

# HSF-73 Reuben E. Taylor Papers

[Human Space Flight Collection]

**Collection Number: HSF-73** 

Title: Reuben E. Taylor Papers

**Dates**: 1980-1986

Creator: Reuben E. Taylor; National Aeronautics and Space Administration

#### **Abstract**

The Reuben E. Taylor Papers is composed of memorandums, operating manuals, publications, technical drawings, technical manuals, technical reports, presentation slides, and miscellaneous materials, used and kept by Reuben E. Taylor during his time working at NASA Johnson Space Center in Houston, Texas. The majority of the materials within the Reuben E. Taylor Papers were used by Taylor during his time working in the Space Shuttle Program Management Operations Effectiveness office. The bulk of the materials are memorandums, technical manuals, and operating manuals used by Taylor between 1981 and 1984 in regards to the planning for the Space Shuttle Program's launching of the Orbiter. Also within the Reuben E. Taylor Papers are the plans for the Vandenberg Project, and documents from NASA's partnership with Ariane Space. Similarly, technical drawings, technical reports, publications, and presentation slides from NASA general management are kept within the Reuben E. Taylor Papers collection.

Extent: 1.45 linear feet

Language(s): English, French

### Repository

University of Houston-Clear Lake Archives and Special Collections, Alfred R. Neumann Library, 2700 Bay Area Blvd., Houston, TX 77058-1002

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

#### Restrictions on Use

There are no known restrictions on using this collection. Some of the technical and scientific information in this collection may fall under the International Traffic in Arms Regulations (ITAR) of the United States government. As such, it cannot be placed shared online, digitally, or

in hardcopy format with individuals residing in, citizens of, or representatives of the countries deemed as being restricted for U.S. citizens to share such information. Researchers interested in publication of the technical and scientific information are required to consult the appropriate NASA officials prior to doing so; otherwise, researchers who do not receive permission from NASA may face federal prosecution for breaking ITAR regulations.

#### **Preferred Citation**

[Item name or title], [Box Numbers], [Folder Numbers], Reuben E. Taylor Papers, HSF-73, University of Houston-Clear Lake Archives and Special Collections, Alfred R. Neumann Library, 2700 Bay Area Blvd., Houston, TX 77058-1002

### Acquisition

The collection was donated to the University of Houston-Clear Lake Archives and Special Collections by Reuben E. Taylor of Lakeway, Texas, in October 2022.

## **Processing Information**

There was no order to the collection when it was received by UHCL Archives from the donor. However, the donor did label many of the folders with Post-It notes identifying the content in them; this identification was made by the donor just before the donation was completed, instead of being added at the time of the records' creation and use by Taylor. Acid-free plastic archival clips were used to replace rusting metal clips where possible.

Some of the materials were stored in large binders that were too thick to fit everything within them in a single archival folder. The processing archivist divided the content into multiple folders, labeled as parts such as "Part 1" and "Part 2" (though on the folder this was abbreviated as "(pt1.)". Because some of the binder's had separate covers that were damaged and larger than the letter-sized pages, they were photocopied for preservation purposes, and the copies are included at the front of the first part of the manuals or binders in the folders.

Some materials that were in the collection were removed in keeping with the UHCL Archives' processing policies and collection policy, as they were determined to have no long-term historical value.

Processed by: Hannah Pullen, Matthew M. Peek, June 2023

#### Arrangement

This collection is arranged based on the main topics discussed within the series in order of most importance. The collection is arranged in the following series: Series I: Space Shuttle Materials; and Series II: NASA General Management.

# **Biographical Note**

Reuben E. Taylor was born and raised in Austin, Texas. He graduated from University of Texas with a Bachelor of Science in mechanical engineering in 1960. The July after graduating with his degree, Taylor began working at the Air Force Flight Test Center (AFFTC) Propulsion Branch at Edwards Air Force Base in California. While working in the AFFTC, Taylor performed engine tests and maintenance analysis on the X-15 rocket. The X-15 aircraft was used to research high speed flight by measuring data on aerodynamics, structures, flight controls, and the physiological aspects of high-speed and high-altitude flight. Taylor also worked as a project engineer for the AM10 Auxiliary Power Unit. Taylor would later leave the Air Force Flight Test Center in September 1964 to transfer to the National Aeronautics and Space Administration (NASA).

In October 1964, Reuben Taylor transferred from the Air Force Flight Test Center in California to the NASA Manned Spacecraft Center (which would later become Lyndon B Johnson Space Center (JSC)) located in Houston, Texas. While working at JSC, Taylor was a member of the Apollo 13 Operations Team that worked on the Apollo 13 rescue mission, resulting in Taylor and his team being awarded the Presidential Medal of Freedom. After the Apollo program was complete, Taylor went on to work on the initial designs for the Space Shuttle Program. He eventually moved to the Space Shuttle Program Management Operations Effectiveness office, where he oversaw the planning for the launching of the Orbiter; the planning for the Vandenberg project; and advised on the transfer of logistics management from JSC to Kennedy Space Center in Florida. Taylor would later retire from NASA in November 1987.

In 1988, Taylor was employed by the McDonnell-Douglas Space Systems Division, where he managed Houston staff and worked alongside JSC personnel to develop the Space Station until this work ceased in January 1994. He would later become an employee of the Boeing Company where he worked to support the Space Station systems integration. In 1998, he would rejoin the McDonnell-Space Systems Division where his job was to protect station surfaces from becoming damaged. The Boeing Company would later acquire McDonnell-Douglass where Reuben E. Taylor would retire from in November 2002. At the time of this writing, Reuben E. Taylor is living in Lakeway, Texas.

### **Scope and Content**

The collection is composed of memorandums, operating manuals, publications, technical drawings, technical manuals, technical reports, presentation slides, and miscellaneous materials, used and kept by Reuben E. Taylor during his time working at NASA Johnson Space Center in Houston, Texas. Taylor worked with NASA from 1964 until 1987. The majority of the materials within this collection were used by Taylor during his time working in the Space Shuttle Program Management Operations Effectiveness office. The bulk of the materials are memorandums, technical manuals, and operating manuals used by Taylor between 1981 and 1984 in regards to the planning for the Space Shuttle Program's launching of the Orbiter. Also within the collection are the plans for the Vandenberg Project, and documents from NASA's partnership with Ariane Space. Similarly, technical drawings, technical reports, publications, and presentation slides from NASA general management are kept within the collection.

## **Subject Terms**

### Personal/Family Name

Taylor, Reuben E.

## **Corporate Names**

Lyndon B. Johnson Space Center United States. National Aeronautics and Space Administration

### Geographic Name

Houston (Tex.)

### **Topical Term**

Manned space flight--History
Space Shuttle Program (U.S.)
Space shuttles--United States--History
Space--Social aspects--History
United States. National Aeronautics and Space Administration--History
Vandenberg Air Force Base (Calif.)--History

### Genre/Physical Characteristic

Memorandums
Operating manuals
Presentations
Publications
Technical drawings
Technical manuals

### **Collection Inventory**

### **Series I: Space Shuttle Materials**

Series I consists of memorandums, operating manuals, technical drawings, technical manuals, technical reports, and presentation slides used my Reuben E. Taylor while he worked in the Space Shuttle Program Management Operations Effectiveness office at NASA Johnson Space Center in Houston, Texas. The bulk of the materials are memorandums, technical reports, and technical manuals used by Taylor during the planning for the Space Shuttle Orbiter missions and the NASA partnership with Ariane Space. Also within the materials is materials outlining the planning of the Vandenberg project, an attempt by NASA to put a launch site on the west coast. This attempt failed after the Challenger explosion in January 1986.

Box/Folder	Description	Date
1/1	Space Shuttle General Information	November 1982, July 1983, October 1983, April 1984
1/2	Space Transportation System Content Presentation	October 1983
1/3	Mission Configurations	1981, 1983
1/4	Operations Technology Mid-Term Review	September 1982
1/5	Financial Plans for Shuttle Program	June 1983, September 1983
1/6	Marketing the Shuttle Program	October 1982, July 1984
1/7	NASA and Ariane Partnership	January 1982, April- May 1982
1/8	Ariane Customer Handbook	June 1981
1/9	Ariane Technologies	November 1981, April 1982, June 1982
1/10	Ariane Launch Notes	June 1981, October 1982
1/11	Ariane Launch Failure Notes	September-November 1982
1/12	Logistics Transfer Agreement Form	August 1985, April 1986, June 1986
1/13	Transfer Overview and Responsibility Matrix	July 1986, October 1986
1/14	Logistics Transfer Discussion and Responsibilities	March-April 1986
1/15	Logistics Set up and Maintenance	September-October 1986
2/1	Meeting Minutes about Logistics Management	September-December 1986

2/2	Space Shuttle Content and Change Request	June-July 1983
2/3	Vandenberg Plans	April 1978
2/4	Delta Launch Delays	October 1982
2/5	Orbiter Provisioning and Modification	March 1984
2/6	French/CNES Space Program	August 1983
2/7	Final Report: Study of Effective Shuttle Utilization	November 1983
2/8	Space Policy Task Team Status Report	March 1982
2/9	Boeing Future Space Transportation System Analysis Manuel, 4 (Part 1)	December 1976
2/10	Boeing Future Space Transportation System Analysis Manuel, 4 (Part 2)	December 1976
2/11	Boeing Future Space Transportation System Analysis Manuel, 4 (Part 3)	December 1976
2/12	Boeing Future Space Transportation System Analysis Manuel, 5 (Part 1)	December 1976
3/1	Boeing Future Space Transportation System Analysis Manuel, 5 (Part 2)	December 1976
3/2	Boeing Future Space Transportation System Analysis Manuel, 5 (Part 3)	December 1976
3/3	Boeing Future Space Transportation System Analysis Final Report (Part 1)	December 1976
3/4	Boeing Future Space Transportation System Analysis Final Report (Part 2)	December 1976
3/5	Boeing Future Space Transportation System Analysis Final Report (Part 3)	December 1976

# **Series II: NASA General Management**

Series II consists of memorandums, publications, technical drawings, technical reports, presentation slides, and miscellaneous materials used by Reuben E. Taylor for the management of the shuttle projects. Within the series, there are financial reports regarding Orbiter missions as well presentations justifying costs to the United States Congress.

Box/Folder	Description	Date
3/6	NASA Goals 1983-1984	December 1983
3/7	Management Reports and Strategies	July 1983, September 1983
3/8	Trend Data	January-February 1984
3/9	Payload Launch Systems	April 1982, June 1983
3/10	Costs Per Mission and Flight	April 1984
4/1	Presentations to the House of Representatives	October 1980, February 1981, February 1982, February 1983
4/2	GAO Report to Congress	February 1982
4/3	The Search for Tomorrow	March 1982
4/4	Aerospace America	May 1982
4/5	Miscellaneous Materials	May 1983, March 1986