



Smithsonian

National Air and Space Museum

Federal Aviation Administration Advanced Simulation Program Collection [Huettner]

Jessamyn Lloyd

2024

National Air and Space Museum Archives
14390 Air & Space Museum Parkway
Chantilly, VA 20151
Business Number: Phone: 703-572-4045
NASMRefDesk@si.edu
<https://airandspace.si.edu/archives>

Table of Contents

Collection Overview	
Administrative Information	1
Biographical / Historical	1
Scope and Contents	2
Arrangement	2
Names and Subjects	

Collection Overview

Repository:	National Air and Space Museum Archives
Title:	Federal Aviation Administration Advanced Simulation Program Collection [Huettner]
Date:	Circa 1979-1980
Identifier:	NASM.2024.0036
Creator:	Huettner, Charles H.
Extent:	0.8 Cubic feet (2 boxes)
Language:	English .
Summary:	Charles H. Huettner was tasked with creating the Federal Aviation Administration's Advanced Simulation Program in 1979. This collection consists of approximately 0.80 cubic feet of material relating to Huettner's work developing this program.

Administrative Information

Acquisition Information

Charles H. Huettner, Gift, 2024, NASM.2024.0036.

Processing Information

Arranged, described, and encoded by Jessamyn Lloyd, 2024.

Preferred Citation

Federal Aviation Administration Advanced Simulation Program Collection [Huettner], NASM.2024.0036, National Air and Space Museum, Smithsonian Institution.

Restrictions

No restrictions on access

Conditions Governing Use

Material is subject to Smithsonian Terms of Use. Should you wish to use NASM material in any medium, please submit an Application for Permission to Reproduce NASM Material, available at [Permissions Requests](#) .

Biographical / Historical

After serving as a pilot in the US Air Force during and after the Vietnam War, Charles H. Huettner went to work for the Federal Aviation Administration (FAA). In 1979, Huettner was tasked with creating the Advanced Simulation Program in response to requests from the airline industry for increased use of simulators in lieu of training in

the actual aircraft. This was partly due to high fuel costs at the time, and partly due to safety issues relating to pilot training aircraft accidents. FAA recognized that advanced simulators could also provide training in maneuvers not possible otherwise, including wind-shear training. In order for this to be feasible, there was a need for more advanced simulators which required data from the airlines and aircraft manufacturers, and improved visual and motion system technology. Huettner was able to obtain the necessary data after some negotiation with various stakeholders resulting in Appendix H to the FAA's airline Part 121 regulations. They were adopted in 1980. Airlines could submit their proposed simulator training program to be certified by the FAA and would be permitted to conduct training under the new simulator certification system if approved. The FAA also created a special team of inspectors to certify simulators. Although the updated training system was optional, it was widely utilized due to the incentives built into the regulation and the enormous benefits it provided to the industry.

Scope and Contents

This collection consists of approximately 0.80 cubic feet of material relating to Charles H. Huettner's work at the Federal Aviation Administration (FAA) developing the Advanced Simulation Program including technical information, financial records, papers written by Huettner and others, conference programs, correspondence, FAA Advisory Circulars, business cards, and a color photograph showing simulator equipment prior to the advanced simulation changes. The collection also includes the complete package Pan American Airways (Pan Am) submitted for review for the Boeing Model 747, the first put forward under the new Advanced Simulator Regulations.

Arrangement

Collection has been rehoused and like material is grouped together, but collection has not yet been fully processed.

Names and Subject Terms

This collection is indexed in the online catalog of the Smithsonian Institution under the following terms:

Subjects:

- Aeronautics, Commercial
- Boeing 747 Family
- Flight simulators

Types of Materials:

- Business cards
- Correspondence
- Financial records
- Technical documents

Names:

- Federal Aviation Administration