The Descriptive Finding Guide for the Hugh Mohrlock Personal Papers
SDASM.SC.10186

San Diego Air and Space Museum Library and Archives
10/2016
2001 Pan American Plaza, Balboa Park
San Diego 92101
URL: http://www.sandiegoairandspace.org/
Language of Material: English
Contributing Institution: San Diego Air and Space Museum Library and Archives
Title: Hugo Frederick Mohrlock Personal Papers & #13
Identifier/Call Number: SDASM.SC.10186
Physical Description: .5 Cubic Feet
The collection consists of one archival box, 12-1/4" x 7" x 10-1/4 inches. In addition, SDASM received proposals and reports from General Dynamics/Convair, and from other aircraft companies which have been placed in the Museum subject files. There was also a large number of the Convair newsletters which have been housed with the others in the Museum collection.

Date (bulk): bulk
Abstract: The collection contains items reflecting Mr. Mohrlock's career in aircraft design and engineering and, in particular, his work with pilot escape systems in aircraft and space vehicles.

Biographical / Historical
Hugo Frederick Mohrlock attended Syracuse University, California Aeronautical Technical Institute and Purdue University. Mr. Mohrlock has extensive experience in aerospace engineering. He was a design engineer for McDonnell Aircraft for one year, followed by three years at Emerson Electric as a design engineer in armament electronic system design. He was associated for over nineteen years with General Dynamics and its predecessor companies. Mr. Mohrlock joined Convair in 1950 where he supervised the Crew Stations Design Group, specializing in cockpit arrangements and instrumentation, breathing systems, flotation and survival equipment, pressure helmets, pressure suits, crew harnessing and restraints, and emergency escape capsules. Project management experience has included research and development of pilot escape systems for the F-102 and F-106 aircraft; Convair 990 crew and passenger compartments and Centaur programs; design and feasibility studies on interim and advanced space stations; space vehicle command module and associated systems: guidance and control, structure and heat shield, launch escape and earth landing, human factors and crew environment and communications. He was Project Engineer for the General Dynamics/Astronautics proposal on Apollo. Supervisory and management positions included group engineer, design specialist, project engineer and technical staff to chief engineer. He later joined Tally Industries where his assignments included the overall project management of the Minuteman Silo Lid Actuator and Minuteman Umbilical Retractor. Mr. Mohrlock has authored many papers, including "Crew Escape and Survival from Space Vehicles," "Aircraft Performance Factors Related to Escape Systems," and "The Development of RESCU, Mark I." These and papers on many related subjects have been presented to industry technical groups and published in various technical journals. He holds a number of patents, including Canopy Actuator and Emergency Removal Device, Pilot Water Immersion System, Supersonic Escape System, Torso Restraint Harness, and Fluid Hose Coupling.

Conditions Governing Use
The collection is open to research by appointment.

Immediate Source of Acquisition
The collection was donated to SDASM

Scope and Contents
Description: The collection consists of one archival box, 12-1/4" x 7" x 10-1/4 inches. In addition, SDASM received proposals and reports from General Dynamics/Convair, and from other aircraft companies which have been placed in the Museum subject files. There was also a large number of the Convair newsletters which have been housed with the others in the Museum collection. Content notes: The collection contains items reflecting Mr. Mohrlock's career in aircraft design and engineering and, in particular, his work with pilot escape systems in aircraft and space vehicles.

Related Materials
Consolidated/Convair/General Dynamics Collection
https://www.flickr.com/photos/sdasmarchives/albums/72157673555856081

Subjects and Indexing Terms
Convair 990
Convair F-106 Delta Dart
Mohrlock, Hugh
General Dynamics Corporation. Convair Division
Convair San Diego

Series I: Technical Manuals/Reports
Folder 1 -- Technical Proposal, Starter Cartridge, Personnel section including short bio of Mr. Mohrlock, #TP-1173.
Folder 2 -- Convair 880/880M/990 Jet Airliner Configuration Record (poster), #CS-61-046, with news clippings and photos on 990 first flight January 24, 1961.
Folder 3 -- General Evaluation of B Seat Ejection System, correspondence, notes, news clippings.

Series II: Presentations/Papers

Folder 4 -- "Safe Escape Throughout the Flight Envelope of Today's Aircraft," Mohrlock and D. A. Liebel, presented at Society of Automotive Engineers, Los Angeles, CA.
Folder 8 -- "Problems of Supersonic and Low Altitude Escape," presented at Physiological Training Officer Symposium, Brooks Air Force Base, Texas, October 8, 1959 (2 copies).
Folder 13 -- Bound report of slides for presentation on B Seat Development Program for F-106.

Series III: Personal Documents

Folder 14 -- Miscellaneous correspondence, notes, data.

Series IV: News Clippings

Series V: Photographs

Folder 16 -- Miscellaneous Photographs.
Folder 17 - Photographs (digitized and sleeved).

Series VI: Miscellaneous

One box of slides: Supersonic Seat Lecture and RESCU Mark I.

One movie film of Supersonic Escape System, Part I (digitized and sent to Film Room).

One small box of 4 x 5-inch negatives.
One small box of 4 x 5-inch negatives.