# University of Houston Z Clear Lake Archives and Special Collections

# HSF-74 William D. Reeves Papers

[Human Space Flight Collection]

# **Collection Number: HSF-74**

Title: William D. Reeves Papers

Dates: 1988-2006

**Creator**: William D. Reeves; National Aeronautics and Space Administration; and United Space Alliance

#### Abstract

The William D. Reeves Papers consists of booklets, binders, calendars, correspondence, handbooks, memorandums, operating manuals, publications, schedules, technical drawings, technical manuals, technical reports, presentations, and miscellaneous materials used by William D. Reeves during his time working at NASA Johnson Space Center in Houston, Texas. Reeves worked at NASA from 1967 until 2001. The bulk of the collection is composed of Reeves' copies of handbooks, presentations, technical manuals, technical reports, and other materials that include his personal notes from 1988 to 2001, that he used while working as a NASA Flight Director and the Manager of the Space Shuttle/Space Station Integration Office. Reeves was an electrical engineer known for his work with the Space Shuttle partnership with Russian Space Station MIR, as well as his help building the International Space Station. Also, within the collection are documents from the Space Station Freedom project. There are general correspondence and presentation slides from the United Space Alliance, and RID Reports are present.

Extent: approximately 2.9 liner feet

Language(s): English, Russian

# 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**

Much of the material in this collection was produced for NASA by contractors on work for-hire contracts. Many of the contractors copyrighted or patented the information or designs or content included in the publications in this collection. As such, the University of Houston-Clear Lake Archives and Special Collections does not own the copyright to all the materials in this collection. Materials created by government agencies such as NASA are public use; but materials created by private organizations other than NASA retain their copyright, and the copyright remains with the creator and organization, under Title 17 of the U.S. Copyright Law. Researchers are responsible for obtaining permission from the copyright holder(s) to use materials beyond the "fair use" clause of the U.S. Copyright Law.

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# **Preferred Citation**

[Item name or title], [Box Numbers], [Folder Numbers], William D. Reeves Papers, HSF-74, 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 Alfred R. Neumann Library by William D. Reeves in August 2019. The collection was transferred by Neumann Library to the University of Houston-Clear Lake Archives and Special Collections within the Library shortly after.

#### **Processing Information**

There was no order to the collection when it was received by UHCL Archives from the donor. The processing archivist separated the materials according to topic. 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-July 2023

## Arrangement

This collection is arranged by topic of the materials, and organized into folders in a chronological order. The collection is organized in the following series: Series I: Space Shuttle; Series II: International Space Station; Series III: United Space Alliance; and Series IV: Miscellaneous Materials.

## **Biographical Note**

William D. Reeves and raised in Jonesboro, Arkansas, and received a Bachelor of Science degree in electrical engineering from Oklahoma University in 1967 and would later earn a Master's degree in business administration from the University of Houston Clear-Lake in 1980. In June 1967, Reeves joined NASA, working at Johnson Space Center in Houston, Texas. While working at NASA, Reeves worked in many different offices and led many teams. During the Apollo program, he worked as a Flight Controller responsible for the Lunar Module's electrical power and pyrotechnic systems. Due to his work on the Apollo 13 rescue mission, Reeves received the Presidential Medal of Freedom. He would establish later operations with Russian Mission Control during NASA's partnership with Russian Space Station MIR, allowing him to earn the Russian Space Medal from Russian Mission Control. He would go on to work as a NASA Flight Director for the Space Shuttle Program for 22 Shuttle Missions. During the planning and assembly of the International Space Station, Reeves would become the Manager of Space Station Assembly Office. Reeves retired from NASA Johnson Space Center in Houston, Texas in 2001.

After his retirement from NASA in 2001, Reeves would go on to work for the United Space Alliance, one of the primary NASA contractors in the early 2000s. Reeves would work as a deputy associate program manager for the Space Shuttle Orbiter Element and later as a deputy program manager for program integration. In September 2005, Reeves was promoted to associate program manager for Space Shuttle Program Integration, where he was responsible for Space Shuttle cargo, systems integration, and the integration of the International Space Station Program Office. After working there for ten years, Reeves retired from the United Space Alliance in 2011. At the time of this writing, William D. Reeves is living in Friendswood, Texas.

#### **Scope and Content**

The collection consists of booklets, binders, calendars, correspondence, handbooks, memorandums, operating manuals, publications, schedules, technical drawings, technical manuals, technical reports, presentations, and miscellaneous materials used by William D. Reeves during his time working at NASA Johnson Space Center in Houston, Texas. Reeves worked at NASA from 1967 until 2001. The bulk of the collection is composed of Reeves' copies of handbooks, presentations, technical manuals, technical reports, and other materials that include his personal notes from 1988 to 2001, that he used while working as a NASA Flight Director and the Manager of the Space Shuttle/Space Station Integration Office. Reeves was an electrical engineer known for his work with the Space Shuttle partnership with Russian Space Station MIR, as well as his help building the International Space Station. Also within the collection are documents from the Space Station Freedom project. There are general correspondence and presentation slides from the United Space Alliance, and RID Reports are present.

This collection is arranged by topic of the materials, and organized into folders in a chronological order. The collection is organized in the following series: Series I: Space Shuttle; Series II: International Space Station; Series III: United Space Alliance; and Series IV: Miscellaneous Materials.

#### **Subject Terms**

#### **Personal/Family Name**

Reeves, William D.

#### **Corporate Names**

United States. National Aeronautics and Space Administration United Space Alliance

#### **Geographic Name**

Houston (Tex.)

#### **Topical Term**

International Space Station Lyndon B. Johnson Space Center Manned space flight--History Mir (Space station) Space shuttles--United States--History Space--Social aspects—History Space Station Freedom Program (U.S.) United States. National Aeronautics and Space Administration--History

#### **Genre/Physical Characteristic**

Booklets Binders Calendars Correspondence Handbooks Memorandums Operating manuals Publications Schedules Technical drawings Technical manuals Technical reports Presentations

## **Collection Inventory**

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

Series I consist of technical manuals, technical reports, operating manuals, handbooks, schedules, presentations, and memorandums, created and used by William D. Reeves during his time at NASA as a Flight Director of the Space Shuttle Program at NASA Johnson Space Center in Houston, Texas. The bulk of the materials are technical manuals, operating manuals, and presentations used by Reeves while planning for and managing the Space Shuttle missions.

<b>Box/Folder</b>	Description	Date
1/1	NSTS 07700 Volume XIV Appendix 1 System Description and Design Data-Contamination Environment	January 1988
1/2	NSTS 07700 Volume XIV Appendix 2 System Description and Design Data-Thermal	January 1988
1/3	NSTS 07700 Volume XIV Appendix 3 System Description and Design Data-Electrical Power and Avionics	January 1988
1/4	NSTS 07700 Volume XIV Appendix 4 System Description and Design Data-Structures and Mechanics	January 1988
1/5	NSTS 07700 Volume XIV Appendix 5 System Description and Design Data-Ground Operations	January 1988

1/6	NSTS 07700 Volume XIV Appendix 6 System Description and Design Data-Mission Planning and Flight Design	January 1988
1/7	NSTS 07700 Volume XIV Appendix 7 System Description and Design Data-Extravehicular Activities	January 1988
1/8	NSTS 07700 Volume XIV Appendix 8 System Description and Design Data-Payload Development and Retrieval Systems	January 1988
1/9	NSTS 07700 Volume XIV Appendix 9 System Description and Design Data-Intravehicular Activities	January 1988
1/10	NSTS 07700 Volume XIV Appendix 10 System Description and Design Data-Integration Hardware	January 1988
1/11	Shuttle Orbiter/Cargo Interfaces ICD 2-19001 (Part 1)	May 1988
1/12	Shuttle Orbiter/Cargo Interfaces ICD 2-19001 (Part 2)	May 1988
2/1	Shuttle Orbiter/Cargo Interfaces ICD 2-19001 (Part 3)	May 1988
2/2	Shuttle Orbiter/Cargo Interfaces ICD 2-19001 (Part 4)	May 1988
2/3	Integrated Operations Scenarios Draft (Part 1)	May1993
2/4	Integrated Operations Scenarios Draft (Part 2)	May1993
2/5	Integrated Operations Scenarios (Part 1)	September 1995
2/6	Integrated Operations Scenarios (Part 2)	September 1995
3/1	Integrated Operations Scenarios (Part 3)	September 1995
3/2	Integrated Operations Scenarios Final (Part 1)	February 1992
3/3	Integrated Operations Scenarios Final (Part 2)	February 1992
3/4	Integrated Operations Scenarios Final (Part 3)	February 1992
3/5	Integrated Operations Scenarios Final (Part 4)	February 1992

3/6	Shuttle Systems Handbook, Volume 2 (Part 1)	July 2007
4/1	Shuttle Systems Handbook, Volume 2 (Part 2)	July 2007
4/2	Shuttle Systems Handbook, Volume 3 (Part 1)	July 2007
4/3	Shuttle Systems Handbook, Volume 3 (Part 2)	July 2007
4/4	Shuttle Systems Handbook, Volume 3 (Part 3)	July 2007
5/1	Shuttle Systems Handbook, Volume 4 (Part 1)	July 2007
5/2	Shuttle Systems Handbook, Volume 4 (Part 2)	July 2007
5/3	Mission Summaries up to 1996	October 1996
5/4	Preliminary Design Review	March-April 1991, June-July 1991, November 1991
5/5	Integration Support Plan and Program Issues	July 1991
5/6	Integration Support Plan Presentation	July 1991
5/7	Roles and Responsibilities	May 1991, October 1993
5/8	Review Item Discrepancy Logs	July 1991
5/9	Review Item Discrepancy Reports	Various Dates
5/10	Integration Team Tally Sheets and Status Report	July 1991
6/1	Mission Build Team	May-June 1991
6/2	Shuttle Meeting Minutes	July 1991, September 1991, July 1994, September 1998

## **Series II: International Space Station**

Series II consists of technical reports, presentations, handbooks, memorandums, and technical drawings used by William D. Reeves during his time as a manager of the Space Shuttle/Space Station Integration Office for the planning of the International Space Station at NASA Johnson Space Center in Houston, Texas. The bulk of the series is made up of technical reports and handbooks that outline the steps and planning of the International Space Station. Also within the

series are materials that outline Reeves' work with Russian Mission Control during the	
partnership between Russian Space Station MIR and the Space Shuttle from 1992 until 1998	•

Box/Folder	Description	Date
6/3	Shuttle-Mir	May-June 1991, November 1993, March 1994, December 1994, February 1995
6/4	Reeves' Workbook for the Space Shuttle	August 1993
6/5	Alpha Program	September-November 1993, March 1994, February 1997
6/6	Russia and the International Space Station	October 1993, May 1994
6/7	Assembly Sequence Materials	May 1998, February 1999
6/8	International Space Station Meeting Minutes	April 1998

#### Series III: United Space Alliance Materials

Series III consists of presentations and handbooks used and presented by William D. Reeves during his time working with the United Space Alliance from 2001 until 2011 after retiring from NASA. The United Space Alliance (USA) was a spaceflight operations company that was a contractor working with NASA. Co-owned by Rockwell International and Lockheed Martin and headquartered in Houston, Texas, USA was established in August 1995. In December 1996, Boeing became a co-owner of the company by buying out Rockwell International. By 2014, the company was in the process of dissolving and was completely dissolved in December 2019. The bulk of the materials within this series are short courses taught by the United Space Alliance on Aerothermodynamics.

Box/Folder	Description	Date
6/9	Aerothermodynamics Short Course Lesson 1	June 2004
6/10	Aerothermodynamics Short Course Lesson 2	June 2004
6/11	Aerothermodynamics Short Course Lesson 3	July 2004

6/12	Aerothermodynamics Short Course Lesson 4	July 2004
6/13	Aerothermodynamics Short Course Lesson 5	July 2004
6/14	Aerothermodynamics Short Course Lesson 6	July 2004
7/1	Aerothermodynamics Short Course Lesson 9	August 2004
7/2	Aerothermodynamics Short Course Lesson 10	August 2004
7/3	Aerothermodynamics Short Course Lesson 11	September 2004
7/4	Aerothermodynamics Short Course Lesson 12	September 2004
7/5	Aerothermodynamics Short Course Filler Material	August 2004
7/6	Solid Rocket Booster Illustrated Systems Manual	May 2005
7/7	Solid Rocket Booster Illustrated Systems Schematics	May 2006

#### **Series IV: Miscellaneous Materials**

Series IV contains miscellaneous materials of various topics. Included in this series are the original designs and plans for Space Station Freedom made and used by Reeves during his time at NASA Johnson Space Station in Houston, Texas, as well as Reeves' personal schedules for team meetings and conference schedules. Also within the series can be found emails to and from Reeves speaking about various topics, presentations to the House of Representatives, and materials detailing the administrative transfer of NASA's director over the Space Flight program.

Box/Folder	Description	Date
7/8	Space Station Freedom	June 1991
7/9	Space Station Freedom Design Review Preboard (Part 1)	June 1993
7/10	Space Station Freedom Design Review Preboard (Part 2)	June 1993
7/11	House of Representatives Documents	April 1993, June 1993
7/12	Reeves' Personal Schedules	June 1991
7/13	Emails from Reeves	June 1991, February- March 1994
7/14	Emails to Reeves	March-April 1997,

		February-March 1998, November 1998, June 2000
7/15	Teams	June-July 1991, June 1994
7/16	Administrative Transfer	July 1993
7/17	Package Distribution	Undated
7/18	Marshall Flight Center	May 1996
7/19	Support	May-July 1991