, TX USA

STS–110 Crew Interview: Rex Walheim
Mar. 12, 2002; In English; Videotape: 31 min. 44 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002049335; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS–110 Mission Specialist Rex Walheim is seen during this preflight interview, where he gives a quick overview of the mission before answering questions about his inspiration to become an astronaut and his career path. Walheim outlines his role in the mission in general, and specifically during the docking and extravehicular activities (EVAs). He describes the payload (SO Truss and Mobile Transporter) and the dry run installation of the SO truss that will take place the day before the EVA for the actual installation. Walheim discusses the planned EVAs in detail and outlines what supplies will be left for the resident crew of the International Space Station (ISS). He ends with his thoughts on the most valuable aspect of the ISS.

CASI

Astronauts: Trusses; Crew Procedures (Inflight); Prelaunch Summaries

2002030895 NASA Johnson Space Center, Houston, TX USA

STS–110 Crew Interview: Mike Bloomfield
Mar. 12, 2002; In English; Videotape: 32 min. 55 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002049336; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS–110 Commander Mike Bloomfield is seen during this preflight interview, where he gives a quick overview of the mission before answering questions about his inspiration to become an astronaut and his career path. Bloomfield outlines his role in the mission in general, and specifically during the docking and extravehicular activities (EVAs). He describes the payload (SO Truss and Mobile Transporter) and the dry run installation of the SO truss that will take place the day before the EVA for the actual installation. Bloomfield discusses the planned EVAs in detail and outlines what supplies will be left for the resident crew of the International Space Station (ISS). He ends with his thoughts on the most valuable aspect of the ISS.

CASI

Astronauts: Trusses; Crew Procedures (Inflight); Prelaunch Summaries

2002030896 NASA Johnson Space Center, Houston, TX USA

STS–110 Crew Interview: Jerry Ross
Mar. 12, 2002; In English; Videotape: 43 min. 24 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002049338; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS–110 Mission Specialist Jerry Ross is seen during this preflight interview, where he gives a quick overview of the mission before answering questions about his inspiration to become an astronaut and his career path. Ross outlines his role in the mission in general, and specifically during the docking and extravehicular activities (EVAs). He describes the payload (SO Truss and Mobile Transporter) and the dry run installation of the SO truss that will take place the day before the EVA for the actual installation. Ross discusses the planned EVAs in detail and outlines what supplies will be left for the resident crew of the International Space Station (ISS). He ends with his thoughts on the most valuable aspect of the ISS.

CASI

Astronauts: Trusses; Crew Procedures (Inflight); Prelaunch Summaries

2002030897 NASA Johnson Space Center, Houston, TX USA

STS–110 Crew Interview: Stephen Frick
Mar. 11, 2002; In English; Videotape: 25 min. 9 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002049340; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

STS–110 Pilot Stephen Frick is seen during this preflight interview, where he gives a quick overview of the mission before answering questions about his inspiration to become an astronaut and his career path. Frick outlines his role in the mission in general, and specifically during the docking and extravehicular activities (EVAs). He describes the payload (SO Truss and Mobile Transporter) and the dry run installation of the SO truss that will take place the day before the EVA for the actual installation. Frick discusses the planned EVAs in detail and outlines what supplies will be left for the resident crew of the International Space Station (ISS). He ends with his thoughts on the most valuable aspect of the ISS.

CASI

Astronauts: Crew Procedures (Inflight); Prelaunch Summaries

2002030898 NASA Johnson Space Center, Houston, TX USA

STS–110 Crew Interviews: Steve Smith
Mar. 12, 2002; In English; Videotape: 42 min. 6 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002049341; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS–110 Mission Specialist Steve Smith is seen during this preflight inter-
view, where he gives a quick overview of the mission before answering questions about his inspiration to become an astronaut and his career path. Smith outlines his role in the mission in general, and specifically during the docking and extravehicular activities (EVAs). He describes the payload (50 Truss and Mobile Transporter) and the dry run installation of the S0 truss that will take place the day before the EVA for the actual installation. Smith discusses the planned EVAs in detail and outlines what supplies will be left for the resident crew of the International Space Station (ISS). He ends with his thoughts on the most valuable aspect of the ISS.

Astronauts: Trusses: Crew Procedures (Inflight); Pre-launch Summaries

STS–108 Flight Day 11 Highlights

Mar. 11, 2002; In English; Videotape: 30 min. playing time, in color, with sound Report No(s): NONP–NASA–VT–2002049131; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On the 11th day of the STS-109 mission, Commander Scott Altman, Pilot Duan 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 northern part 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 2002049331). During this video, the STS-108 crew of the Space Shuttle Endeavour (Commander Dominic Gorrie), as well as the Expedition Four crew, are seen preparing for liftoff at Kennedy Space Center (KSC). Preparations include preflight suit up, and the strapping in of the crew by support staff. The launch is shown from the Launch Control Center. Following the orbital entry of Endeavour, there is an inspection of the shuttle’s payload bay. There is some flight deck activity as the crew prepares for the rendezvous and docking of Endeavour with the ISS. Following the docking, the Expedition Three crew welcomes the others aboard the station, and both crews are briefed. There is an unobstructed view of the South Atlantic Ocean and the coast line of Argentina which includes Peninsula Valdes and Golfo Nuevo. The Raffiello Multipurpose Logistics Module (MPLM) is unberthed from the shuttle payload bay and attached to the ISS.

CASI

Endeavour (Orbiter); International Space Station; Orbital Rendezvous; spacecraft Docking; Spacecraft: Crew Procedures (Inflight)

STS–108 Mission Highlights Resource Tape, Part 2 of 3

Mar. 06, 2002; In English; Videotape: 57 min. 25 sec. playing time, in color, with sound Report No(s): NONP–NASA–VT–2002049330; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video is a continuation of ‘STS-108 Mission Highlights Resource Tape: Part 1 of 3’ (Internal ID 2002049331). Flight day four footage continues with a video tour of the International Space Station (ISS). During flight day five, an exterior view of the Multipurpose Logistics Module (MPLM) is seen, followed by the crew unloading the supplies and equipment from the MPLM. Commander Dominic Gorrie and Mission Specialist Linda Godwin are seen making preparations for the Extravehicular Activity (EVA) scheduled for the following day. Footage of an exterior view of the ISS is also shown. Flight day six footage includes Godwin and Mission Specialist Daniel Tani suiting up for their EVA and the installation of thermal blankets around the solar array wings of the ISS. Expedition 3 Commander Frank Culbertson is seen working in the ISS laboratory during flight day seven. Views are shown of Saudi Arabia and the Red Sea, the western coast of Australia, Cuba and Florida, and Switzerland and Northern Italy. During flight day eight, the crew is seen stowing objects in the MPLM for return to earth. The video concludes with footage of the treadmill used by the astronauts for physical exercise. Flight days nine through twelve are included in ‘STS-108 Mission Highlights Resource Tape: Part 3 of 3’ (Internal ID 2002049329).

CASI

International Space Station; Spacecrews: Extravehicular Activity; Earth Observations (From Space); Crew Procedures (Inflight)

STS–108 Mission Highlights Resource Tape, Part 3 of 3

Mar. 07, 2002; In English; Videotape: 58 min. 33 sec. playing time, in color, with sound Report No(s): NONP–NASA–VT–2002049329; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of ‘STS-108 Mission Highlights Resource Tape, Part 1 of 3’ (internal ID 2002049331) and ‘STS-108 Mission Highlights Resource Tape, Part 2 of 3’ (internal ID 2002049330), this video shows footage from flight days 9-12. The control of the International Space Station (ISS) is handed from the Expedition 3 crew (Commander Frank Culbertson, Jr. and Flight Engineers Mikhail Turin and Vladimir Dezhurkov) to the Expedition 4 crew (Commander Yuri Onufrienko and Flight Engineers Carl Walz and Daniel Bursley) in an on-orbit ceremony. Both Expedition crews and the STS-108 crew (Commander Dominic Gorrie, Pilot Mark Kelly, and Mission Specialists Linda Godwin and Daniel Tani) are seen reloading the Raffiello Multipurpose Logistics Module (MPLM). External shots show the MPLM 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 unlocks from the ISS and performs its Bayrounds. 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; spacecraft Docking; Spacecraft Landing; Crew Procedures (Inflight)

18

SPACECRAFT DESIGN, TESTING AND PERFORMANCE

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

19940000155 NASA Langley Research Center, Hampton, VA, USA

Scout: The unsung hero of space

Mar 1, 1991; In English; 30 min. playing time, in color and black and white, with sound Report No(s): NONP–NASA–VT–91–185304; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

A history of the Scout program, managed by LaRC for 30 years, is presented. Author (revised)

Scout Launch Vehicle: Scout Project

19940000161 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS–32 post-flight press conference

Feb 1, 1990; In English; 19 min. 20 sec. playing time, in color, with sound Report No(s): NONP–NASA–VT–90–185509; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Video footage of the post-flight press conference of STS-32 is presented. The footage is narrated by the crew, and it covers the following topics: launch, deployment of Syncom IV-5; retrieval of the Long Duration Exposure Facility, in-orbit activities, and the landing.

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

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 (STIS)

This video tape documents the planned design and development of the Space Station.
CASI
NASA Space Programs; Space Station Freedom

19940010963 NASA, Washington, DC, USA
Comet Halley returns
Dec 1, 1985; In English; 3 min. 5 sec. playing time, in color, with sound
Report No(s): NONP-NASA-VT–93–190406; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This videotape shows the five exploratory spacecraft, representing several countries, that will study Comet Halley: Giotto, Vega 1 and 2, Planet A, and Siskiyou.
Giotto Mission; Halley’s Comet; Vega Project

19940010998 NASA Lyndon B. Johnson Space Center, Houston, TX, 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–93–190347; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video shows the launches of Viking 1 and 2 and discusses objectives of the first mission to Mars.
Mars Landing; Space Exploration; Viking Mars Program

199400109985 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–93–190309; 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.
Mission Planning; Space Station Freedom

19940011623 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

19940011624 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
19940113837 NASA, Washington, DC, USA
Space Station resource reel
Jul 1, 1990; In English; 24 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-1990471; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
This video presents a series of takes and sequences with model photography of 1990 Space Station design.
CASI
Space Stations; Spacecraft Design

19940114448 NASA, Washington, DC, USA
LDEF update
Oct 1, 1990; In English; 3 min. 17 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-198199; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video explores the research being done on the Long Duration Exposure Facility (LDEF), a satellite carrying 57 experiments designed to study the effects of the space environment, which had been in orbit for almost 6 years, and was retrieved and brought back to Earth by the Space Shuttle Astronauts. The video shows scenes of the retrieval of LDEF, as well as scenes of ongoing research into the data returned with the satellite from experiments on external coating, contamination of optical materials by thermal control paint, the effects of cosmic rays on different materials, and the effect of the space environment on 12 million tomato seeds that have since been planted.
CASI
Earth Orbital Environments; Environmental Tests; Long Duration Exposure Facility; Space Shuttle Payloads; Spacecraft Recovery

19940114449 NASA, Washington, DC, USA
Designing Space Station
Oct 1, 1986; In English; 3 min. 23 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-198200; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
An overview of preparations for the construction of Space Station Freedom (SSF) is presented. The video includes footage of astronauts testing materials for erectable structures in space both in the Shuttle bay while in orbit and in a neutral buoyancy tank at McDonald Douglas’ Underwater Test Facility. Also shown are footage of robot systems that will assist the astronauts in building SSF, a computer simulation of an Orbiting Maneuvering Vehicle, solar dynamic mirrors that will power SSF, and mockups of the living quarters of the SSF.
CASI
Orbital Assembly; Space Station Freedom; Spacecraft Design

19940114492 NASA Goddard Space Flight Center, Greenbelt, MD, USA
TDRS press release
Oct 1, 1988; In English; 7 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-198220; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This material is released to both local and national broadcast media showing the Tracking and Data Relay Satellite (TDRS). The tape has split audio to facilitate ease of customizing for individual broadcast formats.
CASI
Functional Design Specifications; TDRS Satellites

19940829955 NASA, Washington, DC, USA
United States/Russia space cooperation documentary
Dec 1, 1993; In English; 24 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-12937; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
This video documents the initiative to develop a multinational, permanent space research laboratory. Historical background on the U.S. and Soviet manned space flight program as well as joint efforts such as the Apollo-Soyuz link up is shown. The current initiative will begin with collaborative missions involving NASA's space shuttle and Russia's Mir space station, and culminate in a permanently manned space station involving the U.S., Russia, Japan, Canada, and ESA. Shown are computer simulations of the proposed space station. Commentary is provided by the NASA administrator, former astronauts, cosmonauts, and Russian and American space experts.
CASI
International Cooperation; Manned Space Flight; NASA Space Programs; Space Stations; U.S.S.R. Space Program

19950604137 NASA, Washington, DC, USA
Space Station quarterly, May 1992
May 1, 1992; In English; 10 min. 12 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-23141; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This quarterly report discusses the First International Microgravity Laboratory, the building of space station truss structures at the Johnson Space Center, the building of the living and laboratory modules at the Marshall Space Flight Center, and the Lewis Research Center’s work on power for the space station. The video includes a segment on the Japanese Experiment Module.
CASI
Space Laboratories; Space Station Power Supplies; Space Station Structures; Spacecraft Modules

19950604141 NASA, Washington, DC, USA
Aero-SPACE Plane: Flexible access to space
Aug 1, 1991; In English; 3 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-23146; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
The most recently designed X-30 (National Aerospace Plane) is described. The video feature also chronicles the development of the X-plane series, beginning with the X-1.
CASI
Aerospace Planes; National Aerospace Plane Program; X-31 Aircraft

19950616026 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Houston, I think we’ve got a satellite
Jan 1, 1992; In English; 30 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-95-34002; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
This video highlights the record breaking mission of STS-49, the maiden voyage of the Space Shuttle Endeavor. It includes the dramatic capture, repair, and reboost of the INTELSAT VI Satellite, as well as the ASEM experiment. The effectiveness of certain EVA techniques for the future construction of a space station is demonstrated.
JSC
Construction; Endeavour (Orbiter); Extravehicular Activity; Intelsat Satellites; Space Shuttles; Space Stations
A short explanation of NASA's accomplishments and goals are discussed in this video. Space Station Freedom, lunar bases, manned Mars mission, and robotic spacecrafts to explore other worlds are briefly described.

CASI
Aerospace Engineering; NASA Space Programs; Research Projects; Technological Forecasting; Technology Assessment

19950824433 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Mir 18 post flight presentation
Jul 18, 1995; In English; 29 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–59072; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The post flight presentation for the Mir 18 Mission is featured on this video, with both the American astronauts and Russian Cosmonauts present for the press conference. They included: Gibson; Precourt; Baker; Harbough; Dunbar; Strekalov; Dezhurov; and Thagard. Film footage and photographic slides of the various activities performed aboard the Mir Space Station and the spaceborne experiments accomplished during the flight mission are presented. Each of the operations are explained by the cosmonauts, with brief views of the Atlantis-Mir Earth orbit rendezvous over the Red Sea included.

CASI
Astronauts; Cosmonauts; Earth Orbital Rendezvous; Earth Orbits; International Cooperation; Mir Space Station; Russian Space Program; Space Missions; Space Shuttles

1999032576 NASA Johnson Space Center, Houston, TX USA
Delta II Mars Pathfinder
Dec. 04, 1998; In English; Videotape: 1 hour 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999036756; No Copyright; Avail: CASI; B04, Videotape-VHS
Final preparations for lift off of the DELTA II Mars Pathfinder Rocket are shown. Activities include loading the liquid oxygen, completing the construction of the Rover, and placing the Rover into the Lander. After the countdown, important visual events include the launch of the Delta Rocket, burnout and separation of the 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 (Planet); Mars Pathfinder; Mars Missions; Unmanned Spacecraft

1999032577 NASA Johnson Space Center, Houston, TX USA
Mars Climate Orbiter
Dec. 11, 1998; In English; Videotape: 1 hour 2 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999036757; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
The purpose of this mission is to study the climate history and the water distribution of Mars. Beautiful panoramic views of the shuttle on the launch pad, engine ignition, Rocket launch, and the separation and burnout of the Solid Rocket Boosters are shown. The footage also includes an animation of the mission. Detailed views of the path that the Orbiter traversed were shown. Once the Orbiter lands on the surface of Mars, it will dig a six to eight inch hole and collect samples from the planet's surface. The animation also included the prospective return of the Orbiter to Earth over the desert of Utah. The remote sensor on the Orbiter helps in finding the exact location of the Orbiter so that scientists may collect the sample and analyze it.

CASI
Mars (Planets); Mars Surface; Mars Environment; Spacecraft Entry; Return to Earth Space Flight; Mars Sample Return Missions; Mars Surface Samples; Mars Climate Orbiter

1999032578 NASA Johnson Space Center, Houston, TX USA
Delta II Deep Space 1 Launch
Oct. 24, 1998; In English; Videotape: 1 hour 33 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999036758; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
The final preparations of the DELTA II Deep Space I Launch Mission are presented. The footage includes the loading of liquid oxygen, views of the shuttle on the launch pad, countdown, ignition of the engines, launch, burnout and separation of the three Solid Rocket Boosters, separation of the probe from the spacecraft occurring over the Indian Ocean.

**CASI**

**Deep Space 1 Mission: Flyby Missions: NASA Space Programs: Interplanetary Spacecraft**

19990117248 NASA Kennedy Space Center, Cocoa Beach, FL USA

**Galileo Press Conference from JPL**

Jul. 27, 1995; In English; Videotape: 44 min. 20 sec. playing time, in color with sound

*Report No.(s): NONP-NASA–VT–1999206977; No Copyright; Avail: CASI; B03, Videotape-Beta: V03, Videotape-VHS*

The press conference concerns the Orbiter Deflection maneuver that had taken place earlier that day. The participants in the press conference, asked 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.

**CASl**

**Galileo Project; Galileo Spacecraft: Jupiter Atmosphere: Jupiter (Planet): Interplanetary Trajectories**

20000112873 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–1999206992; No Copyright; Avail: CASI; B02, Videotape-Beta: V02, Videotape-VHS*

Live footage includes a continuation of the discussions on Geostationary Satellites, the Automatic Surface Observation System (ASOS), and the Doppler Radar Network lead by Frederick Oxbay, 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, having a Report Number of NONP-NASA-VT-2000000038.

**CASl**

**Atlas Centaur Launch Vehicle: Conferences**

20000113559 NASA Kennedy Space Center, Cocoa Beach, FL USA

**TRW Video News: Chandra X-ray Observatory**

July 99; In English; Videotape: 7 min. 47 sec. playing time, in color, without sound

*Report No.(s): NONP-NASA–VT–2000010635; No Copyright; Avail: CASI; B01, Videotape-Beta: V01, Videotape-VHS*

This NASA Kennedy Space Center sponsored video release presents live footage of the Chandra X-ray Observatory prior to STS-93 as well as several short animations recreating some of its activities in space. These animations include a Space Shuttle flyby by 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 “beautiful shot”, which represents another animated view of Chandra in space.

**CASl**

**X Ray Astrophysics Facility; Computer Animation**

20000114071 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.

**CASl**

**Apollo 11 Flight: Liftoff (Launch); Countdown**

20000033143 NASA Johnson Space Center, Houston, TX USA

**International Space Station: Expedition 2000**

Jan. 01, 2000; In English; Videotape: 55 min. 17 sec. playing time, in color, with sound

*Report No.(s): NONP-NASA–VT–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 Space Shuttle liftoff. Phil West, Engineer; Dr. Catherine Clark, Chief Scientist ISS; and Joe Edwards, Astronaut, narrate the video. The first topic of discussion is People and Communications. Good communication is a key component in our ISS endeavor. Dr. Catherine Clark uses two soup cans attached by a string to demonstrate communication. Bill Nye the Science Guy talks briefly about science aboard the ISS. Charlie Spencer, Manager of Space Station Simulators, talks about communication aboard the ISS. The second topic of discussion is Engineering. Bonnie Dunbar, Astronaut at Johnson Space Flight Center, gives a tour of the Japanese Experiment Module (JEM). She takes us inside Node 2 and the U.S. Lab Destiny. She also shows where protein crystal growth experiments are performed. Audio terminal units are used for communication in the JEM. A demonstration of solar arrays and how they are tested is shown. Alan Bell, Project Manager MRMDM (Mobile Remote Manipulator Development Facility), describes the robot arm that is used on the ISS and how it maneuvers the Space Station. The third topic of discussion is Science and Technology. Dr. Catherine Clark, using a balloon attached to a weight, drops the apparatus to the ground to demonstrate Microgravity. The bursting of the balloon is observed. Sherri Dunnette, Imaging Technologist, describes the various cameras that are used in space. The types of still cameras used are: 1) 35 mm, 2) medium format cameras, 3) large format cameras, 4) video cameras, and 5) the DV camera. Kumar Krishan, Chief Technologist ISS, explains infrared, infrared vision cameras and how they perform. The Short Arm Centrifuge is shown by Dr. Millard Reske, Senior Life Scientist, to subject astronauts to forces greater than 1-g. Reske is interested in the physiological effects of the eyes and the muscular system after their exposure to forces greater than 1-g.

**CASl**

**International Space Station; Expeditions; Assembling; Astronauts**

20000057580 NASA Kennedy Space Center, Cocoa Beach, FL USA

**Delta XTE Moved from Hangar M to Complex 17 at Cape Canaveral Air Station**

Jul. 17, 1995; In English; Videotape: 3 min. playing time, in color, no sound

*Report No.(s): NONP-NASA–VT–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.

**CASl**

**Delta Launch Vehicle: X Ray Timing Explorer; Ground Support Equipment; Space Transportation**

20000057581 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; Space Transportation; Ground Support Equipment**

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**CASI**

**Delta XTE Spacecraft Removed from Transfer Cannister**

**20000087588** NASA Kennedy Space Center, Cocoa Beach, FL USA

**Delta 181 News Release**

Feb. 04, 1998; 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**

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**CASI**

**Delta II/Geotail Pre-Launched Press Conference**

Jul. 23, 1995; 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 Uesugi, Project Manager, ISAS; John Beckham, Delta Launch Manager, GSFC; and Joel Tumbiolo, 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 internal instability that leads to sudden energy releases; 3) to clarify the source of plasma in the tail; and 4) to study the structure of important interfaces such as the Magnetopause. Mario Acuna gives illustrations of the Magnetosphere. James Womack discusses the countdown and status of the mission. Tono Uesugi discusses spacecraft readiness for the July 24, 1992 launch, and Joel Tumbiolo gives the weather forecast for the launch. The press conference concludes with a question and answer period. See NONP-NASA-VT-200087605 for additional questions and footage.

**CASI**

**Geomagnetic Tail; Pre-launch Summaries: Spacecraft Launching: Delta Launch Vehicle**

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**CASI**

**Delta XTE Spacecraft Removed 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 worlds 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**

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**CASI**

**Delta II Geotail Test D5040**

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 Expandable 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 Magnetosphere**

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**CASI**

**Delta XTE Fairing Installation at Complex 17–B CCAS**

Nov. 30, 1995; In English; Videotape: 5 min. playing time, in color, without sound

Report No.(s): NONP–NASA–VT–2000078624; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage of the Delta XTE (X-Ray Timing Explorer) fairing installation is presented. The fairing is installed to provide a smooth surface for the airflow. The primary purpose of the fairing is to reduce drag. The installation of the fairing occurred at complex 17–B CCAS (Cape Canaveral Air Station).

**CASI**

**Fairings: X Ray Timing Explorer; Delta Launch Vehicle; Installing**

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**CASI**

**GOES 9 Spacecraft at Astrotech Plus Exterior and Logo**

Apr. 21, 1995; In English; Videotape: 7 min. 15 sec. 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**

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**CASI**

**Atlas GEOS–J Arrives at KSC and Uncannining 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**

**Atlas Launch Vehicles: GEOS Satellites (ESA): Geosat Project; Arrivals**

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**CASI**

**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**

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**CASI**

**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**

**SOHO Payload Mate to Atlas/Centaur at the SAEF 2**
Aug. 18, 1995; In English; Videotape: 5 min. playing time, in color, no sound
Report No.(s): NONP--NASA--VT--2000078651; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The footage shows the Solar and Heliospheric Observatory’s (SOHO) payload mating with the Atlas Centaur launch vehicle in the Spacecraft Assembly and Encapsulation Facility (SAEF-2).

CASI

**Atlas Centaur Launch Vehicle, SOHO Mission, Preflight Operations, Payloads**

**Delta XTE Spacecraft Solar Panel Deployment, Hangar AO at Cape Canaveral Air Station**
Jun. 06, 1995; In English; Videotape: 5 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000078586; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The footage shows technicians in the clean room checking and adjusting the deployment mechanism of the solar panel for XTE spacecraft. Other scenes show several technicians making adjustments to software for deployment of the solar panels.

CASI

**Deployment: Solar Cells; Panels; Solar Collectors**

**Delta XTE Payload at Hangar AO**
Aug. 14, 1995; In English; Videotape: 3 min. 30 sec. playing time, in color, no sound
Report No.(s): NONP--NASA--VT--2000078618; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The X-ray Timing Explorer (XTE), launched on Dec. 30, 1995, is a satellite that observes the fast-moving, high-energy worlds of black holes, neutron stars, X-ray pulsars and bursts of X-rays that light up the sky and then disappear forever. This videotape shows the 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**

**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**

**Delta II/Geostail Pre-Launch Conference**
Jul. 23, 1992; In English; Videotape: 10 min. 59 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000078605; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video presents a continuation of the question and answer period on the Delta II/Geostail Mission. For the first part of the press conference, see non--NASA--VT--2000078601.

CASI

**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 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**

**Delta Wind Mated to Upper Stage at PHSF**
Oct. 14, 1994; In English; Videotape: 14 min. playing time, in color, without sound
Report No.(s): NONP--NASA--VT--2000078595; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the mating of the Delta Wind to the Upper Stage rocket engine at the Payload Hazardous Servicing Facility (PHSF).

CASI

**Construction: Aircraft Maintenance; Flight Operations; Preflight Operations**

**Delta XTE Lifted to Work Stand**
Jun. 28, 1995; In English; Videotape: 5 min. 13 sec. playing time, in color, no sound
Report No.(s): NONP--NASA--VT--2000078592; 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**

**WIND Mated to Delta**
Oct. 19, 1994; In English; Videotape: 6 min. 4 sec. playing time, in color, no sound
Report No.(s): NONP--NASA--VT--2000078622; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This NASA Kennedy Space Center video release presents footage of the mating of NASA's WIND payload to the Delta launch vehicle at Cape Canaveral Air Station’s complex 17B. The video includes shots of the workcrews as well as wide angle views of the spacecraft in its launching position. WIND was launched on November 1, 1994 and is the first of two NASA spacecraft in the Global Geospace Science initiative and part of the International Solar Terrestrial Physics (ISTP) Project.

CASI

**Payloads: Delta Launch Vehicle: Launch Vehicle Configurations**

**Delta II/Geostail Launch with Pre-Launch Activities**
Jul. 24, 1992; In English; Videotape: 90 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000078607; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Footage contains scenes from both the launch pad and Mission Directors...
Center from T minus 4 minutes and counting until launch. The launch has a short window of 5 minutes. The Geotail satellite is a joint effort between NASA and the International Solar Terrestrial Physics Program. It was developed by the Japanese Inst. of Space and Astronautical Science.

**SOHO**

**ATLAS-SOHO: Satellite Arrival and Uncrating**

**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: Launching; Delta Launch Vehicle

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**Geotail Video News Release**

Jul. 20, 1992; In English; Videotape: 3 min. playing time, in color, with sound

Report No.(s): NONP-NASA-VT–2000078599; No Copyright; Avail: CASI; B01, Videotape-Beta: V01, Videotape-VHS

The Geotail mission, part of the International Solar Terrestrial Physics (ISTP) program, measures global energy flow and transformation in the magnetotail to increase understanding of fundamental magnetospheric processes. The satellite was launched on July 24, 1992 aboard a Delta II rocket. This video shows animation the solar wind, and its effect on the Earth. The narrator explains that the Geotail spacecraft was designed and built by the Institute of Space and Astronautical Science (ISAS), the Japanese Space Agency. The mission objectives are reviewed by one of the scientist 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 Orbit

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**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**

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**Delta XTF Spacecraft Arrives at CCAS Skid Strip**

Aug. 16, 1995; In English; Videotape: 7 min. 30 sec. playing time, in color, no sound

Report No.(s): NONP-NASA-VT–2000078594; No Copyright; Avail: CASI; B01, Videotape-Beta: V01, Videotape-VHS

This NASA Kennedy Space Center (KSC) video release presents footage of the full and mute of NASA's X-ray Timing Explorer (XTE) to a McDonnell Douglas Delta II rocket at Launch Complex 17A, Cape Canaveral Air Station. The video includes shots of the workcrews as well as wide angle views of the spacecraft in its launching position. The XTE was launched into a circular orbit with an altitude of 600 km and an inclination of 23 degrees on Dec. 30, 1995.

CASI

**X Ray Timing Explorer: Ground Support Equipment; Delta Launch Vehicle**

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**SOHO Mission Brieing**

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 member from the SOHO Team: Dr. Richard Harrison, Bert 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 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

**Geomagnetic Tail: Launching: Solar Observatories; Scientific Satellites; Unloading**
the launch and operating costs. The panel members are also answering questions from various NASA Centers and Paris.

CASI

SOHO Mission: ESA Satellites: Conferences

20000062728 NASA Kennedy Space Center, Cocoa Beach, FL USA

GEOS-1 Satellite Applications Briefing
Apr. 12, 1994; In English; Videotape: 53 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000081542; No Copyright; Avail: CASI: B03, Videotape-Beta; V03, Videotape-VHS

This video shows a panel discussion on the GEOS-1 Satellite. The moderator George Diller, NASA Public Affairs, introduces the panel members. Panel members include Dr. Joe Friday, Director of the National Weather Service and Dr. Bob Sheats, from the National Hurricane Center. Discussions include infrared and microwave imagery, the GEOS-1 satellite, and the gathering of weather and hurricane data.

CASI

GEOS Satellites (ESA): Conferences

20000064069 NASA Kennedy Space Center, Cocoa Beach, FL USA

Dutch Viking TROS Aktua Special
Sep. 02, 1986; In English; Videotape: 1 hr. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000081534; No Copyright; Avail: CASI: B03, Videotape-Beta; V03, Videotape-VHS

This video features a panel discussion on the launch and operating costs of the Viking Holland hot air balloon. The crew is shown participating in survival technique training, boarding the plane to depart to Canada, preparing for the vertical takeoff in the hot air balloon across the Atlantic Ocean. Scenes also include the making of the capsule for the balloon, some flight activities, and the landing of the balloon.

CASI


20000064717 NASA Marshall Space Flight Center, Huntsville, AL USA

Starfire I/Consort III Launch
May 16, 1990; In English; Videotape: 28 min. 11 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000081529; No Copyright; Avail: CASI: B02, Videotape-Beta; V02, Videotape-VHS

This video shows the launch of the Starfire rocket on May 16, 1990, from the Naval Ordnance Test Station in California. The video opens with approximately 2 minutes of a man speaking into a microphone but there is no sound. This is followed by a brief summary of the payload, and the expected trajectory, a view of the launch vehicle, the countdown and the launch. The video then shows a film clip from the University of Alabama, with Dr. Francis Westling, project manager for the Consort project, speaking about the mission goals in the materials sciences experimentation. The video shows footage of the payload being assembled. The next section is a discussion by Dr. Roy Hursmoot, of Pennsylvania State University, who reviews the Penn State Bio Module, and the goal of learning about the effects of gravity on physiology. This is followed by George Meyers, from McDonald Douglas, who spoke about the payload integration process while the video shows some of the construction. The last section of the video shows a press conference at the launch site. Ana Villarruel answers questions from the press about the flight.

CASI

Launching: Microgravity: Payloads: Low Gravity Manufacturing: Gravitational Physiology: Physiological Effects

20000064899 NASA Kennedy Space Center, Cocoa Beach, FL USA

AC–67/FLTSATCOM Launch with Isolated Cam Views: Freeze of Lightning Press Conference
Mar. 26, 1987; In English; Videotape: 34 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000087604; No Copyright; Avail: CASI: B03, Videotape-Beta; V03, Videotape-VHS

The FLTSATCOM system provides worldwide, high-priority UHF communications between naval aircraft, ships, submarines, and ground stations and between the Strategic Air Command and the national command authority network. This video 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 of a lightning strike shortly after the launch. The tape then shows a press conference, with Mr. Wolmaster, Mr. Gibbs, and Air Force Colonel Alsbroke. Mr. Gibbs summarizes the steps that were 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


20000067668 NASA Kennedy Space Center, Cocoa Beach, FL USA

TOPEX/POSEIDON Launch from Guiana Space Center Aboard an Ariane 42P
Aug. 10, 1992; In English; Videotape: 22 min. 23 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000081530; No Copyright; Avail: CASI: B02, Videotape-Beta; V02, Videotape-VHS

This video shows the launch control center 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

20000067688 NASA Kennedy Space Center, Cocoa Beach, FL USA

Pegasus Departs from KSC
Feb. 09, 1993; In English; Videotape: 2 min. 32 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000081520; No Copyright; Avail: CASI: B01, Videotape-Beta; V01, Videotape-VHS

This video shows the departure of the Pegasus launch vehicle from Kennedy Space Center (KSC).

CASI

Pegasus Air-Launched Booster: Air Launching: P-52 Aircraft

20000068857 NASA Kennedy Space Center, Cocoa Beach, FL USA

Atlas–Uncrating of SOHO satellite at the SAEF 2
Aug. 05, 1995; In English; Videotape: 6 min. 58 sec. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–2000081537; No Copyright; Avail: CASI: B01, Videotape-Beta; V01, Videotape-VHS

This video shows the removal of the SOHO satellite from its packaging at the Spacecraft Assembly and Encapsulation Facility (SAEF) 2.

CASI

SOHO Mission: Scientific Satellites

20000068916 NASA Kennedy Space Center, Cocoa Beach, FL USA

TOPEX Press Conference (2 of 2)
Feb. 26, 1993; In English; Videotape: 21 min. 23 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000081532; No Copyright; Avail: CASI: B02, Videotape-Beta; V02, Videotape-VHS

This video 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...
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

200100029211 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--20010041436; No Copyright; Avail: CASI; B01; 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

200100029213 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--20010041438; 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) spacewalkers from various assembly missions, including STS-88, STS-96, STS-101, STS-92, STS-106, and STS-97; (3) Zvezda docking to ISS as seen from the camera in the docking port; (4) the launch of the Expedition 1 crew (William Shepherd, Yuri Gidzenko, and Sergei Krikalev) on Soyuz and the spacecraft’s docking with ISS; and (5) the US Destiny Laboratory Module, Leonardo and Rafaelito Modules, Mobile Base System, Kibo Experiment Module, US Airlock, US Habitation Module, and ISS Remote Manipulator System (robotic arm) during processing. Computerized animations show the ISS as the Space Shuttle docks; the Progress Module as it docks to ISS; interior and exterior views of the Columbus Orbital Facility; and an ISS assembly sequence.
CASI
Extravehicular Activity; International Space Station; Construction; Spacecraft Docking; Space Station Modules; Orbital Assembly

200100029215 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--20010041440; 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; Tetherlines
Assembl.v; Space 5'talion Modules

Assembling for launch at the Baikonur Cosmospace 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

200101035852 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 Summary: Crew Procedures (Inflight): International Space Station; Spacecrews

200101036657 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–20001052178; 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)

200101038856 NASA Johnson Space Center, Houston, TX USA

Zarya Resource Reel
Dec. 08, 1998; In English; Videotape: 40 min. 45 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP–NASA–VT–2001041443; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

An overview of the Zarya Module (part of the International Space Station) is given through various clips of its construction, launch, and installation. Computerized animations show the deployment of Zarya’s solar panels, Zarya’s motor firing to a higher orbit, and the installation of Zarya to the Unity Module using the STS-88 Endeavour’s robotic arm. Live footage shows the following: (1) Zarya and the Proton Rocket under construction at the Khrunichev State Research and Production Center in Moscow, Russia; (2) Zarya launch preparations (test deployment of solar arrays) at the Baikonur Cosmodrome in Kazakhstan, Russia; (3) prelaunch activities (inspection, Proton Rocket rollout to launch pad); (4) the launch of Zarya on the Proton Rocket at the Baikonur Cosmodrome; and (5) Endeavour’s capture of Zarya and its berthing to Unity.

CASI Construction: Spacecraft Launching: Zarya Control Module: Solar Arrays

200101038334 NASA Johnson Space Center, Houston, TX USA

Skylab: Space Station 1
Jan. 24, 1996; In English; Videotape: 28 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001181401; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

This video shows a number of astronauts describing the importance of man’s continued space exploration. Footage shows the interior of Skylab as the
crew performs experiments (solar effects, Earth observation), monitors their health, and going about their day-to-day lives.

**Astronauts: Health; Space Exploration; Skylab Program**

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**Astronauts; Health; 5)ace** and x ray telescopes distant stars, supernovae, and black holes. The observatory will use to study B01, Videotape-Beta; V01, Videotape-VHS Report No.(s): NONP NASA VT

Nov. 1, 1989; In English; Videotape: 7 min. 2 sec. playing time, in color, with sound Report No.(s): NONP--NASA--VT--2001174288; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video is a compilation of scenes from the Apollo 11 mission, from the speech President Kennedy gave declaring America’s intention to go to the Moon through the Lunar Module lift-off from the Moon’s surface, including footage from the Apollo 11 spacecraft launch, astronaut activities on the lunar surface, the placing of the American flag on the surface on the Moon, and an astronaut on the Lunar Rover.

**CASI** Astronomy; Lunar Surface; Moon: Apollo 11 Flight

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**Astronauts; Health; 5)ace** will capture images earth-bound observatories can’t, due to interference from the earth’s atmosphere. The video contains footage of the instrument being loaded on the shuttle, animations of anticipated images to be captured, and scenes of the SpaceLab Control Center at MSFC.

**CASI** Astronomy; Lunar Surface; Moon: Apollo 11 Flight

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**Astronauts; Health; 5)ace** and x ray telescopes distant stars, supernovae, and black holes. The observatory will use to study B01, Videotape-Beta; V01, Videotape-VHS Report No.(s): NONP NASA VT

Nov. 1, 1989; 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

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**CASI** Astronomy; Lunar Surface; Moon: Apollo 11 Flight

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**Astronauts; Health; 5)ace** and x ray telescopes distant stars, supernovae, and black holes. The observatory will use to study B01, Videotape-Beta; V01, Videotape-VHS Report No.(s): NONP NASA VT

Nov. 1, 1989; 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

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**CASI** Astronomy; Lunar Surface; Moon: Apollo 11 Flight

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**Astronauts; Health; 5)ace** and x ray telescopes distant stars, supernovae, and black holes. The observatory will use to study B01, Videotape-Beta; V01, Videotape-VHS Report No.(s): NONP NASA VT

Nov. 1, 1989; 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

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**CASI** Astronomy; Lunar Surface; Moon: Apollo 11 Flight

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**Astronauts; Health; 5)ace** and x ray telescopes distant stars, supernovae, and black holes. The observatory will use to study B01, Videotape-Beta; V01, Videotape-VHS Report No.(s): NONP NASA VT

Nov. 1, 1989; In English; Videotape: 7 min. 2 sec. playing time, in color, with sound Report No.(s): NONP--NASA--VT--2001174288; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video is a compilation of scenes from the Apollo 11 mission, from the speech President Kennedy gave declaring America’s intention to go to the Moon through the Lunar Module lift-off from the Moon’s surface, including footage from the Apollo 11 spacecraft launch, astronaut activities on the lunar surface, the placing of the American flag on the surface on the Moon, and an astronaut on the Lunar Rover.

**CASI** Astronomy; Lunar Surface; Moon: Apollo 11 Flight
1994010878 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.

CASI Electric Propulsion; Engines

19940011030 NASA Lewis Research Center, Cleveland, OH, USA Futurepath 1 Apr 1, 1988; In English; 27 min, 15 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT-93-190228; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video looks at the photovoltaic and solar dynamic power systems being developed for Freedom and the Advanced Turboprop Program.

CASI Photovoltaic Conversion; Solar Dynamic Power Systems; Space Station Power Supplies; Turboprop Aircraft

19940027312 NASA Lewis Research Center, Cleveland, OH, USA Solar connection Jan 1, 1992; In English; 14 min. 18 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT-94-9961; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video explains the work package 4, an electrical power system being developed by NASA Lewis Research Center, for use on the Space Station Freedom. It shows footage and explains steps in building and testing of actual flight hardware for Space Station Freedom. Details are given of the threat that plasma poses on cells.

CASI Space Station Freedom; Space Station Power Supplies

19940029051 NASA John C. Stennis Space Center, Bay Saint Louis, MS, USA ASRM testing at Stennis Space Center (proposed) Jan 1, 1993; In English; 6 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT-94-12923; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This summary of the Advanced Solid Rocket Motor (ASRM) program at Stennis Space Center has a specific focus on the environmental impact.

CASI Advanced Solid Rocket Motor (STS); Environment Effects; Environment Protection; Rocket Test Facilities; Test Firing

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 Aerospace Engineering; Chemical Propulsion; Nuclear Propulsion; Propellants; Propulsion System Configurations; Propulsion System Performance; Solar Propulsion; Spacecraft Propulsion

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

20000058551 NASA Kennedy Space Center, Cocoa Beach, FL, USA XTE Solid Motor Installation at Pad 17–A, Cape Canaveral Air Station Jul. 25, 1995; In English; Videotape: 16 min. 48 sec. playing time, in color, without sound Report No.(s): NONP-NASA-VT-2000078587; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This NASA Kennedy Space Center video presents live footage of the installation of the XTE (X-Ray Timing Explorer) Solid Rocket Motor at Launch Pad 17-A. The installation takes place at Cape Canaveral Air Station, Florida.

CASI Installing: X Ray Timing Explorer; Launching Pads; Solid Propellant Rocket Engines

2000018239 NASA Kennedy Space Center, Cocoa Beach, FL, USA OV–185 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-2000152111; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows press members inspecting Endeavour’s main engine before installation as a Vehicle Assembly Building (VAB) official answers questions.

CASI Endeavour (Orbiter); Prelaunch Summaries; Engines

20010019014 NASA Kennedy Space Center, Cocoa Beach, FL, USA SOHO Solid Rocket Booster Installation Nov. 4, 1995; In English; Videotape: 8 min. 42 sec. playing time, in color, no sound Report No.(s): NONP-NASA-VT-2001023116; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the arrival (via truck) and installation of the solid rocket boosters onto the SOHO spacecraft.

CASI Installing: Booster Rocket Engines

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 inorganic and organic compounds: combustion theory; electrochemistry; and photochemistry. For related information see also 34 Fluid Dynamics and Thermodynamics, For astrochemistry see category 90 Astrophysics.

**19940027377 NASA Lewis Research Center, Cleveland, OH, USA**

**Solid surface**

Dec 1, 1992; In English; 7 min. 5 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–94–9946; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video tape describes the development of the Solid Surface Combustion Experiment (SSC) by researchers at NASA LeRC. The experiment studies fire spreading over a small solid fuel sample subjected to microgravity conditions in Earth orbit. Buoyant convection, which determines the heat transfer in fires on Earth, disappears in microgravity; hence, this experiment will help researchers understand how fires act on Earth.

CASI

**Combustion Physics: Fires; Flame Propagation; Heat Transfer; Microgravity; Solid Surfaces**

**19950120784 National Inst. of Standards and Technology, Gaithersburg, MD, USA**

**Chemical engineering: Measurements for a competitive age**

Jan 1, 1986; In English; 19 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–95–49098; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The NIST (National Institute of Standards and Technology) activities supporting chemical research, environmental research, combustion and fuel research, and related industries are described in this video. Highlights include private sector involvement in the research and associated and guest scientist programs, the calibration of customers’ instruments, and the direct funding for the NIST research projects by outside industries.

CASI

**Chemical Engineering: Combustion Chemistry; Combustion Physics; Environmental Chemistry; Research Projects; Technology Assessment; Units of Measurement**

**26 METALS AND METALLIC MATERIALS**

Includes physical, chemical, and mechanical properties of metals and metallic materials; and metallurgy.

**19940099143 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.

**19940016840 NASA, Washington, DC, USA**

**Restoring Miss Liberty**

Apr 1, 1985; In English; 4 min. 25 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–93–190403; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video tape shows how a NASA inorganic coating for metal was used on the Statue of Liberty during its recent refurbishment.

CASI

**Inorganic Coatings: Metal Coatings; Protective Coatings: Restoration**

**29 SPACE PROCESSING**

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

**19940130507 NASA Lyndon B. Johnson Space Center, Houston, TX, USA**

**STS–26 SSP briefing**

Jan 1, 1988; In English; 6 min. 30 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–93–190354; No Copyright; 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.

CASI

**Crystal Structure; Grain Boundaries; Space Shuttle Missions; Spaceborne Experiments; Titanium**

**19940016922 NASA Lyndon B. Johnson Space Center, Houston, TX, USA**

**STS–26 protein growth (PCG) experiment**

Jun 1, 1989; In English; 2 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–93–190356; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Astronauts Nelson and Lounge are shown working on the Protein Crystal Growth experiment aboard the Space Shuttle.

CASI

**Protein Crystal Growth; Space Processing; Spaceborne Experiments**

**19940027378 NASA Lewis Research Center, Cleveland, OH, USA**

**Defying gravity**

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

Report No.(s): NONP–NASA–VT–93–9947; 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.

CASI

**Astronauts; Education; Gravitation; Microgravity**

**19950094106 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 exper-
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 85 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 fluid 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) and the bulk liquid subcooling varied from 39 to 78 K and 1 to 3 deg C, respectively. The boiling process during the entire heating period, as well as a jet-induced mixing process for the first 2 min. of the mixing period, was also recorded on video. Analyses of data from the two flight experiments (TPCE and TPCE/TP) and their comparison with the results obtained in drop tower experiments suggest that as Bond number approaches zero the flow pattern produced by an axial jet and the mixing time can be predicted by the Weber number. This is video tape 4 of 4.

CASI
Tanks (Containers); Bubbles; Flow Distribution; Fluid Jets; Freon; Jet Mixing Flow; Microgravity; Pressure Reduction; Heat Flux
microgravity environment of the space shuttle. TPCE/TP, flown on the Space Transportation System STS-52, was a second flight of the Tank Pressure Control Experiment (TPCE). The experiment used 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·exp 2). The system pressure and the bulk liquid subcooling varied from 39 to 78 kPa and 1 to 3 deg C, respectively. The boiling process during the entire heating period, as well as a jet-induced mixing process for the first 2 min. of the mixing period, was also recorded on video. Analyses of data from the two flight experiments (TPCE and TPCE/TP) and their comparison with the results obtained in drop tower experiments suggest that as Bond number approaches zero the flow pattern produced by an axial jet and the mixing time can be predicted by the Weber number. This is video tape 3 of 4.

CASI

Tanks (Containers); Bubbles; Flow Distribution; Fluid Jets; Freon; Jet Mixing Flow; Microgravity; Pressure Reduction; Heat Flux

31 ENGINEERING (GENERAL)

Includes general research topics to engineering and applied physics, and particular areas of vacuum technology, industrial engineering, cryogenics, and fire prevention. For specific topics in engineering see categories 22 through 39.

199401101846 NASA, Washington, DC, USA

Building a lunar base
Jan 1, 1986; In English; 4 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-190472; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video looks at the testing of lunar materials as a possible building material for lunar bases.

CASI

Construction Materials; Lunar Bases; Lunar Rocks; Lunar Soil; Materials Tests

1995020783 National Inst. of Standards and Technology, Gaithersburg, MD, USA

NIST Automated Manufacturing Research Facility (AMRF); March 1987
Herbert, Judith E., editor, National Inst. of Standards and Technology, USA;
Kane, Richard, editor, National Inst. of Standards and Technology, USA;
June 1, 1987; In English; 19 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-95-49097; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

The completion and advances to the NIST Automated Manufacturing Research Facility (AMRF) is described in this video. The six work stations: (1) horizontal machining; (2) vertical machining; (3) turning machinery; (4) cleaning and deburring; (5) materials handling; and (6) inspection are shown and used for each workstation are cited. Visiting researchers and scientists within NIST describe the advantages of each of the workstations, what the facility is used for, future applications 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

2000058145 Bioptics Corp., Cocoa Beach, FL USA

Cooler Deployment, GOES J on ATLAS
Mar 14, 1995; In English; Videotape: 5 min. 13 sec. playing time, in color, no sound
Report No.(s): NONP-NASA-VT-2000078613; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This NASA Kennedy Space Center video release presents footage of 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

32 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.

19940106819 NASA Goddard Flight Center, Greenbelt, MD, USA

COBE video news
Oct 1, 1989; In English; 3 min. 46 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-190306; 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; Satellite Launching

1995022753 NASA, Washington, DC, USA

High resolution microwave survey
Scheibe, J., editor, NASA, USA; Sep 18, 1992; In English; 12 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-95-46001; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Research information on radar tracking systems, computer animation of star formation, foliage 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 Communications

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.

1994020977 NASA Lewis Research Center, Cleveland, OH, USA

Space electronics video: Research for today and tomorrow
Jan 1, 1991; In English; 7 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-12597; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video gives an overview of work being done by the different branches of the Space Electronics Division at LRC. The video highlights electron beam, solid state, high speed circuit design and, high frequency communication research.

CASI

Electron Beams; Electronic Equipment; NASA Programs; Solid State Devices
FLUID MECHANICS AND THERMODYNAMICS

Includes fluid dynamics and kinematics and all forms of heat transfer, boundary layer flow, hydrodynamics, hydraulics; fluids: mass transfer and ablation cooling. For related information see also 02 Aerodynamics.

1994010773 NASA Ames Research Center, Moffett Field, CA, USA
The 1989 computational fluid dynamics highlights
Jan 1, 1989; In English; 24 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190433; No Copyright; Avail: CASI; B02; Videotape-Beta; V02, Videotape-VHS

This document presents highlights of 1989's CFD graphics, which show shuttle flight problems, F-18 flows, artificial heart, and rotorator with more complex blades.
CASI
Computational Fluid Dynamics: Numerical Flow Visualization: Scientific Visualization

1994010779 NASA, Washington, DC, USA
Ribslets: New speed technology
Mar 1, 1987; In English; 3 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190349; No Copyright; Avail: CASI; B01; Videotape-Beta; V01, Videotape-VHS

This document discusses a new drag reduction technology called ribslets, which may have helped win yachting’s America’s Cup.
CASI
Boundary Layer Control: Drag Reduction: Hydrodynamics: Ribslets

1994010958 NASA Ames Research Center, Moffett Field, CA, USA
The 1988 computational fluid dynamics highlights
Jan 1, 1988; In English; 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190443; No Copyright; Avail: CASI; B01; Videotape-Beta; V01, Videotape-VHS

This video highlights the 1988 CFD graphics which show zero gravity phenomena, boundary layers, aerelasticity, rotor blades, stators, jet ground effects, the F-18, flow about the shuttle, hypersonic flow, and flow in an artificial heart.
CASI

1994012730 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–94–09958; 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 station 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-dominant convection and surface tension-dominant convection is graphically displayed. The clear differences between two mechanisms of fluid transport, thermocapillary convection, and buoyancy dominant convection is illustrated.
CASI

19950404104 NASA Lewis Research Center, Cleveland, OH, USA
ZENO: A critical fluid light scattering experiment
Feb 1, 1994; In English; 7 min. 25 sec. playing time, with sound
Report No.(s): NONP–NASA–VT–94–23162; No Copyright; Avail: CASI; B01; Videotape-Beta; V01, Videotape-VHS

The ZENO experiment flown on the STS-62, it is designed to verify intriguing, but previously untested, theories in fluid physics. These theories attempt to describe dramatic changes in the properties of fluids near the critical temperature at which the vapor and liquid forms co-exist.
CASI

19950106948 NASA Langley Research Center, Hampton, VA, USA
Two-dimensional scramjet inlet unstart model: Wind-tunnel blockage and actuation systems test
Holland, Scott D., NASA Langley Research Center, USA; Nov 1, 1994; In English; Videotape supplement: 10 min. 52 sec. playing time, in color, in VHS and Beta formats
Contract(s)/Grant(s): RTOP 763-35-08
Report No.(s): NONP–NASA–SUPPL–VT–94–32020; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This supplement to NASA TM 109152 shows the Schlieren video (10 min. 52 sec., color, Beta and VHS) of the external flow field and a portion of the internal flow field of a two-dimensional scramjet inlet model in the NASA Langley 26-Inch Mach 6 Tunnel. The intent of the overall test program is to study both experimentally and computationally the dynamics of the inlet unstart; this (phase I) effort examines potential wind-tunnel blockage issues related to model sizing and the adequacy of the actuation systems in accomplishing the start and unstart. The model is equipped with both a moveable cowl and aft plug. Windows in the inlet sidewalls allow limited optical access to the internal shock structure. In the video, flow is from right to left, and the inlet is oriented inverted with respect to flight, i.e., with the cowl on top. The plug motion is obvious because the plug is visible in the aft window. The cowl motion, however, is not as obvious because the cowl is hidden from view by the inlet sidewall. The end of the cowl actuator arm, however, becomes visible above the sidewalls between the windows when the cowl is up (see figure 1b of the primary document). The model is injected into the tunnel and observed through several actuation sequences with two plug configurations over a range of unit freestream Reynolds number at a nominal freestream Mach number of 6. The framing rate and shutter speed of the camera were too slow to fully capture the dynamics of the unstart but did prove sufficient to identify inlet start and unstart. This series of tests indicated that the model was appropriately sized for this facility and identified operability limits required first to allow the inlet to start and second to force the unstart.
Author

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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 Avionics and Aircraft Instrumentation; and 19 Spacecraft Instrumentation.

19940106774 NASA, Washington, DC, USA
Space Station Freedom
Jul 1, 1996; In English; 3 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–09943; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video presents great model photography along with astronaut activity as practiced in mockup.
CASI
Astronaut Training: Space Station Freedom: Spacecraft Models

19940106831 NASA Lyndon B Johnson Space Center, Houston, TX, USA
STS-30 crew photo in building 4
Apr 1, 1989; In English; 7 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190371; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video shows the Space Shuttle crew learning how to use the photographic equipment they will have on board the Space Shuttle.

CASI
Astronaut Training: Photographic Equipment; Space Shuttle Orbits; Spaceborne Photography

199408010843 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 CDT.

CASI
Astronaut Training: Cameras; Space Shuttle Missions

199408010891 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-32 IMAX camera audio class FT
Mar 1, 1989; 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

199409010907 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-32 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

199409010924 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--190264; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The STS-34 crew is shown being taught how to use the 16-mm Arriflex camera.

CASI
Cameras; Spaceborne Photography; Spacecrews

199409010932 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--190351; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The crew is shown studying photography equipment they will carry into orbit, and how to take the best shots possible.

CASI
Astronaut Training: Photographic Equipment; Photography

199409010990 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

199408350833 NASA Lewis Research Center, Cleveland, OH, USA
Improved Optical Techniques for Studying Sonic and Supersonic Injection into Mach 3 Flow

Buggele, Alvin E., NASA Lewis Research Center, USA; Seasholtz, Richard G., NASA Lewis Research Center, USA; Sep. 1997; 22p; In English; 42nd; International Society for Optica Engineering Conference, 27 Jul. - 1 Aug. 1997, San Diego, CA, USA; Sponsored by International Society for Optical Engineering, USA; Original contains color illustrations

This paper presents a study used all 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 0.25 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 cameras 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
Rayleigh Scattering: Shadowgraph Photography; Flow Visualization: Fluid Injection; Helium: Injectors; Fuel Injection; Supersonic Flow; Wind Tunnel Tests; Water Vapor; Continuum Flow; Pulsed Lasers

19970305039 TRW Space and Electronics Group, PMMW Camera Consortium, Redondo Beach, CA USA
PMMW Camera TRP; Phase 1 Final Report, Jan, 1994 - Jul, 1997
1997, 32p; In English; Contract(Grant)(s): NCCI-196
Report No.(s): NONP-NASA-VT--93--1907057110; 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

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develop and demonstrate the capabilities of a W-band PMMW camera with a microwave/millimeter wave monolithic integrated circuit (MMIC) focal plane array (FPA) that can be manufactured at low cost for both military and commercial applications. This overall objective was met in July 1997 when the first video images from the camera were generated of an outdoor scene. In addition, our consortium partner McDonnell Douglas was to develop a real-time passive millimeter wave flight simulator to permit pilot evaluation of a PMMW-equipped aircraft in a landing scenario. A working version of this simulator was completed. This work was carried out under the DARPA-funded PMMW Camera Technology Reinvestment Project (TRP), also known as the PMMW Camera DARPA Joint Dual-Use Project. In this final report for the Phase 1 activities, a year by year description of what the specific objectives were, the approaches taken, and the progress made is presented, followed by a description of the validation and imaging test results obtained in 1997.

**37 MECHANICAL ENGINEERING**

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

**19940009131 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.

**19940010790 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.

**19940010795 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 telerobotics in the exploration of space.

**19940010799 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–93–190365; 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 Wavetrace animation to take the viewer on a tour of the robotics that may, someday, be a part of Space Station Freedom.

**19940010818 NASA, Washington, DC, USA Future of robotics**

Apr 1, 1989; In English; 2 min. 3 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT–91–190390; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This videotape describes robotic research such as the EVA retriever and virtual reality.

**19940010874 NASA, Washington, DC, USA Unistick vehicle controller**

Oct 1, 1986; In English; 4 min. 6 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT–93–190416; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

A single stick control system, like the lunar rover, is presented as a control to enable disadvantaged individuals to drive with only one hand.

**19940010983 NASA Lyndon B. Johnson Space Center, Houston, TX, USA EVA retriever demonstration**

Apr 1, 1988; In English; 10 min. 30 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT–93–190307; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The EVA retriever is demonstrated in the Manipulator Development Facility (MDF). The retriever moves on the air bearing table ‘searching’ for its target, in this case tools ‘dropped’ by astronauts on orbit.

**19940010896 NASA Lyndon B. Johnson Space Center, Houston, TX, USA STS–41 VCS training with mission specialist Bruce Melnick and Bill Shepard**

Sep 1, 1990; In English; 12 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT–93–190310; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Astronaut Bill Shepard is shown using the Voice Command System (VCS) in the Manipulative Development Facility (MDF) under the eye of project engineers and crew trainers. The video shows VCS in action moving cameras around the MDF payload bay mockup.

**19940027298 NASA Lewis Research Center, Cleveland, OH, USA High temperature NASP engine seal development**

Jan 1, 1992; In English; 6 min. 25 sec. playing time, in color, with sound Report No.(s): NONP–NASA-VT–94–9950; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video details research being conducted at the Lewis Research Center on high temperature engine seal design for the National Aerospace Plane. To maximize the speed, the jets on the NASP extract oxygen from the air rather than carry large liquid fuel tanks; this creates temperatures within the jet of over 5000 F. to prevent these potentially explosive gases from escaping, researchers are developing new technologies for use in the engine seals. Two examples explained are the ceramic wafer seal and the braided ceramic rope seal. Computer simulations and laboratory footage are used to illustrate the workings of these seals. Benefits for other aerospace and industrial applications, as well as for the space shuttle, are explored.

**19940029000 NASA Lewis Research Center, Cleveland, OH, USA The Stirling engine**

Jan 1, 1992; In English; 7 min. 25 sec. playing time, in color, with sound Report No.(s): NONP–NASA-VT–94–12360; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video describes the Stirling engine, an external combustion engine which creates heat energy to power the motor, and can use many types of fuel. It can be used for both stationary and propulsion purposes and has advantages of better fuel economy and cleaner exhaust than internal combustion engines. The engine is shown being road tested at Langley Air Force Base.

**CASI**

**Engine Tests: Stirling Engines**

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

199400310086 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 telerobotics technology, specifically teleoperation with the aid of a computer.

**CASI**

Teleoperators; Telerobotics

20000032743 NASA Kennedy Space Center, Cocoa Beach, FL USA

**STS–36 : Turbo Pump Deinstalled and Being Inspected**

Feb. 07, 1990; In English; Videotape: 2 min. 42 sec. playing time, in color, no sound except background noise

Report No.(s): NONP–NASA–VT–2000043338; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

STS-36 was the sixth shuttle mission dedicated to the Department of Defense. The mission was launched onboard the shuttle Atlantis, on Feb 28, 1990. This videotape opens with shots of the shuttle on the launch pad and shows the removal of a turbo pump, and visual and internal inspection of the pump.

**CASI**

Inspection; Turbine Pumps; Space Shuttle Orbiters

20000034085 NASA Johnson Space Center, Houston, TX USA

**STS–36: Hydrogen Turbo Pump Removal Prep**

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

### QUALITY ASSURANCE AND RELIABILITY

Includes approaches to, and methods for reliability analysis and control, inspection, maintainability, and standardization.

19940010847 NASA Marshall Space Flight Center, Huntsville, AL, USA

**IG nuts and bolts**

Jul 1, 1988; In English; 13 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–93–190450; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video highlights the NASA centers and their activities. Additionally, the commitment of the NASA centers to quality assurance is presented.

**CASI**

NASA Programs: Quality Control

199400292165 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

### 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.

19940027333 NASA Lewis Research Center, Cleveland, OH, USA

**Futurepath 3**

Oct 1, 1989; In English; 28 min. 55 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–94–9962; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The story of research and technology at NASA Lewis Research Center’s Structures Division is presented. The job and designs of the Structures Division needed for flight propulsion is described including structural mechanics, structural dynamics, fatigue, and fracture. The video briefly explains why properties of metals used in structural mechanics need to be tested. Examples of tests and simulations used in structural dynamics (bodies in motion) are briefly described. Destructive and non-destructive fatigue/fracture analysis is also described. The arc sprayed monotape (a composite material) is explained, as are the programs in which monotape plays a roll. Finally, the National Aero-Space Plane (NASP or x-30) is introduced, including the material development and metal matrix as well as how NASP will reduce costs for NASA.

**CASI**

Aerospace Planes: Dynamic Structural Analysis; National Aerospace Plane Program; Propulsion System Configurations; Propulsion System Performance

### 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 05 Instrumentation and Photography.

19940010722 NASA, Washington, DC, USA

**Views from space**

Feb 1, 1990; In English; 3 min. 25 sec. playing time, in color, with sound

Report No.(s): 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

19940010824 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
This videotape shows the use of remote sensing to better target mosquito larvae for more effective control.

CASI
Insects: Parasitic Diseases; Remote Sensing

1994010837 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

1994010861 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

1994010936 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

1994010955 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

1994029242 NASA John C. Stennis Space Center, Bay Saint Louis, MS, USA
EOCAP: Commercial Earth observations program
Jan 1, 1994; In English: 8 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–94–12926; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
The Earth Observations Commercial Applications Program (EOCAP) is described. This video explains how EOCAP has aided in the development of new and commercial products.
CASI
Earth Observations (From Space); Earth Observing System (EOS); Earth Resources; Resources Management

19960425967 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, Bahrain, Kuwait, Qatar and the United Arab Emirates), northeastern Africa (Yemen, Oman, Ethiopia, Somalia, and Djibouti), Russia, Siberia, India, Sri Lanka, Tibet, Blalstan, 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

19960825968 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

19960825969 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
44 ENERGY PRODUCTION AND CONVERSION

Includes specific energy conversion systems, e.g., fuel cells, and solar, geothermal, windpower, and wave-energy conversion systems; energy storage; and traditional power generation. For technologies related to nuclear energy production see F3 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.

19940809129 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

199408010765 NASA, Washington, DC, USA

Mars look-alike
Oct 1, 1987; In English; 4 min. 7 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190465; No Copyright; Avail: CASI; 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

199408016816 NASA, Washington, DC, USA

Saving Yellowstone
Nov 1, 1988; In English; 3 min. 46 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190394; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This videotape explains how NASA participated in combating the devastating fires that consumed parts of Yellowstone National Park.

CASI
Forest Fires: Technology Utilization; Yellowstone National Park (ID-MT-WY)

199408016817 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


Feb 1, 1989; In English; 41 min. playing time, in color, with sound

Report No(s): NONP–NASA–VT–93–190253; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, 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; Ozoneosphere; 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, 1989; In English; 4 min. 35 sec. playing time, in color, with sound

Report No(s): NONP–NASA–VT–93–190412; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Recent research on ozone done in the Arctic region is detailed and an update on information is gained from the previous Antarctic research.

CASI

Arctic Regions: Ozone Depletion

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

19940114487 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


19940114542 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–94–199222; 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

19940129645 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–94–19928; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Ozone research done in the Antarctic region is detailed.

CASI

Antarctic Regions: Ozone Depletion: Ozoneometry: Stratosphere

19940403697 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 greenhouse effect.

CASI

Climate Change: Earth Observing System (EOS); Remote Sensing: Synthetic Aperture Radar

19950504367 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.

DFRC

Endangered Species: Environment Protection; Mojave Desert (CA): Turtles

199508116033 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

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 50 Space Radiation.

199410109147 NASA Marshall Space Flight Center, Huntsville, AL, USA
CRRES to blaze new trails in orbit
Jul 1, 1990; In English; 2 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93-185329; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
The purpose of the Combined Release Radiation Effects Satellite in re-mapping and planning protection for future spacecraft is described.
Author (revised)
CRRES (Satellite): Radiation Protection; Spacecraft Shielding

19941010809 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

19941010800 NASA, Washington, DC, USA
Global climate study
Jul 1, 1989; In English; 3 min. 18 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93-190410; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
The Global Surface Radiation Budget Experiment, which determines if current climate models are accurate, is explained.
CASI
Climate; Earth Radiation Budget Experiment; Radiation

19950804148 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

19950804572 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

19950801656 NASA, Washington, DC, USA
Forecasting earthquakes
Jan 1, 1994; In English; 11 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–35012; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
In this video there are scenes of damage from the Northridge Earthquake and interviews with Dr. Andrea Doneslan, Geophysics at JPL, and Dr. Jim Delan, earthquake geologist from Cal. Tech. The interviews discuss earthquake forecasting by tracking changes in the earth's crust using antenna receiving signals from a series of satellites called the Global Positioning System (GPS). JPL
Earth Crust: Earthquakes; Forecasting; Geological Surveys; Global Positioning System

19950817243 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
The atmosphere below
Jan 1, 1992; In English; Its Liftoff to Learning Series; 16 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–43941; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
In this educational 'Liftoff to Learning' video series, astronauts from the STS-45 Space Shuttle Mission (Kathy Sullivan, Byron Lichtenberg, Brian Duffy, Mike Foale, David Leesmaa, Charlie Bolden, and Dirk Frinmont) 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.
CASII
Annual Variations; Carbon Dioxide; Chemical Reactions; Chlorofluorocarbons; Climate Change; Earth Atmosphere; Global Warning; Nitrogen Compounds; Ozone; Ozone Depletion; Ozonosphere

19950820174 Maryland Public Television, Owings Mills, MD, USA
Live from Antarctica: Then and now
Jan 1, 1994; In English; Sponsored by NASA; NSF; PBS K-12 Learning Services; DOE; Amoco; and Duracell Its Passport to Knowledge Special Series; 54 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–42903; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
This real-time educational video series, featuring Camille Jennings from
Maryland Public Television, includes information from Antarctic scientists and interactive discussion between the scientists and school children from both Maryland and Hawaii. This is part of a ‘Passport to Knowledge Special’ series.

In this part of the four part ‘Passport to Knowledge Special’, 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; Histories; Meteorology; Research Facilities

19950120175 Maryland Public Television, Owings Mills, MD, USA

Live from Antarctica: The coldest, windiest place on Earth
Jan 1, 1994; In English; Sponsored by NASA; NSF; PBS K-12 Learning Services; DOE; Amoco; and Duracell Its Passport to Knowledge Special Series; 1 hr, playing time, in color, with sound
Report No.(s): NONP NASA VT–95–42904; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

In this first part of a four part ‘Passport to Knowledge Special’, hosted by Camille Jennings from Maryland Public Television, children from Maryland and Texas schools had the opportunity to directly interact with and ask questions of scientists and researchers in Antarctica live. The physical characteristics of Antarctica are featured, along with their effects on the human and microbiological organisms living in the region. The reasons behind the clothing worn in the Antarctic and the importance of the meteorological station are featured. Interviews with Professor Ian Dolziel (U of Texas) and Lt. commander John Joseph, NSF (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

19950120176 Maryland Public Television, Owings Mills, MD, USA

Live from Antarctica, volume 4
Jan 1, 1994; In English; Sponsored by NASA; NSF; PBS K-12 Learning Services; DOE; Amoco; and Duracell Its Passport to Knowledge Special Series; 57 min. playing time, in color, with sound
Report No.(s): NONP NASA VT–95–42905; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

In this fourth video of a four part ‘Passport to Knowledge Special’, hosted by Camille Moody Jennings from Maryland Public Television, children from Maryland and Alaska public schools had the opportunity to directly interact with and ask questions of scientists and researchers from the Antarctica, 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; Shridar Anandakrishnan (Penn State U.), whose research includes ice plate movement of the central ice sheet and earthquakes and how they affect the sheet; and Dr. j.j. 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; Histories; Marine Meteorology; McMurdo Sound; Meteorological Balloons; Ozone Depletion; Plates (Tectonics); Topology; Weather Forecasting

47

METEOROLOGY AND CLIMATOLOGY

Includes weather observation forecasting and modification

199501205692 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 3230
Cot ten, 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): RTP0 506–41–01–01
Report No.(s): NONP–NASA–VT–92–125907; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

In this video (8 min., color, sound, VHS), animation depicts the inertial oscillation of a new mathematical model (‘vertical rotating draft’) for spinning up a single supercell storm. The oscillation consists of a long quiescent phase when the draft is large in diameter and rotates anticlockwise and a short intense phase when the draft is small and cyclonic. During the intense phase, the rotating draft resembles a supercell. The physical basis for the oscillation is depicted by tracking air parcels in the draft as they move along inertial circles (projected on a horizontal plane), where the horizontal pressure gradient is zero and the Coriolis force balances the centrifugal force. A side view of the oscillation shows that contraction and expansion are linked, respectively, to buoyantly driven compressible downdraft and updraft. An aerial view tracks the draft as it moves above the surface of the Earth and turns to the right during the intense phase. Radar echoes from a supercell storm are superimposed for comparison. The data appear to support only the intense phase. A critical experiment would measure the predominantly downward flow that theoretically occurs before the right turn in a supercell track and causes contraction and spin-up.

CASI

Atmospheric Circulation; Atmospheric Models; Computerized Simulation; Mathematical Models; Oscillations; Rotation; Thunderstorms; Vertical Air Currents

1994010753 NASA Marshall Space Flight Center, Huntsville, AL, USA

Mesoscale lightning
Apr 1, 1989; In English; 2 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190453; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video tape addresses ongoing lightning research and how data is valuable to upcoming projects.

CASI

Lightning; Mesoscale Phenomena

1994010853 NASA, Washington, DC, USA

Wind shear and heavy rain
Jul 1, 1989; In English; 2 min. 56 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190250; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This document looks at research on countering the effects of wind shear and heavy rain situations on flight stability.

CASI

Aerodynamic Stability; Aircraft Stability; Rain; Rainstorms; Wind Shear

1994010957 NASA Ames Research Center, Moffett Field, CA, USA

Venus lightning
Jul 1, 1990; In English; 3 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190442; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This document presents scenes of earth lightning with dramatic sound, views of Venus clouds rotating, and diagrams of Venusian weather.

CASI

Cloud Cover; Lightning; Thunderstorms; Venus (Planet); Venus Clouds; Weather
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.

Coastal zone color scanner: Nimbus 7

May 1, 1989; In English; 15 min. 10 sec. playing time, in color, no sound

Report No.(s): NONP NASA VT-93-190388; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This videotape is a soundless presentation showing the global ocean color for scientific purposes. The tape makes excellent B-roll for use in editing.

CASI

Coastal Zone Color Scanner: Nimbus 7 Satellite; Oceans; Water Color

Life sciences program

Jan 1, 1995; In English; 17 min. 45 sec. playing time, in color, with sound

Report No.(s): NONP NASA VT-95-46006; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This Life Science Program video examines the variety of projects that study both the physiological and psychological impacts on astronauts due to extended space missions. The hazards of space radiation and microgravity effects on the human body are described, along with these effects on plant growth, and the performance of medical procedures in space. One research technique, which is hoped to provide help for future space travel, is the study of aquarists and their life habits underwater.

CASI

Aerospace Medicine; Gravitational Effects; Gravitational Physiology; Life Sciences; Long Duration Space Flight; NASA Space Programs; Psychological Factors; Radiation Effects; Space Missions

LIFE SCIENCES (GENERAL)

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

Plant research

Apr 1, 1985; In English; 3 min. 14 sec. playing time, in color, with sound

Report No.(s): NONP NASA VT-93-190462; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video presentation addresses Stennis research on the use of plants for the purification of water and air for living in space and on Earth.

CASI

Air Purification; Plants (Botany); Water Treatment

STS-29 crew with student experiment

Feb 1, 1989; In English; 15 min. playing time, in color, with sound

Report No.(s): NONP NASA VT-93-190342; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

John Vellinger, student experimenter, and Mark Deuser, Kentucky Fried Chicken Sponsor, are shown explaining the Chicken Embryo experiment to the crew.

CASI

Chicken; Embryos; Experiment Design; Spaceborne Experiments; Students
AEROSPACE MEDICINE

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

19940101777 NASA, Washington, DC, USA

Cool suit
Feb 1, 1988; In English; 3 min. 5 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT–93–190437; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video explains how a boy born with no sweat glands now lives a relatively normal life.

CASI

Chronic Conditions: Circulatory Systems; Disease; Disorders; Medical Equipment; Suits; Sweat; Temperature Control

19940101780 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

19940101798 NASA Goddard Space Flight Center, Greenbelt, MD, USA

GSFC Fun Run
Oct 1, 1988; In English; 10 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT–93–190385; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video shows Goddard's commitment to its employees physical well-being by highlighting the Spring 1988 Goddard Fun Run.

CASI

Physical Exercise: Recreation

19940101836 NASA, Washington, DC, USA

Space adaptation
May 1, 1991; In English; 3 min. 15 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT–93–190399; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This videotape discusses space adaptation syndrome and a training simulator that may help astronauts adjust to microgravity before space flight.

CASI

Astronaut Training: Space Adaptation Syndrome; Training Simulators

19940101839 NASA, Washington, DC, USA

Laser artery repair
Apr 1, 1985; In English; 3 min. 51 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT–93–190402; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This videocassette demonstrates the capabilities of the excimer laser and the angioscope for treating heart disease.

CASI

Arteries; Excimer Lasers; Heart Diseases; Surgery

19940101895 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

Living well in space: Monitoring environment
Jul 1, 1989; In English; 9 min. 45 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT–93–190334; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video describes the Environmental Health Systems (EHS). Progress in experiments concerning water quality, toxicology, microbiology, and radiation are addressed.

CASI

Environmental Monitoring; Health; Space Habitats; Spacecraft Environments

19940101896 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

Living well in space: Ensuring crew capability
Jul 1, 1989; In English; 7 min. 45 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT–93–190355; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video describes the Exercise Countermeasure Facility (ECF). This video provides a comprehensive exercise program to allow astronauts to remain physically fit during extended stays in space. Featured are the Exercise Development Laboratory, the Exercise Physiology Laboratory, the Anthropomorphic and Biomechanical Laboratory, and the Artificial Intelligence Laboratory.

CASI

Aerospace Medicine: Astronauts: Biodynamics; Countermeasures; Exercise Physiology: Ecophysiology; Gravitational Physiology; Physical Exercise; Physical Fitness; Physiological Effects

19940101897 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

Living well in space: Clinical care challenge
Jul 1, 1989; In English; 9 min. 15 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT–93–190386; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video describes the Health Maintenance Facility (HMF). The HMF provides inflight medical care including prevention, diagnosis, and care during transport if the patient must be evacuated. A comparison to medical services found in a large hospital is used to describe the HMF's subsystems.

CASI

Aerospace Medicine: Aerospace Safety; Clinical Medicine: Health; Medical Equipment: Medical Services; Space Stations

19940101898 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-32 crew training for lower body negative pressure unit and AFE
Nov 1, 1989; In English; 13 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT–93–190272; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Astronauts Dunbar, Ivins, and Low are shown preparing for the checkouts of the Lower Body Negative Pressure (LBNP) and American Flight Echocardiograph (AFE) tests. Dunbar gets into the LBNP suit, while technicians look on. Experiments on Dunbar are conducted while other crew members and technicians record data.

CASI

Astronaut Training: Astronauts: Echocardiography; Lower Body Negative Pressure; Physiological Tests; Spacecrafts; Weightlessness Simulation

19940101894 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

Answering the space medicine challenge
Aug 1, 1988; In English; 15 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT–93–190308; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The development of the Space Station Health Maintenance Facility (HMF) is featured. The HMF will provide necessary inflight medical care, including prevention, diagnosis, treatment, and care during transport if the patient must be evacuated from Space Station.

CASI

Aerospace Medicine; Health; Space Stations; Spacecrafts
Aerospace Robots’ CASI
exposed. 

strations lbr fire FDA fire potential benefiks for thousands of operations will be the capabilities of microsurgery procedures. After completing trials and demonstration of the feasibility of live, two-way, full-bandwidth video as a method tool. 

Clinical Medicine; International Cooperation; Medical Electronics; Medical Equipment; Medical Services; Teleconferencing; Video Communication; Video Equipment

Telemedicine Spacebridge

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.

Aerospace Technology Transfer; Computer Aided Design; Medical Science; Ultrasonic Tests

Robotic Assisted Microsurgery – RAMS FY’97

Oct 1, 1997; In English; Videotape: 5 min., 13 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1999022515; 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 cu cm workspace. In 1996 a demonstration was performed to remove a microscopic particle from a simulated eyeball. In 1997, tests were performed at UCLA to compare telerobots with mechanical operations. In 5 out of 7 tests, the RAM tool performed with a significant improvement of preciseness over mechanical operation. New design features include: (1) amplidied forced feedback; (2) simultaneous slave robot instrumentation; (3) index control switch on master handle; and (4) tool control switches. Upgrades include: (1) increase in computational power; and (2) installation of hard disk memory storage device for independent operation and independent operation of forceps. In 1997 a final demonstration was performed using a telerobotics 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 demonstration for the FHA the potential benefits for thousands of operations will be exposed.

Astronauts: Education; Instructors: NASA Programs

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.

Astronaut Training: Mercury Project: Personnel Selection

Expediton 4 Crew Training Clip

Nov 15, 2001; In English; Videotape: 40 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001107428; 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, Hydraub training in Russia, International Space Station (ISS) food selection, and ISS Hab equipping and procedures in the Space Station Mockup and Test/Training Facility (SSTTF).

Man/Systems 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. 

Astronauts Thagard and Lee suit up and enter the WETF to practice training in WETF.

Extravehicular Activity; Inertial Upper Stage: Magellan Project (NASA); Microgravity: Space Shuttle Mission 61-A: Space Shuttle Payloads: Weightlessness Simulation

New prosthetic devices

May 1, 1991; In English; 3 min. 36 sec. playing time, in color, with sound
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-effect-
tors designed to meet individual needs of hand and below the elbow amputees that are more efficient than the traditional hook.

Author

End Effectors; Prosthetic Devices; Robotics

19940010142 NASA, Washington, DC, USA

Recycling in Space

May 1, 1991; In English; 3 min. 11 sec. playing time, in color, with sound
Report No(s): NONP-NASA--VT-93-185325; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

NASA's effort to provide a completely enclosed life support system that offers food and recycled air, water, and waste for long-duration space travel or settlements is explained.

Author

Closed Ecological Systems; Environmental Engineering; Long Duration Space Flight; Recycling

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-93-190285; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Footage showing astronauts Lounge and Hoffman donning EVA suits while astronaut Durrance watches is presented. The footage also shows Lounge and Hoffman working on an ASTRO-I mockup in the WETF.

Author (revised)

Astro Missions (STS); Astronaut Training; Extravehicular Activity; Payloads; Spacecrafts; 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; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video tape shows astronauts Hoffman, Gardner, and Lounge donning the Extravehicular Mobility Unit (EMU) and performing checks on the system.

CASI

Astronaut Training; Extravehicular Activity; Extravehicular Mobility Units

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; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Several aspects of crew training are shown including bailout exercises from the CCT and in the Weightless Environment Training Facility.

CASI

Astronaut Training; Bailout; Egress; Weightlessness Simulation

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; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Mark Brown is shown during ASCan training programs including parachute and classroom instruction.

CASI

Astronaut Training; Astronauts

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; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This videotape examines NASA research regarding the growing of plants for food during long-duration space travel. The primary focus is on the Controlled Ecological Life Support System (CELLS).

CASI

Consumables (Spacecrew Supplies); Food Production (In Space); Long Duration Space Flight

19940010813 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-93-190302; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This videotape shows how Navajo Indians are involved in making the spacesuits of the future.

CASI

American Indians; Space Suits

19940010830 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-30 EVA prep in CCT: Grabe, Lee, and Thagard

Apr 1, 1989; In English; 5 min. playing time, in color, with sound
Report No(s): NONP-NASA--VT-93-190370; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Astronauts Grabe, Thagard, and Lee practice donning extravehicular activity (EVA) suit while in the CCT.

CASI

Astronaut Training; Space Shuttle Missions; Space Suits

19940010832 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS-30 pre-launch and post-landing egress

Mar 1, 1989; In English; 18 min. 10 sec. playing time, in color, with sound
Report No(s): NONP-NASA--VT-93-190372; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

This video shows crew emergency egress training. It includes practice after being hoisted to the ceiling and descending a rope.

CASI

Astronaut Training; Crew Procedures (Inflight); Crew Procedures (Preflight); Egress; Space Shuttles

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; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video shows Astronaut Ross donning an EVA suit and performing various tasks on the Crew and Equipment Translation Aid (CETA) equipment.

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-93-190261; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The Space Shuttle crew is shown looking through equipment they will carry into orbit, including clothing, personal effects, and camera.

CASI

Space Shuttle Orbiters; Spacecrafts

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; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
This video shows crews practicing bailout procedures in the CCT.

**Astronaut Training: Bailout; Space Shuttle Missions**

199401010888 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-34 Chang-Diaz and E. Baker during Galileo contingency training in WETF
Sep 1, 1989; In English; 16 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190263; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Chang-Diaz and Baker are shown donning suits for submersion in the Weightless Environment Training Facility (WETF). Once in the water, they work on the Galileo mockup.

**Astronaut Training: Crew Procedures (Inflight); Weightlessness Simulation**

199401010889 NASA, Washington, DC, USA
Firefighters breathing system
Apr 1, 1989; In English; 2 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190409; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The improvement of protective gear for fire fighters is presented, including the breathing system.

**Astronaut Training; Astronauts**

199401010898 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
International food research project
Oct 1, 1989; In English; 5 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190337; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Dr. Selma Ahmed, an associate professor of Human Nutrition, explains the purpose of the international Food Research Project to food tasters.

**Astronaut Training; Astronauts; Food**

199401010902 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-29 EVA prep in FFT
Jan 1, 1989; In English; 11 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190341; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Astronauts Blaha, Springer, and Bagian are shown donning suits in the FFT. Blaha runs through checklists while the other two suit up in the airlock.

**Astronaut Training; Extravehicular Activity**

199401010904 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-32 LDEF EVA training in WETF with Low and Dunbar
Nov 1, 1989; In English; 14 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190270; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Astronauts Low and Dunbar are shown entering the Weightless Environment Training Facility to perform tasks they might be called on to do if extravehicular activity were required during their mission to retrieve the Long Duration Exposure Facility.

**Astronaut Training; Extravehicular Activity; Long Duration Exposure Facility; Payload Retrieval (STS); Spacecrews; Weightlessness Simulation**

199401010909 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-29 crew food tasting in building 45
Jan 1, 1989; In English; 3 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190345; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The crew is shown tasting food that will be served on the Space Shuttle.

**Astronaut Training; Astronauts**

199401010910 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-32 bailout training in WETF
Dec 1, 1989; In English; 13 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190273; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The crew is shown practicing water survival techniques in the Weightless Environment Training Facility in case of a bailout during the launch or landing.

**Astronaut Training; Bailout; Marine Environments; Protective Clothing**

199401010912 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-29 crew bailout in WETF
Feb 1, 1989; In English; 7 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190346; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The crew is shown practicing water survival techniques in the Weightless Environment Training Facility in case of a bailout during the launch or landing.

**Astronaut Training; Bailout; Marine Environments; Protective Clothing; Spacecrews; Survival; Vests; Water**

199401010914 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-28 Adamson and Brown EMU walk through
Jul 1, 1989; In English; 10 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190347; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Astronauts Adamson and Brown are shown working on EMU suit, donning EVA gear, and entering vacuum chamber.

**Astronaut Training; Astronauts; Extravehicular Activity**

199401010915 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS-33 emergency egress training
Nov 1, 1989; In English; 15 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190322; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video tape shows astronaut candidates training at Fairchild AFB with signal flares, setting up tents, making fires, fishing, and signaling a helicopter with mirrors and radios.

**Astronaut Training; Survival**

199401010917 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
1990 ASCAN land survival training
Feb 1, 1991; In English; 32 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190324; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

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.

**Astronaut Training; Bailout; Egress**

199401010918 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
1990 ASCAN ground egress/parasail
Feb 1, 1991; In English; 32 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190325; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
This video tape shows astronaut candidates practicing ground egress and parachute landing procedures.

\textit{Astronaut Training: Egress; Parachute Descent}

19940410919 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

\textbf{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–93–190028; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video tape shows the Shuttle hatch jettison test at Rockwell facilities. The video also shows a Shuttle escape pole deployment test from a NASA aircraft, and an emergency egress test performed by a volunteer Navy parachutist using the pole and a parachute escape system.

\textit{Astronaut Training: Astronauts; Extravehicular Mobility Units; Spacecrews}

19940410928 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

\textbf{STS-27 EMU and RMS contingency training}

Dec 1, 1988; In English; 23 min. playing time, in color, with sound

Report No(s): NONP-NASA-VT–93–190348; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

This video shows astronauts donning their EMU suits and Astronauts Shepard and Ross training in the WETF on the RMS, which will not come down.

\textit{Astronaut Training: Astronauts; Extravehicular Activity; Spacecraft Equipment}

19940410929 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

\textbf{STS-33 Carter and Thornton during WETF activities}

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

Report No(s): NONP-NASA-VT–93–190268; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Astronauts Carter and Thornton are shown suiting up for work in the WETF (Weightless Environment Training Facility). The payload mockup shown is not related to the STS-33 mission. It is a mockup of the Upper Atmosphere Research Satellite (UARS), which is scheduled to fly in the early 1990s.

\textit{Astronaut Training: Astronauts; Space Flight Training; Spacecrews; Weightlessness Simulation}

19940410931 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

\textbf{STS-27 crew post-insertion deorbit-prep in CCT}

Nov 1, 1988; In English; 14 min. playing time, in color, with sound

Report No(s): NONP-NASA-VT–93–190350; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The crew is shown donning harness backpacks and suits for post-insertion activities in the CCT. Once on the CCT middeck, astronauts take off suits and practice stowing seats.

\textit{Astronauts; Space Shuttle Missions; Space Transportation System Flights; Spacecrews}

19940410933 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

\textbf{STS-27 crew fire training and glove molding}

Nov 1, 1988; In English; 14 min. 30 sec. playing time, in color, with sound

Report No(s): NONP-NASA-VT–93–190352; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

The crew is shown during fire training exercises and space suit glove molding.

\textit{Astronaut Training; Casting; Fire Fighting; Fires; Gloves; Space Suits; Spacecrews}

19940410962 NASA, Washington, DC, USA

\textbf{Food for space}

Jan 1, 1988; In English; 3 min. 20 sec. playing time, in color, with sound

Report No(s): NONP-NASA-VT–93–190466; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video explores the food preparation and selection over the years of space flight.

\textit{Astronaut Training; Space Suits; Weightlessness Simulation}

19940410968 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

\textbf{STS–38 crew training: Habitation equipment procedures, bailout in CCT, 70mm photo class, eva prep and post, and firefighting}

Jul 1, 1990; In English; 20 min. playing time, in color, with sound

Report No(s): NONP-NASA-VT–93–190291; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS

Several aspects of crew training are shown, including habitation equipment procedures and bailout procedures (both in CCT), 70mm photo class, EVA prep and post, and firefighting.

\textit{Astronaut Training; Parachutes; T-38 Aircraft}

19940410987 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

\textbf{STS–37 astronauts Ross and Apt during CETA hardware checkout}

Mar 1, 1990; In English; 7 min. 15 sec. playing time, in color, with sound

Report No(s): NONP-NASA-VT–93–190293; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Astronauts Ross and Apt are shown checking out Crew and Equipment Translation Aid (CETA) equipment.

\textit{Astronaut Maneuvering Equipment; Checkout; Extravehicular Activity; Space Station Structures; Space Technology Experiments; Space Tools}

19940410989 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

\textbf{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.

\textit{Astronaut Training; Extravehicular Activity; Space Flight Training; Space Shuttle Missions; Space Suits; Space Transportation System Flights; Spacecraft Equipment; Spacecrews}

19940410997 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

\textbf{STS–26 crew clothing, glove molding, and personal hygiene}

Jul 1, 1988; In English; 19 min. 41 sec. playing time, in color, with sound

Report No(s): NONP-NASA-VT–93–190317; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
This videotape shows the crew during various phases of flight clothing fit checks, space suit glove molding, and selection of personal hygienes articles for use onboard the Shuttle.
CASI
Space Suits; Space Transportation System Flights; Spacecrews

1994011834 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

1994011841 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Mark 111 suit test evaluation in WETF with Jerry Ross
Oct 1, 1993; In English; 7 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP-NASA—VT—93–190360; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Astronaut Jerry Ross tests the new Mark III spacesuit in the WETF. The Mark III could be used as the main spacesuit on the Space Station Freedom.
CASI
Design Analysis: Space Suits

1995016854 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—93–43939; 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 (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

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.

1994027793 NASA Ames Research Center, Moffett Field, CA, USA
The quest for contact
Feb 1, 1992; In English; 32 min. playing time, in color, with sound
Report No.(s): NONP-NASA—VT—94–99779; 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 radiotelescopes 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 radiotelescopes that will be trained on over 800 stars.
CASI
Deep Space Network; Extraterrestrial Intelligence; Project Seti; Radio Telescopes

1994027783 NASA Ames Research Center, Moffett Field, CA, USA
The quest for contact
Feb 1, 1992; In English; 32 min. playing time, in color, with sound
Report No.(s): NONP-NASA—VT—94–99778; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
This video details the history and current efforts of NASA's Search for Extraterrestrial Intelligence program. The video explains the use of radiotelescopes 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 radiotelescopes that will be trained on over 800 stars.
CASI
Deep Space Network; Extraterrestrial Intelligence; Project Seti; Radio Telescopes

19951029212 NASA Johnson Space Center, Houston, TX USA
ASCAN Training: Land Survival
Jan 01, 1995; In English; Videotape: 61 min. 28 sec. playing time, in color, with sound; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
Footage shows astronaut candidates during land survival training, where they are seen performing such activities as constructing shelters, making nets, and finding food.
CASI
Astronaut Training: Survival

19951029214 NASA Johnson Space Center, Houston, TX USA
ASCAN Training: Egress and Parachute Training
Jan 01, 1995; In English; Videotape: 49 min. 52 sec. playing time, in color, with sound
Report No.(s): NONP-NASA—VT—2001041439; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS
Footage shows astronaut candidates during emergency egress and parachute training, performing such activities as practicing seat ejection procedures, power line landing, and parachute landing and release.
CASI
Astronaut Training: Egress; Parachute Descent

2001089253 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
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.

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

Cray Y-MP
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

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 aerial digital data. This video shows the TAGS in operation.

CASI
Analog Data; Character Recognition; Computer Graphics; Digital Data

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, waterflow around a submarine, and fuel flow inside of the Space Shuttle's engines. The video also details the Cray 2's use in calculating airflow around the Shuttle and its external rockets during liftoff for the first time and in the development of the National Aero Space Plane.

CASI
Computerized Simulation; Cray Computers; Research Facilities; Supercomputers

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.

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

EM-ANIMATE: A computer program for displaying and animating electromagnetic near-field and surface-current solutions
Dec 1, 1991; In English; 3 min. 32 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-94-23148; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video presentation discusses how virtual reality enables scientists to "explore" other worlds without leaving the laboratory. The applicability of virtual reality for scientific visualization is also discussed.

CASI
Computerized Simulation; Virtual Reality

Telepresence media resource tape
Jan 31, 1992; In English; Sponsored by NASA, Washington; 9 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-95-57872; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Dr. Michael McGreevey (NASA's Ames Research Center) explains what virtual reality is and how NASA uses this concept. Computer animation of different planets using virtual reality is shown. One Ames research tool, the Virtual Wind Tunnel allows 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

199608128547 NASA Johnson Space Center, Houston, TX USA Images of Earth and Space: The Role of Visualization in NASA Science Mar. 06, 1996; In English; Videotape: 17 min. 14 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT-96-1996060600; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Fly through the ocean at breakneck speed. Tour the moon. Even swim safely in the boiling sun. You can do these things and more in a 17 minute virtual journey through Earth and space. The trek is by way of colorful scientific visualizations developed by the NASA/Goddard Space Flight Center’s Scientific Visualization Studio and the NASA HPCC Earth and Space Science Project investigators. Various styles of electronic music and lay-level narration provide the accompaniment.

CASI

Scientific Visualization: Computational Fluid Dynamics; Computerized Simulation: Education

63

CYBERNETICS, ARTIFICIAL INTELLIGENCE AND ROBOTICS

Includes feedback and control theory, information theory, machine learning, and expert systems. For related information see also 54 Man/System Technology and Life Support.

199404110402 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-93-19903095; 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 Judy, 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.

199609010140 California Inst. of Tech., Irvine, CA, USA The story of pi Apostol, Tom M., editor, California Inst. of Tech., USA; Jan 1, 1989; In English; Sponsored by NASA, Washington and NSF Its Project Mathematics Series; 26 min. 13 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT-95-680010; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The early history and the uses of the mathematical notation - pi - are presented through both film footage and computer animation in this "Project Mathematics" series video. Pi comes from the first letter in the Greek word for perimeter. Archimedes, and early Greek mathematician, formulated the equations for the computation of a circle’s area using pi and was the first person to seriously approximate pi numerically, although only to a few decimal places. By 1985, pi had been approximated to over one billion decimal places and was found to have no repeating pattern. One use of pi is the application of its approximation calculation as an analytical tool for determining the accuracy of supercomputers and software designs.

CASI

Applications of Mathematics; Computation; Computer Animation; Histories

199608011064 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-95-674710; 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; subtraction formulas; and a application to simple harmonic motion. A brief history of the city Alexandria, its mathematicians, and their contribution to the field of mathematics is shown.

Author

Angles (Geometry): Cosine Series; Simple Harmonic Motion; Sine Series; Theorems; Trigonometry

199608010165 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-95-674711; 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

199608010166 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-95-674712; 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

199608010167 California Inst. of Tech., Irvine, CA, USA Similarity Apostol, Tom M., editor, California Inst. of Tech., USA; Jan 1, 1990; In English; Sponsored by NASA, Washington and NSF Its Project Mathematics Series; 29 min. 27 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT-95-674743; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

In this "Project Mathematics" series, sponsored by the California Institute for Technology (CalTech), the mathematical concept of similarity is presented. The history of and real life applications are discussed using actual film footage and computer animation. Terms used and various concepts of size, shape, ratio, area,
and volume are demonstrated. The similarity of polygons, solids, congruent triangles, internal ratios, perimeters, and line segments using the previous mentioned concepts are shown.

Author

Polygons: Shapes; Similarity Theorem: Solids; Triangles

1996/001/068 California Inst. of Tech., Irvine, CA, USA

Polynomials

Apostol, Tom M., editor, California Inst. of Tech., USA; Jan 1, 1995; In English; Sponsored by NASA, Washington and NSF Its Project Mathematics Series; 27 min. 40 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–95–67474; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

In this 'Project Mathematics' series, sponsored by California Institute for Technology (CalTech), the mathematical concept of polynomials in rectangular coordinate (x, y) systems are explored. Some film footage of real life applications and computer animation sequences, the history of, the application of, and the different linear coordinate systems for quadratic, cubic, intersecting, and higher degree of polynomials are discussed.

Author

Cartesian Coordinates; Computer Animation; Linear Systems; Polynomials

1996/00/1069 California Inst. of Tech., Irvine, CA, USA

Discovering the Theorem of Pythagoras

Lattanzio, Robert, editor, California Inst. of Tech., USA; Jan 1, 1988; In English; Sponsored by NASA, Washington, Association for Computing Machinery's Special Interest Group on Computer Graphics, and the Educational Foundation of America Its Project Mathematics Series; 26 min. 20 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–95–67475; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

In this 'Project Mathematics' series, sponsored by the California Institute of Technology, Pythagoras' theorem a² + b² = c² is discussed and the history behind this theorem is explained. Through live film footage and computer animation, applications in real life are presented and the significance of and uses for this theorem are put into practice.

Author

Applications of Mathematics; Computer Animation; Theorems

1996/00/1070 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 Pythagoreion (named after the famed Greek mathematician, Pythagoras, who lived there), on one of the Greek islands. This tunnel was constructed around 600 BC by King Samos and was built under a nearby mountain. Through film footage and computer animation, the mathematical principles and concepts of why and how this aqueduct tunnel was built are explained.

Author

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

66

SYSTEMS ANALYSIS AND OPERATIONS RESEARCH

Includes mathematical modeling of systems; network analysis; mathematical programming; decision theory; and game theory.

1996/000/2770 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 video shows tests of the FIDO rover in the Mojave Desert. These tests include driving through rock and movement of the rover. Also included in this tape are interviews with Dr. Raymond Arvidson, the test director for FIDO, and Dr. Eric Baumgartner, Robotics Engineer at the Jet Propulsion Laboratory.

CASI

Mars Sample Return Missions; Prototypes; Roving Vehicles; Robotics: Research Vehicles; Mars (Planet); Mars Exploration; Mars Surface

70

PHYSICS (GENERAL)

Includes general research topics related to mechanics, kinetics, magnetism, and electromagnetics. 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.

1995/00/10653 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

This video presentation addresses space research supporting the development of longer lasting, lighter weight, and more powerful magnets.

CASI

Directional Solidification (Crystals); Furnaces; Magnets

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.

1995/00/29873 NASA Lewis Research Center, Cleveland, OH, USA

Flying on the ground

Jan 1, 1991; In English; 11 min. 52 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–94–12953; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video details research being conducted at LeRC on aircraft acoustics and the impact of aircraft noise on communities and passengers. The video
describes LeRC researchers utilization of a laser Doppler velocimeter to study aircraft and the development of the Advanced Ducted Propeller.

CASI
Aeroacoustics; Aircraft Noise; Noise Pollution; Shrouded Propellers

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

19940129214 NASA Marshall Space Flight Center, Huntsville, AL, USA

Rotating unbalanced mass proof—of—concept
Jan 1, 1993; In English; 7 min. playing time, in color, with sound
Report No.(s): NONP—NASA—VT—94–12942; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The video describes the Rotating Unbalanced Mass. The Rotating Unbalanced Mass is a device for scanning ground-based, balloon-borne, and space-based gimbaled payloads, as well as free-flying spacecraft. This device offers advantages over other methods of scanning—especially large payload scanning at high frequencies—such as reduced system power and mass, improved system stability and reliability, and better scan accuracy.

CASI
Control Moment Gyroscopes; Payloads; Pointing Control Systems; Rotating Bodies; Scanners; Torque Motors

80
SOCIAL AND INFORMATION SCIENCES (GENERAL)
Includes general research topics related to sociology; educational programs and curricula.

19940109146 NASA John C. Stennis Space Center, Bay Saint Louis, MS, USA

Taeannutics: Sharing the dream
Apr 1, 1989; In English; 13 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP—NASA—VT—93–185328; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

A week-long teacher workshop is described. Highlights include underwater simulation training, model rocket building and launching, map reading, and survival training.

Author (revised)
Environment Simulation; Instructors

1994010757 NASA Marshall Space Flight Center, Huntsville, AL, USA

SHARP
Jan 1, 1989; In English; 7 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP—NASA—VT—93–190457; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video tape describes the benefits of NASA’s Summer High School Apprenticeship Research Program to participating students.

CASI
Education; NASA Programs

1994010759 NASA Marshall Space Flight Center, Huntsville, AL, USA

Space classroom
Nov 1, 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

1994010775 NASA, Washington, DC, USA

Enhancing sight
Feb 1, 1990; In English; 3 min. 54 sec. playing time, in color, with sound
Report No.(s): NONP—NASA—VT—93–190435; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video describes a new reading program for people with limited sight.

CASI
Blindness; Optometry; Reading; Vision; Visual Perception; Visual Tasks

1994010857 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

1994010899 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
19940014589 NASA Marshall Space Flight Center, Huntsville, AL, USA National Boy Scout Jamboree Aug 1, 1989; In English; 1 min. 57 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT-94-198214; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video looks at a NASA sponsored exhibit at the National Boy Scout Jamboree in Fredricksburg, VA. Boy Scouts are shown interacting with NASA researchers and astronauts and touring mockups of Space Station Freedom and Apollo 11. NASA's program to encourage the researchers of tomorrow is detailed. CASI Astronauts: NASA Programs; Students

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-94-99952; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video describes an educational student activity sponsored by the Challenger Center for Space Science Education and the Educational Information and Resource Center, which was held at the Lewis Research Center. Marsville was held in May 1992, involving students from schools in three counties around Cleveland. In commemoration of the International Year of Space, 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 (Planets); NASA Programs; Space Colonies

19940027301 NASA Lewis Research Center, Cleveland, OH, USA Space acceleration measurement system May 1, 1993; In English; 23 min. playing time, in color, with sound Report No.(s): NONP-NASA-VT-94-9954; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This training video, presented by the Lewis Research Center's Space Experiments Division, gives a background and detailed instructions for preparing the space acceleration measurement system (SAMS) for use. The SAMS measures, conditions, and records forces of low gravity accelerations, and is used to determine 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; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The mission and various programs administered by the Ohio Aerospace Institute, a consortium made up of 9 Ohio Universities, LeRC, and members of the Aerospace Industry are described. The video highlights the following: programs to bring aerospace research to K-12 classrooms; programs to allow graduate students access to laboratory equipment at LeRC; the creation of a statewide television network to link researchers in industry and academia; and focus groups to encourage collaboration between companies in aerospace research. CASI Aerospace Engineering: Aerospace Industry; Communication Networks; NASA Programs; Television Systems; University Program

19940027311 NASA Lewis Research Center, Cleveland, OH, USA NASA report to education, volume 9 Mar 1, 1991; In English; 26 min. 44 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT-94-9960; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This is an edition of 'NASA Report to Education' covering NASA's Educational Workshop, Lewis Research Center's T-34 and the Space Exploration Initiative. The first segment shows NASA Education Workshop program (NEWEST - NASA Educational Workshops for Elementary School Teachers). Highlights of the 14 days of intense training, lectures, fieldtrips and simple projects that the educators went through to teach the program are included. Participants are shown working on various projects such as the electromagnetic spectrum, living 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

19940029689 NASA Lewis Research Center, Cleveland, OH, USA Indianapolis CIP review Dec 1, 1988; In English; 14 min. 35 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT-94-12949; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, 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

19950004110 NASA Lewis Research Center, Cleveland, OH, USA NEWEST 1990 no. 4007 Aug 1, 1990; In English; 15 min. 35 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT-94-23173; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Twenty-two teachers go through the NASA Educational Workshops for Elementary School Teachers Program at the Lewis Research Center. LeRC Aerospace Sciences: Education: Instructors

19950004111 NASA Lewis Research Center, Cleveland, OH, USA Anton Grdina Primary Achievement Program Nov 1, 1993; In English; 29 min. 20 sec. playing time, with sound Report No.(s): NONP-NASA-VT-94-23159; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The Anton project presents a partnership between NASA Lewis, CMHA, and the Cleveland Public Schools. The intent of this project is to empower parents to work with their children in science and math activities. LeRC Education: Mathematics; Science

19950004152 NASA Lewis Research Center, Cleveland, OH, USA SHARP no. 4010, version 1 and no. 4011, version 2 Dec 1, 1990; In English; 10 min. 30 sec. playing time, in color, with sound Report No.(s): NONP-NASA-VT-94-23167; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
**ADMINISTRATION AND MANAGEMENT**

Includes management planning and research.

**NASA experiences in the Goddard MMS**

Jan 1, 1989; In English; 33 min. 20 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--93--185305; No Copyright; Available: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The GSFC connection in the multi-mission spacecraft management field is explored.

Author (revised)

*Multimission Modular Spacecraft: NASA Programs*

**Return to flight 1**

Sep 1, 1987; In English; 17 min. 21 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--93--190461; No Copyright; Available: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video tape presents a dynamic overview of the hard work and tireless efforts of NASA employees and contractors.

CASI

*NASA Programs: Research and Development*

**Fastener Design Course**

Oct 19, 1989; In English; 15 min. 5 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--93--190397; No Copyright; Available: CASI; B01, Videotape-Beta; V01, Videotape-VHS


Richard T. Barrett, Senior Aerospace Engineer of NASA Lewis Research Center presents a comprehensive course on fastener design. A recognized expert in the field of fastener technology Mr. Barrett combines lecture, charts, illustrations with real-world experiences. Topics covered include: materials, plantings and coatings, locking methods, coatings, joint stiffness, rivets, inserts, nut plates, thread lubricants, design criteria, etc. A workbook accompanies the videotape.

Author

*Fasteners: Design Analysis*

**Return to flight 2, the journey continues**

Feb 1, 1989; In English; 15 min. 17 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--93--190449; No Copyright; Available: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This videotape presents a dynamic overview of the hard work and tireless efforts of NASA employees and contractors.

CASI

*NASA Programs: Personnel*

**The second giant leap**

Jan 1, 1991; In English; 15 min. 5 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--93--190355; No Copyright; Available: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video describes the purpose and activities of the Office of Space Commercialization at LeRC. The office promotes interactions between industry and NASA researchers, and promotes the benefits of microgravity research. Examples of knowledge transfer in the production of airplanes and farm equipment are shown.

CASI

*Government/Industry Relations: Microgravity: Space Commercialization*

**Return to flight 3**

Mar 1990; In English; 15 min. 5 sec. playing time, in color, with sound

Report No.(s): NONP--NASA--VT--93--190439; No Copyright; Available: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video introduces the Industrial Space Flight (ISF) program and describes its development, history, and current status.

CASI

*NASA Programs: Research and Development*
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

The highlights of the 1992 Malcolm Baldrige National Quality Award winners - AT and T Network Systems Group, Transmission Systems Business Unit; Texas Instrument Defense Systems and Electronics Group; AT and T Universal Card Services; The Ritz Hotel CO; and The Granite Rock Company are presented, along with brief information about the company and their beliefs and business and production strategies for quality manufacturing and products. Author (revised)

Error Analysis; Mechanical Engineering; Metrology; Software Development Tools; Software Engineering; Units of Measurement

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.

Aerospace Industry; Management Planning; NASA Programs; Personnel Management; Technological Forecasting; Trends

The press asks questions about the findings and recommendations. The research into the advancement of software error compensation techniques 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)

NASA's challenges, accomplishments, and goals are described in this video. Historical footage of man's first lunar walk are shown and there are brief descriptions covering several of NASA's major projects, such as: Skylab; Viking Voyager; Coby; and the 1990 Hubble Space Telescope.

Awards: NASA Programs; Research Projects; Technology Assessment

On March 26, 1987, after the launch of an Atlas/Centaur rocket with a payload of a Navy Communications Satellite, a problem developed and the rocket was lost. John Busse chaired the Accident Investigation Board that was convened to investigate the incident. This videotape is a press conference with Mr. Busse, who reviews the findings of the investigation concerning the loss of the Atlas/Centaur-67 launch vehicle. The press then asks questions about the findings and recommendations.

A/C 67 Investigation Board Final Report

NASA's achievements, accomplishments, and goals are described in this video. Historical footage of man's first lunar walk are shown and there are brief descriptions covering several of NASA's major projects, such as: Skylab; Viking Voyager; Coby; and the 1990 Hubble Space Telescope.

Awards: NASA Programs; Research Projects; Technology Assessment

This video presentation explains how NASA shares its several trillion bits
of raw science and engineering data with universities who help NASA analyze and distribute that data.

CASI
NASA Programs: University Program

199409010778 NASA, Washington, DC, USA
Monitoring history
Jun 1, 1987; In English; 3 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-190438; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

Deep space technology is applied to help monitor the aging process of the retrieved documents in the National Archives.
CASI
Aerospace Technology Transfer; Aging (Materials); Documents; Records; Records Management; Technology Utilization

199409010827 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.
CASI
Computer Graphics; Space Shuttle Missions

199409011047 NASA, Washington, DC, USA
Medical imaging
Jun 1, 1986; In English; 3 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-190473; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video shows how satellite data processing techniques (multispectral scanning) can improve disease detection and treatment.
CASI
Diagonosis; Diseases; Imaging Techniques; Medical Equipment; Multispectral Band Scanners; Scanning; Technology Transfer

199409011050 NASA John C. Stennis Space Center, Bay Saint Louis, MS, USA
Coast encounters: A space age adventure in science literacy
Apr 1, 1989; In English; 6 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-190475; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS

This video recaps the NASA Community Involvement Program for education held on the Mississippi Gulf Coast, April 1989.
CASI
Aerospace Sciences: Education; NASA Programs

19950904161 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 worldwide access to aerospace-related scientific and technical information. A key element of the program is a massive online database of more than three million citations to technical reports and journal literature, acquired, processed and disseminated by the NASA STI Program.
CASI
Data Bases; Information Management

19950902788 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-95-40120; 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.
CASI
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; CENDI Workshop, 16 Apr. 1997, Bethesda, MD, USA;
Videotape: 5 hrs. 51 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-1998099466; No Copyright; Avail: CASI;
B06, Videotape-VHS; B06, Videotape-VHS; B06, Videotape-VHS

The main mission of the CENDI Cataloging Working Group is to provide guidelines for cataloging practices that support the sharing of database records among the CENDI agencies, and that incorporate principles based on cost effectiveness and efficiency. Recent efforts include the expansion of COSATI Guidelines for the Cataloging of Technical Reports to include non-print materials, and the mapping of each agency’s export file structure to USMARC. Of primary importance is the impact of electronic documents and the distributed nature of the networked information environment. Topics discussed during the workshop include the following: Trade-offs in Cataloging and Indexing Internet Information; The Impact on Current and Future Standards; A Look at WWW Metadata Initiatives; Standards for Electronic Journals; The Present and Future Search Engines; The Roles for Text Analysis Software; Advanced Search Engine Meets Metathesaurus; Locator Schemes for Internet Resources; Identifying and Cataloging Web Document Types; In Search of a New Bibliographic Record. The videos in this set include viewgraphs of charts and related materials of the workshop.
CASI
Catalogs (Publications); Bibliographies; Cost Effectiveness; Data Management; Data Bases; Indexes (Documentation); Internets; Text

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.

19940901776 NASA, Washington, DC, USA
From space to Earth
Jun 1, 1987; In English; 3 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-93-190436; No Copyright; 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.
CASI
Aerospace Technology Transfer; Industries; NASA Programs; Technology Transfer; Technology Utilization
This video presentation introduces the Hubble Space Telescope, Gamma Ray Observatory, Advanced X-ray Astrophysics Facility (AXAF), and the Shuttle Infrared Telescope Facility (SIRTF).

Author
Astronomical Observatories: Gamma Ray Observatory; Hubble Space Telescope; Space Infrared Telescope Facility; Spaceborne Telescopes; X Ray Astrophysics Facility

This video describes the work at the Lure observatory (Hawaii) in the area of Lunar ranging. This work uses laser technology to range the moon with an accuracy of one inch.

CASI Laser Applications; Laser Range Finders; Lunar Rangefinding; Observatories
19940118949 NASA Goddard Space Flight Center, Greenbelt, MD, USA NASA's Hubble Space Telescope: The challenge and complexity of operations. Jan 1, 1989; In English; 16 min. 5 sec. playing time, in color, with sound. Report No.(s): NONP-NASA-VT-93-190375; No Copyright; Avail: CASI; B02, Videotape-Beta: V02, Videotape-VHS.

This video presentation touches on the truly vast complexity of the first of NASA's great observatories, the Hubble Space Telescope. CASI

Hubble Space Telescope: NASA Programs

1994014599 NASA, Washington, DC, USA Hubble Space Telescope. Feb 1, 1990; In English; 2 min. 28 sec. playing time, in color, with sound. Report No.(s): NONP-NASA-VT-94-198206; No Copyright; Avail: CASI; B01, Videotape-Beta: V01, Videotape-VHS.

An overview of the mission of the Hubble Space Telescope, a joint project between NASA and the European Space Agency which will be used to study deep space, as well as our solar system is presented. The video contains animations depicting the Hubble Space Telescope in orbit, as well as footage of scientists at the Space Telescope Science Institute making real time observations. The images Hubble acquires will be downloaded into a database that contains images of over 19,000,000 celestial objects called the Star Catalog.

CASI

Hubble Space Telescope: Space Observations (From Earth)

19950004333 NASA Goddard Space Flight Center, Greenbelt, MD, USA B00XRT clip: The Broad Band X-ray Telescope. May 1, 1990; In English; 18 min. playing time. Report No.(s): NONP-NASA-VT-94-23137; No Copyright; Avail: CASI; B02, Videotape-Beta: V02, Videotape-VHS.

This video recording explains the science mission of the Broad Band X-ray Telescope on board the Space Shuttle Columbia, December 1990. This tape was produced before launch.

GSPC

Broadband: Space Shuttle Missions: X Ray Telescopes

19950022751 Tokyo Univ., Inst. for Space and Astronomical Science., Japan Yohkoh Soft X-ray Telescope. Apr 21, 1992; In English; Sponsored by NASA, Washington; 6 min. playing time, in color, with sound. Report No.(s): NONP--NASA--VT--95-46000; No Copyright; Avail: CASI; B01, Videotape-Beta: V01, Videotape-VHS.

This video describes the Soft X-Ray Telescope (SXT), Yohkoh. This is a cooperative program between NASA and the Institute for Space and Astronomical Science of Japan. Images of the Sun's rotation were obtained with the SXT.

CASI

International Cooperation: Japanese Space Program; NASA Space Programs; Universities: X Ray Astronomy; X Ray Telescopes

19950023896 NASA, Washington, DC, USA Space astronomy update. Jun 6, 1995; In English; 38 min. playing time, in color, with sound. Report No.(s): NONP--NASA--VT--95-56622; No Copyright; Avail: CASI; B03, Videotape-Beta: V03, Videotape-VHS.

A discussion of the images obtained by NASA's Hubble Space Telescope (HST) is featured on this video. The discussion panel consists of Dr. Jeff Hester (Arizona State Univ.), Dr. Jon Morse (Space Telescope Science Inst.), Dr. Chris Burrows (European Space Agency), Dr. Bruce Margon (Univ. of Washington), and host Don Savage (Goddard Space Flight Center). A variety of graphics and explanations are provided for the images of star formations and other astronomical features that were viewed by the HST.

Author

Astronomical Photography; Celestial Bodies; Hubble Space Telescope; Spaceborne Astronomy; Star Formation; Ultraviolet Astronomy; Ultraviolet Spectra

19950024678 Interface, Inc., Fort Collins, CO, USA NASA space astronomy update 6. Oct 1, 1992; In English; 6 min. 30 sec. playing time, in color, with sound. Report No.(s): NONP-NASA-VT-95-46007; No Copyright; 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.

CASI

Extreme Ultraviolet Explorer Satellite: NASA Space Programs: Spaceborne Astronomy: Ultraviolet Astronomy; Ultraviolet Telescopes

19970936208 NASA Johnson Space Center, Houston, TX USA Best of Hubble Space Telescope. Feb 18, 1997; In English; Videotape: 90 min. playing time, in color, with sound. Report No.(s): NONP-NASA-VT-1997077165; No Copyright; Avail: CASI; B04, Videotape-Beta: V04, Videotape-VHS.

This video presents a chronological account of the Hubble Space Telescope. Using animation, movies, and stills it documents the design, development, launch, and repair mission to correct its optics. The second part of this video concentrates on the successes of Hubble. Included are the study of Galaxy Clusters, Black Holes, Jupiter animation, and Nebulas.

CASI

Hubble Space Telescope: Galactic Clusters: Nebulae; Jupiter (Planet); Star Clusters; Spaceborne Astronomy

19970936313 NASA Johnson Space Center, Houston, TX USA Hubble Images from 1996. Jun 28, 1997; In English; Videotape: 14 min. 33 sec. playing time, in color, with sound. Report No.(s): NONP-NASA-VT-1997062306; 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 7223; Gaseous Knots, Animation of the Formation of the Helix Nebula, Crab Nebula, Jupiter Aurora Movie, Birth of a Quasar, Merging Galaxies, and Spiral Galaxies.

CASI

Hubble Space Telescope: Crab Nebula; Spiral Galaxies; Quasars; Space Exploration

2000006441 NASA Kennedy Space Center, Cocoa Beach, FL USA Ulysses News Conference. Oct 26, 1995; In English; Videotape: 48 min. 10 sec playing time, in color, with sound. Report No.(s): NONP--NASA--VT--199926989; 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 Maram, NASA/Goddard Space Flight Center, and panel members include Dr. Richard Marsden, ESA (European Space Agency) Project Scientist, Dr. Edward J. Smith, JPL/NASA Project Scientist, Dr. Antonine Galvin, University of Maryland College Park, Dr. Randy Jokipii, University of Arizona, and Dr. John Phillips, Los Alamos National Laboratory. Each panel member contributes to the informative nature of this live video coverage. Topics discussed are the direction of the magnetic fields, solar winds, and cosmic rays. Visual aids of this lecture consist of various slides and computerized simulations.

CASI

Ulysses Mission: Solar Probes; Cosmic Rays; Magnetic Fields; Solar Wind

20000064587 NASA Kennedy Space Center, Cocoa Beach, FL USA HST Briefing: HST Science Overview. Jun 17, 1994; In English; Videotape: 15 min. playing time, in color, with sound. Report No.(s): NONP--NASA--VT--199926993; 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 Spaceflight Center and the press focuses primarily on these upgrades to the Hubble Space Telescope.


200000040912 NASA Kennedy Space Center, Cocoa Beach, FL USA
Hubble Space Telescope Spacecraft Overview Briefing
Jan. 13, 1994; In English; Videotape: 46 min., 18 sec., playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1999206997; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This Kennedy Space Center video release presents the third part of a press conference held at Goddard Space Flight Center on Jan. 13, 1994. The session is moderated by Randy Exler (News Chief, GSFC) and includes presentations by Ken Lodbetter (HST Program Manager, NASA Headquarters), Frank Cepolina (HST Project Manager for Flight Systems and Servicing, GSFC) and Joe Rothenberg (Director, HST Flight Projects, GSFC) that discuss pre-flight testing and training, on-orbit servicing, highlights, and the status of the Hubble Space Telescope (HST). A question and answer period follows the presentations, after which three short highlight videos are presented that include actual footage of on-orbit servicing, galactic images taken by the HST, and pre-flight preparation and construction.

Hubble Space Telescope: Space Maintenance

20000013497 NASA Kennedy Space Center, Cocoa Beach, FL USA
Hubble Space Telescope Briefing: HST Science Overview
Jan. 13, 1994; In English; Videotape: 1 hr. 2 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1999206991; No Copyright; Avail: CASI; B04, Videotape-Beta: V04, Videotape-VHS

This NASA Kennedy Space Center video release presents a broad overview of the science that is now possible as a result of the servicing of the Hubble Space Telescope (HST). Dr. Ed Weiler (HST Program Scientist, NASA Headquarters), Dr. Dave Leckrone (HST, Senior Project Scientist, Goddard Space Flight Center (GSFC)), Dr. John 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 Machedo (European Space Agency (ESA)) give brief presentations, which feature images of stars and galaxies taken from the ground, from WFPC1 (prior to the servicing mission), and from WFPC2 (after the servicing mission). The main theme of the discussions center around the spherical aberration that was found in the images prior to servicing and the corrected images seen without the aberration following servicing. A question and answer period rounds out the press conference, with questions posed from scientific journalists at GSFC and other NASA centers.


20000013498 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA
Searching for Planets Around other Stars
Jan. 28, 1998; In English; Videotape: 1 hr. 19 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--1999206897; No Copyright; Avail: CASI; B03, Videotape-Beta: V03, Videotape-VHS

In this colloquium presentation, Professor of Astronomy, Geoffrey Marcy discusses the discovery of planets orbiting other stars. Using the Doppler shift caused by stellar wobble that is caused by nearby planetary mass, astronomers have been able to infer the existence of Jupiter-sized planets around other stars. Using a special spectrometer at Lick Observatory, the wobble of several stars have been traced over the years required to generate an accurate pattern required to infer the stellar wobble. Professor Marcy, discusses the findings of planets around 47 Ursae Majoris, 16 Cygni B, 51 Pegueas, and 56 Rho 1 Cnc. In the case of 56 Rho 1 Cnc the planet appears to be close to the star, within 1.5 astronomical units. The observations from the smaller Lick Observatory will be augmented by new observations from the larger telescope at the Keck observatory. This move will allow observations of smaller planets, as opposed to the massive planets thus far discovered. The astronomers also hope to observe smaller stars with the Keck data. Future spaceborne observations will allow the discovery of even smaller planets. A spaceborne interferometer is in the planning stages, and an even larger observatory, called the Terrestrial Planet Finder, is hoped for. Professor Marcy shows artists’ renderings of two of the planets thus far discovered. He also briefly discusses planetary formation and shows slides of both observations from the Orion Nebula and models of stellar system formation.


20010021688 Space Telescope Science Inst., Baltimore, MD USA
Hubble Spies Huge Cluster of Stars Formed by Ancient Encounter
Mar. 01, 2001; In English; Videotape: 6 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001030025; No Copyright; Avail: CASI; B01, Videotape-Beta: V01, Videotape-VHS

This release marks the beginning of a new outlet for the Space Telescope Science Institute, the ‘Hubble Minute’. Hubble Minute is an edited vignette suitable for use in newscasts, magazine shows, and as an interstitial program. The Minute explains how scientists are determining when M82 and M81 collided, and how dating the crash may result in a better understanding of how our own galaxy formed.

Author
Crashes: Galaxies: Star Clusters: Time Measurement

20010036664 Space Telescope Science Inst., Baltimore, MD USA
Farthest Supernova Bolsters Proof for a Mysterious Form of Energy Pervading the Universe
[2001]; In English; Videotape: 16 min. 42 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001047824; No Copyright; Avail: CASI; B02, Videotape-Beta: V02, Videotape-VHS

Computerized animations show the following: (1) the acceleration and deceleration of the universe; (2) an image subtraction of the 1995 and 1997 images of the Hubble Deep Field to reveal a supernova in the 1997 image; (3) a pie-chart of the mass composition of the universe; (4) the universe’s expansion after the Big Bang; (5) a supernova detonating; and (6) the lightbulb test (to determine distance by comparing light intensity). Zoom shots show the Hubble Deep Field (from ground-based observations to the Hubble Space Telescope (HST) image) and the Hubble Deep Field with a supernova (from an artist’s conception animation to a ground-based view). Dr. Ron Gilliland explains that he looked for a supernova in the Hubble Deep Field and how supernova are useful as standard candles. Dr. Adam Riess describes how astronomers used supernova to discover that the universe is expanding and why it might be expanding.

CASI
Luminous Intensity: Supernovae: Expansion: Cosmology

20010065304 NASA Goddard Space Flight Center, Greenbelt, MD USA
Microlensing: Globular Cluster M22 Video File
[2001]; In English; Videotape: 6 min. 55 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001092796; No Copyright; Avail: CASI; B01, Videotape-Beta: V01, Videotape-VHS

A computerized animation begins outside a globular cluster similar to M22, with the center of the Milky Way in the distance. The camera flies through the center of the cluster and rests with a dark object in the distance. This object, a wobble of several stars with the center of the Milky Way in the distance. The camera zooms past, in front of a star in the galactic bulge, bending its 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 region surrounding the cluster and continue zooming to reveal the Hubble Space Telescope view of M22. In an interview with Kushala Sahu, Astronomer, he describes the Hubble results, explaining why the objects in M22 can’t be planets.
and explains Hubble’s role in the observations of M22. The last image was taken with Hubble’s Wide Field and Planetary Camera 2 and pierces the heart of a globular cluster with its needle-sharp vision and uncovers tantalizing clues to what could potentially be a strange and unexpected population of wandering, planet-sized objects.

Author

Globular Clusters: Gravitational Lenses; Milky Way Galaxy

20011067427 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–20011067427; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

A computerized animation zooms into the 30 Doradus region. Dr. Nolan Walborn explains how the Hubble images of 30 Doradus and its central cluster are changing our understanding of similar star forming regions and what is happening in the gas pillars.

Derived from text

Magellanic Clouds; Nebulae

90

ASTROPHYSICS

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

19940411022 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–19940411022; 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


199404029056 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–199404029056; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video contains computer generated simulations of the impact of comet Shoemaker-Levy 9 with Jupiter that will take place in July 1994. The simulations display the event from a number of vantage points including earth view, views from orbit, and views from the surface of Jupiter’s moons.

CASI

Cometary Collisions: Hypervelocity Impact: Jupiter (Planet); Scientific Visualization: Shoemaker-Levy 9 Comet

19999116393 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA

Asteroids and Comets Outreach Compilation
Sep. 17, 1999; In English; Videotape: 55 min. 38 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–19999116393; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Contents include various different animations in the area of Asteroids and Comets. Titles of the short animated clips are: STARDUST Mission; Asteroid Castalia Impact Simulation; Castalia, Toutatis and the Earth; Simulation Asteroid Encounter with Earth; Nanorover Technology Task; Near Earth Asteroid Tracking; Champollion Anchor Tests; Early Views of Comets; Exploration of Small Bodies; Ulysses Resource Material from ESA; Ulysses Cometary Plasma Tail Animation; and various discussions on the Hale-Bopp Comet. Animation of the following are seen: the Stardust aerogel collector grid collecting cometary dust particles, comet and interstellar dust analyzer, Wiper-shield and dust flux monitor, a navigation camera, and the return of the sample to Earth; a comparison of the rotation of the Earth to the Castalia and Toutatis Asteroids; an animated land on Toutatis and the view of the motion of the sky from its surface; an Asteroid collision with the Earth; the USAF Station in Hawaii; close-up views of asteroids; automatic drilling of the Moon; exploding Cosmic Particles; and the dropping off of the plasma tail of a comet as it travels near the sun.

CASI

Asteroids: Hale-Bopp Comet; Outer Cloud: Comet Tails: Wild 2 Comet; Cometary Atmospheres

19999117114 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–19999117114; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Hubble’s 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–20000006443; 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 Nanorover 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 Champollon anchoring apparatus; (8) A second live video of the Champollon 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, P1, P2, Q1, and Q2), and simulated views of the Shoemaker-Levy 9 comet impact with Jupiter (from Earth and Galileo spacecraft) were presented. The panelists are: Dr. Eugene Shoemaker (from Lowell Observatory and US Geological Survey), the moderator and Shoemaker-Levy co-discoverer; Dr. Hal Weaver (from Space Telescope Science Institute); Dr. Lucy McFadden (from University of California-San Diego and the University of Maryland); Dr Melissa McGrath (from Space Telescope Science Institute); and Dr. Heidi Hammel (from Massachusetts Institute of Technology).

Topics discussed include: interactions of cometary material with Jupiter’s atmosphere, dynamical parameters of Jupiter’s troposphere and stratosphere, and Hubble Space Telescope (HST) Observations of the SL9 Impacts on Jupiter’s Atmosphere. The panel answered some of the audience’s questions at the end of the discussion. This video, Part 2 (of 2), is a continuation of Part 1. It presents the second part of the question and answer session and a replay of the animations.

CASI Shoemaker-Levy 9 Comet: Cometary Collisions; Jupiter (Planet); Astronomical Observatories: Hypervelocity Impact

Comet Shoemaker–Levy Impact: Briefing, Pt. 1

May 18, 1994; In English; Videotape: 62 min., 40 sec. playing time, in color, with sound
Report No(s): NONP--NASA--VT--2000001071; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

A panel discussion held on May 18, 1994, about the impact of the P/Shoemaker-Levy 9 (SL9) comet with Jupiter and its observable effects on Jupiter’s atmosphere, rings, satellites, and magnetosphere, is presented. Before the panel discussion animations show the first nuclei impact, collision with Jupiter’s might side (5 of the 22 known fragments of P/Shoemaker-Levy 9; N, P1, P2, Q1, and Q2), and simulated views of the Shoemaker-Levy 9 comet impact with Jupiter (from Earth and Galileo spacecraft) were presented. The panelists are: Dr. Eugene Shoemaker (from Lowell Observatory and US Geological Survey), the moderator and Shoemaker-Levy co-discoverer; Dr. Hal Weaver (from Space Telescope Science Institute); Dr. Lucy McFadden (from University of California-San Diego and the University of Maryland); Dr Melissa McGrath (from Space Telescope Science Institute); and Dr. Heidi Hammel (from Massachusetts Institute of Technology).

Topics discussed include: interactions of cometary material with Jupiter’s atmosphere, dynamical parameters of Jupiter’s troposphere and stratosphere, and Hubble Space Telescope (HST) Observations of the SL9 Impacts on Jupiter’s Atmosphere. The panel answered some of the audience’s questions at the end of the discussion. This video, Part 1 (of 2), presents the panel discussion and part of the question and answer session.


Black Holes Shed Light on Galaxy Formation

[2000]; In English; Videotape: 13 min. 10 sec. playing time, in color, with sound
Report No(s): 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 galaxies 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.

CASI Hubble Space Telescope: Black Holes (Astronomy); Collisions; Galaxies; Simulation: Galactic Structure

Hubble Identifies Source of Ultraviolet Light in an Old Galaxy

[2000]; In English; Videotape: 3 min. 47 sec. playing time, in color, no sound
Report No(s): NONP--NASA--VT--2001026548; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This videotape is comprised of four segments: (1) a video zoom in on galaxy M32 using ground images, (2) Hubble images of galaxy M32, (3) Ground base color image of galaxies M31 and M32, and (4) Black and white ground based images of galaxy M32.

Author Hubble Radiation: Andromeda Galaxy: Elliptical Galaxies

Orion Nebula Movie

Feb. 01, 2001; In English; Videotape: 5 min. 11 sec. playing time, in color, no sound
Report No(s): 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 tiling of the Orion mosaic; (2) Orion mosaic fly-through; and (3) a close-up of the Orion mosaic.

CASI Orion Nebula: Simulation

The Secret Lives of Galaxies

Feb. 01, 2001; In English; Videotape: 3 min. 53 sec. playing time, in color, no sound
Report No(s): 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.

Author (revised) Barred Galaxies: Galactic Bulge: Spiral Galaxies: Star Clusters

GIant Star Clusters Near Galactic Core

Feb. 01, 2001; In English; Videotape: 4 min. 11 sec. playing time, in color, with sound
Report No(s): NONP--NASA--VT--2001026545; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

A video sequence of still images goes deep into the Milky Way galaxy to the Arches Cluster. Hubble, penetrating through dust and clouds, peers into the core where two giant clusters shine more brightly than any other clusters in the galaxy. Footage shows the following still images: (1) wide view of Sagittarius constellation; (2) the Palomar Observatory’s 2 micron all-sky survey; and (3) an image of the Arches Cluster taken with the Hubble Space Telescope NICMOS instrument. Dr. Don Figer of the Space Telescope Science Institute discusses the significance of the observations and relates his first reaction to the images.

Author (revised) 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--2001026555; 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 examining the images of 47 Tucanae, and (7) images of 47 Tucanae watching for variations in brightness. CASI

Galactic Clusters: Star Clusters; Extraplanetary Planets; Gas Giant Planets

2001036751 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 formation of the universe. Hubble Space Telescope (HST) images show six quasars' host galaxies (including spirals, ellipticals, and colliding galaxies) and six clumps of galaxies approximately 11 billion light years away. A false color time lapse movie of Neptune displays the planet's 16-hour rotation, and the evolution of a storm on Saturn is seen through a view of the planet's rotation. A zoom sequence starts with a ground-based image of the constellation Ursa major and ends with the Hubble Deep Field through progressively narrower and deeper views. CASI

Computerized Simulation: Galactic Evolution; Galaxies: Interacting Galaxies; Neptune (Planet); Quasars; Saturn (Planet)

2001036752 Space Telescope Science Inst., Baltimore, MD USA Spinning Stardust into Planets [2001]; In English; Videotape: 6 min. 19 sec. playing time, in color, with sound Report No.(s): NONP-NASA--VT--2001026554; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

A computerized animation simulates the formation of a stellar disk and planet. Ten images from the Hubble Space Telescope (HST) show young stellar disks (taken with the Near-Infrared Camera Multi-Object Spectrometer (NICMOS)) and stellar disks around young stars (taken with the Wide-Field Planetary Camera 2 (WFPC2)). Dr. Deborah Pagdes 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


2001036753 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

20010367455 Space Telescope Science Inst., Baltimore, MD USA Galaxy Group Stephan's Quintet Video File HubbleMinute: Battle Royale in Stephan's Quintet Jul 19, 2001; In English; Videotape: 12 min. 40 sec. playing time, in color, with sound Report No.(s): NONP-NASA--VT--2001107899; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The Hubble Space Telescope's closeup view of Stephan's Quintet, a group of five galaxies, reveals a string of brighter star clusters that separate like a diamond necklace. Astronomers studying the compact galaxy group Stephan's Quintet have seen creative destruction in the many collisions taking place among its galaxies. This HubbleMinute discusses what astronomers are learning and hope to learn from exploring the quintet. Derived from text

Galactic Clusters: Galaxies: Collisions

91 LUNAR AND PLANETARY SCIENCE AND EXPLORATION

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

1994090140 NASA, Washington, DC, USA Exploring Mars Mar 1, 1987; In English; 5 min. 40 sec. playing time, in color, with sound Report No.(s): NONP-NASA--VT--93--185324; No Copyright; Avail: CASI; B01, Videotape-Beta; V02, Videotape-VHS

This presentation shows what researchers are designing for future manned missions. Author (revised)

Mars Probes: Planetary Geology: Roving Vehicles: Spacecraft Design

1994090153 NASA Lewis Research Center, Cleveland, OH, USA NASA Images II Apr 1, 1988; In English; 27 min. 6 sec. playing time, in color, with sound Report No.(s): NONP-NASA--VT--93--185303; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

A look at unmanned spacecraft to explore planets is presented. The topics covered include Pioneer 10 and 11, Pioneer-Venus, Voyager, IUE, and HEAO. Author (revised)

HEAO; IUE; Pioneer Project: Space Exploration: Unmanned Spacecraft: Voyager Project

19940901766 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA Voyager encounter highlights Jun 28, 1989; In English; 30 min. 18 sec. playing time, in color, with sound Report No.(s): NONP-NASA--VT--93--190217; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The following are presented: computer animation of trajectories for both Voyagers 1 and 2; view of Jupiter during one orbit of Ganymede; computer animation of Voyager 2's encounter with Jupiter and its satellites; time lapse of the planet's rotation and its satellites; stroboscopic sequence of selected frames; cloud motion; Jupiter's Great Red Spot (4/25 - 5/24, 1979) through a violet filter; and the Great Red Spot through a blue filter by Voyager 1. The dynamics of Jupiter's clouds are shown - the whole planet is shown first, then two closer looks are repeated several times. Also included are pans of all of Jupiter's satellites and a computer simulation tour of Saturn system from POVs 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 all 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

219
19940108767 NASA, Washington, DC, 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;
B03, 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 rotations of Neptune. It
shows spacecraft trajectory 'diving' over Neptune and intercepting Triton's
orbit, depicting radiation and occultation zones. Also shown are a serene orbit
of Triton and Voyager's encounter with Neptune's Magnetopause. A model of
the spacecraft’s complex maneuvers during close encounters of Neptune and
Triton is presented. A view from Earth of Neptune's occultation experiment is
is shown as well as a recreation of Voyager's final pass. There is detail of Voyager's
Image Compensation technique which produces Voyager images. Eighteen
images were produced on June 22 - 23, 1989, from 57 million miles away. A 68
day sequence which provides a stroboscopic view - colorization approximates
what is seen by the human eye. Real time images recorded live from Voyager on
5/24/89 are presented. Photoinclometry 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. Photoinclometry
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

1994010821 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

1994010869 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, X-15, HiMAT, and crash
worthiness tests.
CASI
Energy Technology: HEAO: Highly Maneuverable Aircraft; Hubble Space Tele-
scope; LANDSAT Satellites; Space Shuttles; X-15 Aircraft

1994010875 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

1994010946 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

1994010959 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

1994011018 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA
Voyager 2: Neptune encounter
Aug 8, 1989; In English; 11 min. 31 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190220; No Copyright; Avail: CASI;
B01, Videotape-Beta; V01, Videotape-VHS
Voyager’s encounters with Jupiter, Saturn, Uranus, and pre-Neptune are
reviewed.
CASI
Images: Saturn (Planet); Uranus (Planet); Voyager Project

1994011038 NASA Lewis Research Center, Cleveland, OH, USA
NASA images 12
Apr 1, 1988; In English; 28 min. 7 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT–93–190215; No Copyright; Avail: CASI;
B02, Videotape-Beta; V02, Videotape-VHS
Clips on Voyager 2 at Uranus and Venus are presented.
CASI
Images: Uranus (Planet); Venus (Planet)

1994011048 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA
Life and the solar system: The CRAB 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)

1994011597 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

220
This video contains Galileo probe animation, mission diagrams, and testing and manufacturing footage.

CAS1

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: CAS1; 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.

CAS1
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: CAS1; 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, launched 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.

CAS1
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: CAS1; B01, Videotape-Beta; V01, Videotape-VHS

This video describes the efforts of the Center for the Commercial Development of Space in Wisconsin to develop a strategy for mining Helium 3, an efficient, environmentally safe alternative to fossil fuels that exists on the moon. Animated sequences depict the equipment that could mine the lunar surface, boil away Helium-3 to be transported back to earth, and return the soil to the moon without destroying the lunar surface.

CAS1
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: CAS1; B02, Videotape-Beta; V02, Videotape-VHS

Brian O’Leary gives his ideas on reaching and exploring Mars.

CAS1
Mars (Planet); Space Exploration

19940127299 NASA Lewis Research Center, Cleveland, OH, USA

Mars: Five views on what is known
Feb 1, 1993; In English; 29 min. playing time, in color, with sound
Report No. (s): NONP-NASA-VT-94-9951; No Copyright; Avail: CAS1; B02, Videotape-Beta; V02, Videotape-VHS

This video gives a historical survey of philosophy and scientific study of the nature of the surface of Mars and discussion of whether life existed or exists on Mars. Several Lewis researchers recount early telescope observations of Mars including the identification of ‘channels’ or possible ancient waterways on the surface. An overview of the accomplishments of the Mariner spacecraft in mapping the surface of Mars as well as a detailed description of the Viking missions to Mars are presented. The results of the Viking Biology Experiment, conducted by the Viking Landers, are highlighted. There is also a discussion of the possible presence of monuments and a huge ‘face’ on the Martian surface. The video includes several computer simulations of flight over the Martian surface.

CAS1
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-94-9945; No Copyright; Avail: CAS1; 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.

CAS1
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: CAS1; B01, Videotape-Beta; V01, Videotape-VHS

The exploration of the solar system through video animation is shown. Actual footage of the Earth’s water and land surface is included.

ARC
Exobiology: Space Exploration

1994036998 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: CAS1; B01, Videotape-Beta; V01, Videotape-VHS

This video presentation gives a pre-launch description of the Galileo Mission.

CAS1
Galileo Project; Space Exploration

1994036999 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: CAS1; 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.

CAS1
Space Exploration; Voyager Project

1994031400 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: CAS1; B01, Videotape-Beta; V01, Videotape-VHS

This video presentation blends animation, actual photos, and data of the Voyager-Neptune encounter.

CAS1
Neptune (Planet); Space Exploration; Voyager Project
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

**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)

**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

**Comet impact tape 1**

Jul 1, 1994; In English; 1 hr. playing time, with sound
Report No.(s): NONP–NASA–VT–94–23150; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Continued press coverage of the comet Shoemaker-Levy 9 impact on the surface of Jupiter is presented. This tape covers 16 Jul. 1994.

**CASI**

Cometary Collisions: Jupiter (Planet); Shoemaker-Levy 9 Comet

**Comet impact tape 2**

Jul 1, 1994; In English; 1 hr. playing time, with sound
Report No.(s): NONP–NASA–VT–94–23151; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Continued press coverage of the comet Shoemaker-Levy 9 impact on the surface of Jupiter is presented. This tape covers 16 Jul. 1994.

**CASI**

Cometary Collisions: Jupiter (Planet); Shoemaker-Levy 9 Comet

**Comet impact tape 3**

Jul 1, 1994; In English; 1 hr. 22 min. playing time, with sound
Report No.(s): NONP–NASA–VT–94–23152; No Copyright; Avail: CASI;
B04, Videotape-Beta; V04, Videotape-VHS

Continued press coverage of the comet Shoemaker-Levy 9 impact on the surface of Jupiter is presented. This tape covers 17 Jul. 1994.

**CASI**

Cometary Collisions: Jupiter (Planet); Shoemaker-Levy 9 Comet

**Comet impact tape 4**

Jul 1, 1994; In English; 1 hr. playing time, with sound
Report No.(s): NONP–NASA–VT–94–23153; No Copyright; Avail: CASI;
B03, Videotape-Beta; V03, Videotape-VHS

Continued press coverage of the comet Shoemaker-Levy 9 impact on the surface of Jupiter is presented. This tape covers 18 Jul. 1994.

**CASI**

Cometary Collisions: Jupiter (Planet); Shoemaker-Levy 9 Comet
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--33655; 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 Flights: 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 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 Flights: 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: Old and new
Jan 1, 1970; In English; 25 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--95--42155; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video presents the moon as studied by man for more than 20 centuries. It reviews the history of lunar studies before the first moon landing, the major things learned since Apollo II, and closes with a resume of lunar investigations scientists would like to undertake in the future.

Author
Apollo Spacecraft; Lunar Exploration; Moon

Mercury: Exploration of a planet
Jan 1, 1972; In English; 7 min. 14 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--95--47244; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The 1992 Mars Observer Mission is highlighted in this video overview of the mission objectives and planning. Using previous photography and computer graphics and animation, the main objectives of the 687 day (one Martian year) consecutive orbit by the Mars Observer Satellite around Mars are explained. Dr. Arden Albee, the project scientist, speaks about the pole-to-pole mapping of the Martian surface topography, the planned relief maps, the chemical and mineral composition analysis, the gravity fields analysis, and the proposed search for any Mars magnetic fields.

CASI
Gravitational Fields; Mars (Planet); Mars Exploration; Mars Observer; Mars Satellites; Mars Surface; Mission Planning; Planetary Magnetic Fields; Planetary Mapping; Satellite-Borne Photography; Topography

Collection of Magellan Venus radar mapping results
Mar 8, 1991; In English; 6 min. playing time, in color; with sound
Report No.(s): NONP--NASA--VT--95--46003; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Through computer animation several geological features of Venus are presented in this video. The Sif Mons, a 1.8 mile high volcano and the Gula Mons, a 1.8 mile high volcano are shown. Also, radar images of a rift valley, several impact craters, and a 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/14 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Lunar/Mars exploration for synthesis group
Aug 12, 1992; In English; 10 min. 21 sec. playing time, in color, with sound
Report No.(s): NON-P NASA-VT-95-57873; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Computer animation of future expeditions, research projects, and equipment (satellites, telescopes, etc.) are contained on this video. President George Bush, in a Presidential Address, speaks on future plans for NASA emphasizing Space Station Freedom and a manned mission to Mars.

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

19990123897 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Apollo 14: Shepard hitting golf ball on Moon
Jan 1, 1970; In English; 3 min. playing time, in color, with sound
Report No.(s): NON-P NASA-VT-95-56871; No Copyright; Avail: CASI; B01, Videotape-Beta; V02, Videotape-VHS

Live footage of astronaut Alan Shepard hitting a golf ball on the Moon is featured on this video.

CASI
Apollo 14 Flight; Astronauts; Lunar Exploration; Lunar Surface; Moon; Weighlessness

19990123227 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Apollo 14 mission to Fra Mauro
Beasley, Brian D., editor, NASA Lyndon B. Johnson Space Center, USA; Age 14, 1991; In English; 28 min. 30 sec. playing time, in color, with sound
Report No.(s): NON-P NASA-VT-95-1995055615; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The 1971 Apollo 14 Mission to Fra Mauro, a lunar highland area, is highlighted in this video. The mission’s primary goal was the collection of lunar rocks and soil samples and lunar exploration. The soil and rock sampling was for the geochronological determination of the Moon’s evolution and its comparison with that of Earth. A remote data collection station was assembled on the Moon and left for continuous data collection and surface monitoring experiments. The Apollo 14 astronauts were Alan B. Shepard, Edgar D. Mitchell, and Stuart A. Rossa. Astronauts Shepard and Mitchell landed on the Moon (February 5, 1971) and performed the sampling, the EVA, and deployment of the lunar experiments. There is film-footage of the lunar surface, of the command module’s approach to both the Moon and the Earth, Moon and Earth spacecraft launching and landing, in-orbit command-and-lunar-module docking, and of Mission Control.

CASI
Apollo 14 Flight; Astronauts; Geochronology; Highlands; Lunar Exploration; Lunar Exploration System For Apollo; Lunar Rocks; Lunar Soil; Lunar Surface; Manned Spacecraft; Soil Sampling

19999116267 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA
Voyager Outreach Compilation
Sep. 17, 1998; In English; Videotape: 1 hr., 11 min., 29 sec. playing time, in color, with sound
Report No.(s): NON-P NASA-VT-199923374; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This NASA JPL (Jet Propulsion Laboratory) video presents a collection of the best videos that have been published of the Voyager mission. Computer animation/simulations comprise the largest portion of the video and include outer planetary magnetic fields, outer planetary lunar surfaces, and the Voyager spacecraft trajectory. Voyager visited the four outer planets: Jupiter, Saturn, Uranus, and Neptune. The video contains some live shots of Jupiter (actual), the Earth’s moon (from orbit), Saturn (actual), Neptune (actual) and Uranus (actual), but as mainly comprised of computer animations of these planets and their moons. Some of the individual short videos that are compiled are entitled: The Solar System, Voyager to the Outer Planets, A Tour of the Solar System, and the Neptune Encounter. Computerized simulations of Viewing Neptune from Triton, Diving over Neptune to Meet Triton, and Catching Triton in its Retrograde Orbit are included. Several animations of Neptune’s atmosphere, rotation and weather features as well as significant discussion of the planet’s natural satellites are also presented.

CASI
Voyager Project; Space Probes; Space Missions: Neptune (Planet); Unmanned Spacecraft; Voyager 1 Spacecraft; Voyager 2 Spacecraft; Computer Animation

19999116545 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA
Mars Pathfinder and Mars Global Surveyor Outreach Compilation
Sep. 17, 1999; In English; Videotape: 1 hr. 23 min. 4 sec. playing time, in color, with sound
Report No.(s): NON-P NASA-VT-1999206757; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This NASA JPL (Jet Propulsion Laboratory) 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 cameras pan the surrounding Mars terrain and film Sojourner traversing the surface and inspecting rocks. A single, brief, processed image of the Cydonia region (Mars face) at an oblique angle from the Mars Global Surveyor is presented. A description of the Mars Pathfinder mission, instruments, landing and deployment process, Mars approach, spacecraft orbit insertion, rover operation are all described using computer animation. Actual color footage of Sojourner as well as a 360 deg pan of the Mars terrain surrounding the spacecraft is provided. Lower quality black and white photography depicting Sojourner traversing the Mars surface and inspecting Martian rocks also is included.

CASI
Mars Pathfinder; Mars Global Surveyor; Mars Landing; Mars Surface; Roving Vehicles; Computer Animation

19999116711 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA
Galileo Science Summary October, 1997
Oct. 29, 1997; In English; Videotape: 17 min. 34 sec. playing time, in color, with sound
Report No.(s): NON-P NASA-VT-1999206861; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video is a compilation of visualizations, animation and some actual shots from the Galileo mission. It shows the trajectories of the mission around Jupiter that took the mission to Jupiter, and the various orbits of the spacecraft around the planet, that allowed for the views of several of Jupiter’s moons from which the visualizations of this video are taken. It mainly shows the visualiza-
tions of the Galileo’s view of Jupiter’s atmosphere, Io, Ganymede, and Europa. There is no spoken presentation, the views are announced with slides prior to the presentation. Orchestral selections from Vivaldi’s Four Season’s serves as background.

NASA
Galileo Project: Galileo Spacecraft; Ganymede; Io; Jupiter (Planet); Jupiter Atmosphere; Europa

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. 1995; 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 Probe; 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 simulations from the views taken on December 8, 1992.

CASI
Earth (Planet); Galileo Project

20000602484 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. Leading off the press conference was an announcement of a major discovery that was made possible from the study of the impact. The participants in the panel were: (1) Roger Yelle from the University of Arizona, (2) 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 the computer simulations were reports from the airborne Kuiper Observatory Telescope and the McDonald observatory.

CASI
Atmosphere; Cometary Collisions; Fragments; Shoemaker-Levy 9 Comet; Sulfur (Planet); Jupiter (Planet)

2000060254 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. 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

2000060448 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 planet 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, Cassiopeia, Aria, Ganymede, Ariel, Miranda, Io, Europa, Amalthea, Rhea, Dione, Tethys, Enceladus, Minus, 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)
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.

CASI
Cometary Collisions: Fragmentation; Shoemaker-Levy 9 Comet: Jupiter (Planet); Jupiter Atmosphere

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–2000001070; 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. Clayton 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., 46 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000001069; 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. Neal E. Ausman, Jr. (Mission Director) ends the video with a discussion of mission operations including slides of the Galileo launch scenario and a trajectory correction maneuver.

CASI
Galileo Project: Galileo Spacecraft: Galileo Probe

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–2000001068; 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
Galileo Project; Galileo Probe; Jupiter Atmosphere

This NASA Kennedy Space Center (KSC) video release presents Part 1 of a press conference regarding the successful entry of the Galileo Space Probe into Jupiter’s atmosphere. The press conference panel is comprised of twelve principal investigators and project scientists that oversee the Galileo mission. Among these panelists, William J. O’Neil (Jet Propulsion Lab.) begins the video praising all of the scientists that worked on the orbiter mission. He then presents a visual overview of Galileo’s overall mission trajectory and schedule. Marcie Smith (NASA Ames Research Center) then describes the Galileo Probe mission and the overall engineering and data acquisition aspects of the Probe’s Jupiter atmospheric entry. Dr. Richard Young (NASA Ames Research Center) follows with a brief scientific overview, describing the measurements of the atmospheric composition as well as the instruments that were used to gather the data. Atmospheric pressure, temperature, density, and radiation levels of Jupiter were among the most important parameters measured. It is explained that these measurements would be helpful in determining among other things, the overall dynamic meteorology of Jupiter. A question and answer period follows the individual presentations. Atmospheric thermal structure, water abundances, wind profiles, radiation, cloud structure, chemical composition, and electricity are among the topics discussed. Parts 2 and 3 of the press conference can be found in document numbers NONP-NASA-VT-2000001074, and NONP-NASA-VT-2000001075.

Galileo Project; Galileo Probe; Atmospheric Entry

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.

Galileo Project; Jupiter Atmosphere; Moisture; Jupiter (Planet); Vertical Air Currents; Atmospheric Circulation
Galileo Spacecraft; Ganymede; Jupiter (Planets; Galilean Satellites; Jupiter Exoplanet; Exploration; Exploration Missions; Payloads; Galileo Spacecraft)

Report No.(s): NONP-NASA-VT-2000036566; Non Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Live footage shows the speakers participating in the Magellan Press Conference question and answer session. Speakers include Huntress, Spear, Ledbetter, Johnson, McCarthy, and Saunders. The speakers are shown answering questions from various NASA Centers, and participating audience members from many different industries. They discuss the start and stop date for the mapping, also shown are animation and radar images of Venus and Artemis. This tape is 2 of 2; tape 1 has a report number NONP-NASA-VT-2000036552.

CASI
Conferences: Magellan Project (NASA); Space Exploration; Venus Surface

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Galileo -- Ganymede Family Night
Jun. 26, 1996; In English; Videotape: 1 hr. 30 min. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2000036029; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This video is continued on Videotape number NONP-NASA-VT-2000036028.

CASI
Galileo Spacecraft; Ganymede; Jupiter (Planet); Galilean Satellites; Jupiter Red Spot; Jupiter Satellites

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Titan III Mars Observer Arrival and Uncrating at PHSE
Jul. 09, 1992; In English; Videotape: 8 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP-NASA-VT-2000081540; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage of the uncrating and the arrival of the Titan III Mars Observer to the Payload Hazardous Servicing Facility (PHSF) at the Payload Hazardous Servicing Facility (PHSF). The TOS is a single-stage, solid propellant upper stage vehicle used to propel a spacecraft from low Earth orbit toward its ultimate destination. The TOS is delivered to the PHSE where it is designed to accommodate a variety of NASA and NASA customer payloads and can be used as a payload processing facility (PPF) or a hazardous processing facility (HPF).

CASI
Titan 3 Launch Vehicle; Mars Exploration; Interplanetary Transfer Orbits; Delivery; Upper Stage Rocket Engines; Payloads

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Titan III Launch Replays
Sep. 25, 1992; In English; Videotape: 9 min. playing time, in color, without sound
Report No.(s): NONP-NASA-VT-2000081549; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows several views of the launch of the Mars Observer Titan
The Mars Observer mission spacecraft was primarily designed for exploring Mars and the Martian environment. The Mars Observer was launched on September 25, 1992. The spacecraft was lost in the vicinity of Mars on August 21, 1993 when the spacecraft began its maneuvering sequence for Martian orbital insertion. This videotape shows a press briefing, held after the spacecraft had not responded to attempts to communicate with it, to explain to the press the problems and the steps that were being taken to re-establish communication with the spacecraft. The communications 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 Saturnos 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**

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2000063384 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-2000081550; 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 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 Saturnos 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**

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2000065630 NASA Kennedy Space Center, Cocoa Beach, FL USA

**Mars Observer Press Conference**

Aug. 25, 1993; In English; Videotape: 18 min. 5 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-2000081551; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Footage shows Bob MacMillin, NASA's Public Information Office, as he introduces the Mars Observer Project Manager, Glenn Cunningham. Glen is shown addressing the current status of the Mars Observer communication system, the inability of NASA to establish contact, and the action that is currently being taken to establish contact with the spacecraft. Glen is also seen answering questions from both the audience as well as other NASA Centers.

CASI

**Conferences; Mars Observer**

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2000065631 NASA Kennedy Space Center, Cocoa Beach, FL USA

**TITAN III/Mars Observer Flow Tape for Playback**

Aug. 11, 1992; In English; Videotape: 10 min. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-2000081553; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows components for the Mars Observer spacecraft during checkout. Arrival of the navigation system is also shown.

CASI

**Titan 3 Launch Vehicle; Mars Observer**

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20000676461 NASA Kennedy Space Center, Cocoa Beach, FL USA

**NASA Today – Mars Observer Segment (Part 4 of 6)**

Aug. 20, 1993; In English; Videotape: 16 min. 20 sec. playing time, in color with sound

Report No.(s): NONP-NASA-VT-2000096600; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This videotape consists of eight segments from the NASA Today News program. The first segment is an announcement that there was no date set for the launch of STS-51, which had been postponed due to mechanical problems. The second segment describes the Middeck Dynamic Experiment Facility. The third segment is about the scheduled arrival of the Mars Observer at Mars, it shows an image of Mars as seen from the approaching Observer spacecraft, and features an animation of the approach of Mars, including the maneuvers that are planned to put the spacecraft in the desired orbit. The fourth segment describes a discovery from an infrared spectrometer that there is nitrogen ice on Pluto. The fifth segment discusses the Aerospace for Kids (ASK) program at the Goddard Space Flight Center (GSFC). The sixth segment is about the high school and college summer internship programs at GSFC. The seventh segment announces a science symposium being held at Johnson Space Center. The last segment describes the National Air and Space Museum and NASA's cooperation with the Smithsonian Institution.

CASI

**Mars Observer; Museums; Pluto Atmosphere; Pluto (Planet); Mars Missions**

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20000880361 NASA Kennedy Space Center, Cocoa Beach, FL USA

**NASA Today: Mars Observer Segment**

Aug. 20, 1993; In English; Videotape: 16 min. 20 sec. playing time, in color, with sound

Report No.(s): NONP-NASA-VT-2000096696; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The NASA news format primarily focuses on the 3 month orbit of Mars and the images obtained by the Observer spacecraft. The spacecraft orbits 310 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)

20010821699 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--2001030626; 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. Ame 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.

19940010814 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

19940011049 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

20010836754 Space Telescope Science Inst., Baltimore, MD USA

Final Blaze of Glory
[2001]; In English; Videotape: 14 min. 57 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2001026549; No Copyright; Avail: CASI;
B01, Videotape-Beta: V01, Videotape-VHS

This video gives an overview of planetary nebulae through a computerized animation, images from the Hubble Space Telescope (HST), and interviews with Space Telescope Science Institute Theorist Dr. Mario Livio. A computerized animation simulates a giant star as it swallows its smaller companion. HST images display various planetary nebulae, such as M2-9 Twinjet Nebula, NGC 3568, NGC 3918, NGC 5307, NGC 6826, NGC 7099, and Hubble 5. An artists conception shows what our solar system might look like in a billion years when the Sun has burned out and cast off its outer layers in a shell of glowing gas. Dr. Livio describes the shapes of the planetary nebulae, and gives three reasons to study planetary nebulae, and what the observations made by HST have meant to him. A succession of 17 HST images of planetary nebulae are accompanied by music by John Sorrie.

CASI
Giant Stars; Planetary Nebulae

93
SPACE RADIATION

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

2000026780 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS--37: Gamma Ray Observatory
Jan. 29, 1991; In English; Videotape: 16 min. 2 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000013426; No Copyright; Avail: CASI;
B02, Videotape-Beta: V02, Videotape-VHS

This NASA Kennedy Space Center (KSC) video release presents footage of pre-flight activities involving the STS--37 primary payload, the Gamma Ray Observatory (GRO). The GRO is shown being removed from the transport aircraft to one of the runways at Kennedy. Other footage includes Kennedy work crews moving the GRO into position as well as discussions between the STS-37 astronauts and the work crews regarding GRO operation.

CASI
Gamma Ray Observatory: Cape Kennedy Launch Complex

2000024867 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS--37 The Payload bay door closing at PCR Pad B
Apr. 02, 1991; In English; Videotape: 5 min. in length color with background sounds
Report No.(s): NONP--NASA--VT--2000013433; No Copyright; Avail: CASI;
B01, Videotape-Beta: V01, Videotape-VHS

The primary objective of the STS-37 mission was to deploy the Gamma Ray Observatory. The mission was launched at 9:22:44 am on April 5, 1991, onboard the space shuttle Atlantis. This video shows the payload bay doors being closed. Included are views of the Gamma Ray Observatory in the payload bay, and the clean room operations in the Payload Changeout Room (PCR).

CASI
Bays (Structural Units); Clean Rooms; Doors; Gamma Ray Observatory; Space Transportation System

2000036688 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS--37 Gamma Ray Observatory Arrival and VPF Activities
Feb. 09, 1991; In English; Videotape: 28 min. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000013435; No Copyright; Avail: CASI;
B02, Videotape-Beta: V02, Videotape-VHS

Live footage shows the STS-37 Gamma Ray Observatory, its move to the airlock, the removal of its plastic covering, and its lift to the work-stand.

CASI
Gamma Ray Observatory; Gamma Ray Telescopes; Gamma Ray Astronomy; Spaceborne Astronomy; Air Locks

20000037776 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS--37: Gamma Ray Observatory (2 of 2)
Mar. 24, 1991; In English; Videotape: 55 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP--NASA--VT--2000013425; No Copyright; Avail: CASI;
B03, Videotape-Beta: V03, Videotape-VHS

Live footage shows various unedited Gamma Ray Observatory (GRO) compiled processing shots. Shots depict work being performed on the STS-37 GRO payload, and the STS-37 Shuttle Amateur Radio Experiment (SAREX).

CASI
Gamma Ray Observatory; Spaceborne Astronomy; Spaceborne Telescopes; Spaceborne Experiments
The 1972 highlights and Development; CASI research; V/STOL; jet noise abatement; and Apollo 9, 10, 11, and 12 missions.

Author (revised)

Gamma Ray Observatory; Space Transportation System

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.

The 1981 highlights
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, Kaiser Airborne Observatory, High Altitude Earth Survey, LANDSAT, aerodynamic research, electric cars, wind energy, XV-15, Quiet Shortfield Research Aircraft, X-14 BVTO, 40 x 80 Wind Tunnel, and turboprop research.

Author (revised)
Aerospace Engineering; NASA Programs: NASA Space Programs: Research and Development

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

The 1969 highlights
Dec 1, 1969; In English; 14 min. 30 sec. playing time, in color, with sound Report No.(s): NONP-NASA--VT--93-190428; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video includes Mariners to Mars; Orbiting Solar Observatory; Orbiting Geophysical Observatory; sounding rockets; weather satellites - Tiros and Nimbus; applications technology; advanced research; space shuttle research; V/STOL; jet noise abatement; and Apollo 9, 10, 11, and 12 missions.

CASI
Aerospace Engineering; NASA Programs: NASA Space Programs: Research and Development; Space Missions

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 watcher, communication satellites, aerodynamics, wind tunnel research, STOL, noise abatement, lifting bodies, US/Soviet cooperation, preparation for Skylab, and the Apollo 16 and 17 missions.

CASI
Aerospace Engineering; NASA Programs: NASA Space Programs: Research and Development; Space Missions: Spacecraft

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 watcher, Early Bird satellite, scientific satellites, sounding rockets, aeronauteal research, preparation for the moon, and manned Gemini flights.

CASI
Aerospace Engineering; NASA Programs: NASA Space Programs: Research and Development; Space Missions: Spacecraft

The 1967 highlights
Dec 1, 1967; In English; 15 min. playing time, in color, with sound Report No.(s): NONP-NASA--VT--93-190431; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This document includes Surveyor, Lunar Orbiter, Apollo 4, Bionsatellite, Orbiting Geophysical Observatory, Orbiting Solar Observatory, Explorers, Applications Technology satellites, operational satellites, Mariner to Venus, Juno, sounding rockets, and aeronautical research.

CASI
Aerospace Engineering; NASA Programs: NASA Space Programs: Space Missions: Spacecraft

The 1966 highlights
Dec 1, 1966; In English; 14 min. 30 sec. playing time, in color, with sound Report No.(s): NONP-NASA--VT--93-190424; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video shows on orbit deployments since Shuttle flights resumed in 1988. These deployments include TDRS-C and TDRS-D, and the Magellan and Galileo spacecrafts.

CASI
Deployment: Galileo Spacecraft: Magellan Spacecraft (NASA); Orbital Launching: Space Shuttle Missions: TDRS Satellites

The 1968 highlights
Dec 1, 1968; In English; 15 min. playing time, in color, with sound Report No.(s): NONP-NASA--VT--93-190424; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video includes Vanguard I satellite; communications and navigation satellites, weather satellites, geosynchronous satellites, and Mariner 10 on Mercury.

CASI
Aeronautics; Aerospace Engineering: Histories; NASA Programs

The 1969 highlights
Dec 1, 1969; In English; 15 min. playing time, in color, with sound Report No.(s): NONP-NASA--VT--93-190431; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video includes Ranger to the Moon, Mariner to Mars, Tiros weather watcher, 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
These highlights include the 1970 solar eclipse, Tiros, Nimbus, Intelsat, wake turbulence, the Peru earthquake, Oregon fishing grounds, Apollo 13, SI-C static firing, McDonnell/Douglas 90-day confinement test, and the moon from Galileo to 1971.

CASI
Earthquakes; Galileo Spacecraft; Intelsat Satellites; Marine Resources; Solar Eclipses; Turbulent Skies

19940010944 NASA, Washington, DC, USA
The 1971 highlights
Dec 1, 1971; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190427; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

These highlights include Mariner orbit of Mars, Interplanetary Monitoring Platform, Orbiting Solar Observatory, small scientific satellite, sounding rockets, Stratoscope 11, earth resources, aeronautics, jet noise abatement, airport runway safety, Apollo 14 and 15, and Skylab.

CASI
Accident Prevention: Imp: Jet Aircraft Noise; Mariner Spacecraft; Noise Reduction: OGO; Runways: Small Scientific Satellites; Sounding Rockets

19940010951 NASA, Washington, DC, USA
Sights and sounds of space
Nov 1, 1989; In English; 3 min. 19 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190408; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video details the progress of the first musician’s work, based on the STS-26 mission, in the NASA Fine Arts Program.

CASI
Music: Space Shuttle Mission 51-F

19940010961 NASA Ames Research Center, Moffett Field, CA, USA
Unitary plan wind tunnel landmark dedication and revitalization
Sep 1, 1990; In English; 21 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190447; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video shows construction scenes of unitary plan wind tunnel, aeraial, and views of various models, including an MD-II in the 11 ft. an Apollo in the

19940010919 NASA, Washington, DC, USA
The 1977 highlights
Dec 1, 1977; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190424; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

These highlights include the Space Shuttle, the Voyagers, LANDSAT, aeronautics, Space Shuttle, HEAO-1, and energy research.

CASI
Energy Technology: HEAO 1; LANDSAT Satellites; Space Shuttles; Spacelab

19940010948 NASA, Washington, DC, USA
The 1968 highlights
Dec 1, 1970; In English; 28 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190425; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

These highlights include the end of the Surveyor Program, planetary studies, Pioneers, Orbiting Geophysical Observatory, sounding rockets, radio astronomy Explorer, Orbiting Astronomical Observatory, Nimbus, lifting bodies, X-15 Program, XB-70, V/TOI, model research, jet noise reduction, flight safety, nuclear engines, Project Apollo (testing and training), and Apollo 5,6,7, and 8.

CASI
B-70 Aircraft: Flight Safety; Jet Aircraft Noise; Lifting Bodies; Noise Reduction; OGO; OGO; Pioneer Space Probes; Sounding Rockets; Surveyor Project

19940010942 NASA, Washington, DC, USA
The 1970 highlights
Dec 1, 1970; In English; 28 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190426; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

These highlights include the 1970 solar eclipse, Tiros, Nimbus, Intelsat, wake turbulence, the Peru earthquake, Oregon fishing grounds, Apollo 13, SI-C static firing, McDonnell/Douglas 90-day confinement test, and the moon from Galileo to 1971.

CASI
Earthquakes; Galileo Spacecraft; Intelsat Satellites; Marine Resources; Solar Eclipses; Turbulent Skies

19940010944 NASA, Washington, DC, USA
The 1971 highlights
Dec 1, 1971; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190427; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

These highlights include Mariner orbit of Mars, Interplanetary Monitoring Platform, Orbiting Solar Observatory, small scientific satellite, sounding rockets, Stratoscope 11, earth resources, aeronautics, jet noise abatement, airport runway safety, Apollo 14 and 15, and Skylab.

CASI
Accident Prevention: Imp: Jet Aircraft Noise; Mariner Spacecraft; Noise Reduction: OGO; Runways: Small Scientific Satellites; Sounding Rockets

19940010951 NASA, Washington, DC, USA
Sights and sounds of space
Nov 1, 1989; In English; 3 min. 19 sec. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190408; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video details the progress of the first musician’s work, based on the STS-26 mission, in the NASA Fine Arts Program.

CASI
Music: Space Shuttle Mission 51-F

19940010961 NASA Ames Research Center, Moffett Field, CA, USA
Unitary plan wind tunnel landmark dedication and revitalization
Sep 1, 1990; In English; 21 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190447; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video shows construction scenes of unitary plan wind tunnel, aeriaal, and views of various models, including an MD-II in the 11 ft. an Apollo in the

199400110879 NASA, Washington, DC, USA
NASA: The 25th year
Sep 1, 1983; In English; 50 min. playing time, in color, with sound
Report No.(s): NONP-NASA–VT–93–190254; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video tape chronicles NASA’s research and development programs, especially regarding space travel from 1958 to 1983.

CASI
NASA Space Programs: Space Exploration
8x7, Dynasore 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

19940011835 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 & 4, Challenger completed, unmanned launches, the Hubble Space Telescope, Pioneers 8 & 9 encounter, Mars Pictures, LANDSAT 4, wind energy, ion-electric engines, solar powered medical system, medical image analysis, rotor systems research aircraft, XV-15, propfan research, aircraft icing studies, and Oshkosh Skinshow.

CASI

Aircraft icing: Challenger (Orbiters); Hubble Space Telescope; LANDSAT 4; Mars 4 spacecraft: Pioneer Space Probe; 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

19940011836 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 Seacow Wing, and automated pilot advisory system.

CASI

Automated Pilot Advisory System: Balloon Sounding; GOES 4: Meteorological Satellites: Oblique Wings; Rocket Sounding; Rotor Systems Research Aircraft: Solar Maximum Mission: Space Shuttle; Voyager 1 spacecraft

19940011896 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

History of the manned space flight program
Aug 1, 1990; In English; 13 min. playing time, in color, with sound Report No.(s): NONP—NASA—VT—93—190325; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Astronaut Marshall 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

199400114507 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

199400029667 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

199400029283 NASA Lewis Research Center, Cleveland, OH, USA

Astronauts Part 5: Astronaut Collins
Jan 11, 1989; In English; 28 min. 57 sec. playing time, in color, with sound Report No.(s): NONP—NASA—VT—94—13532; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video is an interview with Michael Collins about his accomplishments, NASA’s accomplishments, and the future.

LeRC

Apollo Project; Astronauts

19950004306 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

19950004301 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

19950004338 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—23650; 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

199500026963 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 Bournand 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 (Sorrel) in space; NASA and its accomplishments, and the future.

DFRC

Histories: NASA Programs: Research Facilities
with Eurus the Monkey, President Kennedy’s speech in Washington about the Space Program, Project Gemini - the 2-manned space flight, and the near disastrous recovery of Virgil Grissom from splashdown.

CASI

Astronauts: Communication Satellites; Histories: Meteorological Satellites; NASA Space Programs; Space Flight

20010018719 NASA Kennedy Space Center, Cocoa Beach, FL USA

Beyond Earth’s Boundaries

Oct. 01, 1987; In English; Videotape: 5 min. 28 sec. playing time, in color, with sound

Report No.(s): NONP-NASA–VT–2001023144; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

An overview of the Lost River System (a method of detecting dry riverbeds) is given, including details on location identification and imaging techniques.

CASI

Imaging Techniques: Rivers; River Basins: Earth Observations (From Space)
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