

NASA JOHNSON SPACE CENTER ORAL HISTORY PROJECT

BIOGRAPHICAL DATA SHEET

NAME: Charles (Charlie) F. Bolden, Jr.

ORAL HISTORY: January 6, 2004 & January 15, 2004

CURRENT RESIDENCE: Houston, TX

EDUCATIONAL BACKGROUND:

B.S. in Electrical Science, United States Naval Academy, Annapolis, MD, 1968
M.S. in Systems Management, University of Southern California, Los Angeles, CA, 1977
D. Sc. (honorary), University of South Carolina, Columbia, SC, 1984
D.H.L. (honorary), Winthrop College, Rock Hill, SC, 1986
D.H.L. (honorary), Johnson C. Smith University, Charlotte, NC, 1990
D.Sc. (honorary), San Diego State University, San Diego, CA, 2003

PRE-NASA EXPERIENCE:

U.S. Marine Corps (1968-2002)

- Accepted as Second Lieutenant (1968)
- Flight Training, Pensacola Naval Air Station, FL, Meridian Naval Air Station, MS, Kingsville Naval Air Station, TX (1968-1970)
- VMAT(AW)-202, Cherry Point Marine Corps Air Station, NC (1970-1971)
- VMA(AW)-121, Basic Training Officer and Schedules Officer, Cherry Point, NC (1971-1972)
- VMA(AW)-533, Nam Phong, Thailand (1973)
- Marine Corps Recruiting Officer, Los Angeles, CA (1973-1975)
- VMA(AW)-242, H&MS-13, MABS-13, El Toro Marine Corps Air Station, CA (1975-1978)
- Graduated from Naval Air Test Center, Patuxent River, MD (1979)
- Ordnance Test Pilot, Naval Air Test Center, Patuxent River, MD (1979-1980)
- Detailed to NASA (1980-1994)
- Retired as Major General (2002)

NASA EXPERIENCE:

NASA Lyndon B. Johnson Space Center, Houston, TX (1980-1994)

- Astronaut, Astronaut Office, Flight Crew Operations Directorate (1981-1994)
- Safety Officer, Astronaut Office, Flight Crew Operations Directorate (1984)
- Special Assistant to the Director, Johnson Space Center (1984)
- Technical Assistant to the Director, Flight Crew Operations Directorate (Date Unknown)
- Astronaut Office Liaison, Directorate of Safety, Reliability, and Quality Assurance, Marshall Space Flight Center, Huntsville, AL (Date Unknown)

- Astronaut Office Liaison, Directorate of Safety, Reliability, and Quality Assurance, Kennedy Space Center, FL (Date Unknown)
 - Chief of the Safety Division, Directorate of Safety, Reliability, and Quality Assurance (1987)
 - Lead Astronaut for Astronaut Office's Vehicle Integration Test Team, NASA Kennedy Space Center, FL (1987-Date Unknown)
- NASA Headquarters, Washington, D.C. (1992-1993)
- Assistant Deputy Administrator (1992-1993)

POST-NASA EXPERIENCE:

U.S. Marine Corps (1994-2002)

- Deputy Commandant of Midshipmen, U.S. Naval Academy, Annapolis, MD (1994-1997)
- Deputy Commanding General, 1MEF, Marine Forces, Pacific (1997)
- Commanding General, 1 MEF (FWD) Operation Desert Thunder, Kuwait (1998)
- Commanding General, Marine Air Wing 3, Miramar, CA (2000-2002)
- Nominated NASA Deputy Administer (2002)
- Retired as Major General (2002)

American PureTex Water Corporation and PureTex Water Works, Houston, TX (2003-Present)

- President and Chief Operating Officer, on Board of Directors (2003-Present)
- Director, Marathon Oil Corporation, Houston, TX (2003-Present)

TechTrans International Corporation, Houston, TX (2003-Present)

- Vice President (2003-Present)
- Serves on Board of Trustees, Family Literacy Foundation, San Diego, CA (2003)
- Director, Tailhook Educational Foundation, San Diego, CA (2003)

MISSIONS:

STS 61-C (*Columbia*)

- Crew: Commander Robert L. "Hoot" Gibson, Pilot Charles F. Bolden, Jr., Mission Specialist 1 Franklin R. Chang-Diaz, Mission Specialist 2 Steven A. Hawley, Mission Specialist 3 George D. "Pinky" Nelson, Payload Specialist 1 Robert J. Cenker, Payload Specialist 2 Congressman C. William Nelson
- Launched: 12 January 1986 at 6:55:00 a.m. EST from Kennedy Space Center, FL
- Duration: 6 days, 2 hours, 3 minutes, 51 seconds
- Landed: 18 January 1986 at 5:58:51 a.m. PST, Edwards AFB, CA
- Mission Highlights: Astronauts deployed the geosynchronous SATCOM KU-I (RCA Americom) satellite by using the Payload Assist Module-D2 (PAM-D2) motor. The orbiter carried 13 Get Away Special (GAS) canisters (12 of them mounted on a special GAS Bridge Assembly), which included experiments analyzing the effects of microgravity on materials processing, seed germination, and chemical reactions. Other activities included three Shuttle Student Involvement Science Laboratory-2 (MSL-2) liquid experiments, the Comet Halley Active Imaging Experiment (IR-IE),

the Initial Blood Storage Experiment (IBSE), and the Hand-held Protein Crystal Growth (HPCG) experiment. Astronauts attempted to film Comet Halley with a 35mm camera, but this resulted in dysfunction due to battery problems.

STS-31 (*Discovery*)

- Crew: Commander Loren J. Shriver, Pilot Charles F. Bolden, Jr., Mission Specialist 1 Steven A. Hawley, Mission Specialist 2 Bruce McCandless II, Mission Specialist 3 Kathryn D. Sullivan
- Launched: 24 April 1990 at 8:33:51 a.m. EDT from Kennedy Space Center, FL
- Duration: 5 days, 1 hour, 16 minutes, 6 seconds
- Landed: 29 April 1990 at 6:49:57 a.m. PDT, Edwards AFB, CA
- Mission Highlights: Astronauts deployed the Hubble Space Telescope (HST) in a 380-statute-mile orbit, captured by the IMAX Cargo Bay Camera (ICBC) and held-held IMAX camera inside the crew cabin. Secondary mission objectives included the Ascent Particle Monitor (APM), the Protein Crystal Growth (PCG) experiment, the Radiation Monitoring Equipment III (RME III), Investigations into Polymer Membrane Processing (IPMP), a Shuttle Student Involvement Program (SSIP) experiment to study effects of near-weightlessness on electrical arcs and an Air Force Maui Optical Site (AMOS) experiment.

STS-45 (*Atlantis*)

- Crew: Commander Charles F. Bolden, Pilot Brian Duffy, Payload Commander 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: STS-41 carried the Atmospheric Laboratory for Applications and Science (ATLAS-1), the first in a series of SpaceLab missions that were part of NASA's Mission to Planet Earth. This included 12 instruments that conducted studies in atmospheric chemistry, solar radiation, space plasma physics and ultraviolet astronomy. 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, one Get-Away Special (GAS) experiment, and six mid-deck experiments.

STS-60 (*Discovery*)

- Crew: Commander Charles F. Bolden, Pilot Kenneth S. Reightler, Jr., Mission Specialist 1 N. Jan Davis, Mission Specialist 2 Ronald M. Sega, Mission Specialist 3 Franklin R. Chang-Diaz, Mission Specialist 4 Sergei K. Krikalev
 - Launched: 3 February 1994 at 7:10:05 a.m. EST from Kennedy Space Center, FL
 - Duration: 8 days, 7 hours, 9 minutes, 22 seconds
 - Landed: 11 February 1994 at 2:18:41 a.m. EST, Kennedy Space Center, FL
- Mission Highlights: STS-60 was the first shuttle mission to have a Russian cosmonaut onboard. Russian cosmonaut Sergei K. Krikalev joined the crew after the implementation on an Agreement on NASA/Russian Space Agency (RSA) in Human Space Flight. It also marked the second flight of SPACEHAB and the 100th Get-Away Special payload to fly in space. There were problems associated with the Wake Shield Facility payload, used in conjunction with the Remote Manipulator System Arm. The NASA and RSA experiments included medical and radiological experiments and radio experimentation through the Shuttle Amateur Radio Experiment (SAREX). There were six Orbital Debris Radar Calibration Spheres (ODERACS) and BREMSAT, a University of Bremen experiment that measured conditions affecting satellites. Secondary experiments also included Capillary Pumped Loop Experiment (CAPL), three additional GAS experiments, and the Auroral Photography Experiment-Phase B (APE-B).

AWARDS & CITATIONS:

- Recipient of Distinguished Flying Cross
- Air Medal
- Strike/Flight Medal (eighth award)
- Navy Unit Commendation
- Armed Forces Expeditionary Medal
- Republic of Vietnam Gallantry Cross with Palm Unit Citation
- Vietnam Service Medal
- Republic of Vietnam Campaign Ribbon
- University of Southern California Outstanding Alumni Award, 1982
- National Technical Association Honorary Fellow, 1983
- Defense Superior Service Medal, 1986
- NASA Space Flight Medals, 1986, 1991, 1992, 1994
- NASA Exceptional Service Medals, 1988, 1989, 1991
- University of Southern California Alumni Award of Merit, 1989
- Defense Meritorious Service Medal, 1990
- AAS Flight Achievement Award, 1991
- NASA Outstanding Leadership Medal, 1992
- NASA Distinguished Service Medal, 1993, 1995
- Yuri Gagarin Gold Medal, 1995

REFERENCES:

Charles F. Bolden, Jr. Biographical Data Sheet (January 2002), NASA Johnson Space Center Homepage, Online, <http://www.jsc.nasa.gov/Bios/htmlbios/bolden-cf.html>.

“Bolden departs JSC for Marines,” Space News Roundup (NASA Lyndon B. Johnson Space Center) 24 June 1994, 1.

“Bolden to head Safety,” Space News Roundup (NASA Lyndon B. Johnson Space Center) 20 March 1987, 1.

Michael Cassutt, Who’s Who in Space (New York: Macmillan Library Reference USA, 1999), 64.

“Charles F. Bolden Jr.,” Marathon Oil Corporation, Online, http://www.marathon.com/About_Us/Board_of_Directors/Charles_F_Bolden_Jr/ (Copyright Date 2003; Accessed May 2003).

“Citation to Accompany the Award of the Defense Meritorious Service Medal to Charles F. Bolden, Jr.,” Charles F. Bolden, Jr. Personnel File, Awards Office, NASA Lyndon B. Johnson Space Center, Houston, TX.

“Citation to Accompany the Award of the Defense Superior Service Medal to Charles F. Bolden, Jr.,” Charles F. Bolden, Jr. Personnel File, Awards Office, NASA Lyndon B. Johnson Space Center, Houston, TX.

Aaron Cohen to Arnauld Nicogossian, “AAS Awards Memo,” 18 July 1991, Charles F. Bolden, Jr. Personnel File, Awards Office, NASA Lyndon B. Johnson Space Center, Houston, TX.

James L. Cole, Jr. to Daniel S. Goldin, “Federation Aeronautique Internationale (FAI) Yuri Gagarin Gold Medal,” 23 June 1995, Charles F. Bolden, Jr. Personnel File, Awards Office, NASA Lyndon B. Johnson Space Center, Houston, TX.

Chuck Crumbo. “Astronaut Bolden retires from Marines,” The State homepage, Online, <http://www.thestate.com/mld/state/3836127.htm> (Article Dated 10 August 2002; Accessed May 2003)

“Former NASA astronaut and manager nominated as Agency’s Deputy Administrator,” Marshall Space Flight Center Homepage, Online, <http://www1.msfc.nasa.gov/NEWSROOM/news/releases/2002/02-021.html> (Article Dated 5 February 2002; Accessed May 2003).

“George W.S. Abbey and Charles F. Bolden Jr. Join American PureTex Water Corporation,” Spaceref Homepage, Online,

<http://www.spaceref.com/news/viewpr.html?pid=10425> (Article Dated 15 January 2003; Accessed May 2003).

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Douglas B. Hawthorne, Men and Women of Space (San Diego: Univelt, 1992), 83-85.

“Individual Award History Report,” Charles F. Bolden, Jr. Personnel File, Awards Office, NASA Lyndon B. Johnson Space Center, Houston, TX.

Lyndon B. Johnson Space Center Telephone Directory (1984), Organization Files, Center Series, History Collection, Scientific and Technical Information Center, NASA Lyndon B. Johnson Space Center, Houston, TX.

Lyndon B. Johnson Space Center Telephone Directory (1987), Organization Files, Center Series, History Collection, Scientific and Technical Information Center, NASA Lyndon B. Johnson Space Center, Houston, TX.

“Managers get new posts,” Space News Roundup (NASA Lyndon B. Johnson Space Center) 20 November 1987, 2.

“Nomination: The AAS Flight Achievement Award,” Charles F. Bolden, Jr. Personnel File, Awards Office, NASA Lyndon B. Johnson Space Center, Houston, TX.

“STS 31,” Kennedy Space Center Homepage, Online, <http://science.ksc.nasa.gov/shuttle/missions/sts-31/mission-sts-31.html> (Last Updated 29 June 2001; Accessed May 2003).

“STS 45,” Kennedy Space Center Homepage, Online, <http://science.ksc.nasa.gov/shuttle/missions/sts-45/mission-sts-45.html> (Last Updated 29 June 2001; Accessed May 2003).

“STS 60,” Kennedy Space Center Homepage, Online, <http://science.ksc.nasa.gov/shuttle/missions/sts-60/mission-sts-60.html> (Last Updated 29 June 2001; Accessed May 2003).

“STS 61-C,” Kennedy Space Center Homepage, Online, <http://science.ksc.nasa.gov/shuttle/missions/61-c/mission-61-c.html> (Last Updated 29 June 2001; Accessed May 2003).

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