

CENTER SERIES
PLANETARY MISSIONS - SILVEIRA FILES

This subseries contains documents related to the design of interplanetary missions, and particularly of a manned Mars mission. They originate with the files of Milton Silveira, a long time NASA engineer who was working in the aerodynamic branch of the engineering directorate when these files were collected. The subseries consists for the most part of conference proceedings, working papers, handwritten notes, and study results. Particularly well represented in the series are documents about wind shear and atmospheric reentry at hypersonic speeds. The material is dated from 1962 to 1969 and is filed chronologically. (See also the Manned Mars Mission subseries.)

Inventory

SubHeading:	Box Number: 1	
	Wind Design Criteria and Wind Shear	1962
	Preliminary Analysis of Hyper-velocity Entry into Earth's Atmosphere	May 9, 1963
	Manned Planetary Mission Technology Conference	May 21 -23, 1963
	AAS Symposium on the Exploration of Mars - Vehicle design for Mars Landing and Return to Mars Orbit	June 6 -7, 1963
	NASA Working Paper: A Preliminary Trajectory Study for Launch from the Martian Surface Into Orbits About the Planet	August 19, 1964
	MSC Internal Notes: Mars Mission Earth Reentry	1964
	NASA TM: Manned Planetary Reconnaissance Mission Study: Venus / Mars	February 5, 1965
	MSC Internal Note: An Introduction to the NASA Manned Planetary Mission Studies and a Brief Survey of the Study Results	February 1965
SubHeading:	Box Number: 2	
	Bellcomm, Inc. - A Feasible Planetary Exploration Program Through 1980	February 26, 1968
	Bellcomm, Inc. - Biological Generalizations and the Search for Extraterrestrial Life	January 22, 1969
	NAA - Physical Characteristics and Atmospheric Data for Mars and Venus	September -November 1965
	AVCO - Mars Probe: Final Oral Presentation to the Langley Research Center	March 1, 1966
	Planetary Mission Studies/ Hard and Soft Lander (Miscellaneous notes)	1966, n.d.
	NAA - Study of Technology Requirements for Atmosphere Braking to Orbit About Mars and Venus	August 1967
	Experiment Payloads for Manned Encounter Missions to Mars and Venus	February 21, 1968
	A Venus Lander Probe for Manned Flyby Missions	February 23, 1968
SubHeading:	Box Number: 3	
	Manned Planetary Mission Data Book	n.d.
	Mars Excursion Module Drawings and Data	n.d.
	Theoretical Investigation of the Static and Dynamic Stability of Entry Vehicles in the Mars Atmosphere	n.d.
	Seminar on Engineering Design and	n.d.

Operation of Manned Spacecraft -
Aerodynamic Drag and Stability

Atmospheric Reentry - Collected
Papers

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