# NASA JOHNSON SPACE CENTER ORAL HISTORY PROJECT BIOGRAPHICAL DATA SHEET

NAME: Maxime Allan Faget

ORAL HISTORY:	18-19 June 1997
	19 August 1998

# **EDUCATIONAL BACKGROUND:**

Attended San Francisco Junior College, 1939-1940 BS in mechanical engineering, Louisiana State University, 1943

**MILITARY EXPERIENCE:** Naval Reserve Officer, United States Navy, Assigned to submarine service (1943-1946)

## **PRE-NASA CAREER:**

NACA Langley Aeronautical Laboratory, Hampton, Virginia Aeronautical Engineer/Research Scientist, Pilotless Aircraft Research Division (PARD) (1946-1950)
Head, Performance Section, Propulsion Aerodynamics Branch (1950-1951)
Head, Performance & Aerodynamics Branch (1951-1958)

### NASA CAREER:

NASA Space Task Group, Langley Research Center, Hampton, Virginia Chief, Flight Systems Division (1958-1961)

NASA Manned Spacecraft Center/Johnson Space Center, Houston, TX Director, Engineering and Development (1961-1981)

## **POST-NASA CAREER:**

Eagle Engineering, Inc., Houston, TX Vice President for New Systems Development (1981-1984) Space Industries, Inc., League City, TX Chairman of the Board (1982- date unknown) Senior Advisor (date unknown -1998)

## **CURRENT OCCUPATION:** Retired

#### **ADVISORY POSITIONS:**

- Director, Eagle Engineering, Inc., Houston, TX
- Trustee, Houston Museum of Natural Science
- Mechanical Engineering Advisory Committee, Louisiana State University
- Texas Space Science and Industry Commission
- Engineering Foundation Advisory Council, University of Texas

### Maxime A. Faget

# **PROFESSIONAL & HONORARY SOCIETIES:**

- Honorary Fellow, American Institute of Aeronautics and Astronautics
- Fellow, American Astronomical Society
- Member, International Academy of Astronautics
- Member, National Academy of Engineering
- Member Emeritus, Board of Visitors, University of Pittsburgh, School of Engineering
- Charter Member, Louisiana State University's Engineering Hall of Distinction
- Omicron Delta Kappa (National Leadership Society)
- Tau Beta Pi (National Engineering Honor Society)

# AWARDS & CITATIONS:

- The Arthur S. Flemming Award, 1959
- Academy of Achievement Golden Plate Award, 1962
- NASA Medal for Outstanding Leadership, 1963
- Sword of Loyola Award, Loyola University, 1965
- Honorary Doctorate of Engineering, University of Pittsburgh, 1966
- NASA Distinguished Service Medal, 1969
- NASA Medal for Exceptional Service, 1969
- National Space Hall of Fame, 1969
- American Institute of Aeronautics and Astronautics Spacecraft Design Award, 1970
- Louisiana State University Alumnus of the Year Award, 1971
- Institute of Electrical and Electronics Engineers Award of Outstanding Accomplishment in the Field of Systems Science and Systems Engineering, 1971
- American Astronautical Society's William Randolph Lovelace II Award, 1971
- Honorary Doctorate of Engineering, Louisiana State University, 1972
- Daniel and Florence Guggenheim International Astronautics Award, 1973
- American Society of Mechanical Engineering Gold Medal, 1975
- Institute of Electrical and Electronics Engineers Harry Diamond Award, 1976
- American Astronautical Society's Space Flight Award, 1976
- Instrument Society of America Albert F. Sperry Medal, 1976
- American Institute of Aeronautics & Astronautics Goddard Astronautics Award, 1979
- Charter Member, Louisiana State University Engineering Hall of Distinction, 1979
- Presidential Rank of Meritorious Executive, 1980
- NASA Distinguished Service Medal, 1981
- NASA Exceptional Engineering Achievement and Medal, 1982
- Rotary National Award for Space Achievement, 1987
- AAS Lloyd V. Berkner Award, 1987
- Jack Swigert Memorial Award, 1988

# **SELECT PUBLICATIONS:**

Faget, M.A. "Flight Tests of a Two Dimensional Wedge Diffuser at Transonic and Supersonic Speeds." <u>NACA RM L8E27</u>, August 1948.

Faget, M.A. and Rudolph Dettwyler II. "Initial Flight Investigation of a Twin-Engine Super-Sonic Ramjet." Confidential. <u>NACA RM L50H10</u>, September 1950.

Faget, M.A. and Raymond S. Watson. "Free-Jet Tests of a 6.5 Inch-Diameter Ramjet Engine at Mach Number of 1.81 and 2.00." Confidential. <u>NACA RM L50L06</u>, March 1951.

Faget, M.A. "Flight Experience with a Small Ground-Launched Ramjet Test Vehicle." Presented to Ames Aeronautical Laboratory, Moffett Field, CA, October 1951.

Faget, M.A. and Carlos A. Demoraes. "Some Effects of a Jet on Surfaces Down Stream of the Exit." Confidential. Presented for AAL, Moffett Field, CA. July 1953.

Faget, M.A. "A Proposed Ramjet Control System Operated by Use of Diffuser Pressure Recovery." <u>NACA RM L52E05b</u>, September 1952.

Faget, M.A. and Rudolph H. Dettwyler. "Engineering Method of Ramjet Thrust Determination Based on Experimentally Obtained Combustor Parameters. Confidential. <u>NACA RM L53E21</u>, August 1953.

Faget, M.A., Sherwood Hoffman, and Austin L. Wolff. "Flight Investigation of the Supersonic Area Rule for a Straight Wing-Body Configuration at Mach Numbers Between 0.8 and 1.5." Confidential. <u>NACA RM L55009</u>, April 1955.

Faget, M.A. and Walter E. Bressette. "An Investigation of the Jet Effects on Adjacent Surfaces." Confidential. <u>NACA RM L55E06</u>, June 1955.

Faget, M.A. and Harry W. Carlson. "Experimental Techniques for Predicting Store Motions During Release of Ejection." Confidential. <u>NACA RM L55123b</u>, February 1956.

Faget, M.A. and Dorothy B. Lee. "Charts Adapted for Van Driest's Turbulent Flat-Plate Theory for Determining Values of Turbulent Aerodynamic Friction and Heat-Transfer Coefficients." <u>NACA TN3811</u>, October 1956.

Faget, M.A. and Carl A. Sandahl. "Similitude Relations for Free-Model Wind-Tunnel Studies of Store-Dropping Problems." <u>NACA TN3907</u>, January 1957.

Faget, M.A. "The Sine-Cosine Method for Reducing the Interference Pressure Drag of Sweptback Wings." Confidential. <u>NACA RM L57D24</u>, July 1957.

Faget, M.A. and Robert O. Piland. "Mercury Capsule and Its Flight Systems." New York: IAS Meeting, January 1960. <u>Aero-Space Engineering</u>, April 1960.

Faget, M.A., Robert R. Gilruth, Robert O. Piland, Stanley C. White, Robert G. Chilton, and Charles J. Donlan. "Guidelines for Advanced Manned Space Vehicle Program." Confidential. <u>NASA N-84650</u>, June 1960.

Faget, M.A. and Charles W. Mathews. "Manned Lunar Landing." <u>Aerospace</u> <u>Engineering</u>, January 1962.

Faget, M.A. "NASA - Manned Spacecraft Center Facilities." San Antonio, TX: Proceedings of the Third Annual Symposium on Non-Destructive Testing of Aircraft and Missile Components. February 27-March 1, 1962, p. 191-198.

Faget, M.A. and Benjamine J. Garland. "Preliminary Studies of Manned Satellites; Wingless Configuration." <u>NASA TN D-1254</u>, March 1962.

Faget, M.A. and Robert R. Gilruth. "Manned Lunar Mission." <u>Technology of Lunar</u> <u>Exploration</u>. Academic Press, 1963, p. 281-290.

Faget, M.A. and Paul E. Purser. "From Mercury to Mars." <u>Astronautics and Aerospace</u> <u>Engineering</u>, February 1963, p. 24-28.

Faget, M.A. "Engineering and Scientific Goals." <u>American Institute of Aeronautics and Astronautics Publication</u>, February 1963.

Faget, M.A. "The Engineer in US Research." <u>Space World</u>, Volume A-11, September 1964, p. 10-13.

Faget, M.A., Paul E. Purser, and Norman F. Smith, editors. <u>Manned Spacecraft,</u> <u>Engineering Design and Operation</u>. New York: Fairchild Publications, Inc., 1964.

Faget, M.A. "Apollo - The Long View." <u>Astronautics and Aeronautics</u>, Volume 3, April 1965, p. 60-63.

Faget, M.A. Manned Space Flight. New York: Holt, Rinehart, and Winston, 1965.

Faget, M.A. and Edward H. Olling. "Orbital Space Stations with Artificial Gravity." NASA SP-152, 1968, p. 7-16.

Faget, M.A. and Robert E. Smylie. "Apollo Life-Support and Protective Systems." Mar del Plata, Argentina : XXth International Astronautical Congress, October 5-11, 1969.

Faget, M.A. "A New Configuration Concept for a Space Shuttle the Provides Suitable Characteristics for Launch, Entry, and Landing." <u>American Institute of Aeronautics and</u> <u>Astronautics</u>. Anaheim, CA: Annual Meeting and Technical Display, October 1969. Faget, M.A. "Space Shuttle: A New Configuration." <u>Astronautics and Aeronautics</u>, January 1970, p. 52-61.

Faget, M.A. and M.A. Silveira. "Fundamental Design Considerations for Earth-Surface-To-Orbit Shuttle." Constance, Germany Federal Republic: XXIst International Astronautical Congress, October 4-10, 1970.

Faget, M.A. and Hubert P. Davis. "Space Shuttle Applications." <u>New York Academy of</u> <u>Sciences</u>, January 1972.

Faget, M.A. "Technology Past, Present, and Future." <u>AIAA Student Journal</u>, February 1972, p. 6-8.

Faget, M.A. "Shuttle Operations and Design Implications." Washington, DC: AIAA Ninth Annual Meeting and Technical Display, January 9, 1973.

Faget, M.A. "Growth Performance Possibilities of the Space Shuttle Transportations System." Langley Research Center, VA: NASA Space Missions Symposium, May 3-5, 1972.

Faget, M.A. "Background and Planning for the Apollo/Soyuz Mission." Tsachkadzor, Russia: VI IFAC Symposium on Automatic Control in Space, August 26-31, 1974.

Faget, M.A. "The Evolution of Flight Control of the Apollo Mission." Alamorgordo, NM: International Space Hall of Fame Dedication Conference, International Academy of Astronautics, October 5-9, 1976.

Faget, M.A. "The Space Shuttle." Helsinki, Finland: IFAC VII World Congress, June 12-16, 1978.

Faget, M.A. "Shuttle Growth." Vancouver, British Columbia: Abbotsford International Aerospace Conference, August 6-7, 1980.

Faget, M.A. "Space Shuttle Life Support Systems - A Status Report." Rome, Italy: XXXII International Astronautical Federation (IAF) Congress, September 6-12, 1981.

Faget, M.A. "An Overview of United States Manned Space Flight from Mercury to Shuttle." Rome, Italy: XXXII International Astronautical Federation (IAF) Congress, September 6-12, 1981.

# PATENTS:

Flight Mach Number Meter. M.A. Faget. October 23, 1956. Patent No. 2,767,579

Aerial Capsule Emergency Separation Device (Escape Tower). M.A. Faget and Andre J. Meyer, Jr. 26 September 1961. Patent No. 3,001,739.

Survival Couch. M.A. Faget, W.M. Bland, Jr., and Jack C. Heberlig. 12 June 1962. Patent No. 3,038,175.

Mercury Capsule. M.A. Faget, A.J. Meyer, R.G. Chilton, W.S. Blanchard, A.B. Kehlet, J.B. Hammack, and C.C. Johnson. 11 June 1963. Patent No. 3,039,346.

Space Capsule. M.A. Faget, A.J. Meyer, R.G. Chilton, W.S. Blanchard, A.B. Kehlet, J.B. Hammack, and C.C. Johnson. 6 September 1966. Patent No. 3,270,908.

Space Shuttle Vehicle and System. M.A. Faget. 14 November 1972. Patent No. 3,702,688

Space Vehicle System. M.A. Faget, William W. Petynia, and Willard M. Taub. 30 December 1975. Patent No. 3,929,306.

Space Operable in Two Alternative Flight Modes. M.A. Faget, C.C. Johnson, and D.J. Bergeron. 1 March 1988. Patent No. 4,728,061.

Spacecraft With Articulated Solar Array. M.A. Faget, C.C. Johnson, and D.J. Bergeron. 31 May 1988. Patent No. 4,747,567.

Modular Spacecraft System. M.A. Faget, C.C. Johnson, and D.J. Bergeron. 30 May 1989. Patent No. 4,834,325.

Apparatus and Method for Docking Spacecraft. M.A. Faget, and C.C. Johnson. 27 February 1990. Patent No. 4,903,939.

Structural Latch for Vehicle Coupling Mechanisms. M.A. Faget, and C.C. Johnson. 14 April 1992. Patent No. 5,104,070.

BIOGRAPHICAL DATA SHEET CREATED: 21 NOVEMBER 1997