NASA JOHNSON SPACE CENTER ORAL HISTORY PROJECT BIOGRAPHICAL DATA SHEET

NAME: George Edwin Mueller, Ph.D.

ORAL HISTORY: 27 August 1998

20 January 1999

EDUCATIONAL BACKGROUND:

B.S. in Electrical Engineering, Missouri School of Mines, University of Missouri, Rolla, Missouri, 1939

M.S. in Electrical Engineering, Purdue University, West Lafayette, Indiana, 1940

Ph.D. in Physics, Ohio State University, Columbus, Ohio, 1951

PRE-NASA CAREER:

Member Technical Staff, Bell Telephone Laboratories, Holmdel, New Jersey (1940-1946)

Ohio State University, Columbus, Ohio

Professor of Electrical Engineering (1946-1957)

Director, Dielectric Antenna Program (1946-1957)

Consultant, Electronics, Ramo-Wooldridge, Inc., California (1955-1957)

Space Technology Laboratories, Redondo Beach, California

Vice President, Research and Development (1962-1963)

Director, Electronic Laboratories (1958-1962)

Program Director, "Able" Space Program (1958-1962)

Vice President, Space Systems Management (1958-1962)

NASA CAREER:

Office of Manned Space Flight, NASA Headquarters, Washington, DC

Deputy Associate Administrator for Manned Space Flight (September 1963-November 1963)

Associate Administrator for Manned Space Flight (November 1963-1969)

Acting Director, Apollo Program (1964)

POST-NASA CAREER:

Senior Vice President, General Dynamics Corporation, Falls Church, Virginia (1969-1971)

System Development Corporation, Santa Monica, California

Chairman, President (1971-1980)

Chairman, Chief Executive Officer (1981-1983)

Burroughs Corporation

Senior Vice-President (1982-1983)

Consultant (1984- date unknown)

President, Jojoba Propagation Laboratories (1983- 1995) Chairman, Desert King Jojoba Corporation (1983- 1995) Chief Executive Officer, Kistler Aerospace, Kirkland, Washington (1995- Present)

PROFESSIONAL & HONORARY SOCIETIES:

- Fellow, American Association for the Advancement of Science (AAAS)
- Fellow, Institute of Electronic and Electrical Engineers (IEEE)
- Fellow, American Institute of Aeronautics and Astronautics (AIAA), President, 1979
- Fellow, American Physical Society
- Fellow, American Astronautical Society (AAS)
- Fellow, American Geophysical Union
- Fellow, British Interplanetary Society
- Fellow, Royal Aeronautical Society
- Member, International Academy of Astronomy, President, 1982
- Member, National Academy of Engineering
- Member, New York Academy of Sciences
- Member, Institute of Advanced Engineering
- Member, Sigma Xi
- Member, Air Force Association
- Member, AIAA technical committee on spacecraft and launch vehicles
- Member, Editorial board of the Institute of Radio Engineers (IRE)
- Chairman, Columbus section of the IRE
- Member, Commission 6 (Radio Wave and Transmission of Information), International Scientific Radio Union

AWARDS & CITATIONS:

- Honorary Degree-Wayne State University, 1964
- Honorary Degree-New Mexico State University, 1964
- Honorary Degree-University of Missouri, 1964
- Honorary Degree-Purdue University, 1965
- Honorary Degree-Ohio State University, 1965
- Honorary Degree-Pepperdine University, 1979
- National Medal of Science, 1970
- NASA Distinguished Service Medals, 1966, 1968, 1969
- Eugen Sanger Award, 1970
- Goddard Medal, from the American Institute of Aeronautics and Astronautics, 1983
- Sperry Award, 1986
- Space Flight Award, from the American Astronautical Society
- Fono Albert Emlekerem Space Award, Hungary, 1983
- National Transportation Award, 1979
- International Peace Cooperation Award, USSR, 1984
- Herman Oberth Medal, 1985
- Veterans of Foreign Wars Space Award, 1968

- Space Humanitarian Award, 1997
- Werner Von Braun Award, 1997

SELECT PUBLICATIONS:

- Mueller, Dr. George E. "Getting it all Together." In <u>Apollo Expeditions to the Moon</u>. The NASA History Series. Washington DC: NASA, 1975.
- Mueller, George E., Robert F. Rozycki, and Click D. Smith, Jr. <u>Improving Cargo Visibility in the Joint Deployment System</u>. Bethesda, MD: Logistics Management Institute, 1986.
- Mueller, George E. "Apollo, Skylab and Shuttle: The Past Present and Future." <u>AIAA Student Journal</u> 11 (April 1973): 32-37.
- Mueller, George E. "The Future of Data Processing in Aerospace." <u>Aeronautical Journal</u> 83 (April 1979): 149-158.
- Mueller, George E. "The New Future for Manned Spacecraft Developments." <u>Astronautics and Aeronautics</u> 7 (1 March 1969): 24-32.
- Mueller, George E. "The Benefits of Space Exploration Related to the Space Shuttle." <u>Interavia</u> 27 (December 1972): 1335-1336.
- Mueller, George E. "Commercial Applications of Space Research." <u>Interavia</u> 24 (December 1969): 1939-1942.
- Mueller, George E. "Post-Apollo Revisited." <u>Astronautics and Aeronautics</u> 17 (July-August 1979): 24-31.
- Mueller, George E. "Space Shuttle-Beginning a New Era in Space Cooperation." <u>Astronautics and Aeronautics</u> 10 (September 1972): 20-25.
- Mueller, George E. "An Integrated Space Program for the Next Generation." <u>Astronautics</u> and Aeronautics 8 (January 1970): 30-51.
- Mueller, Dr. George E. "Application of Computers to Manned Space Flight." <u>Computer Group News</u> (September 1969): 42-46.
- Mueller, G. E. and E. R. Spangler. <u>Communication Satellites</u>. New York: John Wiley & Sons, Inc., 1964.
- Mueller, George E. "A Low Cost Aerospace Vehicle." <u>Acta Astronautica</u> 39 (July-August 1996): 239-244.

- Mueller, G. E. "Step by step toward the second generation of the Space Shuttle." <u>L'Aeronautique et l'Astronautique</u> no. 94 (1982): 31-37.
- Mueller, G. E. "Apollo- Looking Back." In <u>Systems Concepts: Lectures on Contemporary Approaches to Systems</u>. New York: Wiley-Interscience, 1973.
- Mueller, G. E. "Beyond the Shuttle; Future Space Travel Opportunities." In the Future United States Space Program, Proceedings of the 25th Anniversary Conference, Houston, TX, 30 October-2 November 1978.
- Mueller, G. E. and I. J. Gruntfest. "Analog Study of the Dynamics of a Nonlinear Maxwell Model Material." <u>Society of Rheology, Transactions</u> 10, pt. 2 (January 1966): 529-543.
- Mueller, G. E. "Manned Space Flight-The Future." Spaceflight 10 (December 1968): 406-414.
- Mueller, G. E. "Apollo and Beyond." Spaceflight 11 (September 1969): 298-303.
- Mueller, G. E. "A Review of the Gemini Manned Spaceflight Program." Presented at the 17th Spacecraft Systems International Astronautical Congress, Madrid, Spain, 9-15 October 1966.
- Mueller, G. E. "Viscous Heating in Models of Viscoelastic Materials with Temperature Dependent Viscosity." Delaware University, Newark, Delaware.
- Mueller, G. E. and J. Hammersmith. "Manned Space Flight Capabilities, Appendix A." In the Proceedings of the Winter Study on Uses of Manned Space Flight, 1975-1985, 1969.
- Mueller, G. E. "Manned Space Flight Programs Prospectus." 1 January 1967. Washington, DC: NASA.
- Mueller, George E., Robert F. Rozycki, and Click D. Smith, Jr. <u>Improving Cargo Visibility in the Joint Deployment System</u>. Bethesda, MD: Logistics Management Institute, 1986.

PATENTS:

- Electron Discharge Apparatus. G. E. Mueller. 17 August 1943. Patent No. 2,326,877.
- Microwave Directive Antenna. G. E. Mueller, C. B. H. Feldman, and N. J. Rumson. 3 December 1946. Patent No. 2,411,872.
- Microwave Directive Antenna. G. E. Mueller. 12 August 1947. Patent No. 2,425,336.
- Microwave Antenna. G. E. Mueller. 24 August 1948. Patent No. 2,447,768.

Balanced Electronic Translating System. G. E. Mueller. 13 June 1950. Patent No. 2,511,120

High-frequency Amplifier. G. E. Mueller. 1 December 1953. Patent No. 2,661,441.

Radio Control System. G. E. Mueller. 28 November 1961. Patent No. 3,010,416.

BIOGRAPHICAL REFERENCES:

Who's Who in America, 46th ed. Vol. 2, s. v. "Mueller, George Edwin."

American Men and Women of Science, 17th ed. Vol. 5, s. v. "Mueller, George Edwin."

The International Who's Who, 53rd ed., s. v. "Mueller, George Edwin."

NASA Biographical Data Sheet (8 January 1964), George E. Mueller Biographical File, History Collection, Scientific and Technical Information Center, Lyndon B. Johnson Space Center, Houston, Texas.

Henry C. Dethloff, <u>Suddenly, Tomorrow Came: A History of the Johnson Space Center</u>, The NASA History Series (Houston: National Aeronautics and Space Administration, Lyndon B. Johnson Space Center, 1993), 101.

"Kistler: Board of Directors" [Kistler Aerospace Homepage], [Online]. (3 April 1998-Last Updated). Available: http://newspace.com/industry/Kistler/std/directors.html [17 June 1998-Accessed].

"Kistler CEO George Mueller Receives 1997 Space Humanitarian Award" [Kistler Aerospace Corporation Homepage], [Online]. (3 April 1998-Last Updated). Available: http://www.newspace.com/industry/kistler/news/pr/18.html [1 July 1998-Accessed].

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