

PURDUE

UNIVERSITY



FINDING AID TO THE DAVID C. LEESTMA PAPERS, 1969-2014

**Purdue University Libraries
Virginia Kelly Karnes Archives and Special Collections
Research Center
504 West State Street
West Lafayette, Indiana 47907-2058
(765) 494-2839**

<http://www.lib.purdue.edu/spcol>

© 2016 Purdue University Libraries. All rights reserved.
Processed by: Mary A. Segó, October 12, 2016

Descriptive Summary

Creator Information	Leestma, David C. 1949-
Title	David C. Leestma papers
Collection Identifier	MSP 193
Date Span	1969-2014, predominant 1982-1998
Abstract	Papers, awards, and audio visual material related to Leestma's time as an astronaut. This collection includes personal papers from STS-28, STS-41G, STS-45, and STS-95, including his personal journals from 1981-2014.
Extent	31.4 cubic feet (64 mss boxes, 4 cubic feet boxes, 3 medium flat boxes, one small artifact box, and one large, unboxed artifact)
Finding Aid Author	Mary A. Sego, October 3, 2016
Languages	English
Repository	Virginia Kelly Karnes Archives and Special Collections Research Center, Purdue University Libraries

Administrative Information

Location Information:	ASC-R
Access Restrictions:	Collection is open for research. A portion of Leestma's personnel papers have been restricted due to privacy consideration.
Acquisition Information:	Donated by David C. Leestma, 2014.
Accession Number:	20140721
Preferred Citation:	MSP 193, David C. Leestma papers, Karnes Archives and Special Collections, Purdue University Libraries
Copyright Notice:	Purdue University per deed of gift.

**Related
Materials
Information:**

Roy D. Bridges Jr. papers:

<https://apps.lib.purdue.edu/archon/index.php?p=collections/controlcard&id=1246&q=roy+bridges>

Mary A. Cleave papers:

<https://apps.lib.purdue.edu/archon/index.php?p=collections/controlcard&id=1694&q=cleave>

Mark K. Craig papers:

<https://apps.lib.purdue.edu/archon/index.php?p=collections/controlcard&id=759&q=space+shuttle>

Jerry L. Ross papers:

<https://apps.lib.purdue.edu/archon/index.php?p=collections/controlcard&id=1629&q=jerry+ross>

Janice Voss papers:

<https://apps.lib.purdue.edu/archon/index.php?p=collections/controlcard&id=1340&q=janice+voss>

Paul J. Weitz papers:

<https://apps.lib.purdue.edu/archon/index.php?p=collections/controlcard&id=1693&q=weitz>

Subjects and Genres

Persons

David C. Leestma, 1949-

Organizations

NASA

United States. Navy

Flight Archives at Purdue University

Topics

Space Shuttle Program (U.S.)

STS-41G

STS-28

STS-45

Medical Detailed Supplementary Objectives (DSOs)

United States. Navy

Ham radio

Form and Genre Types

Artifacts

Audio-visual materials

Awards

Journals (Diaries)

Log-books

NASA mission reports

Papers

Photographs

Reports

Occupations

Astronaut

NASA Administrator

Biography of David C. Leestma

David C. Leestma was born May 6, 1949, in Muskegon, Michigan to Dr. and Mrs. Harold F. Leestma. He graduated from Tustin High School, Tustin, California, in 1967; received a Bachelor of Science degree in Aeronautical Engineering from the United States Naval Academy in 1971, and a Master of Science degree in Aeronautical Engineering from the U.S. Naval Postgraduate School in 1972.

Leestma graduated first in his class from the U.S. Naval Academy in 1971. As a first lieutenant, he was assigned to USS Hepburn (DE-1055) in Long Beach, California, before reporting in January 1972 to the U.S. Naval Postgraduate School. He completed flight training and received his wings in October 1973. He was assigned to VF-124 in San Diego, California, for initial flight training in the F-14A Tomcat and then transferred to VF-32 in June 1974 and was stationed at Virginia Beach, Virginia. Leestma made three overseas deployments to the Mediterranean/North Atlantic areas while flying aboard the USS John F. Kennedy (CV-67). In 1977, he was reassigned to Air Test and Evaluation Squadron Four (VX-4) at Naval Air Station Point Mugu, California. As an operational test director with the F-14A, he conducted the first operational testing of new tactical software for the F-14 and completed the follow-on test and evaluation of new F-14A avionics, including the programmable signal processor. He also served as fleet model manager for the F-14A tactical manual. He has logged more than 3,500 hours of flight time, including nearly 1,500 hours in the F-14A.

Leestma was selected to become an astronaut in 1980. His space flight experience included STS-41G launched October 5, 1984, STS-28 Launched August 8, 1989, and STS-45 launched on March 24, 1992. Leestma also he served as a Capsule Communicator (CAPCOM) for STS-51C through STS-61A. He was then assigned as the Chief, Mission Development Branch responsible for assessing the operational integration requirements of payloads that will fly aboard the shuttle. From February 1990 to September 1991, when he started training for his third space mission, Leestma served as Deputy Director of Flight Crew Operations. Following this flight, he served as Deputy Chief and acting Chief of the Astronaut Office. Leestma was selected as the Director, Flight Crew Operations Directorate (FCOD) in November 1992. As Director, FCOD, he had overall responsibility for the Astronaut Office and for Johnson Space Center (JSC) Aircraft Operations. During his tenure as Director, 41 shuttle flights and seven Mir missions were successfully flown. He was responsible for the selection of Astronaut Groups 15, 16 and 17. While Director, he oversaw the requirements, development modifications of the T-38A transition to the T-38N avionics upgrades. In September 1998, Leestma was reassigned as the Deputy Director, Engineering, in charge of the management of JSC Government Furnished Equipment (GFE) Projects.

In August 2001, he was assigned as the Johnson Space Center Project Manager for the Space Launch Initiative, responsible for all JSC work related to the development of the new launch system. Leestma also served as the Assistant Program Manager

for the Orbital Space Plane, responsible for the vehicle systems and operations of a new crewed vehicle that served as the transfer vehicle for space flight crews to and from the International Space Station. He then served as the Manager, JSC Exploration Programs Office, responsible for JSC's role in the future exploration programs that were to fulfill the President's vision for exploration. Leestma then took charge of the JSC Advanced Planning Office, which helped to plan JSC's strategy to be fully ready for the challenges of the future, including leading the human missions to the moon and Mars. His latest assignment was to lead JSC's Technology Transfer and Commercialization Office, providing the opportunity for NASA developed technologies to move into the commercial arena.

A veteran of three space flights, Leestma logged a total of 532.7 hours in space. He served as a mission specialist on STS-41G (October 5-13, 1984), STS-28 (August 8-13, 1989), and STS-45 (March 24 to April 2, 1992).

Leestma retired from NASA on May 30, 2014.

Source:

Lyndon B. Johnson Space Center, NASA Biographical Data, 2014,
<http://www.jsc.nasa.gov/Bios/htmlbios/leestma.html>. Accessed 30 September 2016.

Collection Description

Scope

The David C. Leestma papers (1969-2014; 31.4 cubic feet) document his personal experience as an astronaut during the early years of the Space Shuttle program and as a NASA manager and director. Included are papers related to the three missions for which he served as a mission specialist; STS-41-G, STS-28, and STS-45.

Leestma later served as manager and director at the Johnson Space Center's Astronaut Office, Flight Crew Operations Directorate, Advanced Planning Office and for initiatives such as the Space Launch Initiative and the Orbital Space Plane program. The papers include writings related to cooperative efforts with Russia and Russian cosmonauts, the International Space Station, and the implementation of various programs and policies from 1980-2014.

Also contained in the papers is an extensive collection of personal daily work journals and log books that follow the path of his career and provide a glimpse into the daily life of an astronaut and NASA manager, including Leestma's time in space. Other highlights include Russian and U.S. astronaut training documents, and a collection of John W. Young technical memos.

Types of materials include audio-visual materials, awards, books, briefings, correspondence, documents, experiment results, journals (diaries), log-books, memos, NASA mission reports, an oral history, papers, photographs, publications, QSL cards, and reports.

Arrangement

The papers are organized into 8 series:

1. Navy Career, circa 1971-1990s (0.90 cubic feet). This series includes a file marked "Navy Stuff," which includes Naval postgraduate school grades, quizzes, appointments, evaluations, and certificates. Also included is a Naval Air Training and Operating Procedures Standardization (NATOPS) Flight Personnel Training/Qualification Jacket, two flight logs, and flight activity reports. Lastly the series contains promotion certificates and related correspondence, Leestma's application for the Astronaut Candidate Selection Program, dated October 25, 1979, along with his Astronaut candidate notification letter, supporting memos, documents, photographs, and itinerary for NASA Johnson Space Center interview and visit, May 1980. One can also find items from the latter part of his Navy career; discharge papers, award certification documents, and miscellaneous documents.

Materials in the series were retained as found in the original files. Some items are currently marked as restricted, due to Social Security numbers on documents, and one must consult the archivist before use.

2. Astronaut Training, 1969-1990s (0.20 cubic feet). This series mainly consists of "Payload Specialist Training," material, circa 1983-1997. Little training information can be found among the papers.

3. Daily Work Journals and Log Books, 1981-2014 (6.0 cubic feet). Found within this series are Leestma's personal journals and log books compiled during his time at NASA, both as an astronaut and as a part of the administrative staff. The journals are arranged chronologically and follow the path of his career. They provide a glimpse into the daily life of an astronaut, including time in space, and a manager. The later journals include two titled, "NASA 5-Point Plan for the Future," and "Proposal for Investment of Silicon Valley in Space."

4. NASA Missions, 1983-1995 (4.8 cubic feet). This series covers the three missions for which Leestma served as a mission specialist; STS-41-G, STS-28, and STS-45, and it is broken into subseries to represent each mission.

Included are flight crew briefings, reports, memos, documents, numerous papers, Medical Detailed Supplementary Objectives (DSOs), experiment results, debriefing information, and other related mission preparation and post-flight documents.

STS-45 includes an extensive collection of SAREX (Shuttle Amateur Radio Experiment) Amateur Radio QSL cards, letters and audio cassettes received as a result of radio contact with crew during the mission.

5. NASA Administration, circa 1970s-2014 (8.8 cubic feet). This series is broken down into six sub-series representing the various NASA Administrative positions Leestma held throughout his career. There are numerous NASA memos, correspondence, documents, reports, briefings, International Space Station planning information; Preliminary Assessments of the Russian/US/International Partners Space Station Design Option; Flight Crew Operations documents; Safety Review Findings; Hubble Space Telescope documents, among many others. Please see the breakdown of each sub-series within the finding aid in order to see the comprehensive listing.

*Note many additional memos, documents, etc. are interspersed among the NASA Administration papers, due to the interconnectivity of departments. The papers were left in original order in most instances.

Timeline of Leestma's NASA Administrative Positions:

Subseries 1. Chief, Mission Development Branch, February 1990 – September 1991.

Subseries 2. Deputy Chief and Acting Chief of Astronaut Office, April 1992-November 1992

Subseries 3. Director, Flight Crew Operations Directorate, November 1992-September 1998

Subseries 4. Deputy Director, Engineering, September 1998 – August 2001.

Subseries 5. Johnson Space Center Project Manager for the Space Launch Initiative, August 2001 – 2014.

Subseries 6. Manager, Johnson Space Center Exploration Planning Office and Johnson Space Center Advanced Planning Office, -2014

6. Audio Visual, 1973-2000s (5.7 cubic feet). The Audio Visual series is comprised of VHS tapes, which cover STS-41G, STS-28, STS-45 and STS-48 press conferences, mission highlights, and aurora views. Also included is Leestma's contributions to the NASA Johnson Space Center Oral History Project, 2003 (includes the transcript, VHS tape and 2 audio cassettes). Please see the detailed listing for a few other segments on VHS.

The films cover STS-41G, STS-28, and STS-45 crew presentations and press conferences. Found on the numerous slides are Enterprise and Shuttle tests, STS-28 "Earth Observation Debriefing," and STS-41G, STS-45, STS-76, and Shuttle/Mir 21NM21 shots.

Lastly the photographs cover shots from Leestma's Navy days, official NASA photographs and additional photographs of him, circa 1984-1990s. There are also STS-61-E crew photographs, STS-41G, STS-28 photos of Earth, and "APE," Auroral Photography Experiment photographs. In the final folders there are miscellaneous photographs of colleagues, and some are signed,

7. Publications, 1991-2009 (0.5 cubic feet). Contained in this series are monographs that were given to Leestma by the author and are signed and inscribed to him. Also found here are newspaper articles about Leestma from the latter part of his career, and most are about his part in selecting the Columbia crew that tragically lost their lives during the final moments of STS-107, the 113th flight of the Space Shuttle Program.

8. Artifacts, 1979-2014 (4.5 cubic feet). The artifacts series is comprised of the many awards, certificates, plaques, NASA service awards and tokens of appreciation presented to Leestma throughout his career. The awards range from one of his first; a plaque presented, "To Lt. Dave "Wiz" Leestma for Achieving 1000 Hours in the F-14 Tomcat," a Legion of Merit, Distinguished Flying Cross, NASA Exceptional Service Medal, NASA Space Flight Medal, Certificate and Medallion – 1st Shuttle Flight Achievement Award, NASA Medal for Outstanding Leadership, and a NASA retirement plaque, to name a few. Also included are flags, patches, a piece of payload bay liner flown in Space on the Orbiter Atlantis during the STS-125 mission, Hubble Space Telescope Service Mission, and other tokens of appreciation often

attached to signed photographs of Shuttle crews and presented to Leestma. There is a large wooden box containing Orbital Space Plane models of potential boosters that was presented to Leestma when he was project manager.

Descriptive Rules

Describing Archives: A Content Standard

Processing Information

Whenever possible, original order of the materials has been retained. All materials have been housed in acid-free folders and acid-free boxes

DETAILED DESCRIPTION OF THE COLLECTION

Series 1. Navy, circa 1971-1990s

(0.90 cubic feet)

Box 1 *Some Restrictions* - Navy Papers, Documents, Certificates, Astronaut Application, Astronaut Candidate Notification Letter, and Additional Material, circa 1975-1990 (consult archivist)

Folder

- 1 "Navy Stuff," includes Naval Postgraduate School grades, quizzes, appointments, evaluations, and certificates, 1971-1980
2. "Dave Leestma," file includes Ground School evaluations, quizzes, and documents, circa 1972-1978
3. Naval Air Training and Operating Procedures Standardization (NATOPS) Flight Personnel Training/Qualification Jacket, circa 1975-1990 (some items are restricted, consult archivist)
4. United States Navy Officer's Promotion certificate, presented by the President of the United States to Lieutenant David C. Leestma, July 1, 1975
5. Certificate, Naval Postgraduate School, Continuing Education, Introduction to Navy Software, July 21, 1978
6. Letter to Lieutenant Commander Leestma from V. J. Gilroy, Commander of United States Navy, informing Leestma of his selection as a candidate for a junior service college, 1983
7. The United States Naval War College, "Naval Manning of Joint Space Activities," by Lieutenant Colonel Robert S. Dickman and Commander Timothy A. Hunsberger, June 24, 1983
8. Program, Naval Flight Officer Designation Ceremony, Naval Air Station, Pensacola, Florida, 1986; and Naval Flight Officer pamphlet, undated
9. NASA memo notifying Commander Leestma that he has authority to assume the title and wear the uniform of a Captain, U.S. Navy, September 4, 1990
10. United States Navy diploma or certificate cover (empty), undated
11. Application for Astronaut Candidate Selection Program, October 25, 1979
12. Astronaut candidate notification letter, supporting memos, documents, photographs, and itinerary for NASA Johnson Space Center interview and visit, May 1980

Box 2 *Some Restrictions* - Folders Containing Flight Activity Reports, Discharge Papers, Award Certification Documents, and Miscellaneous Documents circa 1976-1998 (consult archivist)

Folder

1. "Fighter Squadron Thirty Two, "Swordsmen," 1977 Mediterranean Cruise

- Report,” additional fighter squadron material, and tactics ground training papers and quizzes, 1976-1977
2. Flight Activity Reports, circa 1980-1987 (folder 1 of 2)
 3. Flight Activity Reports, circa 1987-1998 (folder 2 of 2)
 4. Flight Log Book, April 1973 – November 1979 (includes Training Squadron qualification and achievement stamps)
 5. Flight Log Book, December 1979 – October 1980
 6. Discharge papers, award certification documents, and miscellaneous documents, circa 1980-1985

Series 2. Astronaut Training, 1969-1997 (0.20 cubic feet)

Box 3 Booklet, “Technical Status Review (TSR),” Space Division, North American Rockwell Corporation, and Payload Specialist Training, 1969-1997

Folder

1. Booklet, “Technical Status Review (TSR),” Space Division, North American Rockwell Corporation, March 26, 1969
2. “Payload Specialist Training,” circa 1983-1997

Series 3. Daily Work Journals and Log-Books, 1981-2014 (6.0 cubic feet)

Box 4 *Journals, January 5, 1981 – March 14, 1986*

Folder

1. “Meeting Summaries / Notes,” January 5, 1981 – June 5, 1981
2. Journal, January 17, 1981 – August 12, 1982
3. Journal, August 12, 1982 – January 26, 1983
4. Journal, January 27, 1983 – November 22, 1983
5. Journal, December 15, 1983
6. Journal, January 13, 1984 – July 4, 1984
7. Journal, July 5, 1984 – May 20, 1985
8. Journal, October 23, 1985 – December 15, 1985
9. Journal, January 27, 1986 – March 14, 1986

Box 5 *Journals, January 23, 1986 – March 9, 1990*

Folder

1. Spiral Notebook, January 23, 1986
2. Journal, April 23, 1986 – September 28, 1987

3. Journal, September 30, 1987 – December 8, 1987
4. Journal, December 9, 1987 – January 28, 1988
5. Journal, January 29, 1988 – May 16, 1988
6. Journal, May 16, 1988 – January 3, 1989
7. Journal, August 8, 1989 – August 13, 1989 (STS-28 Mission)
8. Journal, January 9, 1989 – March 9, 1990

Box 6 *Journals, October 5, 1990 – August 9, 1991*

Folder

1. Journal, March 16, 1990 – July 17, 1990
2. Journal, August 13, 1990 – October 4, 1990
3. Journal, October 5, 1990 – December 7, 1990
4. Journal, December 7, 1990 – December 28, 1990
5. Journal, October 31, 1990 – January 23, 1991
6. Journal, January 24, 1991 – February 28, 1991
7. Journal, March 4, 1991 – April 15, 1991
8. Journal, April 17, 1991 – May 23, 1991
9. Journal, May 24, 1991 – August 9, 1991

Box 7 *Journals, June 28, 1991 – May 27, 1993*

Folder

1. Journal, June 28, 1991 – August 6, 1992 (Atlas-1, STS-45)
2. Journal, May 24, 1992 – April 2, 1992 (STS-45, Orbiter Notebook)
3. Journal, August 8, 1992 – November 9, 1992
4. Journal, November 16, 1992 – January 21, 1993
5. Journal, January 22, 1993 – March 15, 1993
6. Journal, March 15, 1993 – April 14, 1993
7. Journal, April 13, 1993 – May 27, 1993

Box 8 *Journals, May 27, 1993 – May 27, 1994*

Folder

1. Journal, May 27, 1993 – August 24, 1993
2. Journal, August 23, 1993 – November 11, 1993
3. Journal, November 5, 1993 – January 14, 1994
4. Journal, January 18, 1994 – March 22, 1994
5. Journal, March 22, 1994 – May 27, 1994

Box 9 *Journals, May 31, 1994 – August 21, 1995*

Folder

1. Journal, May 31, 1994 – August 22, 1994
2. Journal, August 23, 1994 – November 9, 1994
3. Journal, November 10, 1994 – February 14, 1995
4. Journal, February 15, 1995 – May 8, 1995
5. Journal, May 9, 1995 – August 21, 1995

Box 10 *Journals, August 21, 1995 – February 23, 1996*

Folder

1. Journal, August 21, 1995 – November 29, 1995
2. Journal, November 30, 1995 – February 23, 1996
3. Journal, February 25, 1996 – June 6, 1996
4. Journal, June 13, 1996 – October 18, 1996
5. Journal, October 21, 1996 – February 24, 1997

Box 11 *Journals, February 25, 1997 – March 11, 1998*

Folder

1. Journal, February 25, 1997 – May 27, 1997
2. Journal, May 27, 1997 – September 5, 1997
3. Journal, September 8, 1997 – December 18, 1997
4. Journal, December 19, 1997 – March 11, 1998
5. Journal, March 11, 1998

Box 12 *Journals, March 11, 1998 – July 11, 2000*

Folder

1. Journal, March 11, 1998 – June 17, 1998
2. Journal, June 17, 1998 – August 28, 1998
3. Journal, August 31, 1998 – January 6, 1999
4. Journal, January 7, 1999 – May 23, 1999
5. Journal, May 24, 1999 – November 24, 1999
6. Journal, November 29, 1999 – July 11, 2000

Box 13 *Journals, June 23, 2000 – July 22, 2002*

Folder

1. Journal, June 23, 2000 – February 5, 2001
2. Journal, February 5, 2001 – August 7, 2001
3. Journal, August 7, 2001 – March 4, 2002
4. Journal, March 5, 2002 – July 22, 2002

Box 14 *Journals, July 26, 2002 – April 3, 2005*

Folder

1. Journal, July 26, 2002 – January 10, 2003
2. Journal, January 13, 2003 – August 4, 2003
3. Journal, August 11, 2003 – April 14, 2004
4. Journal, April 14, 2001 – October 14, 2004
5. Journal, October 26, 2004 – April 3, 2005

Box 15 *Journals, April 4, 2005 – April 29, 2009*

Folder

1. Journal, April 4, 2005 – January 1, 2006
2. Journal, January 9, 2006 – September 9, 2006
3. Journal, September 11, 2006 – June 10, 2007
4. Journal, June 13, 2007 – March 4, 2008
5. Journal, March 5, 2008 – October 14, 2008
6. Journal, October 15, 2008 – April 29, 2009

Box 16 *Journals, January 9, 2009 – October 20, 2010*

Folder

1. Journal, January 9, 2009 – April 2, 2010 (Special notebook for SRB – ORION)
2. Journal, April 30, 2009 – September 9, 2009
3. Journal, September 9, 2009 – February 1, 2010
4. Journal, February 1, 2010 – June 8, 2010
5. Journal, June 10, 2010 – October 20, 2010

Box 17 *Journals, October 20, 2010 – February 13, 2014*

Folder

1. Journal, October 20, 2010 – January 5, 2011
2. Journal, January 5, 2011 – April 25, 2011
3. Journal, April 25, 2011 – September 28, 2011
4. Journal, October 10, 2011 – October 15, 2012
5. Journal, October 16, 2012 – June 12, 2013
6. Journal, June 13, 2013 – February 13, 2014

Box 18 *Journals, February 13, 2014 – May 30, 2014, NASA 5-Point Plan for the Future, E-Mail Correspondence, November 4, 2009 – June 1, 2010, and “Proposal for Investment of Silicon Valley in Space,” September 3, 2010 – November 16, 2010*

Folder

1. Journal, February 13, 2014 – May 30, 2014
2. Journal, Blank
3. Journal, Blank
4. Journal, NASA 5-Point Plan for the Future, E-Mail Correspondence, November 4, 2009 – June 1, 2010
5. Journal, E-Mail Correspondence, "Proposal for Investment of Silicon Valley in Space," September 3, 2010 – November 16, 2010

Series 4. NASA Missions, 1983-1995

(4.8 cubic feet)

Subseries 1. STS-41G, 1983-1995

(.80 cubic feet)

Box 19 *STS-41G Memos, Correspondence, Documents, Papers, 1983-1995*

Folder

1. Earth Radiation Budget Satellite (ERBS) overview, spacecraft overview and memos, December 13, 1983 – July 27, 1984
2. STS-41G flight crew reports, travel request, launch invitations and guest information, and crew memos concerning clothing, official flight kits, and personal preference flight kits, August 22, 1983 – December 20, 1984
3. STS-41G Medical Detailed Supplementary Objectives (DSOs), March 28, 1984 – July 9, 1984
4. STS-41G Official Flight Kit (OFK) and Personal Preference Kit (PPK) memos, correspondence and related documents, circa September 1994 – January 1995
5. STS-41G Quick Look Data Report, "ORS Lessons Learned," (Orbital Refueling System) Report, and ORS Critical Design Review Board Report, August 1983 – February 1985
6. STS-41G Cargo Systems Manual: GAS Annex for STS-41, and Flight Planning Annex: Get Away Special (GAS) Payloads for STS-41G, June 23, 1984 – July 1984
7. STS 41-G Orbit Flight Techniques Panel Meeting minutes #1, March 27, 1984 and #4 minutes, August 31, 1984, and Orbit Flight Techniques document, December 1983
8. "EVA Fluid Transfer Demo," 1983
9. STS-41G Flight Problem Distribution List, Preliminary Anomaly List, Chronological Time Sort, and Package of STS 41-G Ku-Band CHITS, October 15, 1984 – May 14, 1992

Box 20 *STS-41G Reports, Debriefing Information, Orbital Refueling System Information, 1984-1991*

Folder

1. Scully-Power, P. (1986). *Navy oceanographer shuttle observations: STS 41-G mission report*. Newport, R.I.: Naval Underwater Systems Center.
2. Flight STS-41-G Mission Report for EMU and Ancillary Hardware, Crew Systems Division, November 1, 1984
3. STS-41G Crew Debriefing Information, September 1984 – September 1985 (includes a small audio cassette)
4. Money, K., Bondar, R., Thirsk, M., Garneau, P., & Scully-Power. (1985). CANADIAN MEDICAL EXPERIMENTS ON SHUTTLE FLIGHT 41-G. *Canadian Aeronautics and Space Journal*, 31(3), 215-226.
5. National Air and Space Museum correspondence about the movie, "The Dream is Alive," and Production Scene List Locator, "41-G Astronaut Leestma Presentation," April 24, 1985
6. STS-41-G Flight Crew Report and STS 41-G National Space Transportation Systems Program Mission Report, November 1984 (original binder with adhesive mission patch retained)
7. "APE/GAS," Auroral Photography Experiment (APE) results, 1984 (includes 7 b&w photographs)
8. APE Contributions to *EOS Transactions, American Geophysical Union*; and "Auroral Observations from the Space Shuttle," poster presented at IAGA meeting, Prague, by Denig, W.F., Pike, C.P., Mende, S. B.; Swensen, G. R., et al, August 9, 1985
9. "ORS/STS-17 EVA," Orbital Refueling System (ORS), circa 1983-1984 (folder 1 of 2)
10. "ORS/STS-17 EVA," Orbital Refueling System (ORS), circa 1983-1984 (folder 2 of 2, includes ORS Ops Working Group meeting minutes)
11. "Navy Oceanographer Shuttle Observations STS 41-G Quicklook Report," prepared for Navy Space Oceanography Committee, February 28, 1985
12. Articles about STS-41-G, 1984-1991

Subseries 2. STS-28, 1989-1992

(.40 cubic feet)

Box 21 *STS-28 Information, Reports, Crew Briefing Information, and Miscellaneous Material, 1989-1992*

Folder

1. STS-28 crew/mission pamphlet and guest information, 1989 (3 copies)
2. STS-28 National Space Transportation System Mission Report, September 1989 (2 copies)
3. Medical Radiation Report for STS-28, December 19, 1989 (**restricted**, consult archivist)
4. STS-28 Environmental Photography Request, June 29, 1989
5. Flight Crew Briefing OV-102 L-1 Day (TCDT) S0017 STS-28R, Flight 8, July 13, 1989

6. STS-28R Flight Crew Briefing, July 17, 1989
7. Whitehead, V., Helfert, Lulla, Amsbury, Wilkinson, Stevenson, . . . Brown. (1990). Earth observations during space shuttle mission STS-28 8–13 August 1989. *Geocarto International*, 5(2), 63-80.
8. Catalog of Space Shuttle Earth Observations Handheld Photography: Space Transportation System 28 (STS-28) Mission, August 8 – 13, 1989 (includes 2 summary maps dated April 1990)
9. Flown STS-28 toilet procedures, signed by Leestma, August 1989
10. Flown mission medallion and certificate of authenticity, August 1989 (includes a larger version of medallion)
11. “STS-28 Videotape Scenelist,” 1989
12. Issue of *Space New Roundup*, “Columbia knives through fog on secret mission: STS-28,” by Kelly Humphries, August 11, 1989
13. Whitehead, V., Helfert, Lulla, Amsbury, Wilkinson, Stevenson, . . . Brown. (1990). Earth observations during space shuttle mission STS-28. 8–13 August 1989. *Geocarto International*, 5(2), 63-80.
14. Orbiting of advanced imaging satellite bolsters U.S. intell. (1989). *Aviation Week & Space Technology*, 131(7), 30.
15. STS-28 Terminal Count Demonstration Test (TDT) Action Item Closure, August 18, 1989
16. STS-28 Postflight Debriefing Guide, prepared by W.B.D. Jones, along with various NASA memos in regards to the flight, circa September 1989 – April 15, 1991 (includes one sheet of handwritten notes)
17. STS-28 Orbiter Quick Look Report, Stokes McMillan and Troy Welch, 1989
18. STS-28 Landing Plus 7 Day Program Review of the Level II Preliminary In-Flight Anomaly (IFA) List, August 23, 1989 (includes related paperwork)
19. STS-28 Shuttle Infrared Leaside Temperature Sensing (SILTS) Experiment performance reports and preliminary information, circa November-December, 1989
20. STS-28 Flight Crew Report, March 20, 1990 (includes a floppy disc)
21. Potable Water Report for STS-28, September 13, 1990
22. Manuscript, “Short duration space flight impairs human carotid baroreceptor cardiac reflex responses,” by Janice M. Fritsch, John B. Charles, Barbara S. Bennett, Michele M. Jones, and Dwain L. Eckberg, March 16, 1992
23. “Real-Time and Time-Resolved Dose Measurements on Space Shuttle Mission with the Radiation Monitoring Equipment (RME)-III, by K.A. Hardy, W. Atwell, M.J. Golightly, A.C. Hardy, and W. Quam, undated

Subseries 3. STS-45, 1988-1992

(3.60 cubic feet)

Box 22 *STS-45 Information, Crew Briefing Material, Memos, Documents, Reports, and Images taken by the Atmospheric Emission Photometric Imager, 1988-1992*

Folder

1. STS-45 launch invitation and vehicle permit, March 1992
2. Flight Crew Briefing OV-104 L-1 Day (TCDT) S0017, STS-45 – Flight 11, 1992
3. System: Payloads STS-45 L-1 Day Briefing, S0017, Lesa B. Roe – CS-PPD-1, Payload Integration Engineer, 1992
4. The Mystery of Earth’s Changing Atmosphere: ATLAS 1 Teacher’s Guide with Activities, Second Draft, August 16, 1991, and Atmosphere Laboratory for Applications and Science, Mission 1, 1988
5. STS-45 Flight Requirements Document, February 1992
6. STS-45 Crew Activity Schedule, Circadian Adjustment Protocol, and Guidelines for Circadian Phase-Shifting, February – March, 1992
7. STS-45 Pre-Flight memos and documents, circa January – March, 1992
8. STS-45 Debriefing Documents, including handwritten notes, 1992 (some transcripts included)
9. STS-45 Orbiter Quick Look Report, prepared by Bill Leverich, Pat Oliver, and Don Corcoran, VF3/Flight Evaluation Office, April 6, 1992
10. STS-45 Medical Detailed Supplementary Objectives (DSOs) Summary Report, May 11, 1992
11. STS-45 Images taken by the Atmospheric Emission Photometric Imager (AEPI) experiment on the ATLAS 1 mission, Dr. S.B. Mende, Lockheed Palo Alto Research Laboratories
12. STS-45 Systems Anomaly List, Orbiter Quick Look Report, and STS-45 Flight Control Teams and Mission Evaluation Room, Technical Crew Debrief, April 6-10, 1992
13. STS-45 Space Shuttle Mission Report, May 1992
14. NASA Medical Operations STS-45 Mission Report, June 12, 1992
15. Flight Crew Operations Credo, September 4, 1992

Box 23 *STS-45 Press Information, Publications Related to the Mission, and STS-45 Earth Observations Photographic Debrief, 1992*

Folder

1. The ATLAS-1 shuttle mission. (1992). *Eos, Transactions American Geophysical Union*, 73(10), 105-109.
2. “STS-45 “by the numbers,” by James Oberg, March 12, 1992
3. April Fool’s Day flight plan sent to STS-45 crew, April 1, 1992
4. STS-45 Press Conference Captions “Final (April 10) List, Astronaut Press Conference”
5. STS Mission Profiles: Complete Space Shuttle Mission Coverage, Preflight Guide: STS-45, Vol. 1, Issue 2, and Post Flight Report: STS-45, Vol. 1, Issue 3, May 1992
6. Certificate of Authenticity, STS-45 silver medallion flown aboard the United States Space Shuttle Atlantis, March 24, 1992 – April 2, 1992, for Pete Leestma
7. Ackleson, S., Sullivan, K., Reynolds, R., & Pitts, D. (1992). Astronaut

observations of the Persian (Arabian) Gulf during STS-45. *Geocarto International*, 7; 4; p. 59-68.

8. "STS-45 Earth Observations Photographic Debrief," April 1992

Box 24 *STS-45 QSL Cards from SAREX (Shuttle Amateur Radio Experiment) Antarctica, Argentina, Australia and Belgium, 1992*

Folder

1. QSL Cards, Antarctica, 1992
2. QSL Cards, Argentina, 1992
3. QSL Cards, Australia, 1992
4. QSL Cards, Belgium, 1992 (1 of 6)
5. QSL Cards, Belgium, 1992 (2 of 6)
6. QSL Cards, Belgium, 1992 (3 of 6)
7. QSL Cards, Belgium, 1992 (4 of 6)
8. QSL Cards, Belgium, 1992 (5 of 6)
9. QSL Cards, Belgium, 1992 (6 of 6)

Box 25 *STS-45 QSL Cards from SAREX (Shuttle Amateur Radio Experiment), Brazil – Italy, 1992*

Folder

1. QSL Cards, Brazil, 1992
2. QSL Cards, Canada, 1992
3. QSL Certificate, Canada, Brian Duffy, April 25, 1992
4. QSL Certificate, Canada, Kathy Sullivan, April 25, 1992
5. QSL Cards, Chile, 1992
6. QSL Cards, Czechoslovakia, 1992
7. QSL Cards, Denmark, 1992
8. QSL Cards, Equador, 1992
9. QSL Cards, Finland, 1992
10. QSL Cards, France, 1992
11. QSL Cards, Germany, 1992 (1 of 2)
12. QSL Cards, Germany, 1992 (2 of 2)
13. QSL Cards, Guatemala, 1992
14. QSL Cards, Italy, 1992

Box 26 *STS-45 QSL Cards from SAREX (Shuttle Amateur Radio Experiment), Iraq – Zimbabwe, February – April 1992*

Folder

1. QSL Cards, Iraq, March 1992
2. QSL Cards, Israel, March 1992

3. QSL Cards, Japan, March – April, 1992
4. QSL Cards, Mariana Islands, March 1992
5. QSL Cards, Netherlands, March – April, 1992
6. QSL Cards, New Zealand, March – April, 1992
7. QSL Cards, Norway, March – April, 1992
8. QSL Cards, Papua New Guinea, March 1992
9. QSL Cards, Reunion Island, March 1992
10. QSL Cards, South Africa, February – April, 1992
11. QSL Cards, Spain, March 1992
12. QSL Cards, Sri Lanka, March 1992
13. QSL Cards, Sweden, March 1992
14. QSL Cards, Switzerland, March 1992
15. QSL Cards, United Kingdom, March – May, 1992
16. QSL Cards, Zimbabwe, March 1992
17. QSL Cards, Cassette Recording, Canada, undated
18. QSL Cards, Cassette Recording, France, March 1992
19. QSL Cards, Cassette Recording, Spain, March 1992

Box 27 *STS-45 QSL Cards from SAREX (Shuttle Amateur Radio Experiment), United States, Alabama - Kansas, March – April, 1992*

Folder

1. QSL Cards, Alabama, March – April, 1992
2. QSL Cards, Alaska, March 1992
3. QSL Cards, Arizona, March – April, 1992
4. QSL Cards, Arkansas, March – April, 1992
5. QSL Cards, California, March – April, 1992
6. QSL Cards, Colorado, March – April, 1992
7. QSL Cards, Connecticut, March – April, 1992
8. QSL Cards, Delaware, March 1992
9. QSL Cards, Florida, March – April, 1992
10. QSL Cards, Georgia, March – April, 1992
11. QSL Cards, Hawaii, March – April, 1992
12. QSL Cards, Idaho, March – April, 1992
13. QSL Cards, Illinois, March – April, 1992
14. QSL Cards, Indiana, March – April, 1992
15. QSL Cards, Iowa, March – April, 1992
16. QSL Cards, Kansas, March – April, 1992

Box 28 *STS-45 QSL Cards from SAREX (Shuttle Amateur Radio Experiment), United States, Kentucky - Ohio, March – April, 1992*

Folder

1. QSL Cards, Kentucky, March – April, 1992

2. QSL Cards, Louisiana, March – April, 1992
3. QSL Cards, Maine, March – April, 1992
4. QSL Cards, Maryland, March – Aril, 1992
5. QSL Cards, Michigan, March – Aril, 1992
6. QSL Cards, Massachusetts, March – Aril, 1992
7. QSL Cards, Minnesota, March – April, 1992
8. QSL Cards, Mississippi, March – April, 1992
9. QSL Cards, Missouri, March – April, 1992
10. QSL Cards, Montana, March – April, 1992
11. QSL Cards, Nebraska, March – April, 1992
12. QSL Cards, New Hampshire, March – Aril, 1992
13. QSL Cards, Nevada, March – April, 1992
14. QSL Cards, New Jersey, March – April, 1992
15. QSL Cards, New Mexico, March – April, 1992
16. QSL Cards, New York, March – April, 1992
17. QSL Cards, North Carolina, March – April, 1992
18. QSL Cards, North Dakota, March – April, 1992
19. QSL Cards, Ohio, March – April, 1992

Box 29 *STS-45 QSL Cards from SAREX (Shuttle Amateur Radio Experiment), United States, Oklahoma – Unknowns, March – April, 1992*

Folder

1. QSL Cards, Oklahoma, March – April, 1992
2. QSL Cards, Oregon, March – April, 1992
3. QSL Cards, Pennsylvania, March – April, 1992
4. QSL Cards, Rhode Island, March – April, 1992
5. QSL Cards, South Carolina, March – April, 1992
6. QSL Cards, South Dakota, March – April, 1992
7. QSL Cards, Tennessee, March – April, 1992
8. QSL Cards, Texas, March – April, 1992
9. QSL Cards, Utah, March – April, 1992
10. QSL Cards, Vermont, March – April, 1992
11. QSL Letters, Mater Christi School, Burlington, Vermont, March – April, 1992
12. QSL Cards, Virginia, March – April, 1992
13. QSL Cards, Washington, March – April, 1992
14. QSL Cards, West Virginia, March – April, 1992
15. QSL Cards, Wisconsin, March – April, 1992
16. QSL Cards, Wyoming, March – April, 1992
17. QSL Cards, Puerto Rico, March – April, 1992
18. QSL Cards, Unknown, March – April, 1992

Box 30 *STS-45 QSL Cards from SAREX (Shuttle Amateur Radio Experiment), United States, March – April, 1992*

Folder

1. QSO audio cassette, California, April 1992
2. QSO audio cassette, Indiana, April 1992
3. QSO audio cassette, Kentucky, April 1992
4. QSO audio cassette, Nevada, April 1992
5. QSO audio cassette, Tennessee, March 1992
6. QSL Cards, STS-45 Atlantis, March 24 – April 2, 1992
7. QSO SAREX, STS-45 Contact List, N5WQC, 1992

Series 5. NASA Administration

Subseries 1. Chief, Mission Development Branch, February 1990 – September 1991.

(2.2 cubic feet)

Leestma was responsible for assessing the operational integration requirements of payloads that flew aboard the shuttle.

Box 31 Payload Specialist Information, circa 1982-1995

Folder

1. "Crew Selection Criteria," Johnson Space Center/Flight Crew Operations Directorate (FCOD), March 7, 1989
2. Payload Specialist Policy; Payload Specialist Operations and Integration Plan; NASA Policy for Payload Specialists and Space Flight Participants, including related correspondence and documents, circa March 27, 1985 – June 21, 1991
3. Payload Specialist General Information and International Microgravity Mission (IML-I), circa 1984-1990
4. Payload Specialist Information, Indonesian, Canadian, ATLAS, Spacelab-J (STS-47), Space Launch System-1 (SSL-1), Tethered Satellite System (TSS-1), circa 1988-1995
5. Interface Control Document, Shuttle Orbiter/LFC-ORS, Cargo Element Interfaces, December 20, 1982
6. Hydrazine Tool Adapter Kit, Critical Design Review; Payload Hazard Report, June 13 – July 6, 1983 (includes 6 NASA photographs)
7. Test Summary of Hydrazine Compatibility with Shuttle Suit; Orbital Refueling System (ORS) Training Plan; Beaker Test, EMU Suit Material N2H4 Liquid; Toxicity of Hydrazines; Hydrazine Decontamination Procedures, and related documents, circa 1983-1984

Box 32 Payload Specialist Information, circa 1984-1988

Folder

1. "STS-51-L," 1985-1986 (folder 1 of 2)
2. "STS-51-L," 1985-1986 (folder 2 of 2)
3. "MSFC – 51L," (Marshall Space Flight Center), circa 1984-1986 (includes "Challenger 51-L booster seal info/redesign," folder 1 of 2)
4. "MSFC – 51L," (Marshall Space Flight Center), circa 1986 (includes "Challenger 51-L booster seal info/redesign," folder 2 of 2)
5. "John Denver," 1988

Box 33 Payload Specialist Information, circa 1982-1992

Folder

1. Remote Manipulator System (RMS) operation, training, information and memos; STS-8 PDRS/PFTA Crew Report, February 1982 – February 7, 1984
2. SPARX information, circa 1984
3. Letter of thanks from Co-Chairmen, Carl B. Shelley and Peter T. Lyman, Space Station Operations Task Force, to David C. Leestma, July 22, 1987
4. Leestma's foreward and draft copies for "Before Liftoff: The Making of a Shuttle Crew," by Henry S. F. Cooper, Jr., 1987
5. "PS Issues," Payload Specialist Issues, circa 1987-1995
6. "Puddy Brief on Astronaut Office Org," January 14, 1988
7. "Space Oceanography," Astronauts' Guide to Oceanographic Phenomena, August 1988
8. Documents about the docudrama, "Challenger," (George Englund Productions), includes the script, 1988-1989
9. Investigation of Johnson Space Center Test and Training Incidents, August 12, 1989
10. "Policy Memos," circa 1989-1992
11. "Incident Board," circa 1990-1992 (**RESTRICTED**, consult archivist)
12. "Bill Thorton Folder," Space Exercise Program documents and memos, circa 1990
13. "Space Flight Medals," September 28, 1990
14. "Space Station 'White Papers,' " 1991
15. "Augustine Report," NASA Briefing to National Space Council on the Advisory Committee on the Future of the U.S. Space Program Recommendations, Richard H. Truly, Administrator, January 11, 1991
16. "Augustine Report," (NASA's response to report), January 3, 1992

Box 34 *Space Station, circa 1988-1990*

Folder

1. "Space Station," circa 1988-1990 (folder 1 of 3)
2. "Space Station," circa 1988-1990 (folder 2 of 3)

3. "Space Station," circa 1988-1990 (folder 3 of 3)

Box 35 *"SSF Redesign," (Space Station Freedom), circa 1993-1995*

Folder

1. "SSF Redesign," circa 1993-1995 (Space Station Freedom, folder 1 of 3)
2. "SSF Redesign," circa 1993-1995 (Space Station Freedom, folder 2 of 3)
3. "SSF Redesign," circa 1993-1995 (Space Station Freedom, folder 3 of 3)

Box 36 *Astronaut Mission Selection Information, NASA News Announcements - Shuttle/Shuttle Mir, Reports, 1985-1998*

Folder

1. Astronaut Mission Selection Information and NASA News announcements, Shuttle/Shuttle Mir, November 22, 1989 – June 6, 1994
2. ATLAS 1 Mission Brochure, Final Draft, May 7, 1990
3. Policy, CB," Various NASA memos related to flight policy, circa 1990-1998
4. "Earth Observations," circa 1985-1992
5. "EVA Process Improvement," (Extravehicular Activity), 1992-1993
6. "FCOD Manpower," Flight Crew Operations Directorate, circa 1989-1992
7. "Final Report of the Space Station Freedom Operations Phase Assessment Team," December 16, 1992
8. "GAO Audit," 1993
9. "Science Support Group," circa 1986-1993

Subseries 2. Deputy Chief and Acting Chief of Astronaut Office, April 1992-
November 1992
(0.2 cubic feet)

Box 37 *ASTRO-2, NASA Astronaut Candidate Selection Process, AUTOLAND, Space Station Freedom Operations Phase Assessment Team, Final Report Summary for NASA Administrator, and Miscellaneous Material, 1992*

Folder

1. "ASTRO-2," circa March 1992 – August 1992
2. **RESTRICTED**, NASA Astronaut Candidate Selection Process, circa August 1992 (includes a set of transparencies, consult archivist)
3. "AUTOLAND," AUTOLAND Status and various documents, circa August 1992
4. Space Station Freedom Operations Phase Assessment Team, Final Report Summary for NASA Administrator, by Eugene F. Kranz, September 29, 1992
5. "Promotion Policy," 1992
6. "Appearance Policy," August 26, 1992 (includes older policies and memos)

7. "Army Aviators," October 1992 (includes older information)
8. "'92 Pilots (MS) in T-38," November 10, 1992 (includes older information)

Subseries 3. Director, Flight Crew Operations Directorate, November 1992-September 1998
(5 cubic feet)

Leestma was responsible for Astronaut Office and for Johnson Space Center Aircraft Operations; 41 shuttle flights and 7 MIR missions, and the selection of Astronaut Groups 15, 16, and 17.

Box 38 Overview, Flight Crew Operations – An Introduction to the Flight Crew Operations Directorate Related Documents and Transparencies; Meeting Minutes, Fiscal Data, Status Reports and Additional Information, 1992-1997

Folder

1. Overview, Flight Crew Operations – An Introduction to the Flight Crew Operations Directorate, and related documents and transparencies, 1992-1997
2. "AOD Manpower," Aircraft Operations Division - Manpower, December 4, 1992
3. Minutes of Flight Crew Operations Directorate (FCOD); January FCOD Retreat folder and notes, December 11, 1992 – January 11, 1994
4. Crew Operations Directorate, Space Shuttle Program Support Activities, Technical and Budget Data, December 18, 1992
5. Finance Summaries and Manpower Estimates, Russian related activities; FY93 Travel Funds and FY94 Travel Marks and Travel Policy for Flight Crew Operations Directorate, 1992-1994
6. "Drag Chute," Drag Chute Flight History, January 5, 1993
7. Portable Inflight Landing Operations Training (PILOT), October 28, 1992 - February 12, 1993
8. Status Report to Johnson Space Center Director, Revised November 13, 1992, (includes related documents), and "The distance is nothing...It is only the first step that is difficult," status reports, December 9, 1992 – February 28, 1993
9. Memo, "Return of FY93 Cost Authority," and related correspondence, February 8, 1993
10. Memo, Operations Phase Assessment Team (OPAT) Background, April 13, 1993, and agenda, Operations Phase Assessment Team II, Meeting #2, April 19-22, 1993
11. Job Assignments/Rosters; Astronaut Selection and NASA News press releases; "Evolution of Payload Commander Position," and related e-mail correspondence, April 1993 – February 26, 1998
12. Shuttle Processing Review Team, Review Record Sheets, May 1993; Report of the Shuttle Processing Team, requested by the NASA Administrator, June

- 1993; and Shuttle Processing Review Team Exit Briefing, Kennedy Space Center Director and Staff, Richard U. Perry, Chairman, June 11, 1993
13. Interim Report Competitive Assessment United States Commercial Space for NASA Strategic Avionics Technology Working Group, by SATWG Industry Interface Group, David Scruggs, Gary Lee, Gary Herbella, Mike Raferty, Patrick Ogburn, Steve Oxner, and Mike Bradway, July 16, 1993
 14. "A Shared Vision for Space" – Evolved from Strategic Avionics Technology Working Group (SATWG) Activities, by Dr. Kenneth J. Cox, July 1993
 15. "New Ways of Doing Business Between Industry and Government" – Evolved from Strategic Avionics Technology Working Group (SATWG) Activities, by Dr. Kenneth J. Cox, July 1993

Box 39 *Results of Preliminary Assessments of the Russian/US/International Partners Space Station Design Option, Memos, Correspondence, and Related Documents; EVA (Extravehicular Activity) Memos and Documents, Including EVA Flight Techniques Panel Meeting Minutes, STS-6 Debriefing Notes, and STS-11 EVA Status, 1993-1997*

Folder

1. Dynamic Tolerance Assessment Shuttle Training Aircraft; Super Guppy Proposal; DynCorp contract; George M. Low Award; and related correspondence and NASA memos, July 19, 1993 – September 9, 1997
2. Results of Preliminary Assessments of the Russian/US/International Partners Space Station Design Option, memos, correspondence, and related documents, August 27, 1993 – July 1994
3. "Russian Schedule," various memos and documents, 1993
4. Memos, correspondence, and related documents, Russian/US/International Partners Space Station Design Option, August 1993 – November 1993
5. Memo in regards to Fiesta Bowl football flying on STS-60, and supporting documents, September 7, 1993
6. Johnson Space Center Memo, To: CA/Director, Flight Crew Operations, From: AH3/Stacy Jackson, Subject: Management Curriculum Changes; General Descriptions of Management Competencies; Competencies at Each Level of Management; Prioritizing Management Competencies, October 4, 1993
7. STS-57 Extravehicular Activity (EVA) Report, October 8, 1993
8. EVA (Extravehicular Activity) memos and documents, including EVA Flight Techniques Panel Meeting minutes, STS-6 debriefing notes, and STS-11 EVA status, 1993
9. Correspondence, From: Bill Readdy/CB, To: Dave Leestma and Robert Gibson, Subject: Mir 18 thoughts, etc., December 4, 1993

Box 40 *Various Flight Crew Operations Directorate Documents, circa 1992-1999*

Folder

1. "International Crew Office," circa December 1992 – October 1993
2. "HQ Status Review," December 9, 1992
3. "ASCANS," (Astronaut Candidates), 1992 Class (includes some older information, **RESTRICTED**, consult with archivist)
4. "PAO," Public Affairs Office, circa 1993-1997 (includes copies of correspondence with the White House in regards to the Congressional Space Medal of Honor and summary of achievements for Roger B. Chaffee and Edward H. White II)
5. "GFE SDOM," Government Funded Equipment - Station Development and Operations Meeting, circa 1997-1999
6. "Project Management WI," (Work Instruction), 1998-1999
7. "Project Office Notes," 1999
8. "Skill Base Retention on TransHab/CRV," 1999
9. "SDOM Action," STS-88 Lessons Learned, circa January 1999

Box 41 *E-mail correspondence about Russia training and Star City Status reports; Flight Crew Operations Directorate, Center Director's Review, Shuttle Program, "POP 94-1 Submission;" Flight Crew Operations Support to Astronauts in Russia, Cosmonaut Funding Documents and Related Correspondence, and Joint EVA Working Group Protocol, 1994-1998*

Folder

1. Program Manager's Review, Flight Crew Operations Directorate, David C. Leestma, February 8, 1994
2. E-mail correspondence about Russia training and Star City Status reports, February 7, 1994 – October 24, 1994 (folder 1 of 2)
3. E-mail correspondence about Russia training, Star City Status reports, and Protocol, U.S./Russian Joint Crew Training and Exchange Work Group Meeting minutes/notes, February 7, 1994 – October 24, 1994 (folder 2 of 2)
4. Funding and Program Operating Plan documents, April – June, 1994 (includes "POP 94 Decision Packages Open Actions")
5. Flight Crew Operations Directorate, Center Director's Review, Shuttle Program, "POP 94-1 Submission," May 12, 1994 (includes transparencies, all items in original red folder)
6. Flight Crew Operations Support to Astronauts in Russia, Cosmonaut funding documents and related correspondence, circa July 1993 – December 1995
7. Medical care and card while in Moscow, January 14, 1995
8. Joint EVA Working Group Protocol – International Space Station; EVA Project Office Roadmap; An Assessment of Extravehicular Mobility Unit (EMU) Technology Needs and Capabilities, March 27, 1995 – August 11, 1998
9. Flight Crew Operations Directorate (FCOD) Business Plan, December 4, 1995

Box 42 *E-mail and Fax Correspondence from Astronauts Training in Russia Sent to Flight Crew Operations Directorate, and Fiscal Information, 1994-1998*

1. E-mail and fax correspondence from astronauts training in Russia sent to Flight Crew Operations Directorate; Russia and United States EVA protocols, and Executive Summary of Shuttle-Mir, circa March 8, 1994 – February 20, 1998 (folder 1 of 3)
2. E-mail and fax correspondence from astronauts training in Russia sent to Flight Crew Operations Directorate; Russia and United States EVA protocols, and Executive Summary of Shuttle-Mir, circa December 1994 – July 1995 (folder 2 of 3)
3. E-mail and fax correspondence from astronauts training in Russia sent to Flight Crew Operations Directorate; Russia Training, Mir-18 Training, Daily logs from Russia training, October 25, 1994 – July 1, 1996 (folder 3 of 3)
4. Space Shuttle Program FY 1996 Budget to the Office of Management and Budget (OMB) Status to the Space Shuttle Program, FY94/FY95, FY96 and Out Status, Fee on Subcontracts & Materials, September 14, 1994
5. "Fiscal Year 1996 Marks," David C. Leestma, Flight Crew Operations Directorate, September 23, 1994; "Resources Program Manager's Review," October 26, 1994; "Cost Performance Evaluation Guidelines Team, Status of Activity," October 21, 1994
6. Assessment for Request for Return Items on STS-71, May 1, 1995; and e-mail in regards to STS-69 Issue, May 9, 1995
7. Program Operating Plan (POP) 96 Flight Crew Operations Directorate, June 12, 1996
8. Assessment of Astronaut Office Support Requirements for Proposed Flight Rate Increases, by Linda Godwin, June 13, 1997
9. Assessment of NASA's Financial Assistance to Foreign Visitors, Draft Report, April 1998
10. Correspondence between Mr. Yuri Koptev, Director General, Russian Space Agency, and Daniel S. Goldin, NASA, Office of the Administrator, June-July, 1998

Box 43 *Memos, Policies, Documents, Meeting Minutes, Results, and Miscellaneous Items, 1992-1998*

1. NASA, Johnson Space Center, Flight Crew Standards Review, "Feasibility of Space Flight Opportunities for Individuals with Disabilities," prepared by Space and Life Sciences Directorate and Flight Crew Operations Directorate, January 1993
2. "Spacelab Phaseout Option P-1," prepared by Dr. Harry Holloway, June 1, 1993
3. Memos and policies, "Space Shuttle In-Flight Health Care and Reporting Policy, February 4, 1992;" Guidelines for Approval of Medical Experiments During Space Flight, September 24, 1993;" "Space Shuttle Process Health,

- September 30, 1993;" "Resolution of the Bioethics Concerns and Positions of the Astronaut Office, circa 1995;" "Russian Chief Medical Commission, October 15, 1996;" "Policy Guidelines for Space Flight Medical Research and Experiments;" "Report, Meeting No. 3, NASA Bioethics Policy Task Force, March 9-10, 1995; "Protection of Human Research Subjects, Effective August 8, 1995
4. Memos and documents related to "Continuous Improvement Through Process Analysis and Change," circa August 1992 – September 1993
 5. NASA memo, "Space Shuttle Manifest Supportability for Space Station Program (including Shuttle to Mir)," December 3, 1993
 6. "Scientific Achievements of 10 Years of Spacelab: An Overview of the Missions," Marsha R. Torr, NASA-Marshall Space Flight Center, Huntsville, AL, 32nd Aerospace Sciences Meeting and Exhibit, Reno, NV, January 10-13, 1994 (AIAA 94-0340)
 7. Memos, "DSO-204 (Joint Earth Observations) on STS-60," From: Dr. Michael R. Helfert, Flight Science Branch/SN5, NASA, JSC, March 11, 1994; "Specifications & Standards – A New Way of Doing Business," June 29, 1994; "STS-66 Prelaunch Waiver to Flight Rule 4-64 for TAL Crosswind Limits," From: DA8/STS-66 Ascent Entry Flight Director, November 18, 1994
 8. Various memos, January 1995 – September 1995
 9. NASA News Release, "NASA to Pursue Non-Competitive Shuttle Contract with U.S. Alliance," November 7, 1995
 10. "Issues/Actions from Program Management Plan (PMP) Meeting, December 15, 1995; "Program Management Plan Working Session Minutes, January 3, 1996;" Memo, Subject: "Lead Center Assignment – Effective January 31, 1996, the Johnson Space Center is designated as the Lead Center for the Space Station and Shuttle programs," February 2, 1996
 11. "Space Shuttle Program Changes and Accomplishments Since 1986," NASA Office of Public Affairs, January 1986; "United States General Accounting Office, Report to the Honorable James A. Hayes, House of Representatives, Space Shuttle: Need to Sustain Launch Risk Assessment Process Improvements," March 1996
 12. Orbiter Upgrade Issues and related documents, August 1996
 13. Space Shuttle Program Goals and Objectives, Flight Crew Operations Directorate, David C. Leestma, January 15, 1997
 14. Mission Specialist Training Aircraft reports, evaluations and results, April 13, 1993 – October 21, 1993
 15. Flight Crew Operations Aviation Council Meeting Minutes, June 14, 1994 and September 24, 1994
 16. Aircraft Simulator and Information Systems Contract; Benchmarking Overview; Purchase of Nonessential Items; Aircraft Maintenance and Modification Contract, November 1, 1994 – April 24, 1998
 17. Flight Crew Support Office Options, correspondence and documents, September 1996; and DO7 correspondence and documents, September – October 1996
 18. Flight Projects Office presentation and hierarchy, July – September 1998

- (includes a poster flowchart and handwritten notes)
19. International Space Station Basic Training memos and documents; ISS Construction memos and documents; Correspondence related to US/Russia Mir relations, April 11, 1995 – July 15, 1998

Box 44 *Safety Review Board Findings Briefed to the Johnson Space Center Director, and Correspondence and Memos in Regards to Equipment, Procedures and Personnel, 1993-1998*

1. Safety Review Board findings briefed to the Johnson Space Center Director, July 1994
2. Documents, Johnson Space Center Safety Program; Aviation Safety Presentation; Safety on Russian Mir Space Station, Safety Meeting minutes, October 21, 1994 – May 3, 1998
3. Neutral Buoyancy Laboratory correspondence, November 30, 1993 – March 28, 1994
4. Memos, correspondence, and documents, Space Station Support; Flight Crew Operations Participation in the ISSA Program; FCOD Position on Crew Support to the Space Station Program, March 2, 1993 – July 26, 1994
5. Customer/MOST Team 1994 Goals; Crew Integration Office Standard Operating Procedures (SOP); Informal History of the Banana River Test; Space Shuttle In-Flight Health Care Reporting memo, November 1, 1993 – June 9, 1994
6. Flight Crew Operations Directorate ISS Test and Verification Support Plan, June 24, 1996
7. Correspondence and memos in regards to equipment, procedures and personnel, along with documents; “Long Duration Orbiter Operations,” including handwritten notes, and “Interim Plan for Astronaut Appearances,” by Steven A. Hawley, March 15, 1993 – December 9, 1994
8. Letter to President Bill Clinton, from Jose’ Garcia, NASA/TV-ETD in regards to the safety of the Shuttle, post-Challenger disaster, August 25, 1995
9. Correspondence and memos in regards to equipment, procedures and personnel, along with documents; Astronaut Office Summary of Accomplishments – 1995; “Key Points Related to Requirements for Refrigerators and Freezers Aboard the International Space Station;” “NASA/USAF Liaison Duties;” “Postflight Crew Recommendation Quarterly Status;” “Shuttle-Mir Lessons Learned: Psychology/Psychiatry,” February 1995 - May 1998
10. “Government Furnished Equipment (GFE) Project Performance/EA GFE Projects,” by John Aaron, June 5, 1998

Box 45 *Hubble Space Telescope Information; “Handicapped in Space,” NASA memo; Crew Debrief Notes,” STS-57, STS-68, STS-60, STS-53, STS-54, STS-94, STS-67, ASTRO-2, STS-77, 1991-1996*

- 1 "Brinkley HST," Hubble Space Telescope, circa 1991-1993 (folder 1 of 2)
- 2 "Brinkley HST," Hubble Space Telescope, circa 1991-1993 (folder 2 of 2)
3. "Notes from One-On-One Status with Center Director, circa 1995-1998
4. "Handicapped in Space," NASA memo, From: MB/Deputy Director, Policy and Plans Division, Subject: Review of Flight Crew Standards for NASA Astronauts/Payload Specialists, December 7, 1992
5. "EVA," (Extravehicular Activity), 1992-1994
6. "Crew Debrief Notes," STS-57, STS-68, STS-60, STS-53, STS-54, STS-94, STS-67, ASTRO-2, STS-77, 1993-1996

Box 46 *"JWY Memos," (memos from John W. Young, AC5/Associate Director Technical, 1990-1998*

1. "JWY Memos," circa 1990-1994 (memos from John W. Young, AC5/Associate Director Technical, folder 1 of 3)
2. "JWY Memos," circa 1992-1994 (memos from John W. Young, AC5/Associate Director Technical, folder 2 of 3)
3. "JWY Memos," circa 1994-1998 (memos from John W. Young, AC5/Associate Director Technical, folder 3 of 3)
4. "JY Memos," 1990-1991 (memos from John W. Young, AC5/Special Assistant for Engineering, Operations, and Safety)
5. "JY Memos," 1992-1993 (memos from John W. Young, AC5/Special Assistant for Engineering, Operations, and Safety)

Box 47 *"T-38 AV Upgrade," (Avionics Upgrade), "Independent Shuttle Workforce Review," 1988-1999*

1. "T-38," circa 1988-1997 (**RESTRICTED**, consult archivist)
2. "T-38 AV Upgrade," (Avionics Upgrade) circa 1993-1998 (folder 1 of 2)
3. "T-38 AV Upgrade," (Avionics Upgrade) circa 1993-1998 (folder 2 of 2)
4. "Independent Shuttle Workforce Review," circa 1994-1999 (folder 1 of 2)
5. "Independent Shuttle Workforce Review," circa 1994-1995 (folder 2 of 2)

Box 48 *STS-32, STS-36, STS-34, STS-31, STS-45, STS-50, STS-60, STS-58, STS-53, STS-59, Flight Crew Reports, 1990-1994*

1. STS-32 Postflight Debriefing, March 6, 1990
2. STS-36 Flight Crew Report, July 16, 1990
3. STS-34 Flight Crew Report, August 15, 1990
4. STS-31 Post-Flight Report, October 30, 1990
5. STS-45 Flight Crew Report, 1992
6. STS-50 Flight Crew Report, February 22, 1993

7. STS-60 Quick Look Crew Report, February 22, 1994
8. STS-58 Flight Crew Report, 1993
9. STS-53 Flight Crew Report, October 25, 1993
10. STS-59 Flight Crew Report, September 12, 1994

Box 49 "Strategic Planning," circa 1994-1996

1. "Strategic Planning," circa 1994-1996 (folder 1 of 2)
2. "Strategic Planning," circa 1994-1996 (folder 2 of 2)

Box 50 **RESTRICTED** – Consult Archivist, "ASCAN Selection," 1993-1998

1. "ASCAN Selection," 1994-1995 (**RESTRICTED**, consult archivist, includes transparencies)
2. "ASCAN Selection," 1994 (**RESTRICTED**, consult archivist)
3. "Astronaut Selection," circa 1993-1998 (**RESTRICTED**, consult archivist, folder 1 of 2)
4. "Astronaut Selection," circa 1993-1998 (**RESTRICTED**, consult archivist, folder 2 of 2)

Box 51 **RESTRICTED** – Consult Archivist, "Personnel," NASA Astronaut Office, and "Personal" File, 1992-2006

1. **RESTRICTED**, "Personnel," NASA Astronaut Office, 1993-1995 (consult archivist)
2. **RESTRICTED**, "Personal," 1992-2006 (consult archivist)

Subseries 4. Deputy Director, Engineering, September 1998 – August 2001.
(0.8 cubic feet)

Leestma was in charge of Johnson Space Center Government Furnished Equipment (GFE) Projects.

Box 52 *Various Reports and Documents, 1998-2001*

1. Medical Operations for STS-95 (John Glenn's flight), September 24, 1998
2. "ISS/STS Common Cert Assessment," by John Aaron, October 8, 1998
3. Engineering Directorate (EA) Government Furnished Equipment (GFE) Development – Memorandum of Agreement Between the International Space Station Program Office (ISSPO) and the Engineering Directorate (EA), September 1998
4. "CPDS," Charged Particle Directional Spectrometer (5A.1 & 8A), October 21,

- 1998
5. "TVIS," Treadmill with Vibration Isolation and Stabilization System, October 21, 1998
6. "RSP1," Resupply Stowage Platform 1 – Stowage System Status, October 21, 1998
7. "CTBs," Crew Transfer Bags, Status, October 21, 1998
8. "IVA Driver/Drill and Battery Charger," Status, October 21, 1998
9. "APAS," Androgynous Peripheral Attach System Stoplight Status, circa October 1998
10. "ECOMM EV, SEAT, GSFC/STel, Stoplight Status," October 21, 1998
11. "SIGI/GPS (EV/Honeywell) Flight # 5A & 8A, Stoplight Status," October 21, 1998
12. "SSCS (Hardware Launches on 5A & 6A), Stoplight Status," October 20, 1998
13. "WIS," Wireless Instrumentation System, EV12/GFE Projects Office, Avionic Systems Division, Stoplight Status, September 28, 1998
14. "GFE Office," (Government Furnished Equipment), circa 1998-2001
15. "Team One," NASA-USAF Reusable Space Launch Development, November 20, 2001
16. "SLI Technology Gaps Cycle 2," October 16, 2001
17. "Project Management Plan for the Orbiter Interface Unit (OIU)," Engineering Directorate Avionic Systems Division, Revision B, October 1997
18. "Bud Redding Space Cruiser," July 10, 1995
19. "SLI Schedule and Analysis Training," December 2001

Box 53 *Various Reports and Documents, 1998-2002*

1. "HR Tracking of Projects," NASA – Johnson Space Center, Engineering Directorate, Human Resources Tracking System, July 4, 1998
2. "CHeCS," CHeCS Hardware Briefing, Health Maintenance Capabilities, and Air Quality Monitoring Hardware, circa 1998
3. "Condensation Detector," August 18, 1998
4. "IRED," Configuration 1 (2A.2), Stoplight Status, October 21, 1998
5. "EVA Display Assembly," October 5, 1998
6. "ORCA," Ooxygen Recharge Compressor Assembly (ORCA), Stoplight Status, October 21, 1998
7. "Defibrillator," (5A.1) Stoplight Status, October 21, 1998
8. "VOA," (7A.1) Stoplight Status, October 21, 1998
9. "ASAP (Aerospace Safety Advisory Panel) – Crew Escape," circa 1999-2002 (includes SLI (Space Launch Initiative) presentation to ASAP, by David C. Leestma, November 5, 2002)
10. "Human Factors: The Engineering Design Process," by David C. Leestma (presented to: Research 2000 Leadership Summit)
11. Multiple Biomedical Project Anomalies Investigation Team Results, DA/Lee Briscoe, April 21, 2001

12. Project Manager, Lead Systems Engineer and Lead Subsystem Engineer Roles and Responsibilities – “Art Stephenson’s view of Project Management and Cost Control,” July 16, 2001
13. USA Flight Crew Equipment Process Review, Final Report, August 3, 2001

Subseries 5. Johnson Space Center Project Manager for the Space Launch Initiative, August 2001 – 2014.
(0.4 cubic feet).

Leestma was responsible for all Johnson Space Center work related to the development of the new launch system. He also served as the Assistant Program Manager for the Orbital Space Plane, which oversaw the vehicle systems and operations of a new crewed vehicle that served as the transfer vehicle for space flight crews to and from the International Space Station.

Box 54 *Briefings, NASA Employee Performance Communication System (EPCS), “Orbital Space Plane Lessons Learned Summary, and Binder, Space Shuttle Missions Summary, Mission Operations, Johnson Space Center, Robert D. Legler and Floyd V. Bennett, 2002-2011*

1. Center Director In-Briefing Johnson Space Center Space Launch Initiative Project Office, April 25, 2002
2. Original red folder containing “JSC SLI Project Office Briefing,” by David Leestma, June 12, 2002 (includes transparencies)
3. NASA Employee Performance Communication System (EPCS), August 1, 2001 – July 31, 2002 (**Restricted**, review for Keith Williams, Assistant, Mission Operations Integration)
4. “Astro Space Strategy,” – The Astronaut Perspective on Crew Access to Space, by John Grunsfeld, May 16, 2003
5. Project Management of GFE Flight Projects, Revision D, February 2004
6. NASA, George C. Marshall Space Flight Center, “Orbital Space Plane Lessons Learned Summary,” June 15, 2004
7. “Orbital Space Plane Lessons Learned Summary: The Heart of the Artichoke,” 2004 (1 of 2)
8. “Orbital Space Plane Lessons Learned Summary: The Heart of the Artichoke,” 2004 (2 of 2)
9. Centennial of Flight folder and commemorative flag that flew over the Wright Brothers National Memorial at Kitty Hawk, North Carolina, on board the NASA WB-57H High Altitude Research Aircraft during the First Flight Centennial Celebration, December 2003
10. “Crew Survival – Close Call STS-45 Damage on Right RCC Panel #10 (similar to Columbia),” October 14, 2004
11. “Challenger,” by Arnold D. Aldrich, Former Director, National Space Transportation System, August 27, 2008
12. Binder, Space Shuttle Missions Summary, Mission Operations, Johnson

Space Center, Robert D. Legler and Floyd V. Bennett, September 2011

Subseries 6. Manager, Johnson Space Center Exploration Planning Office / Johnson Space Center Advanced Planning Office, Span of Career and Retirement, circa 1970s-2000s

(0.2 cubic feet)

Leestma oversaw the Johnson Space Center's role in the future exploration program's that were to fulfill the President's vision for exploration. He later took charge of the **JSC Advanced Planning Office** where he helped to plan JSC's strategy in order to be fully ready for the challenges of the future, including leading human missions to the moon and Mars.

Toward the end of his NASA career, he lead **JSC's Technology Transfer and Commercialization Office** where he provided the opportunity for NASA developed technologies to move into the commercial arena.

On May 30, 2014, Leestma retired from NASA.

Box 55 *Personnel File from Throughout Career, circa 1970s-2000s (restricted, consult archivist), Newspapers, Clippings and Magazine Articles About Leestma, DVD, Captain David C. Leestma Retirement Event, June 11, 2014*

1. **Restricted**, Leestma's personnel file from throughout career, circa 1970s-2000s (consult archivist)
2. Newspapers, clippings and magazine articles about Leestma, 1985-1997
3. DVD, Captain David C. Leestma Retirement Event, June 11, 2014

Series 6. Audio Visual, 1973-2000s

(5.7 cubic feet)

Box 56 *VHS Tapes, NASA, STS-41-G, STS-28, STS-45, STS-48, and Leestma's Oral History, 1984-2003*

Item

1. NASA, "41-G Mission Highlights Resource Tape," 50:00, circa October 1984
2. NASA, "Leestma EVA Presentation," 17:28, January 28, 1985 (UCA-20 Videocassette)
3. NASA, "STS-28 Mission Video Navy Stickers," 13:30, September 6, 1989
4. "STS-28 Preliminary Data," 1989
5. NASA, "Space Basics," 20:55, January 1991
6. NASA, "STS-48 Aurora Views," 1:20:00, January 22, 1991
7. NASA, "STS-45 Pre-Flight Press Conf/Crew," 1:16:00, February 14, 1992

8. NASA, "STS-45 Post Flight Press Conference," 18:00, April 2, 1992
9. NASA, "STS-45 Mission Highlights Resource Tape," 58:11, May 27, 1992 (1 of 2)
10. NASA, "STS-45 Mission Highlights Resource Tape," 1:00:00, May 27, 1992 (2 of 2)
11. NASA, "STS-45 Mission Resource Tape," 1:00:00, May 27, 1992 (2 of 2 – Title on case is "STS-45 On-Orbit Video")
12. NASA, "CL-1301/STS-45 Presentation Clip," 17:30, June 10, 1992
13. NASA, "The Atmosphere Below," 16:00, December 1992 (paper insert included, tape label not attached)
14. "Cancer Survivor," KTRK-TV Houston, TX, February 8, 1995
15. "David Leestma at NASA," Dutch National Television, 27:45, 1998
16. Leestma's contributions to the NASA Johnson Space Center Oral History Project, 2003 (includes the transcript, VHS tape and 2 audio cassettes)
17. Blank tape

Box 57 *Films, NASA, STS-28 and STS-45, 1989-1992*

Item

1. 16mm film, NASA, "STS 28 Mags 21, 22, 25-44," August 1989 (no case)
2. 16mm film, NASA, "STS-45" "1 Thru 18; 41-44; 19 Thru 40," April 1992
3. 5 in. Linhof film, NASA, Shuttle: "STS- 28" Camera: "Linhof" Mag: "151, 152, & 153" Film Type: "QX 868 5017 / 2447," August 1989
4. 70mm film, NASA, Shuttle: "STS-28" Camera: "Hass." Mag: "71-81" Film Type: "5017," August 1989
5. 70mm film, NASA, Shuttle: "STS-28" Camera: "Hass." Mag: "82-92" Film Type: "5017," August 1989
6. 70mm film, NASA, Shuttle: "STS-28" Camera: "Hass." Mag: "93-100" Film Type: "2443 5017," August 1989

Box 58 *Films, STS-45, STS-28, STS-41G and "Navy Symposium Clip," 1983-1992*

Item

1. 16mm film, NASA, "STS-45 Post Flight Press Conference – Silent," 16:00, April 1992
2. 16mm film, NASA, "STS-45 Post Flight Press Conference (Sound Version)" 18:00, April 1992
3. 16mm film, NASA, "STS-45 Crew Presentation (Revised)" 16:00, circa April 1992
4. 16mm film, NASA, "STS-28 Crew Presentation Clip (Revised)" 21:00, circa April 1992
5. 16mm film, NASA, "STS-28 Crew Presentation Clip Leestma" 22:00, circa April 1992
6. 16mm film, NASA, "CL – 1102 Leestma /CB" STS – 41G, undated

7. 16mm film, No label. Not in a case, undated
8. 16mm film, NASA, "A' Master D238," 1983
9. 16mm film, NASA, "Navy Symposium Clip," 14:00, undated
10. 16mm film, NASA, "Leestma Code CB NASA/JSC Houston, TX 77058 (713) 483 -2724" STS-41G, undated

Box 59 *Slides, Enterprise and Shuttle Tests, circa 1976-1981 (originally in blue binder with NASA and Space Shuttle adhesive patches)*

Folder

1. Slides (254), Enterprise and Shuttle Tests, circa 1976-1981 (originally in blue binder with NASA and Space Shuttle adhesive patches – binder retained)

Box 60 *Slides, STS-41-G, October 1984 and Services Du Premier Ministre Programmation de la Politique Scientifique, to Captain and Mrs. Leestma, undated*

Folder

1. Slides (254), Enterprise and Shuttle Tests, circa 1976-1981 (originally in blue binder with NASA and Space Shuttle adhesive patches)
2. Slides (129), STS-41-G, October 1984 (1 of 3)
3. Slides, (132) STS-41-G, October 1984 (2 of 3)
4. Slides, (114) STS-41-G, October 1984 (3 of 3)
5. Slides (71) compliments of Services Du Premier Ministre Programmation de la Politique Scientifique, to Captain and Mrs. Leestma, undated (cannot read name on attached card)

Box 61 *Papers, Images and Slides, related to "STS-28 Earth Observation Debriefing," December 15, 1989*

Folder

1. Papers related to "STS-28 Earth Observation Debriefing," December 15, 1989 (originally in white binder, binder retained)
2. NASA images, related to "STS-28 Earth Observation Debriefing," December 15, 1989 (originally in white binder, binder retained)
3. Slides (74), related to "STS-28 Earth Observation Debriefing," December 15, 1989 (originally in white binder, binder retained)
4. Original white binder with "STS-28 Earth Observation Debriefing," on cover, 1989

Box 62 *Slides, related to STS-28, 41G, 46, 51F, 1984-1992*

Folder

1. Slides (80), related to STS-28, 41G, 46, 51F, October 5, 1984 – August 8, 1992 (originally in slide carousel)
2. NASA STS-28 slides (72), August 8, 1989 – August 13, 1989
3. STS-28 slides (142), August 8, 1989 – August 13, 1989
4. STS-28, 45, 76, Shuttle/Mir 21-NM21 slides (5), circa 1989-1996

Box 63 *Navy, Official NASA Photographs and Additional Photographs of Leestma, STS-41-G Crew, NASA Photographs of Earth, and “APE,” Auroral Photography Experiment photographs, circa 1973-1990s*

Folder

1. Navy photographs, circa 1973-1979
2. Official NASA photographs of Leestma, along with additional shots, circa 1984-1990s
3. Signed photograph of STS-41-G crew, along with NASA mission photographs, October 1984
4. STS-41-G photographs, October 5, 1984 – October 13, 1984
5. NASA photographs of Earth, October 1984
6. “APE,” Auroral Photography Experiment photographs, 1984 (folder 1 of 2)
7. “APE,” Auroral Photography Experiment photographs, 1984 (folder 2 of 2)

Box 64 *Photographs of STS-61-E Crew, and STS-28, circa 1986-1989*

Folder

1. Photographs of STS-61-E crew, one signed by Leestma, 1986 (STS-61-E was cancelled after the Challenger disaster)
2. Signed photograph of STS-28 crew, and additional STS-28 crew photographs, 1989
3. NASA STS-28 photographs of Earth, August 1989
4. NASA STS-28 photographs of Earth, August 8, 1989 – August 13, 1989 (1 of 4)
5. NASA STS-28 photographs of Earth, August 8, 1989 – August 13, 1989 (2 of 4)
6. NASA STS-28 photographs of Earth, and Latitude/Longitude Locator document, August 8, 1989 – August 13, 1989 (3 of 4)
7. NASA STS-28 photographs of Earth, August 8, 1989 – August 13, 1989 (4 of 4)

Box 65 *Photographs of STS-28, STS-45, and Miscellaneous photographs of colleagues, including signed photographs of STS-71 and STS-90 crews and fellow astronauts, circa 1980s-2000s*

Folder

1. NASA STS-28 photographs, August 8, 1989 – August 13, 1989
2. NASA STS-28 photographs, August 8, 1989 – August 13, 1989
3. NASA STS-28 negatives of Earth, August 8, 1989 – August 13, 1989
4. NASA STS-45 photographs, March 24, 1992 – April 2, 1992
5. Miscellaneous photographs of colleagues, including signed photographs of STS-71 and STS-90 crews and fellow astronauts, circa 1980s-2000s
6. Miscellaneous photographs of colleagues and other images, circa 1980s-2000s

Series 7. Publications, 1991-2009

(0.5 cubic feet)

Box 66 Publications, and Newspaper Articles Featuring Leestma, 1991-2009

Folder

1. United States. (1991). *From ship to shuttle: NASA orbiter-naming program, September 1988-May 1989* (EP, 276; NASA EP, 276). Washington, D.C.?: Elementary and Secondary Branch, Education Division, Office of Human Resources and Education, NASA Headquarters.
2. *Russian phrase book & dictionary* (Rev. ed.). (1993). Cowley, Oxford: Berlitz.
3. Frimout, D., & Hendrikx, S. (1993). *Dirk Frimout: Op zoek naar de blauwe planeet*. Antwerpen: Coda. (signed and inscribed by author)
4. Wallace, L. E., & United States. (1994). *Airborne trailblazer: Two decades with NASA Langley's 737 flying laboratory*. Washington, D.C.: National Aeronautics and Space Administration.
5. Burgess, C. (1995). *Oceans to orbit: The story of Australia's first man in space: Dr. Paul Scully-Power*. Sydney: Playright. (signed and inscribed by author)
6. Lane, H. W., & Schoeller, D. A. (2000). *Nutrition in spaceflight and weightlessness models*. Boca Raton: Lewis Publishers. (signed and inscribed by author)
7. Drake, B. G. (2009). *Human exploration of Mars design reference architecture 5.0* (NASA SP, 2009-566; NASA SP (Series)). National Aeronautics and Space Administration. (includes CD-Rom)

Newspaper Articles Featuring Leestma, 1998-2003

Item

1. Kirkwood, K. (1998, November 6). John Glenn serves as inspiration to pair: Tustin High alums Gen. John 'Jack' Dailey, Astronaut David Leestma work at NASA. *Tustin Weekly*, Vol. 9, No. 89, pp. A1, A8-A9, A12, A15
2. (2003, February 3). Grim clues found in debris. *Muskegon Chronicle*, Special Issue.
3. Wolffis, S. H. (2003, February 9). Local man chose Columbia's crew. *Muskegon Chronicle*, 1A, 4A.
4. (2003, February 10). Muskegon native helped to choose Columbia's crew. *Michigan News*, p. 4B

5. (2003, February 10). Shuttle memories: Muskegon native recalls helping to pick Columbia's crew. *Midland Daily News*, p. B10
6. (2003, February 10). Muskegon native recalls helping to pick Columbia's crew. *Daily Press & Argus*, p. 5A.

Series 8. Artifacts, 1979-2014

(3.5 cubic feet)

Box 67 *NASA Business Cards, Fuel Turbopump Turbine Blade flown in Support of the Space Shuttle Program, and Saturn V pin, undated*

Item

1. Leestma NASA business cards, 2 small boxes, undated
2. Acrylic pyramid, enclosed within, Space Shuttle Main Engine, High Pressure Fuel Turbopump Turbine Blade flown in Support of the Space Shuttle Program, STS-45, STS-51, STS-53, STS-60)Orbits: 546; Miles 13,777,881, undated
3. Saturn V pin, undated

Box 68 *Awards & Plaques, 1979-2014*

Item

1. Plaque, "To Lt. Dave "Wiz" Leestma for Achieving 1000 Hours in the F-14 Tomcat, July 18, 1979
2. Tustin High School, In Honor of Outstanding Achievements, 1984
3. Plaque from the Royal Aeronautical Society, New Zealand Division, February 27, 1987
4. 6555th ASTG Spacecraft Division Pin, flown into space aboard the Space Shuttle Columbia from 8-13 August 1989, presented to Cdr. David C. Leestma in recognition of outstanding efforts in support of Department of Defense Shuttle Mission STS-28R
5. In Appreciation for a Job Well Done, The First Flight of the Shuttle Activation Monitor, STS-28, August 8-13, 1989, The SAM Team
6. "STS-45 ATLAS-1/SSBUV-A/GAS, March 24 – April 2, 1992," presented to David C. Leestma Mission Specialist by the Payload Processing Team, John F. Kennedy Space Center, NASA
7. Plaque from the Marshall Center ATLAS 1 Team, Huntsville, Alabama, April 29, 1992
8. National Aeronautics and Space Administration Thirty Year Service Award, June 28, 1997
9. "Naval Order of the United States Texas Commandery Presents the Fleet Admiral Chester W. Nimitz Leadership Award to Captain David C. Leestma, USN (Ret), Astronaut, 30 January 1999. Houston, Texas
10. National Aeronautics and Space Administration Thirty-five Year Service

- Award, 2002
11. The Flag of the United States of America flown over the Headquarters of the Multi-National Corps-Iraq in your honor during Operation Iraqi Freedom, for Outstanding Support of Military Personnel During Operation Iraqi Freedom, October 9, 2006
 12. Plaque, Roger B. Chaffee Scholarship Fund, "In grateful recognition and sincere appreciation as the featured guest speaker at the 41st annual award reception, April 17, 2008
 13. National Aeronautics and Space Administration, retirement plaque, forty-eight years of Federal service, 2014
 14. "Class Honorman, Class 418, TRAON-10," undated
 15. Plaque in Recognition of Outstanding Achievement and in Appreciation for His Concern and Interest in Santiago High School," undated
 16. Muskegon, Michigan compass, undated

Box 69 *Awards and Certificates (Paper), 1978-2013*

Folder

1. Navy Commendation Award for service in Fighter Squadron Thirty-Two, and accompanying letter, April 10, 1978
2. Correspondence in regards to the Navy Achievement Medal, May 5, 1980
3. Certificate, YMCA Volunteer Basketball Coach, March 1988
4. Program, NASA Honor Awards Ceremony, April 13, 1988 (Leestma received the Exceptional Service Medal)
5. Certificate and Medallion, First Shuttle Flight Achievement Award, July 1989
6. Certificate, Distinguished Flying Cross, and correspondence, September 20, 1989
7. Certificate, Legion of Merit, and related correspondence, performance of outstanding service from July 1980 – June 1993
8. Certificate of Retirement from the Armed Forces of the United States of America, July 1, 1993
9. Certificate, Internationalis Astronautica Academia MCMXCIV, 1994
10. Inaugural Rolex Achievement Award, 1996 (includes program, paperwork and correspondence)
11. Letter of appreciation from Jennifer Andrews, August 18, 1999
12. Commemorative photo album, 20th Anniversary of Spacewalk, October 8-11, 2004
13. Shenzhou-7 Commemorative Stamps, and a Japanese tapestry, 2008
14. Piece of Payload Bay Liner flown in Space on the Orbiter Atlantis during the STS-125 mission, Hubble Space Telescope Service Mission, May 11-May 24, 2009 (on laminated card)
15. NASA Group Achievement Award, Johnson Space Center Transfer & Commercialization Office, July 18, 2013
16. "ALT Award," The crews of the Approach and Landing Test Program in appreciation of contribution to the successful ALT briefing of the space

shuttle orbiter "Enterprise," undated

OS Box 70 *Plaques (Awards), 1984-1994*

Folder

1. NASA Space Flight Medal, October 13, 1984
2. NASA Space Flight Medal, August 13, 1989
3. NASA Medal for Outstanding Leadership, April, 1994

OS Box 71 *Flown Patches and Flags Presented to Leestma in Appreciation of Service, Certificates, Awards, 1984-2004*

Folder

1. Patch flown on STS-41G presented to Leestma for contributions to the Orbital Refueling System (ORS), 1984
2. Decals flown on STS-41G presented to Leestma in appreciation for contribution to the ERBE Program (Earth Radiation Budget Satellite), October 1984
3. Certificate of Appreciation, Dedication to the Critical Tasks in Support of the Presidential Commission investigating the Space Shuttle Challenger Accident, 1986
4. Small NASA flag flown aboard the Orbiter "Discovery," STS-26. September 29 – October 3, 1988, commemorating the National Space Transportation System "Return to Flight."
5. Photograph of Mark Brown flown aboard STS-28, August 1989
6. Apollo 11 25th anniversary flag flown aboard the Orbiter, "Columbia," STS-65, July 8-23, 1994
7. Signed photograph of Lucid family, given to Leestma in appreciation of his support to Shannon in her extended stay on Mir, December 1996
8. Flag commemorating the Phase 1 Program flown to the Mir Space Station aboard the Space Shuttle Discovery on mission STS-91, June 1998
9. Certificate and Space Station pin flown aboard the United States Space Station, Endeavor, December 4-December 15, 1998
10. Orbital Space Plane Program Office, presented to Leestma for outstanding leadership in defining, planning and implementing the Orbital Space Plan Program..., June 1, 2004
11. Space Flight Awareness Team Award, in recognition of contributions to the Orbital Space Plan Team and human Space Exploration, undated
12. Space Shuttle Program, Center Director's Commendation, undated
13. Plaque, Tustin High School 75th Anniversary Distinguished Alumni Hall of Fame Award, undated
14. Framed Team (?) photograph, undated

OS Box 72 *Matted Photographs, Certificates, Signed Crew Photographs/Collages, Posters, circa 1980s-2003*

Item

1. 3 matted photographs of Earth from space, one has "USAFA – Colorado Springs on back," circa 1980s
2. 3 Certificates from the President of the United States, appointing Leestma Lieutenant Commander, February 1, 1980; Commander, January 31, 1985; and Captain, July 1, 1991
3. Matted photograph of Earth taken from Shuttle, "41G-40-25," in pencil on back, 1984
4. STS 51-G Crew, collage of photographs signed by crew, along with patch flown aboard the Space Shuttle Discovery on STS-51G, June 17-24, 1985
5. STS-61-B Crew, collage of photographs, signed and inscribed to Leestma, 1985
6. Selections from the NASA Art Collection, signed and inscribed to Leestma from Robert Schulman, 1987
7. Poster, United States Naval Academy and letter written to Leestma from U.S. Naval Academy Alumni Association, signed by William S. Busik, October 23, 1991
8. STS-46 Crew, matted and signed photograph, and patch flown on Shuttle, 1992
9. STS-58 Crew, collage of photographs signed by crew, along with patch flown aboard the Space Shuttle Columbia, STS-58, Spacelab Life Sciences 2, October 18 – November 1, 1993
10. Rolex Achievement Award, administered by the College Golf Foundation, 1996
11. Poster, "In Memory of the STS-107 Columbia Crew," February 1, 2003
12. Matted photograph of Shuttle taking off, signed by Bonnie Dunton and Norm Thagard, undated
13. Matted photograph of Shuttle taking off, signed by Bonnie Dunton, Ken Cameron, and Norm Thagard, undated
14. Collage of photographs, "PAD Abort Demonstrator – NASA – Lockheed Martin, undated
15. Collage of photographs, "Presented to Captain David C. Leestma, In appreciation of your thoughtful, dedicated, and outstanding contributions to Johnson Space Flight Center Flight Crew Operations, undated

OS Item 73

Item

1. Wooden box containing Orbital Space Plane models of potential boosters presented to Leestma when he was project manager, undated