CENTER SERIES
DENNIS F. HASSON PAPERS

Dr. Dennis F. Hasson received his BS (Mechanical Engineering) from The Johns Hopkins University in 1955, and MS (Aeronautical Engineering) from Virginia Polytechnic Institute in 1958. He was working as an Aeronautical Research Engineer on experimental aerodynamic studies on advanced aircraft, such as the X-15 and Mach 3 transport, at the Langley Research Center in the Wind Tunnel Division when he was reassigned to the newly formed NASA, Space Task Group, Flight Systems Division, Aerodynamics Group, headed by Alan B. Kehlet. The Chief over the Flight Systems Division was Maxime Faget. The Aerodynamics Group was responsible for the aerodynamic performance of the manned space vehicle in the earth's atmosphere. In addition the lenticular vehicle design, for which he shared a patent with Alan Kehlet and William Petynia, Hasson also worked on wind tunnel tests and escape system qualification testing. In 1960, he worked for one year in the Johns Hopkins Applied Physics Lab, before returning to NASA as an Aerospace Technologist involved in advanced control thruster and power systems for deep-space probes, using advanced materials including fabricators and metallic, polymeric and ceramic materials at Goddard Space Flight Center from 1961-1967. He completed his Ph.D. (Engineering Materials) at the University of Maryland in 1970, and worked as an Associate Professor at the University of District of Columbia, 1970-1972. He joined the faculty of the U.S. Naval Academy in 1973 and at the time of his donation holds the rank of Professor Emeritus. He became a fellow for ASM International in 1988, a fellow for ASME (American Society of Mechanical Engineers) in 1996, and received the U.S. Naval Academy Mechanical Engineering Professor of the Year and Mechanical Engineering Researcher of the Year award in 2000. These copies show the organization of the Flight Systems Division of the Space Task Group in 1959, early center support, and document Dr. Hasson's position on the Space Task Group. Additional memos detail specifics about the development of the lenticular reentry vehicle, including the 1963 patent shared by Alan Kehlet, Dennis Hasson, and William Petynia as inventors. These 21 items, primarily copies of originals, were mailed to us by Dr. Hasson in two separate envelopes. Each item has been placed in a folder and titled according to his description. It is believed that Dr. Hasson retains the originals. The History Search Index shows eight other documents, including some memos authored by Hasson, regarding the lenticular design. Two oral histories discuss the lenticular design: Clarence Syverston (1971) and Alan Kehlet (2005). The National Air & Space Musuem at the Smithsonian Institution has additional materials concerning his NASA employment in their Archives. See the Dennis Hasson Collection, Accession 2004-0064, National Air and Space Museum, Smithsonian Institution. Materials donated by Dennis F. Hasson in August and Sept. 2007. Processed by: Shelly Henley Kelly Preferred Citation: JSC History Collection, Center Series, Dennis F. Hasson Papers

Inventory

SubHeading:	Box Number: 01	
	Organization of Flight Systems Division of the Space Task Group	March 10, 1959
	Notification of Personnel Action	February 22, 1959
	Space Task Group - Flight Systems Division Personnel – New Telephone Numbers	1959
	Space Task Group - Flight Systems Division Personnel – Office Assignments	March 16, 1959
	Space Task Group Personnel – Telephone Numbers as of May 7, 1959	May 7, 1959
	Langley Support for Project Mercury	1959
	Ames Support for Project Mercury	1959
	Designation of Flight Controllers for Mercury Flight Operations	February 18, 1960
	Mercury Flight Controller Personnel Indoctrination and Training Plan Presentation (memo)	February 25, 1960
	Memorandum for Flight Systems Division – Graduate School	October 15, 1959
	Engineering Duties and Responsibilities of Dennis F. Hasson at the NASA Space Task Group, Langley Field, Virginia	1960
	Details of Assignments of Dennis F. Hasson, Feb. 1959 to Aug 1959	1960
	Details of "Design of a Manned Space	1960

Reentry Vehicle” Aug. 1959 to Oct 1959	
“Project Engineer – Lew Rittenhouse” High Mach. August 1959 (copy)	August 1959
Photograph of artist sketch of lenticular vehicle during reentry (NASA B-59-851)	1959
Subsonic wind tunnel results for lenticular shape number 1 (memo)	September 9, 1959
Modified Newtonian Estimates of Static Longitudinal stability Characteristics of a Circular Disc with flaps at m=10 (memo)	October 7, 1959
Meeting of January 7, 1960 to discuss future wind-tunnel test needs for advanced Mercury projects (memo)	January 11, 1960
Description of proposed multi-manned space vehicle capable of reentry into and maneuvering in the atmosphere and performing a glide type landing, with figures	March 30, 1960
Patent application information “ Space and atmosphere re-entry vehicle ” lenticular design. Kehlet, Hasson, Petynia	April 6, 1960
Patent No. 3,090,580 – Space and Atmospheric Re-entry Vehicle (lenticular design)	May 21, 1963
Two photographs of Dennis F. Hasson NASA STG Langley Field, Virginia. (NASA B-60-527)	1959, 1960
American Rocket Society	1958, 1960