# NASA JOHNSON SPACE CENTER ORAL HISTORY PROJECT
# BIOGRAPHICAL DATA SHEET

**NAME:** Richard Noel "Dick" Richards

**ORAL HISTORY:** 26 January 2006

**EDUCATIONAL BACKGROUND:**

B.S. in Chemical Engineering, University of Missouri, St. Louis, MO, 1969
M.S. in Aeronautical Systems, University of West Florida, Pensacola, FL, 1970

**PRE-NASA EXPERIENCE:**

United States Navy (1969-1995)

- Aviator Trainee, Pensacola Naval Air Station, FL (1969-1970)
- Naval Aviator, Tactical Electronic Warfare Squadron 33, Norfolk Naval Air Station, VA (1970-1973)
- Naval Aviator, Fighter Squadron 103, *USS America* (CV-66)
- Naval Aviator, Fighter Squadron 103, *USS Saratoga* (CV-61)
- Test Pilot trainee, U. S. Naval Test Pilot School, Patuxent River, MD (1976)
- Project test pilot, Carrier Systems Branch, Naval Air Test Center, Patuxent River, MD (1976-1978)
- Test Pilot and Carrier Suitability Project Officer, F/A-18A Program Office, Strike Aircraft Test Directorate, Patuxent River, MD (1979)
- Detailed to Fighter Squadron 33 (1980)
- Detailed to NASA (1980-1995)
- Retired as Captain (1995)

**NASA EXPERIENCE:**

NASA Johnson Space Center, Houston, TX (1980-1998)

- Astronaut Candidate, Astronaut Office, Flight Crew Operations Directorate (1980-1981)
- Astronaut, Astronaut Office, Flight Crew Operations Directorate (1981-1995)
- Mission Director, Space Shuttle Program Office (1995-1997)
- Manager, Space Shuttle Program Integration (1997-1998)

**POST-NASA EXPERIENCE:**

Boeing Corporation (1998-current)

- Director, New Reusable Systems for Reusable Space Systems, Huntington Beach, CA (1998-Date unknown)
- Program Director, Shuttle & Space Station Integration, Boeing Human Space Flight & Integration, Houston, TX (Date unknown-current)

**MISSIONS:**

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 8:37:00 a.m. EDT from Kennedy Space Center, FL
- Duration: 5 days, 1 hour, 0 minutes, 8 seconds
- Landed: 13 August 1989 at 6:37:08 a.m. PDT, Edwards AFB, CA
- Mission Highlights: Department of Defense mission.

STS-41 (*Discovery*)

- Crew: Commander Richard N. Richards, Pilot Robert D. Cabana, Mission Specialist 1 William M. Shepherd, Mission Specialist 2 Bruce E. Melnick, Mission Specialist 3 Thomas D. Akers
- Launched: 6 October 1990 at 7:47:15 a.m. EDT from Kennedy Space Center, FL
- Duration: 4 days, 2 hours, 10 minutes, 4 seconds
- Landed: 10 October 1990 at 6:57:18 a.m. PDT, Edwards AFB, CA
- Mission Highlights: deployed ESA-built Ulysses spacecraft combined with two Inertial Upper Stages (IUS) and a Payload Assist Module-S (PAM-S) to explore the polar regions of the Sun. Other payloads and experiments included the Air Force Maui Optical Site (AMOS) experiment, the Chromosome and Plant Cell Division Experiment (CHROMEX), Investigations into Polymer Membrane Processing (IPMP), the Physiological Systems Experiment (PSE), the Radiation Monitoring Experiment III (RME III), the Shuttle Solar Backscatter Ultraviolet (SSBUV) experiment, the Solid Surface Combustion Experiment (SSCE), Shuttle Student Involvement Program (SSIP) experiments, the INTELSAT Solar Array Coupon (ISAC); and the Voice Command System (VCS).

STS-50 (*Columbia*)

- Crew: Commander Richard N. Richards, Pilot Kenneth D. Bowersox, Mission Specialist 2 Ellen S. Baker, Mission Specialist 3 Carl J. Meade, Payload Commander Bonnie J. Dunbar, Payload Specialist 1 Lawrence J. DeLucas, Payload Specialist 2 Eugene H. Trinh
- Launched: 25 June 1992 at 12:12:23 p.m. EDT from Kennedy Space Center, FL
- Duration: 13 days, 19 hours, 30 minutes, 4 seconds
- Landed: 9 July 1992 at 7:43 a.m. EDT, Kennedy Space Center, FL
- Mission Highlights: First Extended Duration Orbiter flight and the longest Space Shuttle mission to date. Primary payload was the United States Microgravity Laboratory-I (USML-1) Spacelab module to conduct microgravity research in a number of disciplines and provide new information on the effects of long-term space habitation on humans in the Extended Duration Orbiter Medical Project (EDOMP). Other experiments conducted included the Astroculture-1 (ASC) experiment, the Crystal Growth Furnace (CGF), the Drop Physics Module (DPM), the Generic Bioprocessing Apparatus (GBA), the Glovebox Facility (GBX), the Protein Crystal Growth (PCG) experiment, the Space Acceleration Measurement System (SAMS),

the Solid Surface Combustion Experiment (SSCE), the Surface Tension Driven Convection Experiment (STDCE), and the Zeolite Crystal Growth (ZCG) experiment. Secondary experiments were the Investigation in Polymer Membrane Processing (IPMP), Shuttle Amateur Radio Experiment-II (SAREX-II), and the Ultraviolet Plume Instrument (UVPI).

STS-64 (*Discovery*)

- Crew: Commander Richard N. Richards, Pilot L. Blaine Hammond, Jr., Mission Specialist 1 Jerry M. Linenger, Mission Specialist 2 Susan J. Helms, Mission Specialist 3 Carl J. Meade, Mission Specialist 4 Mark C. Lee
- Launched: 9 September 1994 at 6:22:35 p.m. EDT from Kennedy Space Center, FL
- Duration: 10 days, 22 hours, 49 minutes, 57 seconds
- Landed: September 20, 1994 at 5:12:52 p.m. EDT, Edwards AFB, CA
- Mission Highlights: deployed and retrieved the free-flying SPARTAN-201 (Shuttle Pointed Autonomous Research Tool for Astronomy) platform containing two telescopes to study the solar wind. Also carried the Simplified Aid for EVA Rescue (SAFER) system, the Biological Research in Canister II (BRIC-II) experiment, the LIDAR In-Space Technology Experiment (LITE), the Robot Operated Materials Processing System (ROMPS), the Shuttle Plume Impingement Flight Experiment (SPIFEX), the Solid Surface Combustion Experiment (SSCE), and the Radiation Monitoring Equipment III (RME-III) experiment. Twelve Get-Away Special (GAS) canisters and the GAS bridge assembly and the Trajectory Control Sensor (TCS) package on an Adaptive Payload Carrier were carried in the payload bay. Secondary experiments included the Air Force Maui Optical Site Calibration Test (AMOS), the Military Application of Ship Trails (MAST) experiment, and the Shuttle Amateur Radio Experiment-II (SAREX-II).

**AWARDS & CITATIONS:**

- Defense Superior Service Medal
- Distinguished Flying Cross
- Defense Meritorious Service Medal
- NASA Distinguished Service Medal (1993, 1995)
- NASA Space Flight Medals (4)
- NASA Exceptional Service Medal
- NASA Outstanding Leadership Medal (1998)
- National Defense Service Medals (2)
- Vietnam Service Medal
- Distinguished Graduate of U.S. Naval Test Pilot School
- Steve Thorne "Top Fox" Safety Award (1994)
- Naval Air Test Center Test Pilot of the Year for 1980
- Vladimir M. Komarov Diploma (1991)

**REFERENCES:**

"Astronauts leave corps," Space News Roundup (NASA Lyndon B. Johnson Space Center), 30 June 1995, 1.

"Awards ceremony honors JSC individuals, teams," Space News Roundup (NASA Lyndon B. Johnson Space Center), 17 July 1998, 1.

"Biographical Data," NASA Lyndon B. Johnson Space Center Homepage, Online, http://www.jsc.nasa.gov/Bios/htmlbios/richards.html (Last Updated April 1995; Accessed 5 August 2004).

"Boeing Float Sweeps Parade," in Inside Delta, Volume 4 Number 8, August 2000, Boeing Corporation Homepage, online, http://www.boeing.com/defense-space/space/delta/id/inde0800.pdf (Last Updated n.d.; Accessed 10 August 2004)

"Dittemore, Richards take on new roles," Space News Roundup (NASA Lyndon B. Johnson Space Center), 31 January 1997, 4.

"Employees earn Aviation Safety Awards," Space News Roundup (NASA Lyndon B. Johnson Space Center), 4 February 1994, 4.

"Employees, contractors earn NASA's highest honors," Space News Roundup (NASA Lyndon B. Johnson Space Center), 21 April 1995, 4.

Jim Dumoulin, ed., "STS-28," NASA Kennedy Space Center Homepage, Online, http://science.ksc.nasa.gov/shuttle/missions/sts-28/mission-sts-28.html (Last Updated 29 June 2001; Accessed 5 August 2004).

Jim Dumoulin, ed., "STS-41," NASA Kennedy Space Center Homepage, Online, http://science.ksc.nasa.gov/shuttle/missions/sts-41/mission-sts-41.html (Last Updated 29 June 2001; Accessed 5 August 2004).

Jim Dumoulin, ed., "STS-50," NASA Kennedy Space Center Homepage, Online, http://science.ksc.nasa.gov/shuttle/missions/sts-50/mission-sts-50.html (Last Updated 29 June 2001; Accessed 5 August 2004).

Jim Dumoulin, ed., "STS-64," NASA Kennedy Space Center Homepage, Online, http://science.ksc.nasa.gov/shuttle/missions/sts-64/mission-sts-64.html (Last Updated 29 June 2001; Accessed 5 August 2004).

"JSC workers earn NASA's top honors," Space News Roundup (NASA Lyndon B. Johnson Space Center), 22 March 1993, 1, 4.

Michael Cassutt, Who's Who in Space: The International Space Station Edition (New York: Macmillan Library Reference USA, 1999), 229-30.

"Resignations," Space News Roundup (NASA Lyndon B. Johnson Space Center), 4 September 1998, 8.

Richard N. Richards Biographical Data Sheet, April 1989, Richards, Richard N. Key Personnel File, Awards Office, Lyndon B. Johnson Space Center, Houston, TX.

"Shuttle crews receive awards for exploration," Space News Roundup (NASA Lyndon B. Johnson Space Center), 20 December 1991, 4.

BIOGRAPHICAL DATA SHEET CREATED: 25 JANUARY 2004