

NASA JOHNSON SPACE CENTER ORAL HISTORY PROJECT

BIOGRAPHICAL DATA SHEET

NAME: David C. Leestma

ORAL HISTORY: 26 November 2002

EDUCATIONAL BACKGROUND:

B.S. in Aeronautical Engineering, United States Naval Academy, Annapolis, MD , 1971

M.S. in Aeronautical Engineering, United States Postgraduate School, Monterey, CA, 1972

PRE-NASA EXPERIENCE:

U.S. Navy (1971-1992)

- First Lieutenant, *USS Hepburn* (DE-1055), Long Beach, CA (1971-1972)
- Naval Aviator Training (1973)
- VF-124, San Diego, CA (1973-1974)
- VF-32, Virginia Beach, VA (1974-1977)
- Air Test and Evaluation Squadron Four (VX-4), Naval Air Station Point Mugu, CA (1977-1980)
- Detailed to NASA (1980-1992)
- Retired as Captain

NASA EXPERIENCE:

NASA Lyndon B. Johnson Space Center, Houston, TX (1980-Present)

- Astronaut, Astronaut Office (1980-Date Unknown)
- Chief, Mission Development Branch (Dates Unknown)
- Deputy Director of Flight Crew Operations (1990-1991)
- Deputy Chief and Acting Chief of the Astronaut Office (1992)
- Director, Flight Crew Operations Directorate (1992-1998)
- Deputy Director, Engineering Directorate (1998-Date Unknown)
- Manager, JSC Space Launch Initiative Project Office (Date Unknown-Present)

MISSIONS:

STS 41-G (*Challenger*)

- Crew: Commander Robert L. Crippen, Pilot Jon A. McBride, Mission Specialist 1 Kathryn D. Sullivan, Mission Specialist 2 Sally K. Ride, Mission Specialist 3 David C. Leestma, Payload Specialist 1 Marc Garneau, Payload Specialist 2 Paul D. Scully-Power
- Launched: 5 October 1984 at 07:03:00 A.M. EDT from Kennedy Space Center, FL
- Duration: 8 days, 5 hours, 23 minutes, 33 seconds
- Landed: 13 October 1984 at 12:26:33 P.M. EDT, Kennedy Space Center, FL
- Mission Highlights: This flight had a total of seven crew members—the largest crew ever to fly onboard a single spacecraft at the time; this was also the first flight which

included two women, Ride and Sullivan. Sullivan was the first American woman to complete an extravehicular activity (EVA). The crew tested the Orbital Refueling System (ORS) and proved it was possible to refuel satellites in Earth orbit. The crew also deployed the Earth Radiation Budget Satellite. Other payloads included: the Large Format Camera (LFC), the IMAX Camera, a package of Canadian Experiments (CANEX), Auroral Photography Experiment (APE), Radiation Monitoring Equipment (RME), Thermoluminescent Dosimeter (TLD), and eight Get Away Specials.

STS 28 (*Columbia*)

- Crew: Commander Brewster H. Shaw, Jr., Pilot Richard N. Richards, Mission Specialist 1 James C. Adamson, Mission Specialist 2 David C. Leestma, Mission Specialist 3 Mark N. Brown
- Launched: 8 August 1989 at 08:37:00 A.M. EDT from Kennedy Space Center, FL
- Duration: 5 days, 1 hour, 0 minutes, 8 seconds
- Landed: 13 August 1989 at 06:37:08 P.M. PDT, Edwards Air Force Base, CA
- Mission Highlights: This was the fourth classified Department of Defense mission.

STS 45 (*Atlantis*)

- Crew: Commander Charles F. Bolden, Pilot Brian Duffy, Mission Specialist 1 Kathryn D. Sullivan, Mission Specialist 2 David C. Leestma, Mission Specialist 3 C. Michael Foale, Payload Specialist 1 Byron K. Lichtenberg, Payload Specialist 2 Dirk D. Frimout
- Launched: 24 March 1992 at 08:13:00 A.M. EST from Kennedy Space Center, FL
- Duration: 8 days, 22 hours, 9 minutes, 28 seconds
- Landed: 2 April 1992 at 06:23:00 A.M. EST, Kennedy Space Center, FL
- Mission Highlights: This was the first Space Shuttle flight to carry the Atmospheric Laboratory for Applications and Science (ATLAS-1). The ATLAS-1 instruments included the Atmospheric Trace Molecule Spectroscopy (ATMOS), the Grille Spectrometer, the Imaging Spectrometric Observatory (ISO), the Atmospheric Lyman-Alpha Emissions (ALAE), the Atmospheric Emissions Photometric Imager (AEPI), the Space Experiments with Particle Accelerators (SEPAC), Active Cavity Radiometer (ACR), Measurement of Solar Constant (SOLCON), Solar Spectrum (SOLSPEC), Solar Ultraviolet Spectral Irradiance Monitor (SUSIM), and the Far Ultraviolet Space Telescope (FAUST). Other experiments included the Shuttle Solar Backscatter Ultraviolet (SSBUV) experiment, a get-away special experiment, and six mid-deck experiments.

AWARDS & CITATIONS:

- Distinguished Flying Cross
- Legion of Merit
- Defense Superior Service Medal
- Defense Meritorious Service Medal
- Navy Commendation Medal
- Navy Achievement Medal
- Meritorious Unit Commendation (VX-4)
- National Defense Service Medal
- Battle "E" Award (VF-32)
- Rear Admiral Thurston James Award, 1973
- NASA Space Flight Medal, 1984, 1989, 1992
- NASA Exceptional Service Medal, 1985, 1988, 1991, 1992
- NASA Outstanding Leadership Medal, 1993, 1994
- Meritorious Executive Award, 1998

REFERENCES:

"David C. Leestma NASA Biographical Data Sheet," Astronaut Biographies Homepage, Online, <http://www.jsc.nasa.gov/Bios/htmlbios/leestma.html> (Sheet Last Updated April 2000; accessed 10 April 2002).

David C. Leestma NASA Biographic Data Sheet (December 1992), David C. Leestma Biographical File, History Collection, Scientific and Technical Information Center, NASA Lyndon B. Johnson Space Center, Houston, TX.

"Senior Executive Service: 1998 Meritorious Executive Awards," United States Office of Personnel Management Homepage, Online, <http://www.opm.gov/ses/98merit.html> (Last Updated 7 June 2002; Accessed 3 June 2002).

"STS-28," Kennedy Space Center Historical Archive Homepage, Online, <http://science.ksc.nasa.gov/shuttle/missions/sts-28/mission-sts-28.html> (Last Updated 29 June 2001; Accessed 3 June 2002).

"STS-45," Kennedy Space Center Historical Archive Homepage, Online, <http://science.ksc.nasa.gov/shuttle/missions/sts-45/mission-sts-45.html> (Last Updated 29 June 2001; Accessed 5 June 2002).

"STS 41-G," Kennedy Space Center Historical Archive Homepage, Online, <http://science.ksc.nasa.gov/shuttle/missions/41-g/mission-41-g.html> (Last Updated 29 June 2001; Accessed 3 June 2002).