

NASA JOHNSON SPACE CENTER ORAL HISTORY PROJECT

BIOGRAPHICAL DATA SHEET

NAME: Joe Henry Engle

ORAL HISTORY: 22 April, 5 May, 27 May, 3 June, 24 June 2004

EDUCATIONAL BACKGROUND:

B.S. in Aeronautical Engineering, University of Kansas, Lawrence, Kansas, 1955

MILITARY EXPERIENCE: Major General, United States Air Force (retired)

PRE-NASA EXPERIENCE:

U.S. Air Force (USAF)

Air Force ROTC Program, University of Kansas, Manhattan, Kansas

Pilot Training (1956-1957)

Advanced Fighter Gunnery School (1957)

George Air Force Base (AFB), California

Fighter Pilot, 474th Fighter Day Squadron (1957-1959)

Fighter Pilot, 309th Tactical Fighter Squadron (1959-1961)

Edwards AFB, California

USAF Experimental Test Pilot School (1961-1962)

Test Pilot, Fighter Test Operations (1962)

USAF Aerospace Research Pilot School (1962-1963)

Project Pilot, X-15 Flight Research Program (1963-1966)

NASA INVOLVEMENT:

NASA Manned Spacecraft Center/ Johnson Space Center, Houston, Texas

Astronaut, Astronaut Office (1966-1982)

NASA Headquarters, Washington DC

Deputy Associate Administrator, Manned Space Flight (1982)

NASA Manned Spacecraft Center/ Johnson Space Center, Houston, Texas

Astronaut, Astronaut Office (1983-1986)

POST-NASA EXPERIENCE:

Kansas Air National Guard (ANG)

Assistant to CINC (Commander in Chief), U.S. Space Command, Colorado Springs,
Colorado (1986-1990s)

Consultant (1990s-present)

NASA Johnson Space Center, Houston, Texas

Consultant, Office of the Associate Director (1990s-present)

Aerospace and Engineering Consultant (1986-present)

Simulation Evaluation Pilot (1986-present)

MISSIONS:

STS-2 (*Columbia*)

- Crew: Commander Joseph H. Engle, Pilot Richard H. Truly
- Launched: 12 November 1981 at 10:09:59 A.M. EST from Kennedy Space Center, FL
- Duration: 2 days, 6 hours, 13 minutes, 12 seconds
- Landed: 14 November 1981 at 1:23:11 P.M. PST Edwards AFB, California
- Mission Highlights: Demonstrate safe re-launch (reuseability) and safe return of shuttle orbiter and crew. Verify the combined performance of entire shuttle vehicle-orbiter, solid rocket boosters and external tank. Payloads included: Orbital Flight Test Pallet consisting of the Measurement of Air Pollution from Satellite (MAPS) experiment, the Shuttle Multispectral Infrared Radiometer (SMIRR) experiment, the Shuttle Imaging Radar (SIR-A) experiment, the Features Identification and Location Experiment (FILE) and the Ocean Color Experiment (OCE). Also included was the 11,048 lb Development Flight Instrumentation (DFI) pallet, the Aerodynamic Coefficient Identification Package (ACIP), the Induced Environment Contamination Monitor (IECM) and the 5,395 lb Office of Space and Terrestrial Applications Pallet (OSTA-1).

STS 51-I (*Discovery*)

- Crew: Commander Joseph H. Engle, Pilot Richard O. Covey, Mission Specialist 1 James D. A. van Hoften, Mission Specialist 2 John M. Lounge, Mission Specialist 3 William F. Fisher
- Launched: 27 October 1985 at 6:58:01 A.M. EST from Kennedy Space Center, FL
- Duration: 7 days, 2 hours, 17 minutes, 42 seconds
- Landed: 3 September 1985 at 6:15:43 A.M. PDT Edwards AFB, California
- Mission Highlights: Three communications satellites were deployed: ASC-1, for the American Satellite Company; AUSSAT-1, an Australian Communications Satellite; and SYNCOM IV-4, the Synchronous Communications Satellite. Fisher and van Hoften performed 11 hours, 27 minutes of space walk. Part of time spent retrieving, repairing and redeploying LEASAT-3, deployed on Mission 51-D. Mid-deck Payload: Physical Vapor Transport Organic Solid Experiment (PVTOS).

PROFESSIONAL & HONORARY SOCIETIES:

- Member, Society of Experimental Test Pilots (SETP)
- Member, Board of Advisors, United Fishing Association Help America Fish Foundation
- Member, Foundation for North American Wild Sheep

AWARDS & CITATIONS:

- USAF Astronaut Wings, 1964
- USAF Distinguished Flying Cross, 1964
- AFA Outstanding Young USAF Officer of 1964
- U.S. Junior Chamber of Commerce- Ten Outstanding Young Men in America, 1964
- AIAA Pioneer of Flight Award, 1965

- AIAA Lawrence Sperry Award for Flight Research, 1966
- SETP Iven C. Kincheloe Award for Flight Test, 1977
- Soaring Society of America Certificate of Achievement, 1977
- NASA Exceptional Service Medal, 1977
- NASA Special Achievement Award, 1977
- AFA David C. Schilling Award for Flight, 1977
- USAF Distinguished Flying Cross, 1978
- AIAA Haley Space Flight Award, 1980
- AAS Flight Achievement Award, 1977
- Department of Defense Distinguished Service Medal, 1981
- NASA Distinguished Service Medal, 1981
- Robert H. Goddard Memorial Trophy, 1981
- Thomas D. White Space Trophy, 1981
- Robert J. Collier Trophy, 1981
- Clifford B. Harmon International Trophy, 1981
- DAR Medal of Honor, 1981
- NASA Space Flight Medal, STS-2, 1981
- Kansan of the Year, 1981
- Distinguished Service Award, University of Kansas, 1982
- Distinguished Engineering Service Award, University of Kansas, 1982
- NASA Space Flight Medal, 51-I, 1985
- USAF Distinguished Service Medal, 1985
- Inducted, Aerospace Walk of Honor, 1992
- Civil Air Patrol Idaho Squadron ID069 named, Joe Engle Squadron
- Lloyd P. Nolen Lifetime Achievement in Aviation Award, 1992

SOURCES:

"Astronaut Joe Engle retires," Space News Roundup (Johnson Space Center), 5 December 1986, 1.

"Biography-at-a-glance: Col. Joe H. Engle," [The Astronaut Connection Homepage], [Online]. (N.D. - Last Updated), Available: <http://nauts.com/bios/nasa/engle.html/> [21 September 2000 - Accessed].

Christopher C. Kraft, Jr. to Colonel Albert E. Preyss, 7 May 1976, Box 012-66, Shuttle Chronological Files, History Collection, Scientific and Technical Information Center, Lyndon B. Johnson Space Center, Houston, TX.

"Engle receives award for lifetime of achievements," Space News Roundup (Johnson Space Center), 28 August 1992, 1.

General Joseph H. Engle, interview by Rebecca Wright, 15 July 1998. Transcript. Phase 1 International Space Station Oral History Project, Scientific and Technical Information Center, Lyndon B. Johnson Space Center, Houston, TX.

Jim Dumoulin, "Joe Henry Engle (Colonel, USAF)," [NASA Kennedy Space Center Homepage], [Online]. (6 August 2000 - Last Updated), Available: <http://www.ksc.nasa.gov/persons/astronauts/e-to-h/EngleJH.txt/> [7 August 2000 - Accessed].

Joe H. Engle Service Record Card, Personnel File, Human Resources Office, Lyndon B. Johnson Space Center, Houston, TX.

Mark Wade, "Engle," [Mark Wade's Encyclopedia Astronautica Homepage], [Online]. (13 September 2000 - Last Updated), Available: <http://www.friends-partners.org/~mwade/astros/engle.htm/> [21 September 2000 - Accessed].

"Engle Bio (83)," [Maxwell Air Force Base/ Air University Homepage], [Online]. (N.D. - Last Updated), Available: <http://www.au.af.mil/au/goe/pages/bios/83bios/engle83.htm/> [21 September 2000 - Accessed].

"Engle Bio (87)," [Maxwell Air Force Base/ Air University Homepage], [Online]. (N.D. - Last Updated), Available: <http://www.au.af.mil/au/goe/pages/bios/87bios/engle87.htm/> [21 September 2000 - Accessed].

"Engle Bio (89)," [Maxwell Air Force Base/ Air University Homepage], [Online]. (N.D. - Last Updated), Available: <http://www.au.af.mil/au/goe/pages/bios/89bios/engle89.htm/> [21 September 2000 - Accessed].

"Engle Bio (95)," [Maxwell Air Force Base/ Air University Homepage], [Online]. (N.D. - Last Updated), Available: <http://www.au.af.mil/au/goe/pages/bios/95bios/engle95.htm/> [21 September 2000 - Accessed].

"Engle Bio (97)," [Maxwell Air Force Base/ Air University Homepage], [Online]. (N.D. - Last Updated), Available: <http://www.au.af.mil/au/goe/pages/bios/97bios/engle97.htm/> [21 September 2000 - Accessed].

Michael Cassutt, Who's Who in Space: International Space Year Edition. 1993, s.v. "Joe Henry Engle."

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Michelle Higley, "The Joe Engle Squadron - Civil Air Patrol - Burley, Idaho," [The Joe Engle Squadron Homepage], [Online]. (19 July 2000 - Last Updated), Available: <http://campus.fortunecity.com/slope/823/> [21 September 2000 - Accessed].

Milton O. Thompson, At the Edge of Space: The X-15 Flight Program, Foreword by Neil A. Armstrong, Washington, DC: Smithsonian Institution Press, 1992.

Johnson, Edwin. "Foundation for North American Wild Sheep," [Montana Guide Service Homepage]. [Online]. (N.D. - Last Updated). Available: <http://www.montanaguide.com/fnaws.html/> [21 September 2000 - Accessed].

" Aerospace Walk of Honor," [Lancaster Redevelopment Agency Homepage]. [Online]. (N.D. - Last Updated). Available: <http://www.econdev.lancaster.ca.us/aerospace.html/> [21 September 2000 - Accessed].

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"Astronaut Bio: Joe Henry Engle," [NASA Johnson Space Center Homepage], [Online]. (4 August 2000 - Last Updated), Available: <http://www.jsc.nasa.gov/Bios/htmlbios/engle-jh.html/> [7 August 2000 - Accessed].

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Roger D. Launius, "X-15 Biography," [NASA Headquarters Homepage], [Online]. (5 July 2000 - Last Updated), Available: <http://www.hq.nasa.gov/> [7 August 2000 - Accessed].

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