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FINDING AID TO THE WILLIAM G. COWDIN PAPERS, 1961-2014

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Processed by: Mary A. Sego, November 13, 2015

Descriptive Summary

| | |
|------------------------------|--|
| Creator Information | Cowdin, William G., 1927- |
| Title | William G. Cowdin papers |
| Collection Identifier | MSA 310 |
| Date Span | 1961-2014 |
| Abstract | This collection includes two 8 x 10 photographs taken during a 1961 Dyna-Soar full scale mockup review, Boeing Co., Seattle, 1961. The photos include NASA test pilots and Aerojet project team members; Neil Armstrong, William Dana, James Woods, Henry Gordon, William Knight, and Aerojet program manager and Purdue graduate William Cowdin. Also includes a biographical statement by Cowdin with a description of the pace and culture of the aerospace industry during the 1950s and 1960s, and Gemini and Titan III B propulsion handbooks. |
| Extent | 1 folder |
| Finding Aid Author | Mary A. Segó |
| Languages | English |
| Repository | Virginia Kelly Karnes Archives and Special Collections Research Center, Purdue University Libraries |

Administrative Information

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|---------------------------------|--|
| Location Information: | ASC |
| Access Restrictions: | Collection is open for research. |
| Acquisition Information: | Donated by William G. Cowdin, December 30, 2014. Addition 1, donated by Cowdin and transferred via Rita Baines, November 18, 2015. |
| Accession Number: | 20141230 20151118 |
| Preferred | MSA 310, William G. Cowdin papers, Karnes Archives and |

Citation: Special Collections, Purdue University Libraries

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**Related
Materials
Information:** Interview with William Cowdin, November 11, 2015. Purdue
Libraries Oral History Program

Neil A. Armstrong papers:

<https://apps.lib.purdue.edu/archon/index.php?p=collections/controlcard&id=149&q=armstrong>

Subjects and Genres

Persons

Cowdin, William G., 1927-
Armstrong, Neil A., 1930-2012

Organizations

Aerojet-General Corporation

Topics

Aerospace Engineering
Propulsion systems
Propulsion systems--United States--History--20th century.
Dyna-Soar (Space glider)
Test pilots

Form and Genre Types

Biographical notes
Clippings
Handbooks
Oral history
Photographs

Occupations

Aerospace Engineer

Biography of William G. Cowdin

William G. Cowdin graduated from Purdue University with a Bachelor of Science degree in Aeronautical Engineering in 1952. While at Purdue, Cowdin participated in the Society of Automotive Engineers (SAE), Scabbard and Blade, Arnold Air Society (Air Force) and Chandelle Squadron (Air Force).

After graduation he was hired by Bell Aircraft in Niagara Falls, New York as a rocket test engineer. During this time he worked on the Bell X-1A aircraft propulsion system. The Bell X-1A was a follow on program to the X-1 aircraft with which Air Force Captain Chuck Yeager became the first person to break the sound barrier in 1947. Later Cowdin was assigned his own rocket test cell, testing rocket engines for a missile system named "Rascal." Rascal was a missile system to be carried by a B-29 aircraft with a range of 100 miles and guided using a TV display.

In 1955, while still employed as a rocket test engineer at Bell Aircraft, Cowdin was recruited by Aerojet-General Corporation and hired. Here he was first placed in charge of the Titan ICBM rocket test program. Later he was selected as the Program Manager for the boost rocket engine for the Gemini suborbital vehicle with Gus Grissom commanding the first flight.

During this time the Air Force had been conducting studies for future Space activities. One study was for the Dyna-Soar (Dynamic Soaring) program. In Cowdin's words, "Studies envisioned a two manned space aircraft which would be boosted into space, complete a mission and return to earth skipping off the earth's atmosphere similar to a rock thrown and skipping over water to gain range. Energy management using this skipping maneuver would permit the Dyna-Soar vehicle to land at any large air base in the world. Early in the 1960s Dyna-Soar contracts were given to the Boeing Company as the system integrator, the Martin Company for the boost vehicle based upon a man rated Titan ICBM (Intercontinental Ballistic Missile), and the contractors for other sub-systems. I was selected as the Program Manager to man-rate the rocket engines for the Titan boost vehicle. Dyna-Soar efforts climaxed in 1962, when the full range mockup with all the contractors and Air Force personnel convening at the Boeing Co. in Seattle, WA."

In 1971 Cowdin enrolled at Southwestern University School of Law, and in 1975 he completed his Juris Doctor degree.

Sources:

Cowdin's biographical notes in the papers and notations in LinkedIn.

Collection Description

Scope

The William G. Cowdin papers (1961-2014; 0.1 cubic feet) document Cowdin's role as Aerojet program manager for the Dyna-Soar boost rocket engines. This collection includes two 8 x 10 photographs taken during a 1961 Dyna-Soar full scale mockup review, Boeing Co., Seattle, 1961. The photos include NASA test pilots and Aerojet project team including Neil Armstrong, William Dana, James Woods, Henry Gordon, William Knight, and Aerojet program manager and Purdue graduate William Cowdin. Also included is a biographical statement by Cowdin with a description of the pace and culture of the aerospace industry during the 1950s and 1960s, and Gemini and Titan III B propulsion handbooks.

Types of materials include photographs, clippings, biographical statement, handbooks, and an oral history.

Descriptive Rules

Describing Archives: A Content Standard

Processing Information

All materials have been housed in polyester sleeves, acid-free folders, and acid-free boxes.

DETAILED DESCRIPTION OF THE COLLECTION

1 Box *William G. Cowdin papers, 1961-2014*

Folder

1. 2 photographs, biographical statement and 2 photocopied clippings, 1961-2014
2. Propulsion Handbook, Gemini, Aerojet-General Corporation, June 1964
3. Propulsion Handbook, Titan III B, Aerojet-General Corporation, October 1965