

# NASA JOHNSON SPACE CENTER ORAL HISTORY PROJECT

## BIOGRAPHICAL DATA SHEET

**NAME:** James C. McLane, Jr.

**ORAL HISTORY:** 13 November 2000

**EDUCATIONAL BACKGROUND:**

B.S. in Civil Engineering, Clemson University, Clemson, SC, 1948

**PRE-NASA EXPERIENCE:**

United States Army Air Force (1942-1945)

- Fighter Pilot (P-51 *Mustang* aircraft, unit and location unknown)

United States Air Force Reserve

- Retired as Major (Date Unknown)

National Advisory Committee for Aeronautics (NACA), Langley Aeronautical Laboratory, Hampton, VA (1948-1951)

- Civil/Structural Engineer (1948-1951)

Arnold Engineering Development Center (AEDC), Arnold Air Force Base, Tullahoma, TN (1951-1963)

- Design Engineer/ First Line Engineering Supervisor, United States Army Corps of Engineers (1951-1960)
- Civilian Supervisory Engineer, Space Chamber Technology, United States Air Force (1960-1963)

**NASA EXPERIENCE:**

NASA Manned Spacecraft Center/ Johnson Space Center, Houston, TX (1963-1981)

- Special Assistant to Chief, Test Facilities Branch, Structures and Mechanics Division, Engineering and Development Directorate (1963-1964)
- Special Assistant to Manager, Systems Evaluation and Test Office, Structures and Mechanics Division, Engineering and Development Directorate (1964-1967)
- Assistant Chief, Structures and Mechanics Division, Engineering and Development Directorate (1967-1968)
- Chief, Space Environment Test Division, Engineering and Development Directorate (1967-1981)

**POST-NASA EXPERIENCE:**

Lockheed Missiles and Space Company, DELTA Thermal/Vacuum Facility, Sunnyvale, CA (1983-1987)

- Engineering Consultant (through Eagle Aerospace Company) (1983-1987)

European Space Research and Technology Centre (ESTEC), Noordwijk, Holland (1991)

- Consultant (1991)

**PROFESSIONAL & HONORARY SOCIETIES:**

- Registered Professional Engineer (Texas and Tennessee)
- Associate Fellow, American Institute of Aeronautics and Astronautics (AIAA)
- Founding Member and Secretary, AIAA Working Group on Space Simulation (1964)
- Member, AIAA Technical Committee for Ground Test and Simulation (1968-1970)
- Chair, AIAA Houston Section (1971-1972)
- Member, AIAA Board of Directors (1977-1979)
- Director, AIAA Region IV (1977-1979)
- Chair, AIAA Career Environment Committee (1977-1980)
- Senior Advisor, AIAA Houston Section (1982-1989)
- Coordinator, AIAA Sister Section – China (1987-1990)
- Member, American Vacuum Society (AVS)
- Member, American Association for the Advancement of Science (AAAS)
- Member, National Society of Professional Engineers (NSPE)
- Member, Texas Society of Professional Engineers (TSPE)
- Member, Air Force Association (AFA)
- Member, People-to-People International

**AWARDS & CITATIONS:**

- NASA Exceptional Service Medal, 1969
- Twenty-three other awards from NASA, the US Air Force and the US Army
- Honorary Life Member, AIAA Working Group of Space Simulation, 1990

**SELECT PUBLICATIONS:**

McLane, J. C., Jr. "Large Butterfly Valves in the Propulsion Wind Tunnel Facility." ASME Paper 61-AV-22. Presented at ASME Aviation Conference, Los Angeles, California, 1961.

McLane, J. C., Jr. "Collecting and Processing Samples of the Moon." Aeronautics and Astronautics. Vol. 5, No. 8. August 1967, 34-37.

McLane, J. C., Jr., et al. "The Lunar Receiving Laboratory." Science. Vol. 155, 1967, p. 525-529.

McLane, J. C., Jr. "Apollo Testing in the Space Environment Simulation Laboratory." Transactions of the International Vacuum Metallurgy Conference. 1969, 175-200.

McLane, J. C., Jr. "Relation of Apollo Space Simulation Test Experience to Future Programs." Invited Address to the AIAA/ASTM/IES 4<sup>th</sup> Space Simulation Conference, Los Angeles, California, September 1969.

McLane, J. C., Jr. "Thermal-Vacuum Tests of All-Up Spacecraft for the Apollo Program." Proceedings of the 1971 Annual Symposium on Reliability. IEEE Catalog Number 71 C 2-R, 310-315.

McLane, James C., Jr. "Apollo Experience Report – Manned Thermal-Vacuum Testing of Spacecraft." NASA TN D-7610. March 1974.

Outman, V., and J. C. McLane, Jr. "Testing in the Simulated Space Environment – An Assessment." AIAA Paper 65-474. Invited for presentation at AIAA Second Annual Meeting, San Francisco, California, July 1965.

**REFERENCES:**

James C. McLane, Jr. Resume, 4 November 1990.

James C. McLane, Jr. Key Personnel (Inactive) File, Awards Office, Lyndon B. Johnson Space Center, Houston, Texas.

James C. McLane Service Record Card, Human Resources Office, Lyndon B. Johnson Space Center, Houston, Texas.

"James McLane: A test facility pro," Roundup (Manned Spacecraft Center), 13 March 1970, 2.

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