MS-504, Paul L. Hooper, Jr. Papers

Collection Number: MS-504

Title: Paul L. Hooper, Jr. Papers

Dates: 1956, 1970-1989

Creator: Hooper, Paul L., Jr., 1950-2014

Summary/Abstract: Lecture notes, and research document the work of Paul L. Hooper, Jr., an aerospace engineer who studied human powered flight, soaring and gliding, and designs for low cost export fighters while at M.I.T. and the United States Air Force.

Quantity/Physical Description: .25 linear feet

Language(s): English

Repository:
Special Collections and Archives, Paul Laurence Dunbar Library, Wright State University, Dayton, OH 45435-0001, (937) 775-2092.

Restrictions on Access: There are no restrictions on accessing material in this collection.

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Preferred Citation:
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Acquisition: The collection was donated to Wright State University, Special Collections & Archives, by Diane Hooper in June, 2015.

Separated Material: A significant library of aviation books and journals included in the collection are individually cataloged and available in the reading room. A keyword search on "Paul L. Hooper" in the Wright State University Libraries online catalog at http://wsuol2.wright.edu/ will result in a list of books that came with the collection.

Other Finding Aid: The finding aid is available on the Special Collections & Archives, Wright State University Libraries web site at http://www.libraries.wright.edu/special/collection_guides/guide_files/ms504.pdf. It is also available in the OhioLINK Finding Aid Repository at http://ead.ohiolink.edu/xtf-ead/ .

Processed by: Toni Vanden Bos, November, 2015.

Arrangement:
The collection is arranged chronologically.

Biographical Note:
Paul Ledley Hooper Jr. was born in St. Paul, Minnesota in 1950 and later moved with his family to Massachusetts where he graduated valedictorian from Danver High School in 1968. He studied Course 16 Astronautics and Aeronautics at M.I.T., completing a Bachelor's degree in 1972 and a Master's Degree in 1974 before entering the U.S. Air Force. Hooper piloted the T-38, F-4, and F-111, and served in Texas, Germany, England, Colorado, and Ohio. At the Air Force Academy he was an instructor of aeronautical engineering. In addition to flying, he worked at the National Air Intelligence Center.

Hooper retired as a Lieutenant Colonel in 1996 after 23 years of service. He went on to be a pilot and eventually a flight instructor for ExpressJet Airlines, Inc., where he worked for 18 years. In 2013, The Federal Aviation Administration (FAA) recognized Paul Ledley Hooper, Jr. with inclusion in the prestigious FAA Airmen Certification Database of certified pilots who have met or exceeded the high educational, licensing and medical standards established by the FAA.

Married to Diane Hooper for 33 years, Paul Hooper passed away July 24, 2014 at Wright Patterson Air Force Base.

Scope and Content:
The papers provide a glimpse into Paul Hooper's work on human powered aircraft at M.I.T. in the 1970s while a student in the Department of Astronautics and Aeronautics. Hooper is published in the *Proceedings of the First International Symposium on the Science and Technology of Motorless Flight*, which took place at M.I.T. in 1972. Also included is a 1989 report on a project which Hooper advised titled "Scorpion Export Fighter: Preliminary Design of a Low Cost Export Fighter". The rest of the files are lecture notes and readings instrumental to Hooper's work in the field of aerospace engineering with the U.S. Air Force.

Subject Terms:

Organizations/Corporate Names
Massachusetts Institute of Technology. Department of Aeronautics and Astronautics

Subjects (General)
Aerospace engineering
Human powered aircraft
Gliding and soaring
Aerospace engineering – Research
Scorpion (Jet fighter plane)

Material Types
Reports
Lecture notes

Collection Inventory

Series I		**Projects**	
Box	**File**	**Description**	**Date**
1	1	*Helicopter Blade Vibration and Flutter* by R.H. Miller (M.I.T.) and C.W. Ellis (Kaman Aircraft Corporation) published in the Journal of the American Helicopter Society	1956 July
	2	M.I.T.'s Man-Powered Aircraft" **by Paul Hooper** and Robert Peterson	1970
	3	Project Report for B.U.M.P.A.S. the Man-Powered Aircraft Group at M.I.T.	1970 Fall
	4	Proceedings of the First International Symposium on the Science and Technology of Motorless Flight, M.I.T.	1972 Oct
	5	Readings on Air Foil Design (cites *Proceedings of the First International Symposium* above)	Undated
	6	16-51 Lecture Notes on Advanced Vertical Takeoff Aircraft (missing pages 82-94)	Circa 1973
	7	Notes on Sailplane Characteristics and Performance Calculation	Circa 1974
	8	Aerodynamics Workshop – United States Air Force Academy: Aircraft Energy and Maneuvering. Notes by Col. James D. Lang	Circa 1976
	9	Calibrated Airspeed and the "F" Factor by Fred H. Porter, III and Roger D. Hartman (USAF)	1980
	10	Center of Gravity Effects by Major Phil Webb, Department of Aeronautics, USAFA	Circa 1980
	11	Lecture Notes on Geometry of Wing Cross Section	Circa 1980
	12	*Methods for Estimating Stability and Control Derivatives of Conventional Subsonic Airplanes* by Jan Roskam	1983
	13	*Drag Prediction Methods for Installed Stores and Missiles* by R.R. Snodgrass (Tech Memo ENF-TM-84-12)	1984 Nov
	14	ENF Store Drag Methodology	Undated
	15	Aero 311: Aircraft Performance	1984 Fall
	16	Aero 464: *Leading Edge Extention (LEX) Strakes* by Lt. Col. Gilliam	1987 Spring
	17	*Air Breathing Propulsion* by Bill Heiser	Undated
	18	Scorpion Export Fighter: Preliminary Design of a Low Cost Export Fighter (**Advisor Major Paul Hooper**)	1989