

NASA JOHNSON SPACE CENTER ORAL HISTORY PROJECT

BIOGRAPHICAL DATA SHEET

NAME: Richard Horace Battin

ORAL HISTORY: 18 April 2000

EDUCATIONAL BACKGROUND:

S.B. in Electrical Engineering, Massachusetts Institute of Technology, Cambridge, Massachusetts, 1945

Ph.D. in Applied Mathematics, Massachusetts Institute of Technology, Cambridge, Massachusetts, 1951

JOBS BEFORE NASA INVOLVEMENT:

Instrumentation Lab, Massachusetts Institute of Technology, Cambridge, Massachusetts (1951-1956, 1957-1959)

Adjunct Professor, Department of Aeronautics and Astronautics, Massachusetts Institute of Technology, Cambridge, Massachusetts (1951-date unknown)

Unknown Private Industry (1956-1957)

NASA INVOLVEMENT:

Instrumentation Lab, Massachusetts Institute of Technology, Cambridge, Massachusetts (1959-1970)

Engineer (1961- date unknown)

Assistant Director (ca.1962- date unknown)

Director of Space Guidance and Analysis (ca.1966- date unknown)

Charles Stark Draper Laboratory, Cambridge, Massachusetts (1970-1975)

JOBS AFTER NASA INVOLVEMENT:

Adjunct Professor, Department of Aeronautics and Astronautics, Massachusetts Institute of Technology, Cambridge, Massachusetts (date unknown -present)

Charles Stark Draper Laboratory, Cambridge, Massachusetts (1970- date unknown)

Associate Department Head (ca. 1981- date unknown)

CURRENT OCCUPATION: Adjunct Professor, Department of Aeronautics and Astronautics, Massachusetts Institute of Technology, Cambridge, Massachusetts

PROFESSIONAL & HONORARY SOCIETIES:

- Honorary Fellow, American Institute of Aeronautics and Astronautics (AIAA)
- Fellow, American Astronautical Society (AAS)
- Member, National Academy of Engineering
- Member, International Academy of Astronautics

AWARDS & CITATIONS:

- AIAA Louis W. Hill Space Transportation Award, 1972
- AIAA Mechanics and Control of Flight Award, 1978
- Institute of Navigation Superior Achievement Award, 1980
- MIT Department of Aeronautics and Astronautics Teaching Award, 1981
- AIAA von Karman Distinguished Lectureship for Astronautics, 1989
- AAS Dirk Brouwer Award, 1996

SELECT PUBLICATIONS:

Laning J. Halcombe, and Richard H. Battin. Random Processes in Automatic Control. New York, NY: McGraw-Hill, 1956.

Battin, Richard H. A Navigation Theory for Round-Trip Reconnaissance Missions to Venus and Mars. Cambridge, MA: MIT Instrumentation Laboratory, 1959.

Alonso, R. L., R. Battin, P. Bowditch, J. M. Dahlen, J. H. Laning, Jr., R. J. Magee, K. Nordtvedt, R. A. Scholten, H. H. Seward, and M. B. Trageser. "Interplanetary Navigation System Study, Volume iii of iii." 1 April 1960. (64N81342 or 71N75477) Scientific and Technical Information Center, Lyndon B. Johnson Space Center, Houston, TX.

Battin, Richard H. Circumlunar Trajectory Calculations. Cambridge, MA: MIT Instrumentation Laboratory, 1962.

Draper, C. S., M. Trageser, D. Hoag, and R. Battin. "Slide Reprints of Presentation at NASA Headquarters, Washington, D. C." 15 April 1963. (73N74771) Scientific and Technical Information Center, Lyndon B. Johnson Space Center, Houston, TX.

Draper, C. S., M. B. Trageser, D. G. Hoag, P. K. Bryant, and R. H. Battin. "Reprints of Presentation to Northeast Executives Visit at Instrumentation Laboratory, Massachusetts Institute of Technology." 13 March 1964. (78N70354) Scientific and Technical Information Center, Lyndon B. Johnson Space Center, Houston, TX.

Battin, Richard H. Astronautical Guidance. New York, NY: McGraw-Hill, 1964.

Battin, Richard H. Application of Kalman Filtering Techniques to the Apollo Program. Cambridge, MA: MIT Instrumentation Laboratory, 1969.

Battin, Richard H. Space Guidance and Navigation. New York, NY: American Institute of Aeronautics and Astronautics, 1970.

Battin, Richard H. An Introduction to the Mathematics and Methods of Astrodynamics. New York, NY: American Institute of Aeronautics and Astronautics, 1987.

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Richard H. Battin, "Space Guidance Evolution – A Personal Narrative," Journal of Guidance and Control 5, no. 2 (March-April 1982): 97.

Richard H. Battin, "A Statistical Optimizing Navigation Procedure for Space Flight," 30 November 1962, Apollo Chronological Files, Correspondence 11-30 November 1962, Box 63-31, History Collection, Scientific and Technical Information Center, Lyndon B. Johnson Space Center, Houston, TX.

Richard H. Battin, "Some Funny Things Happened on the Way to the Moon" (Washington, DC: American Institute of Aeronautics and Astronautics, 1989), 1, AIAA-89-0861.

Atmospheric Flight Mechanics Technical Committee Brochure, [Oklahoma State University Mechanical and Aerospace Engineering Homepage], [Online]. (19 December 1997—Last Updated), Available: http://www.mae.okstate.edu/Faculty/arena/Webfiles/afm_tc/brochure.html [5 August 1999—Accessed].

Reports to the President 1996-97, [Massachusetts Institute of Technology Homepage], [Online]. (28 January 1998—Last Updated), Available: <http://web.mit.edu/communications/pres97/10.01.html> [9 August 1999—Accessed].

1961 and All That, [Northeastern University Department of Electrical and Computer Engineering Homepage], [Online]. (29 October 1997—Last Updated), Available: <http://www.ece.neu.edu/ieebost/articles/articles.html> [5 August 1999—Accessed].

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