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## FINDING AID TO THE NEIL A. ARMSTRONG PAPERS, 1671-2012

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504 West State Street  
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Revised by: Tracy Grimm, November 18, 2014

Processed by: Tracy Grimm, Donovan Irven, and Mary Segó, November 18, 2014

## Descriptive Summary

<b>Creator Information</b>	Armstrong, Neil A., 1930-2012
<b>Title</b>	Neil A. Armstrong papers
<b>Collection Identifier</b>	MSA 5
<b>Date Span</b>	1671-2012, predominant 1960-2012
<b>Abstract</b>	This collection includes documents, coursework, working papers and subject files, correspondence, writings, speeches, photographs, and newspaper clippings related to Neil A. Armstrong's education, Navy career, training and career as a test pilot and astronaut, his career as a professor of engineering, and roles as advisor and participant for various commissions.
<b>Extent</b>	221.3 cubic feet (466 mss, cubic feet, flat boxes, and OS items)
<b>Finding Aid Author</b>	Tracy Grimm, Donovan Irvén, and Mary Segó
<b>Languages</b>	English and Russian
<b>Repository</b>	Virginia Kelly Karnes Archives and Special Collections Research Center, Purdue University Libraries

## Administrative Information

<b>Location Information:</b>	ASC
<b>Access Restrictions:</b>	Collection is open for scholarly research. A 48 hours notice and consultation with the Flight Archivist is required to access the collection. Portions of the collection are restricted per donor restrictions and third party privacy.
<b>Acquisition Information:</b>	Donated by Neil A. Armstrong and Carol Armstrong, with the majority of the papers donated by Carol Armstrong and family in 2012.
<b>Accession Numbers:</b>	20080923 20081007 20081111 20081217 20090114

20090218  
20120922  
20121016  
20121102  
20130412  
20151106  
20160627  
20170608

**Preferred Citation:** MSA 5, Neil A. Armstrong papers, Karnes Archives and Special Collections, Purdue University Libraries

**Copyright Notice:** Purdue University per deed of gift.

**Related Materials Information:** Purdue's Place in Space: From the Midwest to the Moon:  
<http://collections.lib.purdue.edu/moon>  
James R. Hansen papers on Neil Armstrong:  
<https://apps.lib.purdue.edu/archon/index.php?p=accessions/accession&id=470&q=armstrong>

## Subjects and Genres

### Persons

Armstrong, Neil A., 1930-2012  
Armstrong, Viola L., 1907-1990  
Armstrong, Stephen Koenig, 1907-1990

### Organizations

National Advisory Committee for Aeronautics (U.S.)  
National Aeronautics and Space Administration (U.S.)  
United States. Navy--1910-1950  
Society of Experimental Test Pilots  
Edwards Air Force Base (California). Aerospace Research Pilot School  
National Commission on Space (U.S.)  
NASA Advisory Council  
Purdue University  
Purdue University. School of Aeronautical Engineering  
University of Southern California. School of Aerospace Engineering  
University of Cincinnati. School of Aerospace Engineering  
Flight Archives at Purdue University  
Boy Scouts  
Phi Delta Theta Fraternity  
Academy of the Kingdom of Morocco  
President's Advisory Council on the Peace Corps  
Commonwealth Club of Cincinnati  
Commercial Club of Cincinnati

### Topics

Astronautics--Study and teaching.  
Astronauts--Training of.  
Astronauts--1960-1970.  
Apollo 11 (Spacecraft)  
Moon--Landing of space vehicles  
Apollo  
Gemini VIII (Spacecraft)  
Gemini  
Mercury  
Dyna-Soar (Space glider)  
X-15 (Rocket aircraft)  
NASA SPACE PROGRAMS  
Astronautical research  
Military service--1940-1950  
Korean War  
Space exploration  
Space flight  
Lunar module

Lunar Landing Training Vehicle  
Lunar surface  
Air pilots--Military  
Aircraft  
Moon rocks  
Presidential Commission on the Space Shuttle Challenger Accident (U.S.)  
Purdue University--Alumni and alumnae  
"First Flights" documentary

### **Form and Genre Types**

Aerospace engineering--Handbooks, manuals, etc.  
Aerospace engineering--Periodicals.  
Aerospace engineering--Textbooks.  
Artifacts  
Astronautical charts  
Astronautics--Periodicals.  
Aviation--Periodicals.  
Awards  
Books  
Cassettes, Audio  
Clippings  
Correspondence  
Coursework  
Diagrams  
Diplomas  
Documents  
DVD  
Fan mail  
Films  
Handbooks  
Lunar photography  
Magnetic tapes  
Manuals  
Maps  
NASA publications  
Notebooks  
Papers  
Photographs  
Postcards  
Publications  
Recordings, Sound  
Reference Material.  
Report cards  
Scrapbooks  
Slides  
Space photography

Speeches  
Subject files  
Textbooks  
Transcripts  
VHS  
Working papers  
Writings

**Occupations**

Astronaut  
Aerospace engineers  
Pilots (Aeronautics)  
Naval aviator  
Test pilots  
NASA--Deputy Administrator of Aeronautics  
Professor  
Corporate Chairman  
Businessman

## Biography of Neil A. Armstrong

Neil Alden Armstrong was born near Wapakoneta, Ohio on August 5, 1930 to Viola Louise Engel Armstrong and Stephen Koenig Armstrong. He was an active member of the Boy Scouts of America and earned the rank of Eagle Scout. At the age of 16, in 1946, he earned his student pilot certificate. He graduated from Blume High School in Wapakoneta, Ohio and having been accepted to the Navy's Naval Aviation College Program, attended college at Purdue University beginning the fall of 1947. His studies in aeronautical engineering were interrupted in the spring of 1949 when he was called to military duty. His active military service spanned 1949 – 1952. He served as a naval aviator in the Korean War during which he flew 78 combat missions. In 1952 he resumed his studies at Purdue University and received a Bachelor of Science degree in Aeronautical Engineering in 1955. In 1955 he accepted a position as an Aeronautical Test Pilot at the National Advisory Committee for Aeronautics' (NACA) Lewis Flight Propulsion Laboratory in Cleveland, Ohio. Later in 1955 he would join NACA's aeronautical research pilots at the High-Speed Flight Station at Edwards Air Force Base, in California. From 1955 until 1962 he flew a number of experimental aircraft including the X-1B, the F-100C, and the X-15. He authored and co-authored a number of research papers during this period and also conducted research as a pilot-engineer on the developing Dyna-Soar project.

In 1962 Armstrong transferred NASA's Manned Spacecraft Center in Houston as one of the nine astronaut trainees of the astronaut class of 1962. Along with astronaut training activities, he was given the responsibilities for operations and training under Alan Shepard, chief of the astronauts. One of his tasks was to calculate how many crews were needed at any one point in time to meet the requirements of the program's goals. He served in supporting roles for Mercury 9, his first flight crew assignment was as backup commander to Gordon Cooper on Gemini V. Throughout this period his work responsibilities were divided between general training, planning and calculations of the best "trajectories and sequences of events," and in lab spacecraft systems tests and simulations. (see Hansen, 235) He served in a supporting role for Gemini III, command pilot for Gemini VIII that launched in March 1966. He served as commander of Apollo 11 that launched in July 1969 and became the first human to walk on the moon. Following the Apollo 11 mission, he embarked on the "Giant Step" world tour and later a Bob Hope USO Tour. He received numerous awards, achievement medals, and honors following the Apollo 11 mission.

In 1970 he earned his Master's degree in Aerospace Engineering from the University of Southern California. From 1970 -1971 he served as Deputy Associate Administrator for Aerospace in NASA's Office of Advanced Research and Technology. From 1971 through 1979 he taught and conducted research as Professor of Aerospace Engineering at the University of Cincinnati. Armstrong served on several corporate boards including Cardwell International, Gates Learjet Corporation, Marathon Oil Company, United Airlines, U.S. Steel Corporation, and Space Industries International. He also consulted on issues of management as well as on aerospace. He served on commissions including the Presidential Advisory

Committee for the Peace Corps, the Presidential Commission on the Space Shuttle Challenger Accident, the National Commission on Space, and the NASA Advisory Council. He was also a member of the National Academy of Engineering and the Academy of the Kingdom of Morocco. He wrote and delivered hundreds of speeches throughout his professional career and into his retirement. He continued to receive fan mail until his death in 2012. He was married to Janet Shearon from 1956-1994, and to Carol Held Knight from 1994 to 2012. Neil Armstrong died on August 25, 2012 following complications resulting from cardiovascular procedures.

*Sources:*

*Neil A. Armstrong Papers, 1671 – 2012.* The Virginia Kelly Karnes Archives and Special Collections Research Center, Purdue University Libraries, West Lafayette.

*Neil Armstrong: Engineer, Pilot, Astronaut, Teacher Commemorative Website.* University of Cincinnati. Website. Accessed 18 November 2014.  
<http://digitalprojects.libraries.uc.edu/armstrong/index.html>

Hansen, James R. *First Man: The Life of Neil A. Armstrong.* New York: Simon & Schuster, 2005.

*Lyndon B. Johnson Space Center Biographical Data Website.* The National Aeronautics and Space Administration. Website. Accessed 18 November 2014.  
<http://www.jsc.nasa.gov/Bios/htmlbios/armstrong-na.html>

## Collection Description

### Scope

The Neil A. Armstrong papers (1671-2012; 221.3 cubic feet) document the military, aeronautics, astronautics, teaching and corporate business career of Neil A. Armstrong. The papers also feature items from Armstrong's youth and education.

The collection includes but is not limited to documents, coursework, working papers, subject files, correspondence, writings, speeches, recordings, photographs and newspaper clippings.

The papers are divided into eighteen series, and further information on the scope and content of the collection is located at the series level:

### Arrangement

**Series 1. NASA Career, 1951-2008 (42.6 cubic feet).** Housed in this series are the documents and other materials generated during Neil Armstrong's NASA career, from his days as an experimental test pilot through his assignment as the Deputy Administrator of Aeronautics. Early materials of note are documents related to the X-15 program and Armstrong's engineering work as part of the Dyna-Soar team before his transfer into the astronaut program. A central piece of this series is the inclusion of Armstrong's application to the NASA astronaut program, as well as his letter of acceptance from Robert Gilruth. Although he was not assigned to any crew during the Mercury program, Armstrong nevertheless acquired key Mercury program materials from his astronaut training and preserved them as part of his personal collection.

The Gemini program is much more fully represented, Gemini 8 in particular, for which Armstrong served as command pilot. In addition to an array of technical documents detailing all Gemini spacecraft, including the Agena docking vehicle with which Armstrong completed the first docking of two vehicles in space, the Gemini sub-series contains items flown during that historic mission.

The largest sub-series presented here contains the materials from the Apollo program. Comprising over 50 manuscript boxes, these materials cover every part of the Apollo program manned missions, from technical documents for each spacecraft, to training materials, to the details of mission planning, through the public relations campaign associated with the world's first manned lunar landing. Several items in the Apollo sub-series are of historic significance; see the sub-series description for more detail. Armstrong continued his NASA career after Apollo as the Deputy Administrator of Aeronautics. The materials from this part of Armstrong's career offer unique insight into NASA's vision of the future in the early 1970s, as well as the difficulties it faced moving space exploration forward after the success of the lunar landing.

After leaving NASA to teach at the University of Cincinnati, Armstrong kept in touch with many of his NASA colleagues, continued to research the developing technologies of space flight and exploration, and participated in several programs associated with NASA. These documents, although extraneous to Armstrong's official NASA career, are preserved here as a reminder of Armstrong's lifelong commitment to the organization's goals in the exploration of space, as well as his irreplaceable status among NASA astronauts as the commander of Apollo 11. The series concludes with Armstrong's collection of documents published by NASA during the manned space program of the 1960s, including the published findings of those missions.

**Series 2. Family Papers, 1934-2007 (2.20 cubic feet).** The Family Papers series contains materials collected or created by Neil Armstrong's family members, collected genealogy materials, and Boy Scouts of America items. Of particular note, is a scrapbook compiled by his mother, Viola L. Armstrong which contains items related to Armstrong's youth such as his grade school report cards, academic awards, and homework assignments. The series also includes letters from his father, Stephen K. Armstrong, clippings, photographs, and papers his parents compiled as Armstrong's NASA career progressed and he became a public figure. Also included are materials from Armstrong's participation in the Boy Scouts of America. These papers were in Armstrong's possession at the time of his death and were transferred as part of his bequest. The Family Papers series is comprised of 4 sub-series; Viola L. Armstrong, Stephen Koenig Armstrong, [Armstrong] Genealogy, and Boy Scouts.

**Series 3. Education, 1947-1970 (5.20 cubic feet).** This series contains some coursework, notebooks, grade reports, and textbooks from Neil Armstrong's undergraduate aeronautical engineering studies at Purdue University. Armstrong was a student at Purdue from 1947-1949 and then was called to active service in the Navy. He returned to Purdue in 1952 and graduated with a Bachelor of Science degree in Aeronautical Engineering in 1955. Also included in the Education Series are materials from his master's degree work at the University of Southern California. Armstrong began research for his master's in 1960, but due to other aspects of his career, he did not receive his master's degree until 1970. The series is divided into two sub-series, Purdue University and the University of Southern California. Of note in the Purdue University series are papers related to Armstrong's participation in the Purdue musical, "Varsity Varieties". One can find his diplomas at the end of each respective series. For papers related to Armstrong's elementary and high school education, please see Series 3. Family Papers. To respect original order, they were left as found among his mother Viola's scrapbook.

**Series 4. Military Records, 1946-2009 (1 cubic foot).** This series contains Neil Armstrong's United States Navy Officer Service Record, and includes everything from his "Orders; chargeable against appropriation 'Officer Candidate Training,' April 18, 1949" through "Certificate, Honorable Discharge from the Armed Forces of the United States of America, United States Navy, October 21, 1960." The material has been removed from the original file for preservation purposes, but the order has been

retained as set forth in Navy regulations (see folder 3, item 7). This file was placed at the beginning of the series, to provide researcher's with an overall view of his military record.

Located in folder 5 are photocopies of Armstrong's [CNATRA] (Chief of Naval Air Training) - Aviation Training Summaries and Evaluations, 1949-1950. The summaries and evaluations give a detailed account of his training and progression as an aviator at this time and include comments from his instructors. Also of note are various Navy papers found in folder 1 of box 2. These range from letters of appointment, certificates, citations and correspondence. The items were left in their original order, and due to fire damage, they have been sleeved for preservation purposes.

After his military service, Armstrong maintained ties to his military colleagues. The last folders in this series contain correspondence, including e-mails from some of these fellow servicemen. One folder is dedicated to the VF-51 squadron of which he was a member and includes an official "Fighting Fifty One" patch and reunion information from this squadron. Of special note in this folder is a spiral bound document; "Korean Log, Bob (Bottle) Kaps, VF-51, USS Essex, 28 June 1951 to 25 March 1952, USS Valley Forge (CV-45), 20 November 1952 to 12 April 1953," which provides a unique look at the activities aboard the carriers. Also found in the [Navy] folder is correspondence in regards to "The Brown Shoes" History Project (subtitled "Personal Histories of the Flying Midshipmen and other Naval Aviators of the Korean War Era"), a project undertaken by the University of Virginia. Included is Armstrong's personal account, "carrier based fighter escort of B29/B50 raid on Rashin," written for the project. There are also a few photographs, obituaries and miscellaneous items. The few photographs were left in this series in order to retain their significance, since most were sent with correspondence from Navy colleagues. More Navy photographs featuring Armstrong can be found in Series XVI. Photographs.

**Series 5. Teaching, 1961-2004 (4 cubic feet).** This series consists of items from Neil Armstrong's work as a professor at the University of Cincinnati. The first box contains miscellaneous University of Cincinnati material that Armstrong had placed in various folders. These include a press release of his appointment as Professor of Engineering, teaching contracts, campus maps, clippings, correspondence, and publications.

The remaining boxes contain the contents of individual folders and eleven binders and remain as Armstrong had arranged them. The courses include Aircraft Flight Test II, Aircraft Performance, Dynamics I, and Aerospace Engineering, 351, 541, 611, 612, 613, 660, 661 and 823. Also included is course material from an Experimental Flight Mechanics short course he taught at the University of Tennessee Space Institute.

The material ranges from prep material, lecture notes, handouts, assignments, readings, problems, student's homework/projects, quizzes, tests and final exams.

The ninth binder contains the master copies of problems, quizzes, exams and finals for Aerospace Engineering 660, 661 and 662 (one quiz).

Some boxes are restricted, due to student information and personal information.

**Series 6. Boards, Commissions, and Consulting, circa 1970s-2009 (12.8 cubic feet).** The series contains Neil Armstrong's collection of widely varied business cards. The corporate board information includes annual reports, meeting minutes, correspondence, retirement celebration material, minimal subject files, and member photographs for the various boards of which Neil Armstrong was a member. The boards include, Cardwell International; Cincinnati Gas and Electric Company; CENergy Corporation; Cordant and Morton Thiokol, Incorporated; Eagle-Picher Technologies, LLC; Cincinnati Milacron; Fifth Third Bank; Gates Learjet Corporation; Marathon Oil Company; Taft Broadcasting Company; United Airlines; U.S. Steel Corporation; Space Industries International; Space.com; Veridian; AIL Systems Incorporated (Subsidiary of Eaton Corporation); EDO Corporation; RMI Titanium Company; Fiduciary Trust Company of New York, background information; miscellaneous documents, and a Board of Directors subject file used by Armstrong. Due to the nature of the corporate board material, it is restricted.

The second part of the series contains minutes, correspondence, presentations, reports, clippings, and miscellaneous documents related to the commissions Armstrong was appointed to. The commissions include the Academy of the Kingdom of Morocco. The "Dahir" or Law proclaiming the creation of the Academy states that, "Considering Morocco's geographical situation, at the crossroads of the continents, which has determined its historic vocation and necessitates that it continuously plays a part in the communication, liaison and synthesis between the peoples and civilizations of Europe and Africa, of the Mediterranean and Atlantic worlds... Desire that this Academy should be composed of men who by their works and studies are the most eminent and the most qualified, in all branches of learning, who have rendered the greatest service to the country or acquired the highest prestige, recruited freely without any consideration except personal merit and with no other condition to the validity of their election than Our Consent..." "Total membership in the Academy shall be thirty resident members and thirty non-resident members." Dr. Henry Kissinger and Armstrong were the only initial members from the United States. Also included among the material from Armstrong's work with the Academy are a rare collection of conference proceedings and publications compiled by the members of the Academy.

Documents in this series also include material from the Presidential Commission on the Space Shuttle Challenger Accident, for which Armstrong was Vice Chair. In 1985 he was appointed to the National Commission on Space, created to study long-term space policy and goals, and one can also find material from this work. In 2005 Armstrong was appointed to the NASA Advisory Council, for which he was Chair of the Aeronautics Committee. The Council drew on the expertise of its members and other sources to provide advice and make recommendations to the NASA

Administrator on Agency programs, policies, plans, financial controls and other matters pertinent to the Agency's responsibilities.

Some material includes Armstrong's reference resources related to the various Boards and Commissions, along with miscellaneous consulting material.

**Series 7. Memberships and Advisory Groups, 1971-2012 (0.8 cubic feet).** This series contains material pertaining to advisory groups and memberships for which Neil Armstrong had a role. Types of material include, but are not limited to correspondence, certificates of appreciation, directories, documents, draft proposals, itineraries, meeting schedules and minutes, reports and other miscellaneous items.

The first box contains information from Armstrong's 1971-1973 tenure as Chairman of the Presidential Advisory Committee for the Peace Corps, specifically his trip to Korea, along with initial planning documents for the Aviation Safety Institute for which Armstrong served in an advisory capacity in the early 1970s. Also included is correspondence, guides, brochures and miscellaneous items from his membership in the Royal and Ancient Golf Club of St. Andrews. The last folder contains private, third party papers related to the National Aviation Hall of Fame, Combs Award entries which Armstrong reviewed, and the folder is restricted.

The second box contains material related to the Commonwealth Club and Commercial Club of Cincinnati for which Armstrong was a member. According to printed material in this series, the two clubs worked to exchange ideas, educate and inform its members in matters of commercial, cultural and civic importance, with the goal that such an organization would be a force for good in Greater Cincinnati.

**Series 8. Speeches, Writings, Manuscripts for Review, and Notebooks, 1958-2012 (14.4 cubic feet).** This series contains all of the speech materials kept by Neil Armstrong throughout his career. The series also includes materials related to speech preparation and writing. The speeches have been retained in the order in which they were found. Earlier speeches were kept according to the place in which the speech was given or the organization to which he gave the speech.

Also housed here is Armstrong's published writings, which include academic articles, pieces for news and other media outlets, and books to which Armstrong contributed. These writings are organized chronologically by date of publication. Following Armstrong's written work is a collection of manuscripts which were sent to Armstrong for review. For several of these, Armstrong contributed a foreword or introduction. In other instances, Armstrong was simply asked to review the manuscript for publication. The series ends with early notebooks where Armstrong jotted miscellaneous notes for various occasions. The notebooks are exceptional for the insight they provide into his thought process.

**Series 9. Subject Files, 1943-2012 (27.7 cubic feet).** This series contains the majority of Neil Armstrong's subject reference files, as well as active subject files

which includes some of Armstrong's ongoing correspondence. The reference files span the breadth of Armstrong's interests and speak to his personal and professional involvement as a life-long engineer. Much of the reference material preserved here concern space flight and exploration, as well as the aeronautical engineering projects that continued to interest Armstrong after his retirement from NASA. Also of interest are files on geology, including one dedicated to a caving expedition Armstrong took to the Los Tayos caves in Ecuador and another detailing his expedition to the North Pole.

The active subject files reflect research and correspondence Armstrong was conducting toward the end of his life. These files were stored by Armstrong in his office and are preserved here in the order in which they were found. Armstrong's own subject headings are indicated by enclosure in [brackets]. The active files include the files on correspondence related to Apollo 11 lunar surface photography, astronaut policy information, such as policies on the Personal Preference Kit (PPK), policies on appearances, assignments, standards of conduct and other related policies to which the astronauts were held.

**Series 10. Personal Correspondence, 1970-2012 (32.4 cubic feet).** The personal correspondence files consist of incoming letters, cards, requests and copies of replies dating from 1970-2012. Much of this correspondence could be considered fan mail and is global in scope. Please note that personal correspondence prior to 1970 that related directly to Neil Armstrong's Gemini and Apollo missions can be found in Series I, "NASA Career." Also please note that some of the correspondence from Armstrong's later years can be found among the active subject files in Series 9. Subject Files. The correspondence in Series 9 is primarily characterized by being with those Armstrong had an ongoing relationship.

In this finding aid the text in [ ] is exactly as Armstrong and his assistants had the files labeled. Much of the correspondence was arranged alphabetically by the sender's last name or organization name. Found within the series are binders; [NASA FORM LTRS] and [Form Letters] "and codes," which were used when a standard reply was indicated by Armstrong.

The correspondence is arranged into six sub-series: Completed Correspondence, 1970-1979; [OFF-Sort and P.R.], 1970-1980; Correspondence from Organizations and Schools, 1971-1974; Invitations, Requests and General Correspondence, 1977-1983; Miscellaneous Correspondence, 1970-1994 and Correspondence, Post-University of Cincinnati, 1970-2012. A detailed description of each sub-series precedes the listing for each.

Whenever possible, the personal correspondence has been maintained according to the designated categories established by the secretary who handled Armstrong's correspondence during their respective years of employment. Per notations on the correspondence, the following secretaries took care of Armstrong's correspondence that came through NASA, Office of Public Affairs; "S.B. Weber" took care of the

replies from 1970-1971; "(Mrs.) Geneva Barnes, Secretary to Mr. Armstrong," 1971-1972; "(Mrs.) Fern Lee Pickens, Office of Public Affairs," 1972-1973. Letters needing translation were sent to "KSS/ Mr. Nagurney."

Secretaries at the University of Cincinnati who handled Professor Armstrong's correspondence were, Ruta Bankovskis, 1971-1973; (Miss) Luanna J. Fisher, 1974-1975, and 1976-1979 correspondence was handled by Elaine Moore. In 1974 Armstrong begins to refer requests for non-academic appearances to: Mr. Thomas Stix, Stix and Gude, 30 Rockefeller Plaza, New York, New York 10020. In 1980 Armstrong hired Vivian White as his administrative aide, and she managed the correspondence throughout Armstrong's later years.

**Series 11. Artifacts, 1920-2011 (27.2 cubic feet).** The artifacts series houses items of various sizes and in a variety of media, and includes artwork, awards, memorabilia, and some collected items most likely from Neil Armstrong's youth. Much of the artwork came as gifts to Armstrong from colleagues, friends, and admirers. Also included in the series are plaques and awards granted to Armstrong for his service in the NASA manned space program, as well as his professional career at the University of Cincinnati and as a member of several professional boards and commissions. In addition to official award plaques and certificates, Armstrong also collected an array of commemorative coins and medallions related to space flight and exploration, which we have preserved in arrangements according to how Armstrong himself stored them. The series also contains a variety of commemorative memorabilia, including a 1967 Rose Bowl football signed by the winning Boilermakers, and models of different space crafts. Items of note, which are likely from Armstrong's childhood, include his geology collection, wooden model planes, and a small collection of stamps.

**Series 12. Audio Visual, circa 1960s-2011, (11.8 cubic feet).** This series contains a variety of recordings, films, and images on a variety of media. The highlights of this series are; numerous magnetic tapes (audio recordings) which include songs written by those inspired by Apollo 11, "wake-up" greetings to the astronauts, various interviews related to Apollo 11, the crew and their families. One box of recordings is dedicated to the entire Apollo 11 mission, from the day before lift-off, lift-off, the descent to the lunar surface, recordings from the events on the moon, ascent, splashdown, quarantine, and an interview with President Nixon.

There are four 45 RPM records containing Apollo 11 related songs, a LP, and 50 full color, 35 mm slides, titled, "One Giant Leap For Mankind: a history of Apollo 8-11," along with six, 33 1/3 RPM phonograph records and one book which cover the first message from the moon, the Mercury Project, the Gemini Project and the Apollo Project.; "To the moon: Section 1: The story in sound. Section II: The story in pictures and text," New York: Time-Life Records, 1969.

Also featured are 35mm slides which include NACA and NASA related aircraft and events, slides from the travels of the Apollo 11 crew, post-mission, including some

family related slides. There are slide sets featuring "Project Viking," the USA's trip to Mars and "Jupiter/Voyager-2, XA-36."

There is a mixture of other audio visual materials, including, 16 mm films titled, "Korea Welcomes Astronauts," miscellaneous VHS tapes, including a Bob Hope Special, X-14 tape, and Apollo astronaut reunion dinner tape. Other items include, CDs containing interviews with townspeople, "the people that knew Armstrong best," leading up to Tranquility Base, an episode of "I've Got A Secret," which Armstrong's parents took part in, House Hearing pictures on CD and X-15, Astronaut Wings Ceremony on DVD. Cassette tapes range from an X-15 interview with Armstrong, "Future Apollo Missions" and "Advanced Projects," and cassettes related to travels. The audio visual material also includes VHS tapes containing the 1992 Documentary Series, *First Flights*, for which Neil Armstrong was host, along with corresponding documents, transcripts, and photographs. Armstrong explores the history of Aviation in this Arts and Entertainment Network Series.

The last box found in the series contains unmarked, undated and unused, magnetic tapes and cassettes.

The audio visual material has been grouped by type of media and in most cases is in chronological order.

**Series 13. Books and Magazines, 1671-2012 (13.65 cubic feet).** This series contains selected books and magazines from Neil Armstrong's personal library. The magazines are grouped as Armstrong had stored them, except for the second box which contains the older magazines and those from 1969. Many of the older magazines feature various astronauts on the cover or Neil Armstrong himself, with related stories inside. The issues from 1969 and early 1970s feature Apollo 11 or Armstrong on the cover and inside. The books are in chronological order, cited in APA (American Psychological Association) format and indicate if they have been signed and/or inscribed by the author. Some of the books have water damage. The books and magazines are stored in archival boxes.

**Series 14. News Clippings, 1959-2006 (5 cubic feet).** This series consists of Neil Armstrong's collection of newspaper clippings. The clippings have been retained as much as possible in the groups in which they were found but arranged chronologically within each group.

The first two boxes contain oversized newspapers covering the Apollo 11 Moon Landing and its anniversaries. This includes a signed copy by Neil Armstrong of the July 15, 1969 *Wapakoneta Daily News*. The remaining boxes contain clippings from Armstrong's time at NASA, his life after the Apollo 11 Moon Landing, and his teaching and research career at the University of Cincinnati. This series also contains clippings that appear to be loosely organized by topics or subjects that were of interest to Armstrong. Lastly, the series includes what appears to be the personal clipping collection of Neil Armstrong's mother, Mrs. Viola Armstrong.

**Series 15. Oversized Materials, 1967-2000 (1 cubic foot).** This series contains a collection of oversized posters, prints, and maps that Neil Armstrong maintained as part of his interest in space flight, aeronautic and astronautic technology, and geology. Most of these materials were bundled together under the label [Posters] by Armstrong himself. Other items in this series were kept by Armstrong as miscellany, variously stored by him in his office and other work spaces. The bulk of items found here are related to NASA and space flight, the remainder reflect Armstrong's interests in travel and geology.

**Series 16. Photographs, circa 1900s-2002 (12.55 cubic feet).** This series is comprised of six sub-series: NACA/NASA Experimental Test Pilot; Gemini; Apollo and Apollo 11; Military [Navy]; Photograph Subject Files; and Oversized. The text in [ ]s indicate the original folder titles for which Neil Armstrong or his assistant had arranged the photographs. A description of each precedes the sub-series listings.

The NASA photo series begins with Armstrong's time as an experimental test pilot for the X-15 project and extends through both Gemini and Apollo programs. When official NASA photographs are present, they are arranged by designated NASA photograph number.

These are followed by the Military [Navy] series. Armstrong's military service photographs include images of training, formation (flying and marching), various aircraft, Armstrong in his flight suit, Navy friends and Navy reunion photographs.

The Photograph Subject Files series are labeled as Armstrong had originally labeled them and have been left as he had arranged them within the folders.

The photographs in the Oversized (OS) Series were separated out from the other series for preservation purposes. Found within this series are Gemini, Apollo 11, Navy, Awards/Honorary Degrees, Trips and Purdue Alumni Astronaut Reunion photographs, along with miscellaneous photographs.

**Series 17. Restricted Materials, 1969-2010 (.25 cubic feet).** Materials in this series are restricted per donor request to respect third party privacy. Various lengths of restrictions are indicated in the folder listing.

**Series 18. Original Subject File Containers, circa 1943-2012 (7 cubic feet).** This series includes selected cardboard containers originally used by Armstrong in his home office to house a portion of his subject files. These containers were separated from the documents housed in them because the containers are highly acidic. This series also includes original drop file labels also retained during the processing. These materials were retained to represent Armstrong's original records storage system and for exhibit use.

## **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 or polyester sleeves and acid-free boxes. Coursework has been copied on archival paper and originals retained. Some clippings containing images of people or color graphics, or front pages of newspapers, have been preserved for display purposes, with photocopies made available for research. Oversized [OS] maps, diagrams, certificates, and other printed material; photographs; and artifacts have been separated and grouped into individual series for preservation purposes.

## DETAILED DESCRIPTION OF THE COLLECTION

### **Series 1. NASA Career, 1951-2008**

(42.6 cubic feet)

**Series Description:** Housed in this series are the documents and other materials generated during Neil Armstrong's NASA career, from his days as an experimental test pilot through his assignment as the Deputy Administrator of Aeronautics. Early materials of note are documents related to the X-15 program and Armstrong's engineering work as part of the Dyna-Soar team before his transfer into the astronaut program. The series includes Armstrong's application to the NASA astronaut program, as well as his letter of acceptance from Robert Gilruth. Although he was not assigned to any crew during the Mercury program, Armstrong nevertheless acquired key Mercury program materials from his astronaut training and preserved them as part of his personal collection.

The Gemini program is much more fully represented, Gemini 8 in particular, for which Armstrong served as command pilot. In addition to an array of technical documents detailing all Gemini spacecraft, including the Agena docking vehicle with which Armstrong completed the first docking of two vehicles in space, the Gemini sub-series contains items flown during that historic mission.

The largest sub-series presented here contains the materials from the Apollo program. Comprising over 50 manuscript boxes, these materials cover every part of the Apollo program manned missions, from technical documents for each spacecraft, to training materials, to the details of mission planning, through the public relations campaign associated with the world's first manned lunar landing. Please see the sub-series description for more detail. Armstrong continued his NASA career after Apollo as the Deputy Administrator of Aeronautics. The materials from this part of Armstrong's career offer unique insight into NASA's vision of the future in the early 1970s, as well as the difficulties it faced moving space exploration forward after the success of the lunar landing.

After leaving NASA to teach at the University of Cincinnati, Armstrong kept in touch with many of his NASA colleagues, continued to research the developing technologies of space flight and exploration, and participated in several programs associated with NASA. These documents, although extraneous to Armstrong's official NASA career, are preserved here as a reminder of Armstrong's lifelong commitment to the organization's goals in the exploration of space. The series concludes with Armstrong's collection of documents published by NASA during the manned space program of the 1960s, including the published findings of those missions.

### **Sub-series 1. Experimental Test Pilot Files, 1960-1967**

#### **Working Files**

(1.2 cubic feet)

**Sub-series Description:** Working files from project X-15 and project Dyna Soar. X-15 project files cover 1961-1962. The sub-series includes project summary, flight manual, and reports by Neil Armstrong detailing his test flight findings and research. Dyna Soar project files cover 1960-1967 and were kept as found and appear to have been gathered by Armstrong during the course of his research on super-sonic wing design.

**Box 1** *Experimental Test Pilot Papers – Working Files, 1948-1967*

Folder

1. Working Files – X-15 Program, 1960-1962 – “X-15 Flight Data System – A Precursor,” February 27, 1961
2. Working Files – X-15 Program, 1960-1962 – Notes on the X-15 Program, circa 1960
3. Working Files – X-15 Program, 1960-1962 – “ANC Bulletin, Vibration and Flutter Prevention Handbook,” April 1948

Folder

4. Working Files – X-15 Program, 1960-1962 – “Progress Report for period 15 November-15 December 1959, United States Airforce Contract No. AF33(616)-6610 Advanced Flight Vehicle Adaptive Flight Control System” January 5, 1960
5. Working Files – X-15 Program, 1960-1962

Item

1. “X-15 Program, Flight Research Center, NASA, Oct. 1961”  
Loose papers: “Pilot Comments, Flight No. 1-32-53, Pilot: Neil Armstrong, July 26, 1962”
2. “X-15 Operations Flight Report, Flight No. 1-32-53, Pilot: N. A. Armstrong, 8/3/62” “Pilot Questionnaire, Flight No. 3-7-14, Pilot: Major R. White”
3. “F-104 #961 Reaction Control Airplane,” undated

Folder

6. Working Files – X-15 Program, 1961-1962

Item

1. “Flight Utility Manual, USAF Series X-15 Aircraft, 29 Dec. 1961”

Folder

7. Working Files – Dyna Soar Project, 1960-1967

Item

1. “NASA Technical Advisors for Dyna Soar Project,” undated
2. F-5D charts for landing descent and take-off, undated
3. 3 German Flight Postcards, undated
4. “NASA-FRC Memorandum: Review of information on manned rocket flights...” July 19, 1960
5. “Rough Draft – NASA-FRC Summary FRC Rocket Flight Incidents, July 27, 1960” Bundle of Test Flight Data on X-1 flights, Pilot:

Charles Yeager

Folder

8. Working Files – Dyna Soar Project, 1960-1967

Item

1. “Study and Development of an Electric Side Stick Controller for Aerospace Vehicles, Nov. 1961”

Folder

9. Subject Files – [X-15, A/C Safety, Paraglider] – [Paraglider Trainer], undated
10. Subject Files – [X-15, A/C Safety, Paraglider] – [A/C Safety Lectures], undated
11. Archival copies of Application to NASA’s astronaut program with related correspondence, circa 1962
12. Archival copies of correspondence congratulating Armstrong on his achievements as a research pilot at Edwards Air Force Base, circa 1962
13. Archival copies of Correspondence and newspaper clippings related to Armstrong’s achievements as a research test pilot, circa 1962

**Box 2** *Experimental Test Pilot Papers – “Cockpit,” June 1956-April 1973*

Folder

1. “By-Laws of the Society for Experimental Test Pilots, Preliminary – Second Draft” w/ letter to charter members, July 20, 1956
2. Correspondence between Neil Armstrong and Jim Brooks regarding SETP scholarships and member life insurance policies, June-July, 1973
3. Correspondence from the Society of Experimental Test Pilots, February 1956-September 1958
4. “Job Description for Executive Director” circa 1956
5. Mailing Lists of Members of the Society of Experimental Test Pilots, January 1956-February 1957
6. Minutes of the Meetings of the Society of Experimental Test Pilots, January-December 1956
7. “Program for the Annual Business Meeting Held in the Banquet Room of the Hyatt House 25 October 1956”
8. “The Society of Experimental Test Pilots, Application for Membership” w/ informational booklet, circa 1956
9. The Society of Experimental Test Pilots Newsletters, February 1957-August 1958
10. “Cockpit,” Society of Experimental Test Pilots Publication, June-November 1970, (folder 1 of 4)
11. “Cockpit,” Society of Experimental Test Pilots Publication, January-August 1971, (folder 2 of 4)
12. “Cockpit,” Society of Experimental Test Pilots Publication, January-November/December 1971, (folder 3 of 4)
13. “Cockpit,” Society of Experimental Test Pilots Publication, January-April

- 1973, (folder 4 of 4)  
14. "Society of Experimental Test Pilot's Membership Roster," circa 2007

**Box 3** *Experimental Test Pilot Papers – Society of Experimental Test Pilots Quarterly Review, 1957-1971*

Folder

1. Society of Experimental Test Pilots Quarterly Review, Vol. 1 No. 1; Vol. 2 Nos. 2-3; Vol. 3 No. 1, circa 1957-1960 (folder 1 of 5)
2. Society of Experimental Test Pilots Quarterly Review, Vol. 3 Nos. 2-4, circa 1961 (folder 2 of 5)
3. Society of Experimental Test Pilots Quarterly Review, Vol. 4 Nos. 1, 2, 4; Vol. 5 No. 1; circa 1962-1963 (folder 3 of 5)
4. Society of Experimental Test Pilots Quarterly Review, Vol. 5 Nos. 2, 3; Vol. 6 No. 4; circa 1964 (folder 4 of 5)
5. Society of Experimental Test Pilots Quarterly Review, Vol.10 No. 3, circa 1971 (folder 5 of 5)

**Sub-series 2. Astronaut Application and Preflight Assignments 1962-1963**

**Working Files**

(0.4 cubic feet)

**Sub-series Description:** The astronaut application, orientation, and training materials document Neil Armstrong's transition from being a research test pilot to a member of the "New Nine" group of astronauts recruited for the upcoming Gemini program. The sub-series included Armstrong's application to NASA's astronaut program, as well as the associated correspondence and correspondence related to his last days as a research test pilot. In addition to the application materials, documents concerning the initial orientation and training regimen undertaken by astronauts entering NASA's space-flight program can be found. These materials include schedules and actual coursework completed in October and November of 1962, prior to Armstrong's flight assignments.

**Box 4** *Astronaut Application and Pre-Flight Assignments, 1962-1963*

Folder

1. Astronaut Application and Pre-Flight Assignments – [Astro Applic. Edw Corresp. 1962 Prog. Part. Awards] – [1962 Astro Application]
  - Item
  1. Congratulatory telegram from Congressman Jim Fulton, July 18, 1962
  2. "Security Investigation Data for Sensitive Position" (application to

- the NASA astronaut program), "Continuation Sheet for Standard Form 57, 'Application for Federal Employment'" circa 1962
3. Letter of acceptance into the NASA astronaut program from Robert R. Gilruth, June 29, 1962
  4. "Flight Experience Record" May 1962

Folder

2. Astronaut Application and Pre-Flight Assignments – [Astro Applic. Edw Corresp. 1962 Prog. Part. Awards] – [Edw. Corresp.]

Item

1. Professional correspondence congratulating Armstrong on his achievements as a research pilot at Edwards Air Force Base, circa 1962

Folder

3. Astronaut Application and Pre-Flight Assignments – [Astro Applic. Edw Corresp. 1962 Prog. Part. Awards] – [1962 Prog. Part. Awards]

Item

1. Correspondence and newspaper clippings related to Armstrong's achievements as an experimental test pilot, circa 1962

Folder

4. Astronaut Application and Pre-Flight Assignments – Contents of folder [B-1: Dryden folder NASA] , includes acceptance letter from the astronaut program signed by Robert Gilruth, circa September 1962.
5. Astronaut Application and Pre-Flight Assignments – Orientation and Training (folder 1 of 5) – Astronaut orientation and training schedules, October-December 1962
6. Astronaut Application and Pre-Flight Assignments – Orientation and Training (folder 2 of 5) – Astronomy coursework, October 1962
7. Astronaut Application and Pre-Flight Assignments – Orientation and Training (folder 3 of 5) – Computer Theory coursework, October-November 1962
8. Astronaut Application and Pre-Flight Assignments – Orientation and Training (folder 4 of 5) – Flight Mechanics class notes, November 1962
9. Astronaut Application and Pre-Flight Assignments – Orientation and Training (folder 5 of 5) – Gemini Familiarization materials, November 1962
10. Astronaut Application and Pre-Flight Assignments – [Apollo: Non-Tech] (folder 1 of 2) **RESTRICTED**

Item

1. "Company Grade Officer Effectiveness Report," Neil Armstrong reporting on Capt. Michael Collins, January 5, 1965
2. "Company Grade Officer Effectiveness Report," Neil Armstrong reporting on Major Edwin "Buzz" Aldrin, January 5, 1965

Folder

11. Astronaut Application and Pre-Flight Assignments – [Apollo: Non-Tech] (folder 2 of 2)

**Box 5** *Astronaut Application and Pre-Flight Assignments, 1962-1963*

Folder

1. Astronaut Application and Pre-Flight Assignments – NASA Program Schedule

Item

1. Working documents detailing the development of NASA's program schedule and the number of employees necessary for each mission throughout the 1960s as prepared by Neil Armstrong at the behest of Deke Slayton, circa March 1963

**Sub-series 3. Mercury Program, 1961-1963**

**Working Files**

(0.8 cubic feet)

**Sub-series Description:** Manuals, handbooks and NASA publications which were part of Armstrong's subject/working files related to the Mercury Program. Some of the publications also have relevant Mercury Program charts and flyers inside the publications.

**Box 6** *Mercury Program: Manuals, Handbooks and Publications, 1961-1963*

Folder

1. Mercury Program - Manuals - "Familiarization Manual, SEDR104-18, Manned Satellite Spacecraft, 18 Orbit Configuration," June 1, 1962 (includes Mercury Orbit Charts MOC 5 and MOC 3, 1961-1962)
2. Mercury Program - Manuals - "Familiarization Manual, SEDR104, Manned Satellite Spacecraft, One Day Mission," December 1, 1962
3. Mercury Program - Handbooks - "Project Mercury NASA/MSC, Flight Controller Handbook, Spacecraft 20," March 15, 1963 ("Armstrong" written inside)
4. Mercury Program - Publications - "Results of the First United States Manned Orbital Space Flight," February 20, 1962 (copy 1)

**Box 7** *Mercury Program: Publications, 1962-1963*

Folder

1. Mercury Program - Publications - "Results of the First United States Manned Orbital Space Flight," February 20, 1962 (copy 2)
2. Mercury Program - Publications - "Results of the Second United States Manned Orbital Space Flight," May 24, 1962
3. Mercury Program - Publications - "Results of the Third United States Manned Orbital Space Flight," May 24, 1962 (copy 1)
4. Mercury Program - Publications - "Results of the Third United States

5. Manned Orbital Space Flight," May 24, 1962 (copy 2)  
Mercury Program - Publications - "Mercury Project Summary, NASA SP-45, includes results of the fourth manned orbital flight," May 15-16, 1963, along with an errata and "MA-9 Scientific Debriefing," June 26, 1963
6. Mercury Program - Publications - "Descriptive Synopsis of Project Mercury," August 1962
7. Mercury Program - Publications - Booklet, "The Triumph of Astronaut L. Gordon Cooper, Jr. and the Faith 7," May 15-16, 1963 (includes a flyer inside on "Project Mercury")

#### **Sub-series 4. Gemini Program Files, 1962-1969**

##### **Correspondence, Working Files, Oversized Materials**

(8.0 cubic feet)

**Sub-series Description:** The Gemini Program files include a small selection of personal correspondence and a wide range of working documents. Personal items consist of congratulatory correspondence from family and colleagues at NASA. The working documents begin with materials related to the systems of Gemini spacecraft, equipment, and basic operating procedures. Technical documents detailing Gemini systems are followed by training materials used by Neil Armstrong during the Gemini program. The arrangement of this material reflects the order in which materials were filed and labeled by Armstrong. Central to the Gemini series are the manuals, flight checklists, and handbooks pertaining to all vehicles involved in the Gemini program, including the G-8 spacecraft, the Agena docking vehicle first utilized in Gemini VIII, as well as handbooks for the Titan II rocket propulsion systems. The in-flight checklist books, intact with Velcro fasteners and original ring clips, are items of interest, having been used in-flight during Gemini VIII and as part of the ground support crew during XI. The series also houses final flight plans for Gemini Missions VI, VII, IX-A, X, XI, and XII.

Transcripts of Gemini VIII air-to-ground communications, pilot reports, and a collection of reports on Gemini VIII experiments comprise the series of reports within the Gemini program files and remain in the order in which Armstrong himself preserved them, along with a set of reports detailing the scientific results gleaned from the Gemini program. The series includes a collection of material prepared by NASA for the press. A recently compiled binder containing the Gemini Photo Catalog is included here as well, though it was produced circa 2005. The series concludes with one box of oversized materials that includes diagrams and schematics of the Gemini spacecraft's systems, as well as orbital and star charts, and draft drawings of the Gemini VIII mission patch.

**Sub-Subseries 1. Correspondence, 1963-1968.** Correspondence related to the Gemini Program consists primarily of notes of a congratulatory nature, sent to Neil Armstrong and David Scott following the completion of Gemini VIII. Included here are not only letters and telegrams, but also memos conveying information about the

travel arrangements for the friends and families of Gemini astronauts during the Gemini VIII launch.

A binder (scrapbook) was part of an addition to the papers in 2016. The contents were retained as found, and contain not only items from the Gemini program, but also items before and after that period. Of note is correspondence from Charles Lindbergh, Presidents Nixon and Johnson, the Russian Cosmonauts, various dignitaries and celebrities. There are also training certificates, NASA certificates of achievement, photographs and other miscellaneous items.

**Box 8** *Gemini Program – Personal Correspondence, 1963-1967*

Folder

1. Gemini Program – Personal Correspondence – Gemini V back-up crew presentation script, handwritten, circa 1965
2. Gemini Program – Personal Correspondence – [Correspondence] Letters to Mr. Armstrong regarding the Gemini Program, many of congratulatory nature, with responses, January 1963-May 1966 (folder 1 of 2)
3. Gemini Program – Personal Correspondence – [Correspondence] Letters to Mr. Armstrong regarding the Gemini Program, many of congratulatory nature, with responses, May 1966-May 1968 (folder 2 of 2)
4. Gemini Program – Personal Correspondence – Responses from Armstrong and David Scott to congratulatory messages received following Gemini VIII, April-December 1966
5. Gemini Program – Personal Correspondence – Personal correspondence filed in plain brown folder, from Gemini era, 1966-1967
6. Gemini Program – Personal Correspondence – “Travel Arrangements Made – Guest List” for friends and family during Gemini VIII launch, circa 1966
7. Gemini Program – Personal Correspondence – Letters and telegrams to Armstrong from family and NASA colleagues upon return from Gemini VIII Mission. [Gemini VIII Congratulatory Messages], circa 1966
8. Gemini Program – Personal Correspondence – Paper sent to Armstrong, “The Deleterious Effect on Astronaut Capability of Vestibulo-Ocular Disturbance During Spacecraft Roll Acceleration,” inspired by the events of the Gemini VIII mission, December 10, 1966
9. Gemini Program – Personal Correspondence – Letter commemorating an award given to the Gemini astronauts by the International Benjamin Franklin Society, Incorporated on the occasion of Franklin’s 260<sup>th</sup> birthday, July 31, 1967

**Box 8a** *Gemini Program – Scrapbook (Binder), includes Personal Correspondence, 1952-1974*

Folder

1. Gemini Program – First Day Covers - featuring Project Gemini astronauts, includes photographs (16 sheets)
2. Gemini Program – Certificate - NASA Group Achievement Award, Gemini Support Team, November 22, 1966
3. Gemini Program – Personal Correspondence – Letter of thanks from Charles A. Lindbergh to Armstrong, March 16, 1969
4. Gemini Program – Personal Correspondence – Invitation to reception, addressed to Mr. and Mrs. Armstrong, in honor of President of the Republic of Paraguay, General Alfredo Stroessner, March 21, ?
5. Gemini Program – Personal Correspondence – Letter from Dinah Shore, October 4, 1963
6. Gemini Program – Certificate – Ensign N. A. Armstrong USNR made his 100<sup>th</sup> carrier landing aboard the USS Essex, (CV-9), March 4, 1952
7. Gemini Program – Certificate – “to certify that the bearer has successfully qualified as an F-105 pilot and is hereby eligible to be The authority on supersonic fighter-bomber airplanes whenever pilots meet,” December 17, 1959
8. Gemini Program – Personal Correspondence – Telegram and Letter to Armstrong from The Executive Order of The Ohio Commodores, announcing his selection as a charter member, from James A. Rhodes, Governor, State of Ohio, June 7, 1966
9. Gemini Program – Personal Correspondence – Letter of congratulations from Vice President Hubert H. Humphrey, upon Armstrong’s selection as the command pilot for Gemini VIII, September 24, 1965
10. Gemini Program – Certificate – NASA Manned Spacecraft Center, official recognition and a quality salary increase tendered to Armstrong for exemplary performance of duties as Astronaut GS-16, March 26, 1966
11. Gemini Program – Senate of the United States Concurrent Resolution – congratulating Armstrong and Scott on their “epoch-making” orbital flight, March 15, 1966
12. Gemini Program – Photograph of Armstrong holding flight coordinate sign, 5”x7”, b&w, and a signed cosmonaut stamp, undated
13. Gemini Program – Certificate – Order of the Master Mule Skinners of the Grand Canyon Trails, March 6, 1964
14. Gemini Program – Personal Correspondence – Letter from Arch A. Moore, Jr., Congressman, First District, West Virginia, Addressed to Honorable James E. Webb, Administrator, NASA, thanking NASA and Armstrong for his participation in the National Youth Science Camp, August 5, 1964
15. Gemini Program – Certificate – Aviation Medical Acceleration Laboratory, U.S. Naval Air Development Center, Johnsville, Pennsylvania, for voluntarily contributing to the advancement of Aviation Medical Research, June 8, 1959
16. Gemini Program – Personal Correspondence and Photograph – Letter from Ohio Governor James A. Rhodes, thanking Armstrong for the silk flag flown on Gemini VIII and presented to State of Ohio, May 4, 1966 (includes photograph of the governor and Art Katterheinrich with the framed flag)

17. Gemini Program – Personal Correspondence – Letter from Vice President Hubert H. Humphrey congratulating Armstrong on the success of the Gemini VIII mission, December 8, 1966
18. Clipping, Six Test Pilots Set for U.S. Space Travel: They'll take X-15 rocket plane up 100 miles, by Vance Trimble, *The Washington Daily News*, p. unknown, January 8, 1958
19. Autographed piece of paper, signed to Neil Armstrong, signature illegible, November 15, 1974
20. Gemini Program – Photograph – NASA photo of Professor Vieno Johannes Sukselainen, Chairman of the Agrarian Party meeting Armstrong (Armstrong in a Gemini Part Task Trainer), January 9, 1964
21. Gemini Program – Certificate – American Institute of Aeronautics and Astronautics, certifies that Armstrong qualified for membership and elected Associate Fellow, April 1964
22. Gemini Program – Certificate – Helicopter Training Squadron Eight, Armstrong designated an honorary helicopter pilot as a result of his basic helicopter familiarization training..., November 21, 1963
23. Gemini Program – Comic – “Satelites Humanos,” undated
24. Gemini Program – Personal Correspondence – Letter from Ohio Lieutenant Governor, John W. Brown, wishing Armstrong and Scott well on their Gemini VIII mission, March 16, 1966
25. Gemini Program – Personal Correspondence – Letter of thanks from William G. Gisel, President, Bell Aerosystems Company, January 9, 1967
26. Certificates – NASA 10 and 20 Year Service Awards, January 2, 1964 and January 19, 1971
27. Gemini Program – Personal Correspondence – Decree and Certificate, Chile, October 28, 1966
28. Gemini Program – Personal Correspondence – 2 photographs of a bull fighter, inscribed to Armstrong, 1966
29. Gemini Program – Fact Sheet – NASA Manned Spacecraft Center – Gemini VIII Rendezvous and Docking Mission, April 1966
30. Gemini Program – Personal Correspondence – Letter of thanks from Colonel William F. Curry, Director of Air Force Museum, Wright-Patterson Air Force Base, Ohio, for donation of relics and flag flown aboard the Gemini VIII Space Capsule, December 27, 1966
31. Gemini Program – Personal Correspondence – Artifact – Letter and wood chip from the actual Douglas World Cruiser, “New Orleans,” that was part of the aircraft making the first flight around the world in 1924, letter from William Curry, Director of Air Force Museum dated February 15, 1967
32. Gemini Program – Personal Correspondence – Letter from James A. Rhodes, Governor of Ohio, notifying Armstrong that he had been selected to receive the Governor’s Award for the year 1966, January 13, 1967
33. Certificates – Outstanding Young Men of America, 1966
34. Gemini Program – Photographs – NASA photos (3), Gemini IV spacewalk, 1965
35. Gemini Program – Personal Correspondence – Letter and photograph from

- Vice President Hubert H. Humphrey, February 7, 1967
36. Gemini Program – Personal Correspondence – Letter from Oklahoma Governor Dewey F. Bartlett, February 15, 1967 (NASA spacewalking photo on same page in binder)
  37. Gemini Program – Personal Correspondence – Letter from American Ambassador, J. Wesley Jones, February 11, 1968 (NASA spacewalking photo on same page in binder)
  38. Gemini Program – Photographs – 3 photographs with James A. Rhodes, Governor of Ohio, upon Armstrong's receipt of the Governor's Award for the year 1966, January 13, 1967 (signed by James A. Rhodes)
  39. Gemini Program – Artifact – Project Gemini Information Sheet, postmarked Cape Canaveral, November 11, 1966
  40. Apollo Program – Personal Correspondence – Letter from Charles A. Lindbergh to Armstrong, accepting his invitation to the launching of Apollo XI, June 15, 1969 (signed by Lindbergh)
  41. Artifact – Small photograph of Wilbur Wright along with his autograph, July 17, 1911
  42. Gemini Program – Artifact – Luncheon invitation from President and Mrs. Johnson, January 26, 1967
  43. Gemini Program – Certificate – Proclaiming Armstrong an Honorary Conch and Citizen of the Fabulous Florida Keys, signed by Gerald Saunders, Chairman, Board of County Commissioners, Monroe County, Florida, undated
  44. Gemini Program – Certificate – U.S. Naval School, Underwater Swimmers, U.S. Naval Base, Key West, Florida, certify that Neil Armstrong satisfactorily completed a 40 hour course in skin and scuba diving under the sanction of the National Association of Underwater Instructors, April 14, 1967, and an Identification Card, successfully completed the National YMCA Scuba Diving Course, April 14, 1967
  45. Certificate – Kappa Kappa Psi, Honorary Band Fraternity, Gamma Phi Chapter, April 30, 1966
  46. Gemini Program – Clipping – Armstrong presenting Purdue President Hovde with a Boilermaker Pete flag that was flown aboard Gemini VIII, 1966
  47. Gemini Program – Certificate – Certificate of Field Service Training, 32 Hour Course in Apollo Guidance and Navigation System Familiarization, June 2, 1964
  48. Gemini Program – Certificate – "Brothers of the Sun," signed by Bill Luton, circa 1966
  49. Gemini Program – Certificate – Armstrong Qualified as a Delta Pilot by flying the USAF F-102 Delta Wing Supersonic Interceptor, March 29, 1956
  50. Apollo Program - Personal Correspondence – Letter from Vice President, signed "Ted," thanking Armstrong for giving up his Christmas with family to appear with Bob Hope in Vietnam, along with Stafford and Cernan, dated January 27, 1970
  51. Gemini Program – Certificate – University of North Carolina at Chapel Hill,

- names Armstrong honorary Alumnus and Tarheel, undated
52. Gemini Program – Certificate – College of Variable Stability Knowledge, duly acknowledged as a pilot extraordinaire, undated
  53. Gemini Program – Personal Correspondence – Letter and drawing from Neil Caldwell, State of Texas, House of Representatives, Austin Texas, undated
  54. Gemini Program – Certificate – United State Air Force, Successfully Completed the ADC Life Support Training Course given by 4780<sup>th</sup> Air Defense Wing (ADC), Perrin Air Force Base, Texas, July 30, 1968, Class 68-32
  55. Gemini Program – Personal Correspondence – Two Letters from Vice President, Hubert Humphrey, December 19 and 20, 1968
  56. Gemini Program – Personal Correspondence – Letters of thanks to Armstrong from Esther C. Goddard, April 4, 1970, and Ralph W. Yarborough, October 3, 1969
  57. Gemini Program – Personal Correspondence – Telegram - Pre-formal invitation notification from the White House in regards to a black tie dinner honoring H.E. General Alfredo Stroessner, President of the Republic of Paraguay, March 13, 1968
  58. Gemini Program – Photographs – 2 NASA photographs, Geology Training, Iceland, North Atlantic Ocean, Armstrong with U.S. Ambassador Karl Rolvaag and Icelandic Prime Minister Bjarni Benediktsson, July 2-8, 1967
  59. Gemini Program – Photographs – NASA Photograph, Visit of Vice President Spiro T. Agnew and party to Kennedy Space Center to view launch of Apollo 9, Armstrong and additional astronauts in photo, March 3, 1969
  60. Gemini Program – Personal Correspondence – Letter from Fred K. Godfrey, President Weber Aircraft in regards to Weber Boosters Club, July 10, 1968, and an “OMIAS” member certificate, May 6, 1968
  61. Gemini Program – Personal Correspondence – Invitation from General Alfredo Stroessner, President of the Republic of Paraguay, 1963
  62. Apollo Program - Personal Correspondence – Letter and photograph from Gregory Peck, photo inscribed to the family of Neil Armstrong, May 7, 1969
  63. Apollo Program - Personal Correspondence – Letter from President Richard Nixon, includes signature, June 25, 1969
  64. Apollo Program - Personal Correspondence – Letters from Nicaraguan Ambassador Guillermo Sevilla Sacasa and President Somoza-Debayle, August 29, 1969
  65. Gemini Program – Photographs – 5”x7” color photograph of an eagle, moon in background, undated
  66. Apollo Program - Personal Correspondence – Letter, El Jefe Del Estado Generalissimo De Los Ejercitos Nacionales, November 6, 1969
  67. Apollo Program - Personal Correspondence – Invitation from President and Trustees of the National Geographic Society, presentation of the Hubbard Medal to the Apollo 11 Crew, February 16, 1970, and sheet of inscribed American Lung Association Christmas Seal stamps, issued September 24,

- 1969
68. Gemini/Apollo Program - Personal Correspondence – Postcard from Barbara Streisand, wishing Armstrong good-luck on Apollo 11 mission, and postcard from Paris, Scott and Armstrong on front, (sender unknown) 1967-1969
  69. Apollo Program - Personal Correspondence – Letter from President Richard Nixon (signed) upon Armstrong’s appointment as Chairman and a Member of the Peace Corps National Advisory Council, December 3, 1969
  70. Apollo Program - Personal Correspondence – Telegram of congratulations to Armstrong, Aldrin and Collins, from the Russian Cosmonauts, July 25, 1969
  71. Apollo Program – Certificate – NASA Group Achievement Award, Manned Spacecraft Center, September 29, 1969
  72. Apollo Program – Certificate – NASA Group Achievement Award, Manned Spacecraft Center, Flight Crew Operations Directorate, for exceptional contributions to the Flight Crew Operations participation in the achievements of the Apollo program and man’s first lunar landing on July 20, 1969
  73. Apollo Program – Certificate – NASA Apollo Achievement Award, in appreciation of dedicated service to the nation as a member of the team which has advanced the nation’s capabilities in aeronautics and space and demonstrated them in many outstanding accomplishments culminating in Apollo 11’s successful achievement of man’s first landing on the moon, July 20, 1969
  74. Apollo Program - Personal Correspondence – George R. Brown, The Brown Foundation, Inc., Houston Texas, to the Purdue Board of Trustees in regards to the Brown Foundation establishing 2 Purdue Engineering scholarships in Armstrong’s name, September 23, 1969
  75. Apollo Program - Personal Correspondence – Copy of letter sent by the Apollo 11 crew inviting President Nixon to an informal dinner in the crew quarters at the John F. Kennedy Space Center, July 15, 1969
  76. Apollo Program - Personal Correspondence – Letter from Hanna Reitsch (?), undated

**Sub-Subseries 2. Working Files, 1961-1969.** Working files related to the Gemini program consist of documents detailing the spacecraft and equipment used by Gemini astronauts in most of the Gemini missions under the heading “Systems”. Following these technical documents are coursework and memos related to the training undertaken by Neil Armstrong for his part in Gemini missions under the heading “Training”. Memos, working documents, internal notes, and reports which detail the planning of specific Gemini missions, particularly Gemini VII, are collected together under the “Mission Planning” header. Items that facilitated the actual execution of missions, whether in flight or in training, such as checklists, operating procedures, and flight plans, are housed together under the heading “Mission Planning/Execution”. Transcriptions of the Gemini VIII in-mission communications,

with Armstrong's pilot's report and narrative history of Gemini VIII, are collected under the heading "Results", together with a series of reports detailing the scientific findings of the Gemini program overall. The working files are concluded by a series of documents intended for the press, and materials produced by NASA contractors advertising their technical contributions to the Gemini program. Press kits and related documents fall under the heading "Public Relations".

**Box 9** *Gemini Program – Systems, 1964-1966*

Folder

1. Gemini Program – Systems – "NASA Project Gemini Familiarization Manual Long Range and Modified Configurations," March 15, 1964
2. Gemini Program – Systems – "NASA Project Gemini Familiarization Manual Rendezvous and Docking Configurations," May 31, 1965
3. Gemini Program – Systems – "Gemini Recovery Operations Manual, NASA-MSD," February 1966
4. Gemini Program – Systems – "Gemini Mission Rules, Gemini VIII, Rev. A, February 21, 1966"

**Box 10** *Gemini Program – Systems, August-November 1965*

Folder

1. Gemini Program – Systems – "Gemini Spacecraft Number 8 Performance/Configuration Specification," August 6, 1965 revision
2. Gemini Program – Systems – "Gemini Spacecraft Number 8 Performance/Configuration Specification," [This is a Spare], [completely] revised November 26, 1965
3. Gemini Program – Systems

Item

1. "Recovery Requirements Gemini VIII, January 31, 1966"
2. "Figure 12: Gemini VIII Launch Abort Areas and Recommended Ship and Aircraft Deployment," See Gemini Oversized Materials Box 18 Folder 1, undated
3. Map – "Gemini VIII Recovery Aircraft Staging Bases," See Gemini Oversized Materials Box 18 Folder 1, undated
4. Map – "recovery Zone Support," See Gemini Oversized Materials Box 18 Folder 1, undated

**Box 11** *Gemini Program – Training, 1961-1966*

Folder

1. Gemini Program – Training – [Desert Survival] "Project Gemini Lesson Plans for Academic Phase," undated

Folder

2. Gemini Program – Training – [Gemini Math Flow] (folder 1 of 2)
  1. “Launch Abort,” undated
  2. “Typical Command Bank Angle Time History,” undated
  3. “Touchdown Prediction Mode,” undated
  4. “Astronauts View of Horizon at Re-entry for Various Trim Angles,” Rev. 1, August 1961
  5. “Gemini Touchdown Descent Math Flow Description,” November 21, 1963
  6. “Gemini Ascent Guidance Math Flow Description,” November 8, 1963
  7. “McDonnell Aircraft Corp. Guidance and Control Mechanics Gemini Design Note No. 400: Development of the Trajectory and Procedural Plan for the Gemini XI On-board Direct Rendezvous,” August 3, 1966

Folder

3. Gemini Program – Training – [Gemini Math Flow] (folder 2 of 2)
  - Item
    1. “Guidance and Control Mechanics Gemini Design Note No. 7 Revision D: Functional Sequence for Closed-Loop Orbital Mechanics Rendezvous Maneuver,” April 10, 1964
    2. “McDonnell Aircraft Corp. Guidance and Control Mechanics Gemini Design Note No. 350: Seventh Operational Program Description (Modules 1 Through 6),” March 1, 1966
    3. “McDonnell Aircraft Corp. Guidance and Control Mechanics Gemini Design Note (*illegible*): The Gemini VIII Touchdown Predict Mode Procedures,” March 3, 1966

Folder

4. Gemini Program – Training – [Gemini Computer]
  - Item
    1. Prelaunch countdown sequence (from T-300; 19 pages)
    2. “Figure 1: Guidance System,” undated
    3. “Figure 2: Gemini Launch Vehicle and Spacecraft Coordinates,” undated
    4. “Figure 3: Relation of GLV Axes, Spacecraft Axes, and Platform Axes,” undated
    5. “Figure 4: Guidance Axes,” undated
    6. “Figure 5: Launch Guidance System,” undated
    7. “Figure 6: Altitude Profile and Event Sequence,” undated
    8. “Figure 7: Inertial Velocity,” undated
    9. “Figure 8: Longitudinal Acceleration,” undated
    10. “Figure 9: Pitch Steering Block Diagram,” undated
    11. “Figure 10: IGS Attitude Errors for RGS Guiding the GLV Nominal Conditions,” undated
    12. “Figure 11: Pitch Parameters During Switchover Transient Hardover Engine Malfunction @ 70 sec.” undated

13. "Figure 12: Pitch Parameters for Manual Switchover Due TARS Drift Malfunction; Switchover at 70 sec." undated
14. "Figure 13: Prelaunch Guidance and Control DAS Data," undated.
15. "Figure 14: Ascent Guidance and Control DAS Parameters," undated
16. "Rendezvous and Catch-Up Modes," April 13, 1964
17. "Lesson Plan, Gemini Systems Qualification Training, Computer," undated
18. "MDIU (MDKU-MDRU) Functions," undated
19. Gemini Computer System Schematic; See Gemini Oversized Materials Box 18 Folder 2, undated
20. [Digital Computers – Dr. Smith, 3/16/64] Notes and outline of Computer training course (26 loose pages), undated
21. "Gemini Fourth Systems Math Flow Diagram: Change Record," See Gemini Oversized Materials Box 18 Folder 2, undated
22. "Gemini Fourth Systems Math Flow Diagram: DAS Quantities from Computer Memory," (2 copies) See Gemini Oversized Materials Box 18 Folder 2, undated
23. "Gemini Fourth Systems Math Flow Diagram: Touchdown Predict Flight Constants," See Gemini Oversized Materials Box 18 Folder 2, undated
24. "Gemini Fourth Systems Math Flow Diagram: Re-entry Flight Constants," See Gemini Oversized Materials Box 18 Folder 2, undated
25. "Gemini Fourth Systems Math Flow Diagram: Rendezvous Flight Constants," See Gemini Oversized Materials Box 18 Folder 2, undated
26. "Gemini Fourth Systems Math Flow Diagram: Ascent Flight Constants," See Gemini Oversized Materials Box 18 Folder 2, undated
27. "Gemini Fourth Systems Math Flow Diagram: Touchdown Predict and re-entry," (3 copies) See Gemini Oversized Materials Box 18 Folder 2, undated
28. "Gemini Fourth Systems Math Flow Diagram: Rendezvous," (3 copies) See Gemini Oversized Materials Box 18 Folder 2, undated
29. "Gemini Fourth Systems Math Flow Diagram: Ascent," (2 copies) See Gemini Oversized Materials Box 18 Folder 2, undated
30. "Gemini Fourth Systems Math Flow Diagram: DCS/MDIU Format," (2 copies) See Gemini Oversized Materials Box 18, Folder 2, undated
31. "Gemini Fourth Systems Math Flow Diagram: Executor," (2 copies, 1 w/ handwritten notes) See Gemini Oversized Materials Box 18 Folder 2, undated
32. "McDonnell Aircraft Corp. Guidance and Control Mechanics Gemini Design Note No. 200A: Inertial Guidance System Computer Operational Program Functional Description," January 1, 1965

Folder

5. Gemini Program – Training

Item

1. “Gemini Extravehicular Equipment Operating Procedures and Limitations,” Revised: March 12, 1966
2. “Figure 1: Effect of Orbital Mechanics on Extravehicular Trajectories in the Orbital Plane,” circa 1966; See Gemini Oversized Materials Box 18 Folder 3, undated
3. Figures 1-3 of ranges for 85-, 100-, and 25-pound O.A.M.S. jet plumes (3 sheets); See Gemini Oversized Materials Box 18 Folder 3, undated
4. Fig. 5 showing effects of jet plumes on an Extravehicular astronaut at various ranges, circa 1965; See Gemini Oversized Materials Box 18 Folder 3
5. “EV Astronaut rescue procedure discussion,” undated

Folder

6. Gemini Program – Training

Item

1. “Gemini Mission Chart (GMC) 8, Gemini Mission 8,” See Oversized Materials, Box 18 Folder 4, undated
2. Notes on Launch Restrictions, undated
3. Notes on “OAO ‘Fly-By’,” undated
4. “Addendum to Memorandum No. 66-FM34-20, Agena status reports,” April, 7, 1966” July 13, 1966
5. “Satellite Summary for Gemini Orbit Inclinations,” December 31, 1965

Folder

7. Drafts of Gemini VIII Mission Patch by Armstrong and David Scott, circa 1965-1966 (Please see OS Box 18a, Folder 5 for 3 more draft drawings.)

**Box 12** *Gemini Program – Mission Planning, 1963-1966*

Folder

1. Gemini Program – Mission Planning – [Gemini Memos, 1966, NA GT-5 Memos, 1965, NA Gemini Notebook] Notebooks, memos, and related documents used in planning Gemini program missions, circa 1965-1966 (folder 1 of 2)
2. Gemini Program – Mission Planning – [Gemini Memos, 1966, NA GT-5 Memos, 1965, NA Gemini Notebook] Notebooks, memos, and related documents used in planning Gemini program missions, circa 1965-1966 (folder 2 of 2)
3. Gemini Program – Mission Planning – [Gemini Memos 1963-65] Memos and working documents relevant to the planning of Gemini program missions, circa 1963-1965 (folder 1 of 2)

Item

1. "McDonnell Aircraft Corporation Guidance and control Mechanics Gemini Design Note 325: Seventh Operational Program Description (Modules One through Five)," November 8, 1965. Note: ATM Read Program Block Diagram (pg. 5), Table 3.1.2-1 and continuation (pg. 7-8), and Table 3.1.2-2 (pg. 10) have been removed to Gemini Oversized Materials, Box 18 Folder 4
2. "McDonnell Aircraft Corporation Guidance and control Mechanics Gemini Design Note 286: Analysis of the Gemini Rendezvous Radar False Lock On Problem," April 28, 1965 with archival copy
3. "Deficiencies noted in Gemini Optical Sight," January 7, 1965.
4. "MIT simulator evaluation," January 6, 1965
5. "Changes – GLV Systems," September 23, 1964
6. "Gemini Engine Light Displays," October 9, 1964
7. "Gemini Survival Kits," April 27, 1964
8. "Gemini Extravehicular sun visor," August 17, 1964
9. "Gemini Spacecraft Checkout – Cape vs. McDonnell," August 5, 1964
10. "Results of Gemini Extravehicular Activity Meeting, 14 July 1964," July 17, 1964
11. "Status Report on Recovery," April 15, 1964
12. "Ballute Test Results," February 11, 1964
13. "Gemini Egress Development," February 7, 1964
14. "Gemini Rendezvous and Reentry Meeting, 27 January 1964," February 5, 1964
15. "Gemini Mission Planning – 28 January 1964," February 3, 1964
16. "Status of GT-3 as of first of the year," January 28, 1964
17. "Inflight Experiments Panel Meeting – 16 January '64," January 17, 1964

Folder

4. Gemini Program – Mission Planning – [Gemini Memos 1963-65] Memos and working documents relevant to the planning of Gemini program missions circa 1963-1965 (folder 2 of 2)
5. Gemini Program – Mission Planning – [Gemini Reports, 1966 + (G-8 Press Cont..)] Reports and memos related to the planning of Gemini 8 as well as information prepared for distribution to the press, circa 1966 (folder 1 of 2)
6. Gemini Program – Mission Planning – [Gemini Reports, 1966 + (G-8 Press Cont..)] Reports and memos related to the planning of Gemini 8 as well as information prepared for distribution to the press, circa 1966 (folder 2 of 2)

**Box 13** *Gemini Program – Mission Planning, 1965-1966*

Folder

1. Gemini Program – Mission Planning – "Gemini Reentry Guidance after Gemini VIII," (packet of memos and reports assembled and bound presumably by Armstrong) circa 1965

2. Gemini Program – Mission Planning – (Arranged by Armstrong in plain brown binder) Memos regarding mission planning, briefings/debriefings, training schedule, and miscellaneous schematics, including Gemini VIII orbit chart. November 1965 – March 1966 (folder 1 of 3)
3. Gemini Program – Mission Planning – (Arranged by Armstrong in plain brown binder) Memos regarding mission planning, briefings/debriefings, training schedules, including operational reports on equipment designed for Gemini VIII and assembly schematic for G-8 Spacecraft, (folder 2 of 3)

Item

1. “Systems Briefing for GT-8 Crew,” note: Control System Reentry Control System Propulsion (RCS), Control System Orbit Attitudes Maneuver System (OAMS) Propulsion, and Enclosures 1-4 estimating propellant depletion removed to Gemini Oversized Materials, Box 18 Folder 5, January 17, 1966
2. “S/C 5 Fuel Cell Power System Briefing,” undated
3. “Gemini VIII Postflight Crew Debriefing Plan,” undated
4. “Space News Roundup,” December 23, 1965; see Gemini Oversized Materials, Box 19 Folder 6
5. “Incorporation of lightweight sextant into GT-8 flight equipment,” December 27, 1965
6. “Request for Engineering Change Proposal: Individual Pressure Reference System for Fuel Cell Section #1 and #2,” December 28, 1965
7. “Gemini VIII Operational and Experimental GFAE/CFE Hardware Status,” February 18, 1966
8. “Gemini Program Abstract of Meeting on Mission Planning Coordination,” January 24, 1966
9. “Gemini Flight control Data Acquisition Requirements – MCC-H (ATDA Requirements) Gemini VIIIA Rev. A,” January 20, 1966
10. “ESP Donning Procedures,” Revised January 3, 1965
11. “Backup reentry guidance for Gemini VIII and up,” November 19, 1965
12. “Pre-Launch Transportation Requirements for Support of the Gemini VIII Flight Crew Activities,” undated
13. “McDonnell Print No. 52-87155: Schematic of Gemini Capsule, Bottom View Seat Assembly,” undated. See Gemini Oversized Materials Box 18, Folder 7

Folder

4. Gemini Program – Mission Planning – (Arranged by Mr. Armstrong in plain brown binder with [defaced label]) Memos regarding mission planning, briefings/debriefings; includes review of operational designs and a “DRAFT” of the Gemini VIII Mission Overview collected together with relevant memos by Armstrong (folder 3 of 3)

Item

1. “Guidance Failure Starting at Guidance Initiate (T+2:47.5) Giving a Constant Pitch Rate of 2°/sec.” undated

2. "Gemini Strength Note #31: Model 133P Analysis of Separations in Ablative Layer of Spacecraft Ablation Shield"
3. "Operational and Experimental GFAE/CFE equipment status No. 12," March 8, 1966
4. "Gemini Orbit Chart GOC-5 (GT-5)," undated. See Flat Files Drawer 3 Flight and Space Exploration Archives
5. "Design Certification Review," February 7, 1966
6. "Contract NAS 9-170, Review of Contractor Actions relative to Spacecraft Acceptance Review, Phase I, Spacecraft 8," January 31, 1966
7. "ATM Operational Procedures," November 9, 1965
8. "[DRAFT] A-8.0 Gemini Mission Eight (Gemini VIII)," undated
9. "Mission Panning for Gemini VI through XII," October 1, 1965
10. "Project Gemini, Aerodynamic Information Note Number 124, GT-5 Astronaut Abort Procedures," July 20, 1965
11. "Retrofire Attitude for Gemini VI and Gemini VII," September 9, 1965
12. "Retrofire Attitude," April 27, 1965

Folder

5. Gemini Program – Mission Planning – Internal Notes

Item

1. Internal Note # 65-FM-93 "Proposed Re-rendezvous Exercise for a Gemini-Agena Rendezvous Mission," July 12, 1965
2. Internal Note # 65-FM-155 "Preliminary Mission Profile for Gemini VIII," November 22, 1965
3. Internal Note # 66-FM-8 "Orbital and Rendezvous Report for Gemini VIII," February 8, 1966 (2 copies)

Folder

6. Gemini Program – Mission Planning – Internal Notes

Item

1. Internal Note # 66-FM-11 "Preflight Gemini VIII Reentry Report," February 4, 1966
2. Internal Note # 66-FM-13 "Recommended Gemini VIII Reentry Guidance, Monitoring and Backup Control Procedures," February 7, 1966
3. Internal Note # 66-FM-25 "Supplementary Launch Abort Trajectory Data for the Gemini VIII Launch," March 3, 1966
4. Internal Note # 66-FM-31 "Effect of Gemini VIII Constant Platform Torquing Rate on Velocity Requirements for Terminal Phase," March 14, 1966

Folder

7. Gemini Program – Communications – "Launch test Directive Gt-8," January 12, 1966

**Box 14** *Gemini Program – Mission Planning [Gemini VIII, Systems, Blue List, CCB], 1964-1966*

Folder

1. Gemini Program – Mission Planning – [CCB] Memos from Gemini Configuration Control Board (CCB) regarding equipment changes necessary for upcoming Gemini Mission, March-July, 1965 (folder 1 of 3)
2. Gemini Program – Mission Planning – [CCB] Memos from Gemini Configuration Control Board (CCB) regarding equipment changes necessary for upcoming Gemini Mission. August-December 1965 (folder 2 of 3)
3. Gemini Program – Mission Planning – [CCB] Memos from Gemini Configuration Control Board (CCB) regarding equipment changes necessary for upcoming Gemini Mission. January-March, 1966 (folder 3 of 3)
4. Gemini Program – Mission Planning – [Blue List Add.] Addendums updating the status of Gemini equipment in development, Add. No. 4-57 w/ related memos, several documents have hand written notations. October-December 1965
5. Gemini Program – Mission Planning – (Loose Papers from magazine sleeve [Gemini VIII, Systems, Blue List, CCB])

Item

1. SAR Phase II Spacecraft Acceptance Reviews, recommending action and justifying to contractors designing Gemini Spacecraft and equipment, Nos. 0802-1 to 0802-44, 1965-1966

Folder

6. Gemini Program – Mission Planning – (Loose Papers from magazine sleeve [Gemini VIII, Systems, Blue List, CCB])

Item

1. "S/C 11, Power System Review," circa 1966
2. "S/C 11 Fuel Cell Power Briefing," August 4, 1966
3. "Astronaut Briefing: Environmental Control System, GTA-11"
4. "Communications Briefing for GT-11," August 1, 1966
5. "TDA Antenna Switching Logic," undated
6. "Astronaut Briefing: Propulsion, GTA-11," August 4 1966
7. "McDonnell Aircraft Corp. Guidance and Control Mechanics Gemini Design Note No. 394, The Gemini XI Re-entry Monitoring and Control Procedure," August 18, 1966
8. "S/C 11 Second Fuel Cell Power Briefing," September 2, 1966
11. "SC1 Constellation Chart, Equatorial Region – Epoch 1925," with orbit plotting and color-coded notation by hand, 1961; see Gemini Oversized Materials, Box 18 Folder 8
12. NASA Photo S-65-20742, see Series 16. Photographs, Subseries 2. Gemini, Boxes 429-430

Folder

7. Gemini Program – Mission Planning – "Nuclear Rockets Based on

Graphite Reactor Technology: Their Application and Development Status,"  
September 28, 1964

8. Gemini Program – Mission Planning – “Argentine Space Research Program – Investigaciones Especiales Argentina Space Research,” 1966

**Box 15** *Gemini Program – Mission Planning/Execution, 1965-1966*

Folder

1. Gemini Program – Mission Planning/Execution – “Gemini Agena Target Operational Capability Handbook,” May 1, 1965
2. Gemini Program – Mission Planning/Execution – “Gemini Agena Operations Handbook, Vehicle 5003,” January 21 1966
3. Gemini Program – Mission Planning/Execution – “Gemini Operations Handbook, Spacecraft 8, Rev. A, Section II: Controls and Displays, February 11, 1966”

**Box 16** *Gemini Program – Mission Planning/Execution, 1963-1966*

Folder

1. Gemini Program – Mission Planning/Execution  
Item
  1. “Titan II Propulsion Handbook,” March 1963
  2. “Gemini Propulsion Handbook,” Personalized “N. A. Armstrong” December 1963

Folder

2. Gemini Program – Mission Planning/Execution – “Part No. CF55019: Check List & Log,” [Back-up], circa 1966
3. Gemini Program – Mission Planning/Execution – “Part No. CF55019: Flight Plan,” [Back-up], circa 1966
4. Gemini Program – Mission Planning/Execution – “)( VIII Systems, Part No. CF55019: Systems Data Handbook,” [Prime], circa 1966
5. Gemini Program – Mission Planning/Execution – “Part No. CF55019: Rendezvous,” [Backup], circa 1966

**Box 17** *Gemini Program – Mission Planning/Execution, 1966*

Folder

1. Gemini Program – Mission Planning/Execution – “GT-11, Procedures, 8-15-66,” circa 1966
2. Gemini Program – Mission Planning/Execution – “[XI] Part No. CF55019: Systems, 8-25-66”
3. Gemini Program – Mission Planning/Execution  
Item

1. "GT-11 Soft Suit EVA, 9-1-66"
2. "GT-11 Hard Suit EVA, 9-1-66"

Folder

4. Gemini Program – Mission Planning/Execution – Orbit Chart, mounted on cardboard w/ handwritten notations, undated

**Box 18** *Gemini Program – Mission Planning/Execution, 1965-1966*

Folder

1. Gemini Program – Mission Planning/Execution

Item

1. "Final Gemini VI Flight Plan, November 15, 1965"
2. "Final Gemini VII Flight Plan, November 15, 1965"

Folder

2. Gemini Program – Mission Planning/Execution – "Final Gemini IX-A Flight Plan, May 21, 1966"
3. Gemini Program – Mission Planning/Execution – "Final Gemini X Flight Plan, June 22, 1966"
4. Gemini Program – Mission Planning/Execution

Item

1. "Final Gemini XI Flight Plan, August 19, 1966"
2. "Preliminary Gemini XII Flight Plan, September 1, 1966"

**Box 18a** *Gemini Program – Oversized Materials, 1965-1966*

\*See Sub-subseries 3. Gemini Oversized Materials, 1965-1966 below.

**Box 19** *Gemini Program – Mission Execution – Gemini Kits, 1966*

Tray

1. Gemini Artifacts – Gemini Kit – 1'x1' Plastic Bag

Item

1. Bag containing misc. nuts, bolts, washers, 8"x8"
2. Checklist for dock, release, and walk-around
3. Chewing Gum, 3"x3"
4. "ESP" booklet, 3½"x10½"
5. "GOH [Gemini Operations Handbook] Jr." Handmade booklet
6. Motion sickness pills, two (2) packages (empty) 1"x1"
7. Orbital Chart w/ hand-drawn weather forecast, 32½"x10½"
8. Rubber Washer, 3cm diameter
9. "Skin Cleaning Towel," 3"x3"
10. "Toasted Breadcrumbs," 3½"x5"
11. Toothbrush, in opened packaging, 1"x7"

Tray

2. Gemini Artifacts – Gemini Kit – 1'x1' Plastic Bag
  - Item
  - 1. Gemini Mission patches, two (2, one slightly faded)
  - 2. Mercator Celestial Display, 7"x11"
  - 3. Polar Celestial Display, 9½" diameter
  - 4. United States flag, 8"x11"
  - 5. United States flag mounted on cardboard with photo of Agena in orbit as seen from the window of the Gemini 8 capsule, 8½"x11"
  - 6. United States flags, flown in space, interleaved with tissues paper, 2 per page, fifteen (15) small (3"x5")

Tray

3. Gemini Artifacts – Gemini Kit – 1'x1' Plastic Bag
  - Item
  - 1. Burn calculation/time card?
  - 2. Event timer chart 4½"x9"
  - 3. Gemini Celestial Display devices, two (2), 7"x11"
  - 4. "Gemini Mission Chart (GMC) 8" 32"x11" (loose, not in bag)
  - 5. Polar Celestial Display, 9½" diameter

**Box 20** *Gemini Program – Results, 1962-1969*

Folder

1. Gemini Program – Results – "Reference Notes on Communications Systems," November 1962
2. Gemini Program – Results – "Mission Commentary," Transcript, tapes 1-40, March 16, 1966 (folder 1 of 2)
3. Gemini Program – Results – "Mission Commentary," Transcript, tapes 41-71, March 16, 1966 (folder 2 of 2)
4. Gemini Program – Results – "Gemini Voice Communications (Air-to-ground, Ground-to-air, and On-board Transcription)," circa March 1966
5. Gemini Program – Results – "Gemini 8 Pilot's Report, Houston, TX, March 26, 1966"
6. Gemini Program – Results – "Comment Draft: Chapter (16) of Gemini Narrative History: Trials of Agena and Gemini VIII," September 22, 1969

**Box 21** *Gemini Program – Results, 1966*

Folder

1. Gemini Program – Results – Memos regarding experimental parameters, May-July 1966
2. Gemini Program – Results – [Exp - Intro]
  - Item
  - 1. "Experiment D-15, 'Night Image Intensification'," circa 1966
  - 2. "Experiment D-16, 'Power Tool Evaluation'," circa 1966

3. "Experiment MSC-5 – "Ultraviolet Reflectivity of the Lunar Surface'," circa 1966
4. "Experiment M-5, 'Bioassays of Body Fluids'," circa 1966
5. "Experiment S-4, 'Radiation and Zero G Effects on Blood'," circa 1966
6. "Experiment S-9, Investigation of Cosmic Radiation using Nuclear Emulsion," circa 1966
7. "Experiment S-11, 'Airflow Horizon Photography'," circa 1966
8. "Experiment S-13, 'Ultraviolet Astronomical Camera'," circa 1966
9. "Experiment S-26, 'Ion Wake Measurement'," circa 1966

Folder

3. Gemini Program – Results – [D-15 Night Image Intens.] Collection of materials related to experiment D-1, circa 1966
4. Gemini Program – Results – [D-16 Power Tool Eval] Collection of materials related to experiment D-1, circa 1966
5. Gemini Program – Results – [MSC-5 Lunar U/V Spect Refl] Collection of materials related to experiment MSC-5, circa 1966
6. Gemini Program – Results – [M-5 Bioassays Body Fluids] Collection of materials related to experiment M-5, circa 1966
7. Gemini Program – Results – [S-4 Rad & Zero G on Blood] Collection of materials related to experiment S-4, circa 1966
8. Gemini Program – Results – [S-9 Nuclear Emulsion] Collection of materials related to experiment S-9, circa 1966
9. Gemini Program – Results – [S-11 Airglow Horizon Photo] Collection of materials related to experiment S-11, circa 1966
10. Gemini Program – Results – [S-13 U/V Astronomical Cam.] Collection of materials related to experiment S-13, circa 1966
11. Gemini Program – Results – [S-26 Ion Wake Meas.] Collection of materials related to experiment S-26, circa 1966
12. Gemini Program – Results – [D-3 Mass Determination] Collection of materials related to experiment D-3, circa 1966
13. Gemini Program – Results – [S-29 Libration Regions Photo] Collection of materials related to experiment S-29, circa 1966
14. Gemini Program – Results – [S-30 Dim Sky Photo/Orthicon] Collection of materials related to experiment S-30, circa 1966
15. Gemini Program – Results – [S-28] Collection of materials related to experiment S-28, circa 1966

**Box 22** *Gemini Program – Results, 1965-1967*

Folder

1. Gemini Program – Results – "Manned Space Flight Experiments Symposium, Gemini III and IV," October 18-19, 1965
2. Gemini Program – Results – "Manned Space Flight Experiments Interim Report, Gemini V Mission," January 6, 1966

3. Gemini Program – Results – “Gemini Mid-program Conference Including Experiment Results,” February 23-25, 1966
4. Gemini Program – Results – “Gemini Summary Conference,” February 1-2, 1967 (2 copies)
5. Gemini Program – Results – “Gemini Rendezvous Summary,” MSC Internal Note No. 67-FM-128, November 1, 1967

**Box 23** *Gemini Program – Results/Public Relations, 1966-1969*

Folder

1. Gemini Program – Results – “Earth Photographs from Gemini III, IV, and V,” NASA publication, 1967
2. Gemini Program – Results – “NASA Interim Report, Manned Space Flights Experiments, Gemini XI Mission, September 12-15, 1966,” May 1967.
3. Gemini Program – Results

Item

1. “Scientific Studies on the Moon,” Westinghouse Engineer article, May 1967
2. “A Concept for Space Flight Safety,” April 1967
3. “Anti-Gravity Power: Aerospace Propulsion System of the Future,” circa 1968

Folder

4. Gemini Program – Results – “NASA Contractor Report CR-1106, Project Gemini: A Technical Summary,” June 1968
5. Gemini Program – Results – “Project Gemini: A Chronology,” circa 1969
6. Gemini Program – Public Relations – “Gemini VIII Press Kit,” March 11, 1966
7. Gemini Program – Public Relations

Item

1. “Latin American Tour with Astronauts Armstrong and Gordon, Oct. 7-31, 1966”
2. “Fact Sheet 291-E, April 1966, Gemini VIII: Rendezvous and Docking Mission,” NASA Manned Space Center fact sheet, circa April 1966
3. Publicity photos of Gemini VIII crews, prime and back-up (4 photos), circa 1966

Folder

8. Gemini Program – Public Relations – “Gemini: Learning to Live in Space – Special Report,” December 23, 1966
9. Gemini Program – Public Relations – “Hasselblad,” publication by the manufacturer about the cameras used in Gemini, circa 1966 (water-damaged)
10. Gemini Program – Public Relations – Speeches delivered by NASA astronauts other than Armstrong, circa 1966
11. Gemini Program – Public Relations – “Gemini Spacecraft,” NASA-

McDonnell joint publication, undated

**Box 24** *Gemini Program – Public Relations, 1967*

Folder

1. Gemini Program – Public Relations – “Gemini Titan II Air Force Launch Vehicle Press Handbook,” Final revision February 2, 1967

**Box 25** *Gemini Program – Public Relations, 2005*

Folder

1. Gemini Program – Public Relations – “Gemini Photo Catalogue,” circa 2005

**Sub-subseries 3. Oversized Materials, 1965-1966.** The Gemini oversized materials consist mainly of diagrams and schematics of the various Gemini spacecraft systems, particularly those essential to the execution of Gemini VIII. Also housed here are studies of the effects of jet plumes on extravehicular astronauts, and orbital charts used to plan various Gemini missions, along with three draft drawings of the mission patch.

**18a** *Gemini Program – Oversized Materials, 1965-1966*

Folder

1. Gemini Program – Oversized Materials

Item

1. Figure 12 – “Gemini VIII Launch Abort Areas and Recommended Ship and Aircraft Deployment,” circa 1966
2. Map – “Gemini VIII Recovery Aircraft Staging Bases,” circa 1966
3. Map – “Recovery Zone Ship Support,” circa 1966

Folder

2. Gemini Program – Oversized Materials

Item

1. Gemini Computer System Schematic, circa 1966
2. “Gemini Fourth Systems Math Flow Diagram: Change Record,” circa 1966
3. “Gemini Fourth Systems Math Flow Diagram: DAS Quantities from Computer Memory,” (2 copies), circa 1966
4. “Gemini Fourth Systems Math Flow Diagram: Touchdown Predict Flight Constants,” circa 1966
5. “Gemini Fourth Systems Math Flow Diagram: Re-entry Flight Constants,” circa 1966
6. “Gemini Fourth Systems Math Flow Diagram: Rendezvous Flight

- Constants," circa 1966
- 7. "Gemini Fourth Systems Math Flow Diagram: Ascent Flight Constants," circa 1966
- 8. "Gemini Fourth Systems Math Flow Diagram: Touchdown Predict and re-entry," (3 copies), circa 1966
- 9. "Gemini Fourth Systems Math Flow Diagram: Rendezvous," (3 copies), circa 1966
- 10. "Gemini Fourth Systems Math Flow Diagram: Ascent," (2 copies), circa 1966
- 11. "Gemini Fourth Systems Math Flow Diagram: DCS/MDIU Format," (2 copies), circa 1966
- 12. "Gemini Fourth Systems Math Flow Diagram: Executor," (2 copies, 1 w/ handwritten notes), circa 1966

Folder

3. Gemini Program – Oversized Materials

Item

- 1. "Figure 1: Effect of Orbital Mechanics on Extravehicular Trajectories in the Orbital Plane," circa 1966
- 2. Figures 1-3 of ranges for 85-, 100-, and 25-pound O.A.M.S. jet plumes (3 sheets), circa 1965
- 3. Fig. 5 showing effects of jet plumes on an extravehicular astronaut at various ranges, circa 1965

Folder

4. Gemini Program – Oversized Materials

Item

- 1. "ATM Read Program Block Diagram," November 8, 1965
- 2. "Table 3.1.2-1: ATM Auto Mode (Repro and/or Verify)," November 8, 1965
- 3. "Table 3.1.2-1 (Continued)," November 8, 1965
- 4. "Table 3.1.2-2: ATM manual Reprogram Mode Indication," November 8, 1965

5. Gemini Program – Oversized Materials

Item

- 1. Draft drawings (3) of patch for Armstrong/Scott Gemini VIII Mission, 1966

**Note:** Official NASA Gemini equipment photos are part of Series 16. Photographs, Subseries 2. Gemini, Boxes 429-430

**Sub-series 5. Apollo Program, 1961-1977**

**Personal and Working Files**

(22.8 cubic ft.)

**Sub-series Description:** The Apollo subseries contains a high volume of diverse materials. It houses both personal papers consisting of congratulatory correspondences from friends, family, and NASA colleagues together with newspaper clippings collected by Neil Armstrong in the years following the success of the lunar landing mission as well as the working files used by Armstrong in the years of planning and during the Apollo 11 mission.

The guiding principle in the organization of the working files is to maintain the organizational pattern used by Armstrong himself. However, this pattern was a suggestive one as the sheer volume of materials generated by the Apollo program itself led Armstrong to group large amounts of related materials together under general headings without these headings having any discernible internal organization. Though the materials falling under any one of Armstrong's headings are all clearly related, he himself did not seek to impose any specific organizational pattern on them, and thus there are materials of different varieties from a wide range of dates found under any given heading. All of Armstrong's general subject headings have been retained and the materials he had grouped under these headings remains intact. Heading titles used by Armstrong are indicated by enclosure in [brackets]. However, a structure has been imposed on these materials in two ways.

First, the Apollo materials were housed by Armstrong in different locations, and therefore there was no clear meta-structure of all Apollo related material. One has been imposed here in the following way. When Apollo material was found in a particular location, these materials proved to be related. Armstrong himself had used a large number of general headings to organize his papers, and these headings themselves fell into 6 categories: Systems, consisting of technical documents generally describing the equipment and procedures necessary for the success of the Apollo Program missions, the lunar landing in particular; Training, which consists of memos, reports, and technical documents relating to the training procedures and equipment necessary to prepare the astronauts for the Apollo program missions; Mission Planning consisting of memos, reports, and technical documents detailing the specific steps undertaken in the execution of the Apollo program missions, especially Apollo 11; Results, consisting largely but not exclusively of reports and conference summaries detailing the successes of the Apollo program and the findings of experiments associated with Apollo, in particular the advances in Moon science stemming from Apollo 11; Public Relations, consisting of documents expressly intended for public relations and instructions for how NASA representatives should handle information with the press; and finally, Subject Files, which contain various smaller files labeled by Armstrong and were not housed by him under any general heading.

The second way in which order was imposed upon the collection, aside from the grouping of Armstrong's numerous general headings under larger categories, was the ordering of Armstrong's headings themselves. For the sake of simplicity, these headings have been placed in alphabetical order within their respective categories.

In many cases, it was necessary to move oversized items from their original context for preservation purposes. Any time an item was moved, researchers will find separation sheets documenting the change and cross-references within the finding aid to the Apollo artifacts, oversized, and photo subseries respectively.

**Box 26** *Apollo Program – Correspondence, 1966-1971*

Folder

1. Apollo Program – Personal Correspondence – Correspondence with NASA colleagues, some of are a congratulatory nature. Also contains letters suggesting Armstrong accept an administrative position within NASA after fulfilling his duties as astronaut, circa 1966-1970
2. Apollo Program – Personal Correspondence – [Correspondence] July 2, 1969-June 23, 1971 (folder 1 of 2)
3. Apollo Program – Personal Correspondence –[Correspondence], includes lunar surface activities letter from George M. Low, January 10-June 27, 1969, (folder 2 of 2)
4. Apollo Program – Personal Correspondence – Congratulatory telegrams on the Apollo 11 mission, circa 1969 (folder 1 of 2)
5. Apollo Program – Personal Correspondence – Congratulatory telegrams on the Apollo 11 mission, circa 1969 (folder 2 of 2)
6. Apollo Program – Personal Correspondence – Commemorative note from Capt. C. J. Seiberlich, Commander of the USS Hornet, recovery vessel for Apollo 11, envelope signed by Richard Nixon
7. Apollo Program – Personal Correspondence – Letter from Governor Frank L. Farrar of South Dakota congratulating Armstrong on Apollo 11 and inviting him pheasant hunting, July 19, 1969
8. Apollo Program – Personal Correspondence – Letter from Captain C. J. Seiberlich, Commanding Officer USS Hornet, with 3 Apollo 11 recovery mission patches, August 6, 1969
9. Apollo Program – Personal Correspondence – “Congressional Record Vol. 115 No. 121” July 21, 1969
10. Apollo Program – Personal Correspondence – From the Congressional Record, reading of commemorative poems on the occasion of Apollo 11 by Mr. Brown of Ohio, September 3, 1969
11. Apollo Program – Personal Correspondence – Letter from Captain C. J. Seiberlich, Commander of USS Hornet, commemorating the Apollo 12 recovery mission, November 24, 1969
12. Apollo Program – Personal Correspondence – “Welcome Aboard the USS Hornet CVS-12,” with 2 Apollo 11 recovery mission patches, circa 1970
13. Apollo Program – Personal Correspondence – Invitation to the presentation of the Commander Naval Air Force, United States Pacific Fleet, Battle Efficiency Pennant to the USS Hornet CVS-12, circa 1970
14. Apollo Program – Personal Correspondence – NASA biographical information on Neil A. Armstrong, undated

15. Apollo Program – Personal Correspondence – Fan mail, invitations, and thank-yous from Armstrong, circa 1969
16. Apollo Program – Personal Correspondence – [Janet Armstrong 1969] Letters and Telegrams to Janet Armstrong wishing her well during the Apollo 11 mission and immediately after, June 13, 1969-February 8, 1970 (folder 1 of 3)
17. Apollo Program – Personal Correspondence – [Janet Armstrong 1969] Poem with a short note to Janet Armstrong from Janet R. Banse, circa 1969 (folder 2 of 3)
18. Apollo Program – Personal Correspondence – [Janet Armstrong 1969] Correspondence and photos to Janet Armstrong from Dorothea C. Rovito; contains children's stories about space by Ms. Rovito, circa 1969 (folder 3 of 3)
19. Apollo Program – Personal Correspondence – Congratulatory letters to Mr. Armstrong and Mrs. Janet Armstrong from various labor unions, circa 1969

**Box 27** *Apollo Program – Correspondence, 1969-1998*

Folder

1. Apollo Program – Personal Correspondence – memo from Ohio Department of Mental Hygiene and Corrections informing employees that Monday, July 21, 1969 was declared a holiday by Governor Rhodes, July 17, 1969
2. Apollo Program – Personal Correspondence – Correspondence from Brigadier General Samuel Goodwin and Hans Kettner sending congratulatory gifts on the occasion of Apollo 11, August 18, 1969
3. Apollo Program – Personal Correspondence – List of names at US Embassy in Venezuela, likely used to send “thank you” notes following a trip by Armstrong, undated
4. Apollo Program – Personal Correspondence – [Mail] Apollo related correspondence, circa 1969-1970
5. Apollo Program – Personal Correspondence – [Neil Armstrong] Apollo 11 pre- and post-mission telegraphs, circa 1969
6. Apollo Program – Personal Correspondence – Scrapbook made by Sirintorn School in Thailand as a gift for Armstrong after Apollo 11, with unrelated correspondence in front cover, circa 1969
7. Apollo Program – Personal Correspondence – Scrapbook of newspaper clippings about Apollo 11 activities, circa 1969
8. Apollo Program – Personal Correspondence – Copies of scheduling charts for phases of Lunar Module development at the Grumman Corporation Originals circa 1962, copies preserved here are undated
9. Apollo Program – Personal Correspondence – Photocopies of the lists of music taken aboard Apollo 11. Sent to Armstrong by Michael Kapp, November 1998
10. Apollo Program – Personal Correspondence – Partial transcript of the re-

entry phase of an unidentified Apollo mission, undated

**Sub-sub-series 1. Systems:** The Systems files within the Apollo working files contain a series of technical documents that detail the design, operational procedures, and functional capabilities of all spacecraft and equipment utilized in the Apollo program. These include the Saturn V rocket, the Block II Command and Service Modules (CSM), and the Lunar Module (LM). Included here are blueprints, diagrams, handbooks, and manuals, as well as a collection of memos and working documents arranged by Neil Armstrong himself. Effort has been taken to preserve Armstrong's arrangement when at all possible and the materials listed with headings in [brackets] remain as Mr. Armstrong had stored them. Materials at the very end of the sub-subseries were not originally stored with the other systems related materials, but are clearly systems related and have therefore been placed there by the archives.

**Box 28** *Apollo Program – Systems, 1966-1970*

Folder

1. Apollo Program – Working Files – Systems [Apollo]

Item

1. "Apollo Operations Handbook, Extravehicular Mobility Unit, Vol. 1," Rev. III, March 1970

Folder

2. Apollo Program – Working Files – Systems [Apollo]

Item

1. "Design Reference Mission IIA, Apollo Mission Planning Task Force, Vo. III Spacecraft Flight Sequence of Operations," Oct 30, 1966

Folder

3. Apollo Program – Working Files – Systems [Apollo]

Item

1. "Design Reference Mission IIA, Apollo Mission Planning Task Force, Appendices to Vol. I," October 30, 1966

Folder

4. Apollo Program – Working Files – Systems [Apollo]

Item

1. "Environmental Factors Involved in the Choice of Lunar Operations Dates and the Choice of Lunar Landing Sites," undated

**Box 29** *Apollo Program – Systems, 1962-1969*

Folder

1. Apollo Program – Working Files – Systems [Apollo]

Item

1. "Lunar Mission Modular Data Book (Updated Issue)," February 15, 1967

Folder

2. Apollo Program – Working Files – Systems [Apollo]

Item

1. "Space Photography – A Review," undated
2. "A Review of the Photography of the Earth from Sounding Rockets and Satellites," August 1964
3. Photo #225, undated
4. "Apollo Mission G-1 Lunar Landing Phase Photographic Operations Plan," March 10, 1969
5. "Preliminary Photographic Operations Plan, Apollo 11 Command Module, Experiments Section Mission Operations Branch Flight Crew Support Division," February 24, 1969

Folder

3. Apollo Program – Working Files – Systems [Apollo]

Item

1. "NASA Historical Report No. 6 – Historical Origins of NASA (Rev.)," October 4, 1962

Folder

4. Apollo Program – Working Files – Systems [Apollo]

Item

1. "SA-8 Technical Information Summary," May 10, 1965
2. "SA-9 Technical Information Summary," February 1, 1965
3. "SA-10 Technical Information Summary," July 16, 1965

Folder

5. Apollo Program – Working Files – Systems [Apollo]

Item

1. "AS-201 Technical Information Summary," January 17, 1966
2. "AS-202 Technical Information Summary," August 5, 1966
3. "AS-203 Technical Information Summary," June 14, 1966

**Box 30** *Apollo Program – Systems, 1968-1969*

Folder

1. Apollo Program – Working Files – Systems [Apollo – CSM Systems]

Item

1. "Apollo CSM Logistics Training, Apollo Operations Handbook, Subsection 2.9, Sequential Systems," May 1, 1969
2. "Apollo Training, Sequential Systems (EDA, SECS, LES, ELS), Course No. A-318, Handout No. 1," February 15, 1969
3. "Apollo Training, Structures and Mechanical Subsystems, No. A-512S," January 13, 1969

Folder

2. Apollo Program – Working Files – Systems [Apollo – CSM Systems]

Item

1. "Apollo Training, Telecommunications Systems Block II," January 1, 1969
2. "CSM Logistics Training, Apollo CSM Distribution Diagrams," April 2, 1969

Folder

3. Apollo Program – Working Files – Systems [Apollo – CSM Systems]

Item

1. "Apollo Training, Block II CSM Propulsion Subsystem," June 12, 1968

**Box 31** *Apollo Program – Systems, 1965-1969*

Folder

1. Apollo Program – Working Files – Systems [Apollo – Hardware]

Item

1. "Apollo Block II, ECS Components," March 1968, personalized with inscription: "N. A. Armstrong"

Folder

2. Apollo Program – Working Files – Systems [Apollo – Hardware]

Item

1. "Apollo Training, Environmental Control System, Block II," December 15, 1968

Folder

3. Apollo Program – Working Files – Systems [Apollo – Hardware]

Item

1. "Apollo 11 Flight Readiness Review," June 1969.

Folder

4. Apollo Program – Working Files – Systems [Apollo – Hardware]

Item

1. "LEM Electrical System and Fuel Cells," 1965-1966

Folder

5. Apollo Program – Working Files – Systems [Apollo – Hardware]

Item

1. "Internal Note No. CF-R-69-23: LM Rendezvous Procedures, G Mission, Final Rev. A," June 20, 1969

Folder

6. Apollo Program – Working Files – Systems [Apollo – Hardware]

Item

1. "S/C 107 Flight Stowage and Onboard Stowed Equipment Record," July 16, 1969
2. "LM-5 and Onboard Stowed Equipment Record," July 16, 1969
3. "Loss of LMP Bus," June 4, 1969
4. "EVC5 Modes of Operation," undated
5. "Description of the Landing Radar for the Apollo Lunar Module, Ryan aeronautical Company," Nov. 10, 1966

6. "NASA Manned Spacecraft Center, Minutes of Meeting LM-5 Flight Readiness Review Board," June 23, 1969

Folder

7. Apollo Program – Working Files – Systems [Apollo – Hardware]

Item

1. "Significant Landing Radar Parameters – LM5," April 1969

Folder

8. Apollo Program – Working Files – Systems [Apollo – Hardware]

Item

1. "Spacecraft 107, Crew Data Record," January 1969

**Box 32** *Apollo Program – Systems, 1965-1969*

Folder

1. Apollo Program – Working Files – Systems [Apollo – Hardware]

Item

1. "Apollo Operations Handbook, Extravehicular Mobility Unit, Vol. I, System Description, CSD-A-789-(1)," May 1969 Rev.
2. "Apollo Operations Handbook, Extravehicular Mobility Unit, Vol. I, System Description, CSD-A-789-(1), Missions 13 Through 15," March 1970 Rev. III
3. "Results of Manual Thrust Vector Control Study a Minneapolis-Honeywell, April 13-16, 1965," April 21, 1965

Folder

2. Apollo Program – Working Files – Systems [Apollo – Hardware]

Item

1. "Apollo Spacecraft Familiarization, NASA Support Manual," December 1965

Folder

3. Apollo Program – Working Files – Systems [Apollo – Hardware]

Item

1. [EMU History] (folder 1 of 2) – materials related to the development of the Extra-Vehicular Mobility Unit (EMU), circa 1965-1969

Folder

4. Apollo Program – Working Files – Systems [Apollo – Hardware]

Item

1. [EMU History] (folder 2 of 2) – materials related to the development of the Extra-Vehicular Mobility Unit (EMU), circa 1965-1969

Folder

5. Apollo Program – Working Files – Systems [Apollo – Hardware]

Item

1. Flight System Familiarization Manual (Rev. A)," August 1, 1968

Folder

6. Apollo Program – Working Files – Systems [Apollo – Hardware]

Item

1. "LM-5 Phase III, CARR Minutes," January 23, 1969

**Box 33** *Apollo Program – Systems, 1966-1969*

Folder

1. Apollo Program – Working Files – Systems [Apollo – LM Systems]

Item

1. "Abort Guidance Section Study Guide, Lunar Module LM-5 & Subsequent," May 1969
2. "DEDA Outputs/(Lunar Missions) DEDA Inputs," January 1969
3. "Lunar module Communications Subsystems, Crew Briefing" undated
4. "FP-5 DEDA Location Switch Function/DEDA Inputs/ DEDA Outputs," undated
5. "DEDA Utilization," undated

Folder

2. Apollo Program – Working Files – Systems [Apollo – LM Systems]

Item

1. "Communications Subsystem Study Guide, Lunar Module LM-5 & Sub," April 1969

Folder

3. Apollo Program – Working Files – Systems [Apollo – LM Systems]

Item

1. "Internal Note No. 66-FM-152: Limitations of LM S-Band Communications for Powered Descent and Ascent for a Typical Year," December 23, 1966
2. "LM Guidance Computer (LGC) display of S-band antenna pointing angles for AS-504," February 8, 1967
3. "Lunar Module Communications Subsystem, Crew Briefing," circa 1969
4. "Grumman Aircraft Engineering Corp. LEM Memorandum, LMO-480-317A," September 21, 1966
5. "EVA communications requirements," February 27, 1967 memo signed by Armstrong
6. "Minutes, EVA Communications Requirements," February 28, 1967

Folder

4. Apollo Program – Working Files – Systems [Apollo – LM Systems]

Item

1. "Propulsion & RCS Subsystem Study Guide, Lunar Module LM-4," January 1969

Folder

5. Apollo Program – Working Files – Systems [Apollo – LM Systems]

Item

1. "Radar Section Study Guide, Lunar Module LM-5," April 1969

**Box 34** *Apollo Program – Systems, 1964-1970*

Folder

1. Apollo Program – Working Files – Systems [Apollo – Nav.]

Item

1. “Apollo Guidance, Navigation and Control: Guidance, Navigation and Control Command Module Functional Description and Operating Using Flight Program Colossus IA (Rev. 249) – Rev. IV, Vol. I,” February 1969

Folder

2. Apollo Program – Working Files – Systems [Apollo – Nav.]

Item

1. “Apollo Guidance and navigation System, Equipment Familiarization Manual,” March 1, 1964

Folder

3. Apollo Program – Working Files – Systems [Apollo – Nav.]

Item

1. “Basic Objectives for LM Powered-Landing Guidance-and-Navigation System,” undated

Folder

4. Apollo Program – Working Files – Systems [Apollo – Nav.]

Item

1. “CMS ISCMC Reference Information (CSM Flight Program Colossus 2D), (Comanche Rev. 72),” January 15, 1970  
2. “LSM-ISLGC Reference Information, Luminary 131 (1C),” December 30, 1969

Folder

5. Apollo Program – Working Files – Systems [Apollo – Nav.]

Item

1. “Apollo Guidance, Navigations and Control: E-1982 LEM PGNCs and Landing Radar Operations During the Powered Lunar Landing Maneuver,” August 1966

Folder

6. Apollo Program – Working Files – Systems [Apollo – Nav.]

Item

1. “Colossus Navigation Capability Summary,” September 24, 1968  
2. “Colossus Priority Displays,” February 27, 1968  
3. “Colossus / P23,” undated  
4. “Return to Earth Program (P37) – Operation Information and Procedures,” November 8, 1968

Folder

7. Apollo Program – Working Files – Systems [Apollo – Nav.]

Item

1. “Optics,” undated  
2. “Guaranteeing Self-Contained Return-to-Entry Navigation or Get Me Home, MIT,” January 19, 1969

3. "Programmed Guidance Equations for Colossus 2, Command Module Earth Orbital and Lunar Program," May 20, 1969
4. "Spacecraft computer programs controlling DPS throttling need some changes," February 20, 1968
5. "Simulation of Powered Landing Maneuver with Current Trajectory-Targeting Parameters, DPS Model, Terrain Model, and LR Dropout Boundaries," June 14, 1968
6. "Transmittal of Change 3 to the Universal Lunar Module Systems Handbook," May 14, 1969
7. Validation of return to earth program P37 as coded in COLOSSUS (Apollo 8 version)," January 30, 1969

**Box 35** *Apollo Program – Systems, 1960-1969*

Folder

1. Apollo Program – Working Files – Systems [Apollo – Nav.]

Item

1. "FMES/FCI Data Book Update, G Mission, Vol. III-B," June 13, 1969
2. "FMES/FCI Data Book Update, G Mission, Vol. I-B," June 13, 1969

Folder

2. Apollo Program – Working Files – Systems [Apollo – Nav.]

Item

1. "Guidance, Navigation and Control, Command Module Functional Description and Operation Using Flight Program Colossus 2A (Comanche 55)," June 1969

Folder

3. Apollo Program – Working Files – Systems [Apollo – Nav.]

Item

- 1 "Alinement Optical Telescope (AOT) accuracy for lunar surface alinement," May 12, 1968
2. "An Early Users Guide to the Lunar Landing Guidance Programs," undated.
3. "Apollo Software Information Memo #12-68-24, LGC input/output channel discrettes," December 10, 1968
4. "Apollo Project Memo # 7-69: What is LUMINARY 1A?" January 30, 1969
5. "Capabilities of P37," July, 1968
6. "Change Pages for Appendix of Reference," May 5, 1969.
7. "Definitions," notes and graph explaining "guidance coordinate frame" undated
8. "Guidance, Navigation and Control Lunar Module Functional Description and Operation Using Flight Program Luminary (Rev. 069)," June 5, 1969
9. "LUMINARY Memo #80: Abnormal Exit from Landing Ignition

- Algorithm," April 24, 1969
- 10. "LUMINARY Memo #81: Landing Dependence on Platform Alignment," April 28, 1969
- 11. "Use of inflight drift measurements for G&N failure determination," August 5, 1968

Folder

- 4. Apollo Program – Working Files – Systems [Apollo – Nav.]

Item

- 1. "Navigation—From Canoes to Spaceships," April, 1960
- 2. "Instrumentation and Inertial Guidance," June, 1960

Folder

- 5. Apollo Program – Working Files – Systems [Apollo – Nav.]

Item

- 1. "Apollo Project Memo #1914: Response to Action Items from the SCB on PCN 179 and PCN 180," June 6, 1968
- 2. "Apollo Project Memo No. 1933: LM Program Items Discussed and Acted on at the 19<sup>th</sup> SCB Meeting," June 27, 1968
- 3. "Apollo Project Memo No. 1938: Colossus Highlights of SCB Meeting #9, 25 June 1968 (Dance/Luminary action is covered by G. Cherry in a separate memo)," June 28, 1968
- 4. "Apollo Project Memo #1951: Highlights of the 20<sup>th</sup> Software Configuration Control Board Meeting," July 10, 1968
- 5. "Apollo Software Information Memo 5-68-10, Weight and Inertia Updates for the COLOSSUS Program," May 28, 1968
- 6. "Apollo Software Information Memo 5-68-11, Use of SPLERROR Display (Noun 50) for Mode III no-voice aborts in P11 (Boost monitor) in SUNDISK and COLOSSUS," June 3, 1968
- 7. "Apollo Software Information Memo 5-68-12, Differences in the orbital parameter displays in P11 for SUNDISK and COLOSSUS," May 28, 1968
- 8. "Apollo Software Information Memo 5-68-13, the infamous stage verify discrete for SUNDANCE," June 5, 1968
- 9. "Apollo Software Information Memo 5-68-16, P22 downlist valid indicator (COLOSSUS)," June 11, 1968
- 10. "Apollo Software Information Memo 6-68-14, Change in operating procedures for AGS Initialization in programs SUNDANCE," June 13, 1968
- 11. "Apollo Software Information Memo 6-68-15, 'Operator error' indications in the CMC/LGC update program," June 10, 1968
- 12. "Apollo Software Information Memo 6-68-17, definition of DAPBOOLS bits for SUNDANCE," June 17, 1968
- 13. "Apollo Software Information Memo 7-68-18, Post-burn apogee and perigee calculation for P37," July 8, 1968
- 14. "Apollo Software Information memo 7-68-19, P22 downlist valid indicator (COLOSSUS)," July 10, 1968
- 15. "COLOSSUS Memo #65, Digital Simulation memo #8-68: Revision

- of COLOSSUS Digital Environment," June 18, 1968 (2 copies)
- 16. "COLOSSUS Memo #66: A Multiplier Effect While Using TLOSS During Simulations," June 19, 1968 (2 copies)
- 17. COLOSSUS Memo #71: Coasting in Average G," July 11, 1968
- 18. "COLOSSUS Memo #72: COLOSSUS Revision 221," July 18, 1968
- 19. "COLOSSUS Memo #73 Rev. 1: Behavior of the Tracker and UPLINK ACTY Lights During Rendezvous," July 30, 1968
- 20. "COLOSSUS Memo #77: COLOSSUS Program Notes at Time of FACI (8/8/69)," August 6, 1968
- 21. "COLOSSUS Program Notes," undated
- 22. "DANCE Memo #51, COLOSSUS Memo #42, LUMINARY Memo #17: AGC Time Dependent Constants," April 5, 1968
- 23. "DANCE Memo #56: Change to SUNDANCE Program and SUNDANCE FACI," April 1, 196
- 24. "DANCE Memo # 67: MIT Comments on GAEC Software Discrepancy Reports," April 15, 1968 (2 copies)
- 25. "DANCE Memo #71: Discrepancies reported by Astronauts Conrad and Schweickart at SUNDANCE FACI," April 29, 1968 (2 copies)
- 26. "DANCE Memo #76: Comparison of Radar Scale Factors in SUNDANCE and GSOP," June 18, 1968

Folder

6. Apollo Program – Working Files – Systems [Apollo – Nav.]

Item

- 1. "LM DAP manual modes evaluation," March 5, 1968
- 2. "Mission Simulation Memo # 20: Simulation of Powered Landing Maneuver with Current Trajectory-Targeting Parameters, DPS Model, Terrain Model, and LR Dropout Boundaries," July 5, 1968
- 3. "Mission Simulation Memo # 22: SUNDISK Pre-TPI Program," June 24, 1968
- 4. "Mission Simulation Memo # 25: Clarification of a Result in Mission Simulation Memo #20," June 25, 1968
- 5. "RMS Position and Velocity Error Display (PCR 173)," June 10, 1968
- 6. "Software development plan meeting at MIT on march 26," March 27, 1968
- 7. "Spacecraft Autopilot Development Memo #68-12: Limits on Engine Gimbal Servo Frequency Response Imposed by Autopilot Stability Requirements," July 29, 1968
- 8. "SUNDANCE Memo #83, LUMINARY Memo #36: Computing the Lag Angles which Prevent Beginning and Supervised DAP Maneuvers," August 9, 1968
- 9. "Sundisk program notes," January 3 1968
- 10. "Trip Report," July 15, 1968

**Box 36** *Apollo Program – Systems, 1968-1969*

Folder

1. Apollo Program – Working Files – Systems [L.O.H. A.O.H.]

Item

1. “Apollo Operations Handbook, Lunar Module 5, Vol. 1 Subsystem Data,” October 30, 1968 (folder 1 of 4)

Folder

2. Apollo Program – Working Files – Systems [L.O.H. A.O.H.]

Item

1. “Apollo Operations Handbook, Lunar Module 5, Vol. 1 Subsystem Data,” October 30, 1968 (folder 2 of 4)

Folder

3. Apollo Program – Working Files – Systems [L.O.H. A.O.H.]

Item

1. “Apollo Operations Handbook, Lunar Module 5, Vol. 1 Subsystem Data,” October 30, 1968 (folder 3 of 4)

Folder

4. Apollo Program – Working Files – Systems [L.O.H. A.O.H.]

Item

1. “Apollo Operations Handbook, Lunar Module 5, Vol. 1 Subsystem Data,” October 30, 1968 (folder 4 of 4)

Folder

5. Apollo Program – Working Files – Systems [L.O.H. A.O.H.]

Item

1. “Apollo Operations Handbook, Lunar Module 5, Vol. 2 Operational Procedures,” May 1, 1969 (folder 1 of 3)

Folder

6. Apollo Program – Working Files – Systems [L.O.H. A.O.H.]

Item

1. “Apollo Operations Handbook, Lunar Module 5, Vol. 2 Operational Procedures,” May 1, 1969 (folder 2 of 3)

Folder

7. Apollo Program – Working Files – Systems [L.O.H. A.O.H.]

Item

1. “Apollo Operations Handbook, Lunar Module 5, Vol. 2 Operational Procedures,” May 1, 1969 (folder 3 of 3)

**Box 37** *Apollo Program – Systems, June-September 1969*

Folder

1. Apollo Program – Working Files – Systems [L.O.H. A.O.H.]

Item

1. “Apollo Operations Handbook, Command and Service Modules Vol. 1 Spacecraft Description,” September 28, 1969

Folder

2. Apollo Program – Working Files – Systems [L.O.H. A.O.H.]

Item

1. “Apollo Operations Handbook, Command and Service Modules Vol. 2, Operational Procedures,” June 6, 1969

**Box 38** *Apollo Program – Systems, 1968-1969*

Folder

1. Apollo Program – Working Files – Systems [L.O.H. A.O.H.]

Item

1. “Apollo Operations Handbook Lunar Module (LM-5 and Subsequent) Vol. 2 Operational Procedures,” June 15, 1969

Folder

2. Apollo Program – Working Files – Systems [L.O.H. A.O.H.]

Item

1. “Apollo Universal Lunar Module Systems Handbook, LM-4 and Subsequent Vehicles, Change 2,” May 15, 1968

**Box 39** *Apollo Program – Systems, 1968-1970*

Folder

1. Apollo Program – Working Files – Systems [Lunar Descent]

Item

1. “Internal Note MSC-CF-R-68-20: The Effects of LM Rotational Hand Controller Scalings During Simulated Lunar Landing,” December 20, 1968
2. “Internal Note No. 67-FM-117: Proposed LM Powered-Descent Trajectory for the Apollo Lunar Landing Mission,” August 15 1967
3. “Internal Note No. 69-FM-20: Preliminary Lunar Descent Dispersion Analysis,” January 30, 1969

Folder

2. Apollo Program – Working Files – Systems [Lunar Descent]

Item

1. “An Improved LM Descent Trajectory for the G Mission – Case 310,” May 23, 1969
2. “Effects of exceeding LM RCS impingement limits,” May 26, 1969
3. “Preliminary integrated ground/onboard monitoring procedures for the powered descent maneuver,” April 23, 1969
4. “RLS Determination,” April 4, 1969
5. “RTCC display of command thrust versus horizontal velocity for lunar powered descent,” May 6, 1969

Folder

3. Apollo Program – Working Files – Systems [Lunar Descent]

Item

1. "Landing radar altitude reasonability test limits," April 7, 1969
2. "LM descent phase of the G Mission Operational Trajectory," March 6, 1969
3. "Preliminary Data from LMS/LUMINARY 1A Tests – Abort Cases," June 4, 1969
4. "Preliminary Data from LMS/LUMINARY 1A Powered Descent and landing Tests," June 4, 1969
5. "Preliminary Data from LMS/LUMINARY 1A Test No. 6 – Manual Interventions with P64-P64 Transition," May 26, 1969
6. "Preliminary Data from LMS/LUMINARY 1A Test No. 7 – Manual Interventions with P64-P64 Transition," May 29, 1969
7. "Some 'improvements' in Descent preparation procedures," May 20, 1969
8. "Use of landing radar self-test option during lunar powered descent," March 14, 1969

Folder

4. Apollo Program – Working Files – Systems [Lunar Descent]

Item

1. "Internal Note MSC-CF-P-69-16: LM Descent/Ascent Summary Document, Mission G & Subsequent, Final," June 3 1969.
2. "Lunar Descent and Ascent Trajectories," January 23, 1970
3. "LEM Descent Engine Capability Improvement, A Proposal," November 11, 1966
4. "Lunar Landing Site Selection Briefing, Compilation of Presentation Material," March 8, 1967
5. "Scaled Lunar Module Jet Erosion Experiments," April 1969
6. Flow chart depicting operational procedures for landing, undated

**Box 40** *Apollo Program – Systems, 1961-1969*

Folder

1. Apollo Program – Working Files – Systems [Saturn]

Item

1. "Launch Mission Rules, Apollo 11 (SA-506/CSM-107/LM-5)," June 11, 1969

Folder

2. Apollo Program – Working Files – Systems [Saturn]

Item

1. "Spacecraft Backup Guidance System Definition," April 1, 1969 (2 copies)

Folder

3. Apollo Program – Working Files – Systems [Saturn]

Item

1. "Apollo Emergency Egress Plans for Cplexes 34, 37, and 39,"

- Nov. 6, 1963
2. "Backup piloted guidance and control for Saturn V vehicle May 31," 1968
  3. "Crew Safety Panel Meeting, May 7, 1963," May 28, 1963
  4. "Launch vehicle implementation to continue flight after ST-124 platform failure detection," December 21, 1967
  5. "'Pogo' in the Saturn," April 16, 1964
  6. "Saturn V Platform Failure," April 30, 1968
  7. "Status of Saturn Boosters," October 16, 1963
  8. Packet of conceptual artwork for the Saturn V rocket and launch-pad, undated
  9. "Technical Information Summary Concerning SATURN I Vehicle SA-4," March 18, 1963
  10. "Titan III Program 624A Standard Launch System Characteristic Summary," circa 1965

Folder

4. Apollo Program – Working Files – Systems [Saturn]

Item

1. Drafts – "Inflight Studies of Pilot Guidance and Control Methods During the Launch of Phase of Flight Utilizing the Saturn I-B," circa 1967-1968

Folder

5. Apollo Program – Working Files – Systems [Saturn]

Item

1. "SIC manual Control Simulation," July 14, 1966 (3 copies)
2. "MSFC-ARC, Detailed Saturn V Manual Backup Control Study," undated
3. "Saturn V Flight Manual – Emergency Procedures (S-IC)," undated
4. "Pilot's Report of Participation in ASD Centrifuge Program," August 31, 1961
5. Letter to Mr. Armstrong w/ enclosure "Dyna-Soar Step I, Roll Moment Dues to Sideslip," December 8, 1961
6. "Martin Piloted Boost Simulation," October 20, 1961

Folder

6. Apollo Program – Working Files – Systems [Saturn]

Item

1. "Manned Control of Large Space Boosters," undated
2. "Minutes of the Third Meeting of the Working Panel on Manual Booster Control," June 15, 1964 (3 copies)
3. "Report to the Steering Group on Guidance and Control Research and Technology," undated
4. "Outline of Technical Approach to: System Analysis of a Piloted Control System for a Large Flexible Booster Using a Human Transfer Function Pilot Model," May 8, 1964
5. "E. Pilot Participation in Saturn V Guidance and Control." *Astronautics Research and Development Report No. 2*, circa 1964

6. "A Manual Booster Guidance Feasibility Study for the Saturn V Vehicle," undated
7. "Phase I Manual Guidance Study," undated
8. "Manual Guidance Study," undated
9. "Study on Manual Control of the Saturn V Booster," April, 1964
10. "Evaluation of Pilot's Ability to Stabilize a Flexible Launch Vehicle During First-Stage Boost," undated
11. "Statement of Work: Man/Machine Design Criteria for Reusable Launch Vehicles," March 5, 1964
12. "Utilization of the Pilot in the launch and Injection of a Multistage orbital vehicle," Neil A. Armstrong, co-author, January 1960
13. "Study on Manual Control of the Saturn V Booster," April 1964
14. Report on Saturn V manual control simulations, August 8, 1966
15. Comments on and proposal for an experiment for studying pilot control of Saturn I-B launch vehicle, December 8, 1965

Folder

7. Apollo Program – Working Files – Systems [Saturn]

Item

1. "Saturn V Flight Manual SA 506," June 12, 1969
2. "F-1 Engine Major Components," October 15, 1968

Folder

8. Apollo Program – Working Files – Systems [Saturn ]

Item

1. "Major Events of Terminal Count Sequence," undated
2. "AS-506 Trajectory Event Sequence"
3. "Boost Phase Control Switchover Implementation"
4. "Saturn V and Saturn IB cutoffs," March 25, 1968
5. "Saturn Backup Control Simulation at Boeing, Huntsville, April 11," April 10, 1969

**Box 41** *Apollo Program – Systems, 1965-1969*

Folder

1. Apollo Program – Working Files – Systems

Item

1. "Apollo Guidance Navigation and Control Lunar Module Functional Description and Operation Using Flight Program LUMINARY (Rev. 069) Vol. I," March, 1969

Folder

2. Apollo Program – Working Files – Systems

Item

1. "Interim change Bulletin: Apollo Operations Handbook Block II Spacecraft, Volume 1, Spacecraft Description," May 5, 1969

Folder

3. Apollo Program – Working Files – Systems (LUMINARY and COLOSSUS)

Item

1. "LUMINARY Memo #88: LUMINARY Anomaly #64," June 11, 1969
2. "Rationale for determining a maximum  $\Delta H$  for which the descent can be continued with a partial landing radar update," June 4, 1969
3. "LUMINARY 1A," undated
4. "COLOSSUS 2A Notes (Not a Complete Set)," undated
5. "LUMINARY 1A Notes (Not a Complete Set)," undated
6. "[COLOSSUS Program Notes, G-Mission]," undated
7. "Loss of SPS with and without communications loss on translunar coast," January 17, 1969
8. "Additional program notes for the G mission COLOSSUS 2a program," undated
9. "Some significant LUMINARY program changes you should know about," June 13, 1969

Folder

4. Apollo Program – Working Files – Systems [CM]

Item

1. "Internal Note MSC-EG-68-11: Project Apollo, Apollo CSM RCS DAP Propellant Studies," September 9, 1968
2. "CSM Operational Improvements," March 2, 1967
3. "Communications Design Panel," February 28, 1967
4. "Comparison of the Gemini and Apollo Reaction Control Systems," April 28, 1966
5. "Communications," October 1, 1968
6. "SC 103 C.O.A.S. Alignment," September 20, 1968
7. "CSM Potential operational flight problem areas," October 9, 1968
8. "High Gain Antenna (HGA) Checkout," October 9, 1968
9. "Recommendations to improve Crew Performance and eliminate Crew-Guidance Systems incompatibilities during re-entry," September 5, 1968
10. "Communications," October 1, 1968
11. "C' Communication Loss," September 25, 1968
12. "VHF Ranging, RCA, Camden, New Jersey," February 28, 1968
13. "Tools," June 15, 1967
14. "Land 'landing' versus the foldable couch; Review at Weber, June 23, 1967," June 16, 1967
15. "SCS redefinition study recommendations," July 22, 1967
16. "Summary of docking and EVA lights evaluation – NAA – 10 August 1967," August 22, 1967
17. "Status of CM docking Hardware," September 15, 1967
18. "Water Sterilization Progress Review, NAA – September 13, 1967," September 18, 1967
19. "Apollo Configuration Control Board Meeting, September 25, 1967"
20. "Obvious conclusions from the Apollo parachute qualification test," May 29, 1967
21. "Integration of the CSM-Apollo Operations Handbook Volume II into

- the Apollo CSM Operational Checkout Procedures,” April 21, 1967  
 22. “Potential CSM Problem,” July 11, 1968

Folder

5. Apollo Program – Working Files – Systems

Item

1. “Preliminary, Users’ Guide, Paragraph 6.4.5 Return-to-Earth Targeting (P37),” undated

Folder

6. Apollo Program – Working Files – Systems

Item

1. “Project Apollo Coordinate System Standards,” June 1965

**Sub-sub-series 2. Training:** The Training files contain a wide variety of materials used specifically in the astronaut training programs which led to the success of the Apollo missions. Neil Armstrong played a large role in designing both simulation training exercises and in the development of the Lunar Landing Research Vehicle (LLRV). The LLRV was a specialized training vehicle designed to train pilots how to fly and land the lunar module, and as such, presented a unique engineering problem to its development team; i.e. how to design a vehicle for non-aerodynamic flight while still constrained by earth’s gravity.

**Box 42** *Apollo Program – Training, 1956-1973*

Folder

1. Apollo Program – Working Files – Training [Academics]

Item

1. “General Information Manual, Introduction to IBM Data Processing Systems,” 1960
2. “General Information Manual, FORTRAN,” 1961
3. Graphs and charts depicting variables necessary to reentry phase of Apollo missions, undated
4. “Gyroscope Fundamentals,” May 22, 1963
5. “Reentry Lecture,” undated
6. “Space Navigation,” May 28, 1962

Folder

2. Apollo Program – Working Files – Training [Academics]

Item

1. “A.E. 515a – Aircraft Dynamics – Dr. Gene O’Hern (Autonetics)”
2. “Derivation of Equation for  $v_e$  or C,” undated
3. “Introduction to the Root Locus Method (Lecture No. 2),” June 20, 1956
4. Letter from Paul Werve detailing method for computing orbital trajectories, undated

5. "PE-1 Class Notes – Lecture 5," July 2, 1956
6. "PE-1 Class Notes –Lect. 6," July 6, 1956
7. "A Simple Passive Method for Predicting the path of a Space Ship with Respect to a Planet which it is Approaching," February 1958
8. "Slide No. 1-25," prints of slides with descriptions, undated
9. "Table I, Equations of Motion (referenced to body axis)," undated
10. "10/29 / Dave Hammack / Rocket Propulsion." Notes, undated

Folder

3. Apollo Program – Working Files – Training (Academics), Notes on Spherical Geometry by Edward A. Knobelauch, undated
4. Apollo Program – Working Files – Training [Apollo Geology]

Item

1. "Aerial Photographs in Geologic Interpretation and Mapping, Geologic Survey Professional Paper 373," 1960
2. "Ash-Flow Tuffs" Their Origin, Geologic Relations, and Identification, Geologic Survey Professional Paper 366," 1961

Folder

5. Apollo Program – Working Files – Training [Apollo Geology]

Item

1. Coursework: "Principles of Geology" (folder 1 of 4), "G-1 Soil Mechanics Investigation," January 31, 1969 with photos

Folder

6. Apollo Program – Working Files – Training [Apollo Geology]

Item

1. Coursework: "Principles of Geology," (folder 2 of 4), 1969

Folder

7. Apollo Program – Working Files – Training [Apollo Geology]

Item

1. Coursework: "Principles of Geology," (folder 3 of 4), 1969

Folder

8. Apollo Program – Working Files – Training [Apollo Geology]

Item

1. Coursework: "Principles of Geology," (folder 4 of 4), 1969

Folder

9. Apollo Program – Working Files – Training [Apollo Geology]

Item

1. "Evolution of the Earth's Crust: Evidence from Comparative Planetology," October 1973

Folder

10. Apollo Program – Working Files – Training [Apollo Geology]

Item

1. "The Geologic Evolution of the Moon," (with congratulatory note from the author) March 31, 1972

Folder

11. Apollo Program – Working Files – Training [Apollo Geology]

Item

1. Geologic Maps and Surveys of the Lunar Surface (4 photos w/descriptions, 1 negative)
2. Geologic Results: "Ranger VII Post-Impact Press Conference," July 31, 1964
3. "Geologic Map and Sections of the Letronne Region of the Moon," 1963
4. "Geologic Map and Sections of the Kepler Region of the Moon," 1962

**Box 43** *Apollo Program – Training, 1953-1974*

Folder

1. Apollo Program – Working Files – Training [Apollo Geology]

Item

1. "Geologic Results from the Lunar Pre-Cursor Probes," October 1967

Folder

2. Apollo Program – Working Files – Training [Apollo Geology]

Item

1. "Interplanetary Correlation of Geological Time – United State Department of the Interior Geological Survey," April 1961

Folder

3. Apollo Program – Working Files – Training [Apollo Geology]

Item

1. "JPL Technical Report 32-1265: III. Television Observations from Surveyor," circa 1968.

Folder

4. Apollo Program – Working Files – Training [Apollo Geology]

Item

1. "Lecture Outline – Principles of Terrestrial and Lunar Geology," May 26, 1964

Folder

5. Apollo Program – Working Files – Training [Apollo Geology]

Item

1. "Mantles of the Earth and Terrestrial Planets," 1967
2. "The Structure and Strength of the Inner Planets," 1963

Folder

6. Apollo Program – Working Files – Training [Apollo Geology]

Item

1. "On the Moon with Apollo 16," April 1972 (2 copies)
2. "On the Moon with Apollo 17," April 1972 (signed by author Gene Simmons)
3. "Apollo 11 Voice Transcript Pertaining to the Geology of the Landing Site," 1974

Folder

7. Apollo Program – Working Files – Training [Apollo Geology]  
Item  
1. “Refraction: A Discussion of the Refraction Method for Seismic Prospecting,” undated (2 copies).

Folder

8. Apollo Program – Working Files – Training [Apollo Geology]  
Item  
1. Reports: “Preliminary Examination of Lunar Samples from Apollo 11,” (draft and copy from *Science*) September 19, 1969  
2. Report: “Sample Information Summary #1,” July 29, 1969  
3. Report: “US/USSR Cooperation in Space Programs,” undated  
4. Report: “Sample Information Summary #5 – Final,” August 27, 1969  
5. Report: “Apollo 11 Geologic Transcript,” undated

Folder

9. Apollo Program – Working Files – Training [Apollo Geology]  
Item  
1. “The Scientific Value of Manned Lunar Exploration,” circa October 1965

Folder

10. Apollo Program – Working Files – Training [Apollo Geology]  
Item  
1. “Significant Results Reported at the Apollo 11 Lunar Science Conference,” January 30, 1970

Folder

11. Apollo Program – Working Files – Training [Apollo Geology]  
Item  
1. “Structures and Forms of Basaltic Rocks in Hawaii – Geological Survey Bulletin 994,” 1953

**Box 44** *Apollo Program – Training, 1963-1969*

Folder

1. Apollo Program – Working Files – Training [Apollo Simulation and Training]  
Item  
1. “CMS 2 Base Line Configuration for AS-506/CSM-107,” circa 1969

Folder

2. Apollo Program – Working Files – Training [Apollo Simulation and Training]  
Item  
1. “Internal Note No. MSC-CF-D-68-28: Mission Training Program for the Apollo Lunar Landing Mission,” December 20, 1968

Folder

3. Apollo Program – Working Files – Training [Apollo Simulation and Training]  
Item  
1. “Memorandum RM-4311-NASA: Astronaut-Crew Requirements for

Apollo In-Flight Operations," September 1964

Folder

4. Apollo Program – Working Files – Training [Apollo Simulation and Training]

Item

1. "NASA Lunar Module Visual Simulation Study, Vol. II – Lunar Module Rendezvous in Earth Orbit," February 20, 1967

Folder

5. Apollo Program – Working Files – Training [Apollo Simulation and Training]

Item

1. "Project Technical Report Task E74 CSM-107G Mission Final Data Analysis Hybrid Simulation Data," July 9, 1969

Folder

6. Apollo Program – Working Files – Training [Apollo Simulation and Training]

Item

1. "Saturn – Apollo Boost Abort Simulation Program – Briefing Package," May 1963

Folder

7. Apollo Program – Working Files – Training (Apollo Simulation)

Item

1 Simulation Exercise Schedule, undated

Folder

8. Apollo Program – Working Files – Training (Apollo Simulation)

Item

1. "Simulator Discrepancy Report: Powered Descent and PGNS Minimum Impulse Mode," May 12, 1969

Folder

9. Apollo Program – Working Files – Training (Articles)

Item

1. Articles used to train for the Apollo 11 lunar landing mission folder, circa 1963-1969 (folder 1 of 3)

Folder

10. Apollo Program – Working Files – Training (Articles)

Item

1. Articles used to train for the Apollo 11 lunar landing mission folder, circa 1963-1969 (folder 2 of 3)

Folder

11. Apollo Program – Working Files – Training (Articles)

Item

1. Articles used to train for the Apollo 11 lunar landing mission folder, circa 1963-1969 (folder 3 of 3)

**Box 45** *Apollo Program – Training, 1962-1965*

Folder

1. Apollo Program – Working Files – Training [Astronautics and Aeronautics]

- Item
  - 1. "Aeronautical and Astronautical Events of 1961," June 7, 1962
- Folder
  - 2. Apollo Program – Working Files – Training [Astronautics and Aeronautics]
    - Item
      - 1. "Aeronautical and Astronautical Events of 1961," June 12, 1963 (2 copies)
- Folder
  - 3. Apollo Program – Working Files – Training [Astronautics and Aeronautics]
    - Item
      - 1. "Astronautics and Aeronautics 1963: Chronology of Science and Technology in the Exploration of Space," 1963
- Folder
  - 4. Apollo Program – Working Files – Training [Astronautics and Aeronautics]
    - Item
      - 1. "Astronautics and Aeronautics 1965: Chronology of Science and Technology in the Exploration of Space," 1965

**Box 46** *Apollo Program – Training, 1962-1969*

- Folder
  - 1. Apollo Program – Working Files – Training [LLRV]
    - Item
      - 1. "Free Flight Lunar Landing Simulator Program – Flight Research Center – NASA" January 9, 1962
- Folder
  - 2. Apollo Program – Working Files – Training [LLRV]; [LEM Simulator], (folder 1 of 2)
    - Item
      - 1. "Aircraft Simulation of LEM Final Approach Trajectories," July 2, 1963
      - 2. "Analog Simulation and Piloting Procedure for Evaluation of LEM Touchdown Velocity Criteria," July 30, 1964
      - 3. "Apollo Flightcrew Training in Lunar Landing Simulators," March 1968
      - 4. "Assumption on the FMES Equations of Motion," undated
      - 5. "Grumman Aircraft Engineering Corps. LEM Engineering Memo: Detailed Objectives and Schedules of the Operation and Analysis Phase of the Ascent, Descent and Abort Simulation IIB," October 9, 1963
      - 6. "Grumman Aircraft Engineering Corps. LEM Engineering Memo: Detailed Objectives and Schedules of the Operation and Analysis Phase of the Hover and Landing: Separation and Docking Simulation IIIB," October 8, 1963
      - 7. "Grumman Aircraft Engineering Corps. LEM Engineering Memo:

- Hover and Landing; Separation and Docking Simulation IIIB (Revision to Kick-Off Memo Schedule),” October 8, 1963
- 8. “Grumman Aircraft Engineering Corps. LEM Engineering Memo: Objectives of GAEC Manual Abort Simulation Program – (LING-TEMCO-VOUGHT),” October 9, 1963
- 9. “Grumman Aircraft Engineering Corps. LEM Engineering Memo: A Summary of Basic Principles Relating to Visual Detection and Recognition of Lunar Surface Features,” February 13, 1963
- 10. “GCD Simulation of LEM approach and landing,” undated
- 11. “LEM Docking Control Quality as a Function of Thruster Impulse Value” Graphs with different thruster impulse values, undated
- 12. “LEM Engineering Simulation Program,” May 10, 1963
- 13. “Lunar Landing Approach Simulation,” July 18, 1963
- 14. “Lunar Landing simulation evaluation at Grumman on July19-20, 1963,” July 29, 1963
- 15. “Participation in GAEC LEM about simulation at LTV,” March 31, 1964

Folder

- 3. Apollo Program – Working Files – Training [LLRV]; [LEM Simulator], (folder 2 of 2)

Item

- 1. “A Review of In-Flight Simulation Pertinent to Piloted Space Vehicles,” July 1962
- 2. “Uprated LLRV Pre-Design Configuration Studies for Research & Training,” July 1964
- 3. “Visit to Grumman Aircraft Corporation (GAEC) to discuss LM control system characteristics,” April 16, 1968

Folder

- 4. Apollo Program – Working Files – Training [LLRV]

Item

- 1. [LLRF] – A summary of landing velocities, attitudes, and attitude3 rates of Langley’s LLRV , October 7, 1967

Folder

- 5. Apollo Program – Working Files – Training [LLRV]; Contents of black [LLRV] binder, (folder 1 of 2)

Item

- 1. “LLRV Flight Checklist,” March 24, 1967
- 2. “LLRV/LLTV Emergency Procedures,” Nov. 1967

Folder

- 6. Apollo Program – Working Files – Training [LLRV]; Contents of black [LLRV] binder, (folder 2 of 2)

Item

- 1. “Ground Training Flight Procedures Manual for the Lunar Landing Research Vehicle,” July 1967

Folder

- 7. Apollo Program – Working Files – Training [LLRV]

- Item
  - 1. "Lunar Landing Research Vehicle – Flight Manual," April 1, 1964
- Folder
  - 8. Apollo Program – Working Files – Training [LLRV]
    - Item
      - 1. "Lunar Landing Research Vehicle – Flight Manual Rev. B" May 24, 1969
- Folder
  - 9. Apollo Program – Working Files – Training [LLRV]
    - Item
      - 1. "Lunar Landing Research Vehicle – Ground Training Flight Procedures Manual," (First Draft) December 1966

**Box 47** *Apollo Program – Training, 1962-1969*

- Folder
  - 1. Apollo Program – Working Files – Training [LLRV]
    - Item
      - 1. "Lunar Landing Research Vehicle – Estimated Handling Qualities," April 1, 1964
- Folder
  - 2. Apollo Program – Working Files – Training [LLRV]
    - Item
      - 1. "Lunar Landing Research Vehicle – LLRV Service and Maintenance Manual," April 1, 1964
- Folder
  - 3. Apollo Program – Working Files – Training [LLRV]
    - Item
      - 1. "Lunar Landing Research Vehicle Pilot Training Plan," with Appendices 1-4, May 27, 1969
- Folder
  - 4. Apollo Program – Working Files – Training [LLRV]
    - Item
      - 1. "Lunar Landing Research Vehicle Progress Reports # 1-39," April 1, 1963-February 6, 1967
- Folder
  - 5. Apollo Program – Working Files – Training [LLRV]
    - Item
      - 1. "Lunar Landing Research Vehicle – Structural Analysis Handbook," April 1, 1964
- Folder
  - 6. Apollo Program – Working Files – Training [LLRV]
    - Item
      - 1. Memos and information documenting the LLRV crash in which Armstrong was the pilot, circa 1968

Folder

7. Apollo Program – Working Files – Training [LLRV]

Item

1. "Design Engineering Inspection of the Lunar Landing Research Vehicle at the Flight Research Center, August 13-14, 1964," August 25, 1964
2. "Formulation of Lunar Lander Research Vehicle Coordination Panel," May 26, 1964
3. "Grumman Aircraft Engineering Corps. LEM Engineering Memo: Meeting at NASA-FRC on Use of a Lunar Landing Research Vehicle (LLRV) for LEM Hardware Testing – 21, 22 April 1964," April 28, 1964
4. "Memo. to those concerned with the Lunar Landing Research Vehicle Project (LLRV): Visit to General Electric Co., Lynn, Massachusetts, to examine test setup for CF700 engine and to discuss spare parts requirements," July 15, 1963
5. "Memo. to those concerned with the Lunar Landing Simulator Project: Information received during second visit to Bell, February 1, 1962," February 5, 1962
6. "Memo. to those concerned with the Lunar Landing Simulator Project: Visit to Bell Aerosystems Company, February 19 to February 23, 1962," February 27, 1962
7. "LEM LLRV Program," August 12, 1964
8. "LLRF Pilots Evaluation," February 3, 1966
9. "LLRV Final Weight Summary," April 13, 1964
10. "LLRV – Matranga," undated
11. "LLRV-LEM Test Vehicle Meeting," July 24, 1964
12. "LLRV/TV pilot ejection envelope," February 28, 1968
13. "Lunar Landing Simulator Being Tested at Ames Research Center" New Release w/ photos, December 7, 1962
14. "Meeting at Flight Research Center on 'Program Review and proposal for Flight Testing LEM Systems on the LLRV'," May 18, 1964
15. "Memo. for LLRV Project Manager: Phone call from Mr. Arnold Schaffer of GAEC," June 11, 1964
16. "Review of condition of one-second time delay parachute drogue gun cartridges, P/N C-2003-20, to be used in the LLRV testing program," March 1, 1967
17. "Revised funding plan for Lunar Landing Research Vehicle," December 4, 1963
18. "Status of Lunar Landing Research Vehicle (LLRV) Program," January 26, 1965
19. "Use of LLRV at Cape Kennedy," February 28, 1964
20. "Utilization of the Ames X-14A research vehicle by MSC flight crew personnel," August 13, 1964

Folder

8. Apollo Program – Working Files – Training [LLRV]  
Item  
1. “Operational Experience with the Electronic Flight Control Systems of a Lunar Landing Research Vehicle,” October 1966

Folder

9. Apollo Program – Working Files – Training [LLRV]  
Item  
1. “Project Development Plan: Free-Flight Lunar Landing and Take-off Research Vehicle,” December 1962

Folder

10. Apollo Program – Working Files – Training [LLRV]  
Item  
1. Summaries of LLRV Flights, various dates

**Box 48** *Apollo Program – Training, 1964-1969*

Folder

1. Apollo Program – Working Files – Training [LLRV] (folder 1 of 2)  
Item  
1. “Design and Operational Characters of a Lunar-Landing Research Vehicle,” September 1965  
2. “Langley Working Paper: Interim Report on Flight Evaluations of Lunar Landing Vehicle Attitude Control Systems,” undated  
3. “Lunar landing Research Vehicle Program,” February 1964  
4. “SETP: Flight Results with a Non-Aerodynamic, Variable Stability, Flying Platform,” undated (2 copies)

Folder

2. Apollo Program – Working Files – Training [LLRV] (folder 2 of 2)  
Item  
1. Working files used to draft presentations on the lunar landing research vehicle, undated

Folder

3. Apollo Program – Working Files – Training – “Answers to Systems Briefing Questions on Tuesday, July 8, 1969”  
4. Apollo Program – Working Files – Training – “Briefing on Development of Nominal Rendezvous for Lunar Landing Mission,” February 28, 1969  
5. Apollo Program – Working Files – Training – “Effect of revised ascent targeting on PGNCS RCS insertion capability,” March 18, 1969  
6. Apollo Program – Working Files – Training [LM], (folder 1 of 4)  
Item  
1. “RCS insertion during LM powered ascent,” September 14, 1967  
2. “AGS accelerometers may not work,” January 16, 1968  
3. “AOT and LM RR Info.,” February 22, 1967  
4. “Apollo Lunar/Zero Gravity Flight Tests,” undated  
5. “Apollo 10 Attitude Excursions at Staging,” July 1, 1969

6. "ATCA Jet Selection," LM-4, September 1967
7. "Autopilot Parameters of general interest," July 25, 1968
8. "Comments on LM descent engine trim system failure," December 13, 1966
9. "Contract NAS 9-1100, Removal of X-axis Override from LGC," December 8, 1967
10. "Crew provision discrepancies indicated by LM-5 manned altitude chamber test at KSC," March 24, 1969
11. "Crew Report, Subject: Crew Liquid Cooling from LM ECS," undated
12. "Descent engine characteristics," February 1968
13. "Development status of lightweight headsets and communication carriers," February 12, 1968
14. "DECA design deficiency," June 13, 1968
15. "DPS Propellant quantity gaging system," June 13, 1969
16. "Discussion of Engine Thrust and Engine Thrust Command Indicator Operation," undated
17. "Duration of LM APS and DPS thrusting maneuvers," September 16, 1966
18. "Failure effects of LM controllers," October 17, 1966
19. "Figure 1.-LM inert weight boundaries for revised  $\Delta V$  budgets and APS propellant off-loaded, DPS full," December 1, 1967
20. "Figure 2.-LM inert weight boundaries for revised  $\Delta V$  budgets and APS and DPS propellant full," December 1, 1967
21. "Grumman Aircraft Engineering Corp. LEM Memo: One-sixth Gravity Flight Tests Conducted at Wright-Patterson Air Force Base on 21, 22 and 23 March 1966," March 30, 1966
22. "Grumman Aircraft Engineering Corp. LEM Memo: Revised Crew Malfunction Diagnosis and Corrective Procedures for Lighting Subsystems," August 11, 1966
23. "Grumman Aircraft Engineering Corp. LEM Memo: Sub-Gravity Test Flights – Wright-Patterson AFB, Dayton, Ohio, 21-24 March 1966," March 28, 1966
24. "IMU coarse/fine system transient problem," undated
25. "IMU fine align transient problem," April 29, 1968
26. "Internal Note MSC-EG-69-4: Project Apollo, Apollo Lunar Module Propellant Studies," February 17, 1969
27. "Internal Note No. 67-FM-183: Performance of the Lunar Module Ascent Propulsion System in a Blowdown Mode," November 29, 1967
28. "Minutes," of MIT/IL presentation, undated

Folder

7. Apollo Program – Working Files – Training [LM], (folder 2 of 4)

Item

1. "LEM gauge failure," February 1, 1966
2. "LR Data-read Routine (R-12)," October 26, 1967

3. "Lunar LMK Tracking Info," December 12, 1967
4. "LLRV/LM," hand written notes, undated
5. "LM AGS External  $\Delta V$  Guidance Routine," March 24, 1967
6. "LM/AGS handling qualities and jet select logic," September 20, 1967
7. "LM Caution and Warning Peculiarities," undated
8. "LM CCP No. 48, November 2, 1966," November 7, 1966
9. "LM crew station changes," April 23, 1969
10. "LM DAP Development," January 9, 1968
11. "Lunar module descent engine gimbal trim failure," November 4, 1967
12. "LM Descent Stage Battery Removal," June 14, 1968
13. "LM ECS Change," January 10, 1969
14. "LM FDAI 8-ball," March 13, 1967
15. "LM Guidance Computer (LGC) and Abort Electronic Assembly (AEA) Input/Output Incompatibilities," September 21, 1966
16. "LM hand controller failure analysis," March 17, 1969
17. "LM Hand Controller Scaling," October 29, 1968
18. "LM Handling Qualities," September 19, 1967
19. "LM/IMU coarse alignment while docked with the CSM on AS-258 and AS-504," February 3, 1967
20. "Lunar Module (LM) ingress/egress problems under one g versus 1/6 g," April 18, 1967
21. "LM minimum impulse," January 24, 1968
22. "LM Powered Descent Trajectory Constraints," undated
23. "LM PGNS jet selection policy for use during y- or z- axis translation maneuvers in the presence of detected y or z translation jet failures," January 5 1967
24. "LM/SLA Extraction Studies," November 2, 1967

Folder

8. Apollo Program – Working Files – Training [LM], (folder 3 of 4)

Item

1. "LM-4 Altitude Chamber Test," December 9, 1968
2. "LM-4 Caution and Warning Lights," undated
3. "LM-4 rendezvous radar range rate anomaly," June 9, 1969
4. "LM-5 Actual Weight Report," February 6, 1969
5. "LM-5 and sub thermal blanket problem" September 9, 1968
6. "LM-5 CCFF Crew Report" undated
7. "Mode II Rendezvous Radar Designate," January 29, 1968
8. "Non-interrupted Guillotined Cables on LM-4," May 14, 1968
9. "Problem Statement," undated
10. "Problem: What change, if any, should be made to the LM ECS hose stowage brackets," March 31, 1967
11. "Questions Arising from LM Systems Training," undated
12. "RR constraint to avoid CDU transients," May 15, 1968
13. "RR Operator's Signal/Logic/Data Flow," February 1, 1968

14. "Recommended LM G&C alignment procedure and resolution of alignment action items," February 16, 1967
15. "Report on ATCA Limit Cycle Tests with FMES," September 20 1967
16. "Results of Waste Management Section/PGA Interface Test and Restraint System/PGA Test held at GAEC February 9-10, 1967," February 23, 1967
17. "Review and Evaluation Request: Rendezvous Radar/RCS Plume," July 17, 1968
18. "Review of Landing Probe Light Logic," August 14, 1966
19. "Review of Propellant Quantity Indication," August 16, 1966
20. "Revision of the LM Malfunction Procedures," November 18, 1968
21. "'Spider' Hardware," March 18, 1969
22. "Status of the Engine," January 23, 1967
23. "Symptoms and Recovery Procedures for System A or B Failures of the LM RCS Systems," undated
24. "Use of AOT in IMU Alignments," December 1, 1966

Folder

9. Apollo Program – Working Files – Training [LM], (folder 4 of 4)

Item

1. "1/6 G and 1 G Lunar Surface Activities On and Around LEM, HFS-66-11," September 8, 1966
2. "1/6 g tests at Wright Patterson Air Force Base," with photos, March 31, 1966
3. Contents of folder, collected by Armstrong containing notes and memos regarding the LM radar and Positioning systems, undated

Folder

10. Apollo Program – Working Files – Training (LM)

Item

1. "Internal Note No. 69-FM-20: Preliminary Lunar Descent Dispersion Analysis," January 1969
2. "Manual Launch from the Lunar Surface Using the Horizon for Altitude Reference," December 7, 1967

**Box 49** *Apollo Program – Training, 1963-1969*

Folder

1. Apollo Program – Working Files – Training (LM)

Item

1. "LUMINARY Memo # 75: R-2 Lunar Potential Model Added to LUMINARY," April 1, 1969
2. "LUMINARY Memo # 76: Variable Gains in Guidance Frame Erection," April 1, 1969
3. "FM3/Flight Analysis Branch, Memo #69-FM37-209: Preliminary Analysis of Immediate Recontact Problems Associated with Abort

- Stage Fire-in-the-Hole for Apollo 11,” May 16, 1969
4. “Technical Information Release: Preliminary Data from LMS/LUMINARY 1A Tests,” May 19, 1969

Folder

2. Apollo Program – Working Files – Training (LM) “LMS – Luminary 47A Rate of Descent, Lunar Landing Runs,” January 16, 1969
3. Apollo Program – Working Files – Training (LM) “LM-5 Communications System Characteristics,” undated
4. Apollo Program – Working Files – Training (LM) “LM-5 Flight Data File,” undated
5. Apollo Program – Working Files – Training (LM) “Neil, Buzz – Latest LM Attitude Info from Houston,” with Apollo 11 launch window, June 26, 1969
6. Apollo Program – Working Files – Training (LM) “Presentation for Design Certification Review,” April 4, 1969
7. Apollo Program – Working Files – Training (LM) “Simulator Stowage Equipment,” June 2, 1969
8. Apollo Program – Working Files – Training (LM) “Technical Information Release: Preliminary Data from LMS/LUMINARY 1A PGNS Powered Lunar Ascent Test” June 10, 1969
9. Apollo Program – Working Files – Training (LM) “Operator’s and Crew Members Manual, Army Models OH-13E, OH-13G, OH-13H, and OH-13S Helicopters, Pilot’s Checklist,” May 1964.
10. Apollo Program – Working Files – Training (MIT Coursework – Guidance & Navigation, folder 1 of 2)

Item

1. “FP-6 (Apollo 11) DEDA Locations,” April 1969
2. Handwritten lecture notes, undated

Folder

11. Apollo Program – Working Files – Training (MIT Coursework – Guidance & Navigation, folder 2 of 2)

Item

1. “Apollo Guidance and Navigation: Astronauts’ Guidance and Navigation Course Notes: Section II, Gyro Principles,” December 1962
2. “Apollo Guidance and Navigation: Astronauts’ Guidance and Navigation Course Notes: Section III, Stabilization,” December 1962
3. “Apollo Guidance and Navigation: Astronauts’ Guidance and Navigation Course Notes: Section IV, Electromagnetic Navigation,” December 1962
4. “G & N,” handwritten notes, February 12, 1963
5. “Apollo Guidance and Navigation: Astronauts’ Guidance and Navigation Course Notes: Section V, Midcourse Navigation and Guidance,” February 1963
6. “Apollo Guidance and Navigation: Astronauts’ Guidance and Navigation Course Notes: Section VI,” March 1963

7. "Apollo Guidance and Navigation: Astronauts' Guidance and Navigation Course Notes: Section VII, Optics," February 1963

Folder

12. Apollo Program – Working Files – Training [PLSS/EVA/TMG – etc.] (folder 1 of 3)

Item

1. "Apollo Operations Handbook Extravehicular Mobility Unit, Vol. I, System Description," August 1968
2. "Apollo Operations Handbook Extravehicular Mobility Unit, Vol. II, Operational Procedures," May 1969
3. "Apollo Life Support System," schematic, March 27, 1969
4. "Back-Contamination," January 18, 1967
5. "Biological Isolation Garment," August 13, 1968
6. "Crew Procedures Change Request(s)," May 1969
7. "Current Candidates for Lunar Environs Timelines on the G1 Mission – case 320," March 14, 1969

Folder

13. Apollo Program – Working Files – Training [PLSS/EVA/TMG – etc.] (folder 2 of 3)

Item

1. "Descent Stage Electrical Load Analysis," undated
2. "EMU CCB items for 3/21/69," March 20, 1969
3. "EMU Lunar Surface Qualification," March 12, 1969
4. "EMU Status Report #21," March 31, 1969
5. "EMU Status Report #22," April 30, 1969
6. "EVA Procedures," undated

Folder

14. Apollo Program – Working Files – Training [PLSS/EVA/TMG – etc.] (folder 3 of 3)

Item

1. "EVA Training Plan," March 13, 1967
2. "Extra-vehicular mobility unit (EMU) configuration for the early lunar missions," April 14, 1969
3. "Extra-vehicular mobility unit (EMU) pre-flight checkout requirements," April 14, 1969
4. "Final EVA Procedures, Apollo 11," May 16, 1969
5. "'G' mission contingency stowage and EVA procedures," December 5, 1968
6. "Life Support Systems for Advanced Missions," May 13, 1969
7. "LM-5 Crew Hardware Review Comments," undated
8. "Minimizing Crew Work Day Prior to EVA on the First Lunar Landing Mission – Case 310," March 3, 1969
9. "Redline on PLSS water," May 6, 1969
10. "Reference EVA Procedures, Mission G (CM107/LM5)," December 20, 1968

Folder

15. Apollo Program – Working Files – Training (EVA) “Revised MSFN coverage of Mission ‘G’ EVA periods for third quarter of 1969,” May 12, 1969
16. Apollo Program – Working Files – Training “Final, Apollo 11 Crew Training Summary, July 1-15, 1969,” July 24, 1969

**Box 50** *Apollo Program – Training, 1968-1969*

Folder

1. Apollo Program – Working Files – Training (LLRV Training Program) (folder 1 of 3)

Item

1. “Request for Lunar Landing Research Facility Training Program for Manned Spacecraft center Lunar Landing Research Vehicle Pilots,” March 18, 1968
2. Response from Robert R. Gilruth, director, March 21, 1968
3. Geomagnetic Axis showing strength of magnetic field at x altitude in thousands of miles (photo), undated

Folder

2. Apollo Program – Working Files – Training (LLRV Training Program) (folder 2 of 3)

Item

1. “Model 7260, Lunar Landing Training Vehicle, Pilot Flight Checklist, Checklist No: 7260-931008, Revision C,” March 3, 1969
2. “Model 7260, Lunar Landing Training Vehicle, Pilot Flight Checklist, Checklist No: 7260-931008, Revision E,” June 10, 1969

Folder

3. Apollo Program – Working Files – Training (LLRV Training Program) (folder 3 of 3)

Item

1. “Draft: Apollo Flight Crew Training in Lunar Landing Simulators,” undated

**Box 51** *Apollo Program – Training, 1954-1969*

Folder

1. Apollo Program – Working Files – Training (Training Exercises)

Item

1. “Chart for Visual Percentage Estimation” with Geology training manual and photos of training sites for exercises “Broken Gate” and “Sand Dune,” circa 1969

Folder

2. Apollo Program – Working Files – Training (Training Exercises)

Item

1. [Armstrong, Broken Gate, S69-26505 start S69-26460 last], circa 1969

Folder

3. Apollo Program – Working Files – Training (Training Exercises)

Item

1. [Armstrong, 50 Foot, S69-26366 first S69-26308 last], circa 1969

Folder

4. Apollo Program – Working Files – Training (Training Exercises)

Item

1. [Armstrong, Sand Dune, S69-26459 first S69-26435 last], circa 1969

Folder

5. Apollo Program – Working Files – Training (Training Exercises)

Item

1. “Zones and Zonal Variations in Welded Ash Flows,” with map, undated

Folder

6. Apollo Program – Working Files – Training (Training Exercises)

Item

1. “The 1910 Eruption of Kilauea Volcano Hawaii,” with maps, undated

Folder

7. Apollo Program – Working Files – Training (Training Exercises)

Item

1. “On the Origins of the Lunar Surface Features,” October 1954
2. “Ash Flows,” reprinted from *Bulletin of the Geological Society of American Vol. 71*, 1964
3. “Plateau, Vol. 35 No. 1,” Summer, 1962
4. “Volcanoes of the national parks of Hawaii,” May 1961
5. “Hawaii Volcanoes During 1955,” 1964

Folder

8. Apollo Program – Working Files – Training (Training Exercises)

Item

1. “Philmont Country: The Rocks and landscape of a Famous New Mexico Ranch,” (2 copies with maps) circa 1964

**Box 52** *Apollo Program – Training, 1969*

Folder

1. Apollo Program – Working Files – [Iceland], maps of Iceland used in Apollo training, circa 1969

**Sub-subseries 3. Mission Planning:** The Mission Planning files contain those materials essential to the planning and execution of the Apollo program mission,

especially the Apollo 11 lunar landing mission. The bulk of the sub-subseries is retained in Armstrong's original order. However, a significant amount of mission planning material was found throughout the Armstrong papers. To assist researchers, all materials related to Apollo mission planning have been collected and arranged here, beginning with Armstrong's arrangement scheme and ending with a collection of planning materials arranged by the archives.

**Box 53** *Apollo Program – Mission Planning, 1964-1969*

Folder

1. Apollo Program – Working Files – Mission Planning [Apollo Experiments & Lunar Surface]

Item

1. "Apollo Lunar surface Experiments Package, ALSEP Familiarization Course Handout," January 15, 1968

Folder

2. Apollo Program – Working Files – Mission Planning [Apollo Experiments & Lunar Surface]

Item

1. "Apollo lunar surface operations planning", February 28, 1968
2. "G lunar Surface stuff is still incomplete," March 7, 1969
3. "Results of the Fifteenth Lunar Surface Operations Planning Meeting (LSOPM) held on February 14, 1969, Room 261, Building 4," February 27, 1969

Folder

3. Apollo Program – Working Files – Mission Planning [Apollo Experiments & Lunar Surface]

Item

1. "Apollo 11/LM-5 Post Mission Report," August 5, 1969
2. "Preliminary mineralogical, petrological, and geochemical examination of lunar samples and subsequent astronaut training," December 8, 1966

Folder

4. Apollo Program – Working Files – Mission Planning [Apollo Experiments & Lunar Surface]

Item

1. "The Apollo 15 X-Ray Fluorescence Experiment," March 1972

Folder

5. Apollo Program – Working Files – Mission Planning [Apollo Experiments & Lunar Surface]

Item

1. "EASEP Deployment Zones," undated

Folder

6. Apollo Program – Working Files – Mission Planning [Apollo Experiments & Lunar Surface]

Item

1. "Element of Space and Reentry Mechanics," undated
- Folder
7. Apollo Program – Working Files – Mission Planning [Apollo Experiments & Lunar Surface]
- Item
1. "Interchange of Solar Wind Composition Flight Unit," March 6, 1969
- Folder
8. Apollo Program – Working Files – Mission Planning [Apollo Experiments & Lunar Surface]
- Item
1. "Internal Note No. EB-R-69-7: Communication Systems Performance and Coverage Analysis for Apollo 11 (G Type Mission), Vol. III – Lunar Operations," July 8, 1969
- Folder
9. Apollo Program – Working Files – Mission Planning [Apollo Experiments & Lunar Surface]
- Item
1. "Lunar Surface Nominal Activities Sequence," circa 1969
- Folder
10. Apollo Program – Working Files – Mission Planning [Apollo Experiments & Lunar Surface]
- Item
1. "Minutes of November 1, 1968, Monthly Mission review (G Mission EVA)," November 13, 1968
2. "OSMF response to MSC EVA Review," December 2, 1968
- Folder
11. Apollo Program – Working Files – Mission Planning [Apollo Experiments & Lunar Surface]
- Item
1. "Operational Aspects of Supercritical Cryogenic Storage and Supply Systems," February 1964
- Folder
12. Apollo Program – Working Files – Mission Planning [Apollo Experiments & Lunar Surface]
- Item
1. "Press Kit for the Apollo Laser Ranging Retro-Reflector Experiment," April 28, 1969
- Folder
13. Apollo Program – Working Files – Mission Planning [Apollo Experiments & Lunar Surface]
- Item
1. "PGNCS operations while on the lunar surface," April 1, 1969
- Folder
14. Apollo Program – Working Files – Mission Planning [Apollo Experiments & Lunar Surface]
- Item

1. "Probable significance of Surveyor I results to early Apollo lunar landing," October 4, 1966

Folder

15. Apollo Program – Working Files – Mission Planning [Apollo Experiments & Lunar Surface]

Item

1. "Review of Apollo 11 Preliminary Lunar Surface Operations Plan (LSOP)," June 5, 1969

Folder

16. Apollo Program – Working Files – Mission Planning [Apollo Experiments & Lunar Surface]

Item

1. "Second Core Tube for Apollo 11 mission," May 6, 1969

Folder

17. Apollo Program – Working Files – Mission Planning [Apollo Experiments & Lunar Surface]

Item

1. "Summary of recent translations of Russian lunar data," December 27, 1966

Folder

18. Apollo Program – Working Files – Mission Planning [Apollo Experiments & Lunar Surface]

Item

1. "Summary Timeline: Nominal Lunar Surface EVA," January 1969

Folder

19. Apollo Program – Working Files – Mission Planning [Apollo Experiments & Lunar Surface]

Item

1. "Task: Attempt to determine what might be done to shorten the time between wakeup in lunar orbit and landing (by several hours) in order to permit EVA prior to sleeping on the lunar surface" undated

**Box 54** *Apollo Program – Mission Planning, 1964-1969*

Folder

1. Apollo Program – Working Files – Mission Planning [Apollo CCB]

Item

1. Apollo spacecraft SCB approved PCRs, April 22 – May 27, 1968

Folder

2. Apollo Program – Working Files – Mission Planning [Apollo CCB]

Item

1. Apollo spacecraft SCB approved PCRs, June 20 – July 26, 1968

Folder

3. Apollo Program – Working Files – Mission Planning [Apollo CCB]

Item

1. Apollo spacecraft SCB approved PCRs, August 9, 1968
2. Minutes of Apollo SCB Meetings # 21 and 22, undated
3. "Minutes of SUNDANCE CARR," circa 1968
4. PCRs approved at SCB Meeting # 11, undated

Folder

4. Apollo Program – Working Files – Mission Planning [Apollo Mission Planning F]

Item

1. "Apollo Mission Techniques Lunar Landing Mission Ascent Phase, Vol. I: Techniques Description," (Draft of Internal Note yet to be numbered) July 22, 1968

Folder

5. Apollo Program – Working Files – Mission Planning [Apollo Mission Planning F]

Item

1. "Alternate separation procedure for nominal LM ascent stage jettison on Apollo 11," July 14, 1969
2. "Analysis of allowable deviation in DOI ignition time for the lunar landing mission," July 14, 1969
3. "Apollo Command and Service Module (CSM)/LM-S-IVB docking and withdrawal lighting constraints," February 20, 1967
4. "Apollo 11 spacecraft gimbal angles for viewing the LM ascent stage after the CSM separation maneuver," July 11, 1969
5. "Ascent Phase Mission Techniques meeting – February 27, 1968," March 4, 1968
6. "CSM Rendezvous Procedures, F Mission, Preliminary Copy," January 23, 1969
7. "CSM lunar orbit plane change maneuver on Apollo 11," July 11, 1969
8. "Contingency deorbit data for Apollo 11," July 14, 1969
9. "Crew integration coordination," September 29, 1964
10. "Currently proposed LM-activate phase of Mission F," November 15, 1968
11. "Descent Data Select procedures are finalized," July 11, 1969.
12. "Descent Monitoring after landing radar velocity updating," July 14, 1969
13. ECS line and plume deflector separation and recontact analysis resulting from abort during main powered descent for Apollo 11," July 11, 1969
14. "Effects of DPS engine dispersions and LM weight on throttle-down time," July 8, 1969
15. "Effects of known dispersions at PDI on throttle-down time," July 8, 1969
16. "Effect of premature ignition on major SPS burns for Apollo Mission G."

17. "F Rendezvous Mission Techniques," November 15, 1968

Folder

6. Apollo Program – Working Files – Mission Planning [Apollo Mission Planning F]

Item

1. "G-Lunar surface operations," March 26, 1969
2. "G Rendezvous," September 12, 1968
3. "G Rendezvous Mission Techniques," September 23, 1968
4. "How we will handle the effect of mascons on the LM lunar surface gravity alignments," July 14, 1969
5. "An Introduction to the Existent LM On-Board Radar Filter Problem," February 6, 1967
6. "Investigation of a throttleable region about the FTP of the LM DPS," Nov. 2, 1967
7. "Joint Reference Constraints for Mission 'F'," (review draft) undated

**Box 55** *Apollo Program – Mission Planning, 1966-1969*

Folder

1. Apollo Program – Working Files – Mission Planning [Apollo Mission Planning F]

Item

1. "Internal Note MSC-EG-69-16, Project Apollo: Stability Analysis of Apollo Block II CSM/LM Thrust Vector Control Systems," March 20, 1969
2. "Internal Note No. S-PA-9T-055: Apollo Mission Techniques, Mission G, Manual Ascent, Techniques Description," July 17, 1969
3. "Internal Note No. S-PA-9T-137: Mission G Abort from Lunar Powered Descent and Subsequent Rendezvous," July 11, 1969
4. "Internal Note No. S-Pa-9T-144: Apollo Mission techniques, Mission G, Earth Parking Orbit and Translunar Injection, Techniques Description," July 23, 1969
5. "Internal Note No. 66-EG-41: The Effect of Range on LM Descent Guidance Performance in the Presence of Engine Thrust Uncertainties," November 15, 1966

Folder

2. Apollo Program – Working Files – Mission Planning [Apollo Mission Planning F]

Item

1. "Internal Note No. 68-FM-74: LM Powered Ascent Trajectory for the Apollo Lunar Landing Mission," March 20, 1968
2. "Internal Note No. 69-FM-30: Apollo Mission F Mission Planning Briefing for the Crew," January 31, 1969
3. "Internal Note No. 69-FM-57: Preliminary Alternate Mission Plan for Apollo Mission F, Vol. III Lunar Alternate Rendezvous," March 4,

- 1969
4. "Internal Note No. 69-FM-154: Quickest Possible Returns to Earth for Apollo 11 (Mission G) Aborts," June 3, 1969
5. "Internal Note No. 69-FM-156: Apollo 11 (Mission G) Spacecraft Dispersion Analysis, Vol. IV, Descent and Ascent Dispersion Analyses, Part 1 Lunar Descent," (Addendum) July 2, 1969
6. "Internal Note No. 69-FM-181: An Evaluation of the LOI Attitude Monitoring Procedure Technique for Dispersed Translunar Approach Hyperbolas," July 1, 1969

Folder

3. Apollo Program – Working Files – Mission Planning [Apollo Mission Planning F]

Item

1. "Apollo 11/LM-5 Post Mission Report," August 5, 1969
2. "Preliminary mineralogical, petrological, and geochemical examination of lunar samples and subsequent astronaut training," December 8, 1966
3. "Internal Note No. 69-FM-187: Entry Mission Plan Apollo 11 (Mission G)," July 3, 1969
4. "Internal Note No. 69-FM-193: Rationale for Using the Saturn Monitor and Abort Crew Charts for Apollo 11 (Mission G)," July 7, 1969

Folder

4. Apollo Program – Working Files – Mission Planning [Apollo Mission Planning F]

Item

1. "Ionizing radiation sources on Apollo 11," July 14, 1969
2. "Landing site dependent phases of Apollo lunar missions," November 29, 1967
3. "Lunar dust disturbance on descent," July 15, 1969
4. "Lunar landing site position determined requirements for AS-504 and subsequent missions," circa 1969
5. "LM communication Capability During Lunar Landing Descent and Ascent," undated
6. "LM powered descent loss of comm procedure" July 8, 1969
7. "LM PGNCS/AGS steering signal compatibility during powered ascent," December 13, 1966
8. "LM Recontact Analysis During Tiltover Abort Staging for Apollo 11," July 10, 1969
9. "LM RCS insertion capability for safe orbit," November 29, 1967
10. "LM rendezvous radar during Ascent is about to go over the brink," December 28, 1967
11. "LM withdrawal from SIVB," November 30, 1966
12. "Lunar orbit timeline to be used in the mission F reference trajectory," May 15, 1968
13. "Lunar Rendezvous Mission Techniques," October 15, 1968

14. "Lunar Rendezvous Mission Techniques," June 3, 1968
15. "Manual Ascent data," July 18, 1969.
16. "Manual Ascent revisited," July 7, 1969
17. "Minimum altitude during powered descent without landing radar altitude updating," July 16, 1969

Folder

5. Apollo Program – Working Files – Mission Planning [Apollo Mission Planning F]

Item

1. "Mission Data Change Notification Form: Battery Charger Calibration," March 31, 1969
2. "Mission Data Change Notification Form: CSM 106 and 107 SPS Engine Performance," March 31, 1969
3. "MIT/MSC review of LUMINARY Descent Programs," November 9, 1967
4. "Missions F and G Translunar Injection, Midcourse Correction and Lunar Orbit Insertion," June 10, 1969
5. "Mission G Transearth Insertion, Midcourse Correction, and Entry Document," July 11, 1969
6. "More on LM ascent from the moon," October 14, 1969
7. "New DPS GDA Descent mission rule is imminent if not now," July 1, 1969
8. "No change needed in the landing site determination programs – CMC or RTCC," January 17, 1968
9. "No need to perform lunar landmark orbit determination," December 18, 1967
10. "No 15 minute constraint for Lunar Ascent Guidance," July 18, 1968
11. "Nominal LM in-orbit ascent profile for the lunar landing mission (Mission G)," January 23, 1968
12. "Out-the-window cues for LM onboard monitoring and manual guidance for ascent," February 8, 1969
13. "Preentry horizon check on Apollo 11," July 11, 1969
14. "Proposed abort techniques for SPS failure during LOI burn of Hybrid Lunar Mission," April 18, 1969
15. "Recommended Apollo 11 entry crew charts," July 14, 1969
16. "Results of the Eighteenth AS-504 FOP Meeting on June 16, 1967"
17. "Return to earth requirements for Apollo Mission G hybrid trajectories," May 5, 1969
18. "Revised LM-active phase of Mission F," July 22, 1968

Folder

6. Apollo Program – Working Files – Mission Planning [Apollo Mission Planning F]

Item

1. "Separation and recontact analysis for Apollo 11 nominal lunar liftoff (LM staging)," July 15, 1969

2. "Some alternate ways of figuring out where the LM is on the moon will be available," June 7, 1968
3. "Some new ideas on how to use the AGS during Descent," July 3, 1969
4. "Some things about the LM computer ascent program and how it should be changed," March 1, 1968
5. "Some thoughts about Lunar Ascent procedures," January 15, 1968
6. "Spacecraft computer programs controlling DPS throttling need some changes," February 20, 1968
7. "Spacecraft/Crew Integration Plan for Manned Block II Apollo CSM and LM Missions, 'Revision B'," February 1969
8. "Sun-vehicle-earth angles for rest attitudes during translunar, lunar orbit, and transearth coast," May 15, 1968
9. "Throttling about the FTP of the LM DPS," January 2, 1968
10. "Trajectory Change Evaluation Report," February 5, 1969
11. "TEI maneuvers for each lunar orbit for an F mission launched May 17, 1969," March 3, 1969
12. "Tweak burns," July 10, 1969
13. "Unusual procedure required for LM Ascent from the moon," September 26, 1968
14. "Use of the DPS H vs H limit line," July 8, 1969
15. "Velocity residual flight limits during powered descent," July 11, 1969

Folder

7. Apollo Program – Working Files – Mission Planning [Apollo Mission Planning F]

Item

1. "Apollo 11 Flight Plan – Preliminary," November 1968

Folder

8. Apollo Program – Working Files – Mission Planning [Apollo Mission Planning F]

Item

1. Photographs, undated

**Box 56** *Apollo Program – Mission Planning, 1962-1969*

Folder

1. Apollo Program – Working Files – Mission Planning [Apollo Planning]

Item

1. "Abort Guidance System Gyro and Accelerometer In-Flight Calibration for Powered Descent," November 20, 1967

Folder

2. Apollo Program – Working Files – Mission Planning [Apollo Planning] (folder [Apollo Planning] 1 of 3)

Item

1. "Apollo CM restraint harness review, August 7, 1964," August 10, 1964
2. "Apollo ECS and Thermal Information," March 15, 1965
3. "Apollo Entry Monitoring," undated
4. "Apollo Mission Phases," August 1962
5. "Apollo Postlanding Ventilation meeting, Downey – July 28, 1964," August 1964
6. "Apollo Pressure Suit Meeting April 21, 1964"
7. "Apollo Restraint Couch and Side Hatch Mockup Review, 18 August, 1964," August 24, 1964
8. "Block I C/M Lighting," July 28, 1964
9. "Block I SCS," October 28, 1964
10. "Block II changes affecting the CM control system," August 18, 1964
11. "Block II CSM and LM Flight Program," September 23, 1966
12. "Change in policies for LM-1 and LM-2," October 12, 1966
13. "Command Module Block II guidance and control," August 27, 1964
14. "Command Module Map and Data Viewer," December 21, 1964
15. "Comments on the Hecmar Suit and Helmet used on the lunar surface activities testing at Bend, Oregon," September 14, 1964
16. "Comments on LEM Mockup," November 27, 1962
17. "Extravehicular Ground Rules," October 7, 1964
18. "Footprint," October 1962
19. "Gemini Mode 2 and 3 Abort Reentry Guidance," April 28, 1964
20. "General Status of Pressure Suit Program," November 23, 1962
21. "LEM Back-Up Guidance," April 28, 1964
22. "LEM Communications System," January 21, 1965
23. "LEM G & C Implementation Meetings," November 30, 1964
24. "LEM Landing Load Simulation at GAEC," April 1, 1965
25. "LEM Overhead Window," April 28, 1964
26. "LEM Technical Management Meeting – 1/26/65; LEM Crew Systems Meeting – 1/27/65," January 28, 1965.
27. "Monthly LM Status Report – December 1966," January 9, 1967

Folder

3. Apollo Program – Working Files – Mission Planning [Apollo Planning] (folder [Apollo Planning] 2 of 3)

Item

1. "LM Status Report – January 1967," February 14, 1967
2. "LM Monthly Report – February 1967," February 28, 1967
3. "LM Monthly Status Report – March 1967," April 4, 1967
4. "Memorandum for Apollo Spacecraft Program Office Attn: Mr. William Lee: Docking Operational Requirements," December 2, 1963
5. "Memorandum for Astronauts: AC Spark Plug Electronics Division, January 21, 1963," January 28, 1963

6. "Memorandum for Astronauts: Apollo Abort," October 21, 1963
7. "Memorandum for Astronauts: Apollo Action Committee Meeting, 18 February 1963 (Executives in attendance were Jim Decker, Bob Piland, and Cadwell Johnson)," February 20, 1963
8. "Memorandum for Astronauts: Apollo Actions Meeting, 24 June 63, Various and Sundry Items (Detailed items discussed will be published and go into our file system for reference.)," June 27, 1963
9. "Memorandum for Astronauts: Apollo Action Committee Meeting, July 15, 1963," July 16, 1963
10. "Memorandum for Astronauts: Apollo Action Committee, 5 Aug 63," August 7, 1963
11. "Memorandum for Astronauts: Apollo BP #19 Chute Test," October 29, 1963
12. "Memorandum for Astronauts: Apollo C/M Cockpit Displays," August 6, 1963
13. "Memorandum for Astronauts: Apollo C/M Impact System," February 24, 1964
14. "Memorandum for Astronauts: Apollo C/M-S/M Communication and Instrumentation Meeting, August 27, 1963," September 3, 1963
15. "Memorandum for Astronauts: Apollo Command Module Survival Equipment," November 29, 1963
16. "Memorandum for Astronauts: Apollo Communications & Instrumentation Meeting – No. 5," July 26, 1963
17. "Memorandum for Astronauts: Apollo Crew Systems Meeting, March 6, 1963," March 7, 1963
18. "Memorandum for Astronauts: Apollo Crew Systems Meeting of March 19, 1963; Gemini Mechanical Systems Meeting of March 19, 1963," March 21, 1963
19. "Memorandum for Astronauts: Apollo Crew Systems Meeting, Office City, February 19, 1963," February 21, 1963
20. "Memorandum for Astronauts: Apollo ECS Development, ASPO, April 19, 1963," April 22, 1963
21. "Memorandum for Astronauts: Apollo ECS Hardware Briefing, AiResearch, April 30, 1963," May 1, 1963
22. "Memorandum for Astronauts: Apollo ECS Meeting No. 8, October 29, 1963," October 30, 1963
23. "Memorandum for Astronauts: Apollo Electrical System Meeting, July 11, 1963," July 16, 1963
24. "Memorandum for Astronauts: Apollo Electrical Systems Meeting, August 14, 1963," August 26, 1963
25. "Memorandum for Astronauts: Apollo Guidance Analysis Panel Meeting on Reentry Guidance, NAA, March 21, 1963," March 27, 1963
26. "Memorandum for Astronauts: Apollo Guidance Analysis Panel Meeting on Spacecraft Guidance, 12 March 63" March 13, 1963

27. "Memorandum for Astronauts: Apollo Hand Controller," April 29, 1963
28. "Memorandum for Astronauts: Apollo Hand Controller Meeting, February 8, 1963," February 11, 1963
29. "Memorandum for Astronauts: Apollo Mechanical Systems Meeting," July 24, 1963
30. "Memorandum for Astronauts: Apollo Mission Planning Panel, March 27, 1963" March 29, 1963
31. "Memorandum for Astronauts: Apollo Mission Planning Systems Meeting, July 31, 1963," August 26, 1963
32. "Memorandum for Astronauts: Apollo Operations Meeting, NAA S&ID, January 24, 1963," January 24, 1963
33. "Memorandum for Astronauts: Apollo Phase 'B' Suit/Couch/Command Display Centrifuge Rides 3 to 8 November 1963," November 8, 1963
34. "Memorandum for Astronauts: Apollo Phase 'B' Suit Mobility Evaluation C/M of October 24 & 25," October 29, 1963
35. "Memorandum for Astronauts: Apollo Portable Life Support System (PLSS) and Space Suite Program Briefings at Contractor Facilities (Hamilton Standard and International Latex) on February 14-15, 1963," February 18, 1963
36. "Memorandum for Astronauts: Apollo Recovery Meeting, ASPO and FOD, March 15, 1963," March 18, 1963
37. "Memorandum for Astronauts: Apollo Spacecraft and Entry Guidance and Navigation Meetings, November 21 and 22," December 3, 1963
38. "Memorandum for Astronauts: ASPO Weekly Activity Report," June 27, 1963
39. "Memorandum for Astronauts: Bidders' Presentation on Apollo Mission Simulator, NAA S&ID, January 22-23, 1963," January 28, 1963
40. "Memorandum for Astronauts: Command Module Layout," April 2, 1963
41. "Memorandum for Astronauts: Command and Service Modules Communications Instrumentation Subsystem Meeting No. 2, April 15, 1963," April 17, 1963
42. "Memorandum for Astronauts: CSM Electrical System Meeting – 1 October 1963," October 8, 1963
43. "Memorandum for Astronauts: C/M-S/M Static Firing at Merrit Island," November 6, 1963
44. "Memorandum for Astronauts: Command Module – Service Module trust vector failure mode simulation" March 23, 1964
45. "Memorandum for Astronauts: C/M Stabilization and Control Meeting, April 18, 1963," April 18, 1963
46. "Memorandum for Astronauts: Comparison of Gemini and Apollo Phase 'B' Pressure Suit Operations in the Apollo Couch, November

- 18-19," November 22, 1963
47. "Memorandum for Astronauts: Crew Couch for Apollo Block II Spacecraft," February 17, 1964
  48. "Memorandum for Astronauts: Crew Systems Command Module/Space Suit Assembly Interface Meeting No. 5, June 18-19 1963," June 24, 1963
  49. "Memorandum for Astronauts: Design Review No. 7, NAA, Downey, December 14-15, 1962," January 5, 1963
  50. "Memorandum for Astronauts: Docking Simulations, North American Aviation, Columbus Division," November 29, 1962
  51. "Memorandum for Astronauts: Docking Simulations at NAA, Columbus, Ohio," January 16, 1963
  52. "Memorandum for Astronauts: Emergency Entry System as Presented During the Guidance and Control Systems Meeting of 12 February 1963," February 15, 1963
  53. "Memorandum for Astronauts: Escape and Landing Systems Study" November 29, 1962
  54. "Memorandum for Astronauts: Evaluation of C/M-LEM Tunnel Tasks, Removal of Prove and Drogue Assembly in NAA's Zero G Rig," November 21, 1963
  55. "Memorandum for Astronauts: Evaluation of Grumman LEM Proposal," November 30, 1962
  56. "Memorandum for Astronauts: Evaluation of improved shoulders in Apollo full pressure suit, Johnsville, Pennsylvania," December 12, 1963
  57. "Memorandum for Astronauts: Evaluation of Power Simulators," January 5, 1963
  58. "Memorandum for Astronauts: Extra-vehicular Stability and Translation, LTV Briefing of March 13, 1963"
  59. "Memorandum for Astronauts: Eye Relief for Navigation Instruments," February 14, 1963
  60. "Memorandum for Astronauts: FOD Operations Meeting, February 19, 1963," February 21, 1963
  61. "Memorandum for Astronauts: Gemini Electrical Systems Meeting, March 5, 1963; Apollo Electrical Systems Meeting, March 6, 1963; LEM Electrical Systems Meeting, March 7, 1963," March 18, 1963
  62. "Memorandum for Astronauts: Gemini Survival Kit Meeting, 28 June 1963," July 1, 1963
  63. "Memorandum for Astronauts: Guidance Analysis Panel on LEM Guidance at MIT, April 4-5, 1963," April 17, 1963
  64. "Memorandum for Astronauts: Guidance & Navigation Computer panel, 19 July 1963," July 24, 1963
  65. "Memorandum for Astronauts: Hand Controller Information," June 13, 1963
  66. "Memorandum for Astronauts: Highlights of the Colloquium on the Lunar Surface, March 4, 1963, Washington, D.C.," March 8, 1963.

67. "Memorandum for Astronauts: Inflight Test Systems Meeting, February 25-26, 1963," March 1, 1963
68. "Memorandum for Astronauts: Lift-off Study Group Meeting," October 7, 1963
69. "Memorandum for Astronauts: Location and Orientation of the Attitude Controller at the G&N Station," November 29, 1963

Folder

4. Apollo Program – Working Files – Mission Planning [Apollo Planning] (folder [Apollo Planning] 3 of 3)

Item

1. "Memorandum for Astronauts: LEM Backup Guidance," September 9, 1963
2. "Memorandum for Astronauts: LEM/CM Tunnel Probe and Drogue Removal/Replacement, 13 February," February 17, 1964
3. "Memorandum for Astronauts: LEM Controls and Displays Meeting," September 3, 1963
4. "Memorandum for Astronauts: LEM Crew Systems Meeting at Bethpage," April 26, 1963
5. "Memorandum for Astronauts: LEM Decent Engine," November 13, 1963
6. "Memorandum for Astronauts: LEM ECS Meeting No. 3, June 13, 1963," June 14, 1963
7. "Memorandum for Astronauts: LEM ECS Meeting No. 6, October 30, 1963," October 31, 1963
8. "Memorandum for Astronauts: LEM Electrical Power Systems Meeting, April 11, 1963," April 23, 1963
9. "Memorandum for Astronauts: LEM Electrical Power Systems Meeting, June 13, 1963," June 14, 1963
10. "Memorandum for Astronauts: LEM Electrical Systems Meetings; August 15, 1963," August 26, 1963
11. "Memorandum for Astronauts: LEM Electrical Power Systems Meeting – 26 September 1963," October 8, 1963
12. "Memorandum for Astronauts: LEM Guidance and Navigation System," October 22, 1963
13. "Memorandum for Astronauts: LEM Landing," December 2, 1963
14. "Memorandum for Astronauts: LEM Landing – 14 January 1964," January 22, 1964
15. "Memorandum for Astronauts: LEM Mockup, Peter Pan Rig, Apollo Phase 'B' Suit Mobility Evaluation of 2 September 1963," September 30, 1963
16. "Memorandum for Astronauts: LEM SCS Meeting, February 28, 1963," March 1, 1963
17. "Memorandum for Astronauts: LEM SCS Meeting, September 11, 1963" September 13, 1963
18. "Memorandum for Astronauts: LEM Visibility," August 15, 1963.
19. "Memorandum for Astronauts: LEM Visibility Problem," July 23,

- 1963
20. "Memorandum for Astronauts: LEM Visual Landing Aids," July 22, 1963
  21. "Memorandum for Astronauts: Meeting at MIT," January 15, 1963
  22. "Memorandum for Astronauts: NAA-Collins-NASA Coordination Meeting on Apollo Communications and Instrumentation – 14-15 November 1963," Nov. 18, 1963
  23. "Memorandum for Astronauts: NAA Crew Equipment Briefing of 11 October 1963," undated
  24. "Memorandum for Astronauts: Navigation & Guidance Systems Meeting, 26 June 63," June 28, 1963
  25. "Memorandum for Astronauts: Navigation Station; Apollo Command Module," December 5, 1962
  26. "Memorandum for Astronauts: Notes on Flight Technology Systems Meeting No. 12, Apollo, 27 November 1962," November 30, 1962
  27. "Memorandum for Astronauts: One-day Trip to NAA on Apollo Crew Couch System and Instrument Panel Mock-up," April 10, 1963
  28. "Memorandum for Astronauts: Operational Objectives of the LEM Thrust-translational Controller," November 29, 1963
  29. "Memorandum for Astronauts: Pad Abort Test Boilerplate 6," November 13, 1963
  30. "Memorandum for Astronauts: Pisgah Crater Lunar Landing Program," November 14, 1963
  31. "Memorandum for Astronauts: Post flight analysis of SA-5," March 20, 1964
  32. "Memorandum for Astronauts: Preliminary Look at C/M Single Position Couch," June 10, 1963
  33. "Memorandum for Astronauts: Pressure Suit Interface Evaluation at NAA, Downey, march 26-27, 1963," March 29, 1963
  34. "Memorandum for Astronauts: Range Safety," October 29, 1963
  35. "Memorandum for Astronauts: Recommendations for Alteration From Design Status Report, September 11, 12, 1963 (C/M and S/M)," October 1, 1963
  36. "Memorandum for Astronauts: Results of Apollo Cockpit Review at NAA, July 9-10, 1963," July 23, 1963
  37. "Memorandum for Astronauts: Results of Bell Aerosystems Study on Extra Vehicular Operations, 26 June 63," June 28, 1963
  38. "Memorandum for Astronauts: Review of Apollo Cockpit Mockup with Latest Instrument Panel and Four Position 12° Back Angle Couches," April 12, 1963
  39. "Memorandum for Astronauts: RSO Meeting – November 21, 1963," November 26, 1963
  40. "Memorandum for Astronauts: S-IV Design Meeting" March 5, 1963
  41. "Memorandum for Astronauts: SCS Design Review, M-H 23 and 24 March," April 1, 1964

42. "Memorandum for Astronauts: SCS Review, NAA, 20 December 1963," December 2, 1963
43. "Memorandum for Astronauts: SPS and RCS Review – Questions and Comments," December 2, 1963
44. "Memorandum for Astronauts: Status of Saturn C-1 Emergency Detection System," March 25, 1963
45. "Memorandum for Astronauts: Translunar Extra-vehicular Operation as SOP," November 3, 1963
46. "Memorandum for Astronauts: Trip to MIT, February 18-21, 1963," March 11, 1963
47. "Memorandum for Astronauts: Trip to MIT, December 18-20, 1963," January 6, 1964.
48. "Memorandum for Astronauts: Trip Report – Apollo Design Review #6 October 17-18, 1962, Downey, California," October 22, 1962
49. "Memorandum for Astronauts: Use of latest Phase B Apollo suit in the docking mechanism Peter Pan rig at NAA on April 5-6," March 11, 1964
50. "Memorandum for Astronauts: Visit to Fuel Cell Subcontractors," April 17, 1963
51. "Memorandum for Astronauts: Visit to the Guidance and Navigation Simulator located at NAA, Downey, July 11, 1963," July 16, 1963
52. "Memorandum for Astronauts: Visit to the RCA Princeton and Camden, New Jersey, Facility," July 26, 1963
53. "Memorandum for Astronauts: 1/6 'g' and the Apollo Phase 'B' Space Suit Assembly, Wright-Patterson AFB, November 1, 1963," November 8, 1963
54. "Memorandum for Major D.K. Slayton...: LEM Crew Station Requirements," October 26, 1962
55. "Memorandum for Mr. Charles W. Frick, Manager, Apollo Project Office: Apollo Crew Couching Positioning," January 18, 1963
56. "Mock-Up Review of portable radiation survey meter," September 6, 1964.
57. "Notes on the Apollo Suit Status Review – 9/11/64," September 24, 1964
58. "Oral Hygiene," October 7, 1964
59. "PLSS Donning and Accessibility Test in LEM, 21 July," July 28, 1964
60. "Proposed LEM Weight Reduction Items," November 18, 1964
61. "RCS engine thermal control philosophy," December 7, 1964
62. "RCS quad thermal control philosophy change," December 10, 1964

Folder

5. Apollo Program – Working Files – Mission Planning [Apollo Planning]

Item

1. "Apollo Lunar Landing Mission Symposium, June 25-27, 1966"

Folder

6. Apollo Program – Working Files – Mission Planning [Apollo Planning]  
Item  
1. “Apollo Recovery Operational Procedures Manual,” (revision A)  
February 10, 1969

Folder

7. Apollo Program – Working Files – Mission Planning [Apollo Planning]  
Item  
1. “Constraint of LM yaw attitude during lunar descent,” March 13,  
1967

**Box 57** *Apollo Program – Mission Planning, 1964-1969*

Folder

1. Apollo Program – Working Files – Mission Planning [Apollo Planning]  
Item  
1. “Contributions of MSC Personnel to the Manned Lunar Exploration  
Symposium,” June 15 and 16, 1964

Folder

2. Apollo Program – Working Files – Mission Planning [Apollo Planning]  
Item  
1. “Design objectives for the one-phase targeting descent trajectory,”  
October 2, 1968  
2. “Differences between Apollo 10 and Apollo 11 Flight Plans,” May 2,  
1969  
3. “Entry Monitoring System (EMS) corridor verification for the C’ and  
subsequent mission,” November 26, 1968  
4. “How the MSFN and sextant data are used to target DOI and  
Descent,” April 16, 1969

Folder

3. Apollo Program – Working Files – Mission Planning [Apollo Planning]  
Item  
1. “Initial Concept of Lunar Exploration Systems for Apollo,” March  
1964

Folder

4. Apollo Program – Working Files – Mission Planning [Apollo Planning]  
Item  
1. “Internal Note No. 68-FM-20: Status Report on the Lunar Mission  
Entry Monitoring and Backup Mode Development,” January 22,  
1968  
2. “Internal Note No. 69-FM-130: Entry Mission Plan Apollo 8  
Summary,” May 28, 1969

Folder

5. Apollo Program – Working Files – Mission Planning [Apollo Planning]  
Item  
1. “Lunar Mission Planning Data Book,” July 1967

Folder

6. Apollo Program – Working Files – Mission Planning [Apollo Planning]

Item

1. “The LM can handle big Descent plane changes but requires protection against APS abort fuel depletion,” July 18, 1968
2. “LM Descent abortability computation is proposed,” July 16, 1968
3. “LM powered descent trajectory constraints,” October 8, 1968

Folder

7. Apollo Program – Working Files – Mission Planning [Apollo Planning]

Item

1. “Major Issues to be Resolved for Lunar Mission Planning,” August 11, 1967

Folder

8. Apollo Program – Working Files – Mission Planning [Apollo Planning]

Item

1. “Out-the-window reentry data for the C-prime mission,” December 2, 1968
2. “Peak load factors attained by an initial lift vector down attitude to some specified g level for the F mission,” February 12, 1969
3. “Performance Requirements for CSM Rescue,” April 29, 1968
4. “Powered descent throttle logic correction,” July 17, 1968

Folder

9. Apollo Program – Working Files – Mission Planning [Apollo Planning]

Item

1. “A Piloted Flight Simulation Study to Define the Handling Qualities Requirements for a Lunar Landing Vehicle,” September 13, 1962

Folder

10. Apollo Program – Working Files – Mission Planning [Apollo Planning]

Item

1. “Program and mission Definition Apollo Lunar Exploration,” May 15, 1969

Folder

11. Apollo Program – Working Files – Mission Planning [Apollo Planning]

Item

1. “Reentry corridor reference timeframe,” July 8, 1966
2. “Reentry Corridor Sensitivity to Midcourse Errors,” May 10, 1968
3. “Reentry range targeting philosophy for Apollo Missions F and G,” April 21, 1969
4. “Relative range capability from entry interface (400,000 ft) for various g levels as a function of the inertial flight-path angle,” March 3, 1969

Folder

12. Apollo Program – Working Files – Mission Planning [Apollo Planning]

Item

1. “Simulation of the Integrated LEM Mission,” (Final Report) June 1963

Folder

13. Apollo Program – Working Files – Mission Planning [Apollo Planning]

Item

1. “Throttle up time is fixed during the powered descent maneuver,” July 2, 1968
2. “To Neil, From Charlie Duke,” May 15, 1969

**Box 58** *Apollo Program – Mission Planning, 1967-1970*

Folder

1. Apollo Program – Working Files – Mission Planning [A-11 Planning]

Item

1. “ALSEP recommendations based on suited deployment exercises,” April 17, 1967
2. “Analysis of LM-5 touchdown control performance,” June 4, 1969
3. “Apollo 11 and 12 landing phase trajectories,” March 17, 1970
4. “Apollo 11 and 12 landing phase trajectory data,” February 6, 1970

Folder

2. Apollo Program – Working Files – Mission Planning [A-11 Planning]

Item

1. “Apollo 11, Apollo AS-506/CM-105/LM-5 Final Flight Plan,” July 1, 1969

Folder

3. Apollo Program – Working Files – Mission Planning [A-11 Planning]

Item

1. “Apollo 11 Flight Plan, AS-506/CM-107/LM-5,” July 1, 1969

Folder

4. Apollo Program – Working Files – Mission Planning [A-11 Planning]

Item

1. “Ascent with busted guidance and control systems,” undated
2. “Change Pages for Appendix of Reference,” April 29, 1969
3. “CSM Rendezvous Procedures, G Mission, Final,” May 15, 1969
4. “CSM should have good rendezvous navigation in the lunar mission,” April 30, 1968
5. “Contingency sample container (CSC),” September 25, 1968
6. “Crew safety during RTG lunar operations,” May 15, 1968
7. “Current proposed rendezvous profile for Mission G (LLM),” October 28, 1968
8. “DPS abort curve for the descent H vs H plot,” June 20, 1969
9. “The effect of delaying transearth injection for one lunar orbit while keeping the nominal TEI targets,” June 10, 1969
10. “Effect of fixed throttle point thrust on the time from loss of radial guidance control to DPS throttle-down,” June 5, 1969
11. “Entry guidance evaluations for inertial velocities of 36,200 – 36,600 fps,” May 15, 1969

Folder

5. Apollo Program – Working Files – Mission Planning [A-11 Planning]

Item

1. “Final Flight Mission Rules, Apollo 11 (AS-506/107/LM-5),” May 16, 1969

**Box 59** *Apollo Program – Mission Planning, 1967-1969*

Folder

1. Apollo Program – Working Files – Mission Planning [A-11 Planning]

Item

1. “Fuel reserve penalties incurred when SEA is reduced,” March 7, 1969

Folder

2. Apollo Program – Working Files – Mission Planning [A-11 Planning]

Item

1. “Internal Note No. CF-R-69-6: Project Apollo – Analysis of Terminal Phase Rendezvous Lighting,” March 5, 1969
2. “Internal Note MSC-CF-P-69-21: Apollo Entry Summary Document Mission ‘G’ and Subs, Final Copy,” May 15, 1969
3. “Internal Note MSC-CF-P-69-30: Apollo Abort Summary Document Mission G & Subs (AS-506/107) Final,” May 21, 1969
4. “Internal Note MSC-EG-69-2: Project Apollo, Considerations in Lunar Landmark Sighting and Recommended Techniques,” February 2, 1969

Folder

3. Apollo Program – Working Files – Mission Planning [A-11 Planning]

Item

1. “Internal Note No. 68-FM-268: Preliminary LM Abort and CSM Rescue Plan for Apollo Mission G, Vol. I – LM Abort, CSM Rescue, and CSM Assist During Ascent and Descent,” October 28, 1968
2. “Internal Note No. 69-FM-104: TLI Ship Positioning and Coverage Data for Mission G (Apollo 11) Lunar Launch Opportunities for July, August, and September 1969,” May 23, 1969

Folder

4. Apollo Program – Working Files – Mission Planning [A-11 Planning]

Item

1. “Internal Note No. 69-FM-162: Operational Abort Plan for Apollo 11 (Mission G),” June 13, 1969
2. “Internal Note No. 69-FM-172: Launch Window Effects on the Apollo 11 (Mission G) Operational Abort Plan,” June 24, 1969

Folder

5. Apollo Program – Working Files – Mission Planning [A-11 Planning]

Item

1. “July 9 and 24 ‘G’ rendezvous Mission techniques meetings,” July

- 26, 1968
2. "Langley Working Paper: An Exploratory Evaluation of Some Visual Cues Associated with Simulated Lunar Landings," December 9, 1969
3. "Let's ass a plane change into the lunar rendezvous timeline," June 21, 1968
4. "Lunar rendezvous shaping up," July 2, 1968
5. "Lunar stay activities – touchdown to 2 hours," June 26, 1968
6. "Mission G rendezvous techniques for LM aborts after PDI + 10 minutes," May 19, 1969
7. "Mission Review Minutes," June 18, 1969
8. "Preliminary analysis of immediate recontact problems associated with abort stage Fire-in-the-Hole for Apollo 11," May 16, 1969
9. "Preliminary G mission 15 minute crew chart for aborts during LOI," May 20, 1969
10. "Post-perilune return to earth requirements for Apollo Mission G hybrid trajectories," March 6, 1969
11. "Recommended PGNCS Alignment Sequences for the Lunar Surface Phase and P-57 Drift Checks," March 20, 1969
12. "Preliminary Lunar Rendezvous Abort and Rescue Plan," July 15, 1968
13. "Recovery Requirements, Apollo 11," June 12, 1969

Folder

6. Apollo Program – Working Files – Mission Planning [A-11 Planning]

Item

1. "Rendezvous maneuver targeting for guidance system backup," April 23, 1968
2. "Results of the Fifteenth Lunar Surface Operations Planning Meeting (LSOPM) held on February 14, 1969, Room 261, Building 4," February 27, 1969
3. "Review of the status of Apollo sample return containers (SRC's)," September 25, 1968
4. "Sensitivity of translunar midcourse  $\Delta V$  components for Apollo Mission F," February 7, 1969
5. "Sensitivity to dispersions in the transearth injection and transearth midcourse correction maneuvers and entry longitude control requirements for Apollo Mission F," February 7, 1969
6. "Spacecraft Autopilot Development Memo #20: Feasibility of Performing TEI and Subsequent SPS Burns With the Empty LM Ascent Stage Docked to the CSM," May 19, 1969
7. "Spacecraft computer program design to process VHF ranging for rendezvous navigation," November 14, 1967
8. "Sun in the window analysis for the Apollo Mission G launch phase," July 9, 1969
9. "TEI maneuvers for each lunar orbit for an Apollo Mission G launched July 16, 1969," May 2, 1969

10. "Utilization of the rendezvous radar for determining the perilune altitude prior to the powered lunar descent maneuver," June 18, 1969

Folder

7. Apollo Program – Working Files – Mission Planning [A-11 Planning]

Item

1. "Vol. II LM Data Book – S/C Constraints & Operational Limitations – Struc/Mech," amendment 2-156, June 6, 1969

Folder

8. Apollo Program – Working Files – Mission Planning [A-11 Planning]

Item

1. Note to Mr. Armstrong from Freddo regarding FMES at GAEC on June 16 and 17

**Box 60** *Apollo Program – Mission Planning, 1968-1969*

Folder

1. Apollo Program – Working Files – Mission Planning [D Mission]

Item

1. "Apollo Mission Techniques Document – 'D' Rendezvous," August 16, 1968
2. "'D' Rendezvous," July 25, 1968
3. "D Rendezvous Ground Data Rules and Working Agreements update," September 23, 1968
4. "D Rendezvous Mission Techniques," October 10, 1968
5. "'D' Rendezvous Mission Techniques Ground Rules, Working Agreements, and other things," June 25, 1968
6. "'D' Rendezvous Mission Techniques meeting of August 22," July 26, 1968
7. "D Rendezvous Mission Techniques Meeting – September 9, 1968," September 12, 1968
8. "D Mission Rendezvous Navigation Mission Techniques Panel Meeting" August 28, 1968
9. "D Rendezvous Open Items, Action Items or whatever you call them," October 17, 1968
10. "Flight Mission Description, Apollo D mission," undated
11. "Mission 'D' Rendezvous Mission Techniques meeting," January 24, 1968

Folder

2. Apollo Program – Working Files – Mission Planning [D Mission]

Item

1. "Third 'D' Mission Rendezvous Mission Techniques meeting," February 8, 1968
2. "Fourth Mission 'D' Rendezvous Mission Techniques meeting," February 16, 1968

3. "Fifth 'D' Mission Rendezvous Mission Techniques meeting---don't miss Paragraph 5; it's great," March 1, 1968
4. "Seventh 'D' Mission Rendezvous Mission Techniques meeting," April 2, 1968
5. "Seventh 'D' Mission Rendezvous Mission Techniques meeting," March 13, 1968
6. "Internal Note MSC-CF-P-58-17: Apollo Abort Summary Document, Mission 'D' (SA-503, S/C-103) Reference Copy," June 3, 1968
7. "Internal Note MSC-CF-P-69-2: Apollo Abort Summary Document, Mission D, Final," January 2, 1969
8. "Internal Note No. S-PA-8M-036: Apollo Mission Techniques Mission D Rendezvous, Vol. 1 – Techniques Description (Revision A)," February 14, 1969

Folder

3. Apollo Program – Working Files – Mission Planning [D Mission]

Item

1. "LM Rendezvous Procedures, D Mission, Review Copy," June 13, 1968
2. "LM rendezvous Procedures, F Mission, Preliminary," February 7, 1969
3. "Procedures to be used during 'D' transposition and docking," September 24, 1968
4. "Proposed Maneuver for jettisoning the LM descent stage for aborts initiated at TPI by the LM during the LM active rendezvous (Apollo 9)," February 10, 1969
5. "Propulsion system to be used on the 'D' Mission Rendezvous CSI Maneuver," August 5, 1968
6. "Stable Orbit Rescue for Mission D," November 19, 1968

Folder

4. Apollo Program – Working Files – Mission Planning [103]

Item

1. "Apollo VIII Food System," undated
2. "Apollo 8 slidewire status," December 10, 1968
3. "CSM 103 Ground Test Constraints Plan," October 1968
4. "CSM 103 Notes (#1)," December 10, 1968
5. "CSM 103 Notes (#2)," December 14, 1968
6. "CM 103, Revision D, Stowage List Change Notice (SLCN), SLCN No. 1D," November 18, 1968
7. "CSM 103 Status," November 4, 1968
8. "CSM 103 Status," November 26, 1968
9. "Crew Debriefing of Crew Compartment Fit and Function, Manned Suit Loop Check-Out S/C 103," July 20, 1968
10. "Flight Readiness Review for Spacecraft 103 (Command and Service Module 103, Spacecraft Lunar Adapter 11, and Spacecraft Lunar Test Article B)," October 15, 1968
11. "Following Spacecraft hardware will be installed after TCP 0034

- testing is completed,” undated
12. “Minutes of Meeting the Customer Acceptance Readiness Review Phase III Board, CSM 103, at North American Rockwell Corporation, Downey, California,” July 25, 1968
  13. “Minutes of the Meeting, The Customer Acceptance Readiness Review Top Deck Buildup Board, CSM 103, at North American Rockwell Corporation, Downey, California,” August 9, 1968
  14. “Minutes of Meeting Flight Readiness Review Pre-Board, CSM 103,” November 11, 1968
  15. “Spacecraft 103 Configuration Changes and Problems,” undated
  16. “Status of Crew Comments from Simulated Altitude Test and altitude for CM 103,” October 22, 1968
  17. “Stowage for TCP K-0007 S/C 103,” November 22, 1968

**Box 61** *Apollo Program – Mission Planning – Single File Folders Labeled by Armstrong, 1961-1969*

Folder

1. Apollo Program – Working Files – [Apollo] (folder 1 of 6)

Item

1. “Pilot’s Abbreviated Flight Crew Checklist, USAF Series T-33A,” June 3, 1968
2. “Operational Supplement, Flight Manual USAF Series T-38A Aircraft,” March 21, 1969

Folder

2. Apollo Program – Working Files – [Apollo] (folder 2 of 6)

Item

1. “Grumman Aircraft Astroguide,” October 1961

Folder

3. Apollo Program – Working Files – [Apollo] (folder 3 of 6)

Item

1. [Policy Papers – NASA] “Policy Paper, An Assessment of Aeronautics in NASA,” October 14, 1969

Folder

4. Apollo Program – Working Files – [Apollo] (folder 4 of 6)

Item

1. Summary Reports on the LLRV Crash, May 6, 1968 (Neil Armstrong, pilot)

Folder

5. Apollo Program – Working Files – [Apollo] (folder 5 of 6)

Item

1. “Statement of Charles W. Harper, Deputy Associate Administrator (Aeronautics), Office of Advanced Research and Technology, National Aeronautics and Space Administration before the Subcommittee on Advanced Research and Technology Committee

- on Science and Astronautics, House of Representatives,” circa 1969
2. “Statement of Bruce T. Lundin, Director, Lewis Research Center, National Aeronautics and Space Administration before the Subcommittee on Advanced Research and Technology Committee on Science and Astronautics, House of Representatives,” circa 1969

Folder

6. Apollo Program – Working Files – [Apollo] (folder 6 of 6)

Item

1. “Latin American Tour with Astronauts Armstrong and Gordon, October 7-31, 1966,” (5 copies)

**Box 62** *Apollo Program – Mission Planning – Single File Folders Labeled by Armstrong, 1965-1969*

Folder

1. Apollo Program – Working Files – Mission Planning [Back Contamination]

Item

1. “Level I Apollo Back Contamination Program Documents,” May 23, 1969
2. “Integrated Quarantine Operations Plan,” May 15, 1969
3. “Lunar Receiving Laboratory Contingency Plan,” May 22, 1969
4. “Back Contamination Mission Rules (Recovery to Lunar Receiving Lab),” May 21, 1969
5. “Procedures for Control of Back Contamination,” May 8, 1969
6. “Action items from Interagency Committee on Back Contamination (ICBC) Meeting,” May 5, 1969
7. “Back Contamination,” May 6, 1969

Folder

2. Apollo Program – Working Files – Mission Planning [Back Contamination]

Item

1. “Back contamination Mission Rules (Recovery to Lunar Receiving Lab) Revision A,” July 7, 1969

Folder

3. Apollo Program – Working Files – Mission Planning [CCB]

Item

1. Minutes of Configuration Control Board Meetings, March to May, 1969 (minutes of 5 meetings)

Folder

4. Apollo Program – Working Files – Mission Planning [Descent Engine]

Item

1. “LM Main propulsion systems,” February 20, 1967  
“STL LEM Descent Engine Support Manual, Section II, GAEC Para. 10.1,” October 29, 1965

“Gimbal drive Actuator System,” circa 1966

Folder

5. Apollo Program – Working Files – Mission Planning [DOI]

Item

1. “The DOI Maneuver as affected by DPS engine constraints,” Nov. 27, 1967
2. “The manually throttled DOI maneuver and its effect on the determination of an intermediate thrust level,” April 4, 1968
3. “Descent Orbit Insertion (DOI) monitoring and abort procedures are proposed,” April 23, 1968 (2 copies)
4. “Internal Note No. 68-FM-194: A Manually Throttled Thrust Profile for DOI,” August 6, 1968
5. “DOI Direct Return Chart,” undated
6. “Stowed GFE required to support CSM spacecraft milestones,” October 19, 1968
7. “LM-5 Descent Stage CCFF Board Review,” April 8, 1969

Folder

6. Apollo Program – Working Files – Mission Planning [LLRV]

Item

1. “‘G’ Mission Attitude Timeline and Venting Sequence,” undated
2. “Internal Note MSC- EG-69-9: Project Apollo, Guidance laws for Controlling Off-Nominal Lm Powered Descent Trajectories Back to the Nominal,” February 28, 1969
3. “Internal Note No. 69-FM-23” Preliminary LM Abort and CSM Rescue plan for Apollo Mission G, Volume IV, Aborts from Powered Descent,” January 31, 1969
4. “LM landing approach guidance and control modes,” March 12, 1969
5. “LM powered descent guidance,” March 5, 1969
6. “Trip to Langley Research Center to Flight with the Lunar Landing Research Facility Case Number – 310,” February 25, 1969

Folder

7. Apollo Program – Working Files – Mission Planning [LM-5]

Item

1. “In orbit smoke/fire in cabin,” August 22, 1968”
2. “[Final Systems Brief]” attached; “Orbit Emergency Procedures, Smoke/Fire in SM” undated.; results of S/C 107 Phase III Carr – Notes of Interest,” January 8, 1969
3. “[Apollo 8 Debriefing],” handwritten notes (3 pages)
4. “Minutes of Meeting the Customer Acceptance Readiness Review Phase III Pre-Board, CSM 107, at MSC, Houston, Texas, KSC, Florida and North American Rockwell Coproration, Downey, California, December 16, 1968,” December 26, 1968
5. “CSM-106/LM-4 Ascent Stage Docking test 12-13 December, 1968,” December 16, 1968
6. “Visit to RCA, Camden, New Jersey, May 3, 1968,” May 7, 1968

7. "Some curious facts about VHF ranging," November 3, 1967
8. "SPS Gimbal Trim Thumbwheel Sensing," September 15, 1967
9. "Suite Demand Pressure Regulator," undated
10. Equipment photos (3), undated

Folder

8. Apollo Program – Working Files – Mission Planning [MSFN]

Item

1. "MSFN Lunar Orbit Determination Uncertainties (Action Item G/107/LM6-111)," March 27, 1968
2. "MSFN/RTCC Performance," undated

Folder

9. Apollo Program – Working Files – Mission Planning [Stowage] (folder 1 of 2)

Item

1. "LM-5 Descent Stage C<sup>2</sup>F<sup>2</sup>," April 10, 1969
2. "Apollo Stowage List, Mission AS 506 CM 107/LM-5, Apollo 11," June 24, 1969
3. "LM-5 Post Altitude Chamber Test Review Minutes," April 8, 1969
4. "Apollo 8 Crew Station Evaluation," January 27, 1969
5. "Stowed GFE required to support CSM spacecraft milestones," October 19, 1968
6. "LM-5 Descent Stage CCFF Board Review," April 8, 1969

Folder

10. Apollo Program – Working Files – Mission Planning [Stowage] (folder 2 of 2)

Item

1. "CM 107 Altitude Chamber Tests," March 27, 1969
2. "CM 107 Crew Equipment Shortages and Flight Crew Comments from TCP K-0048," undated
3. "[S/C 107]," stowage diagram, undated
4. "CM 107/LM-5 Flight Crew Equipment Bench Review," February 7, 1969
5. "Apollo 11 Support Team Meeting No. 1," January 22, 1969
6. "Apollo 11 Support Team Meeting No. 2," January 29, 1969
7. "Apollo 11 Support Team Meeting Number 3," February 4, 1969
8. "LM-5 and Subs Altitude Chamber Testing," January 14, 1969
9. "CSM Flight Data File," February 25, 1969
10. "LM-5 Ascent Stage Crew Equipment Shortages and Flight Crew Comments from KL-0014," undated
11. "CM 107 Bench Review Crew Comments/Resolutions," undated.
12. "Crew Comments/Resolutions for CM 107-Simulated Altitude Chamber Tests and C<sup>2</sup>F<sup>2</sup> Exercises," April 29, 1969
13. "Mission Training Program for the Apollo Lunar landing Mission," December 20, 1968
14. "LM-5 Open Changes," May 2, 1969
15. "Crew Comments/Resolutions for LM-5 Simulated Altitude

- Chamber Tests, C2F2 Exercises, Altitude Chamber Tests, and Descent Stage C2F2 Exercises,” May 16, 1969
16. “LM-5 Altitude Chamber A/S RFA Status (3/25/69),” May 19, 1969
  17. “CM107 Delta Crew Compartment Fit and Functional,” June 10, 1969
  18. “LM Stowage for CDDT,” June 17, 1969

Folder

11. Apollo Program – Working Files – Mission Planning [2TV-1 LTA-X]

Item

1. “2TV-1 test briefing,” June 7, 1968
2. “Crew Report,” July 2, 1968
3. “2TV-1 Thermal Vacuum Test Results, Reference: 2TV Crew Report of 2 July, 1968,” July 8, 1968
4. “2TV/103 support test, quick look,” September 20, 1968
5. “2TV-1/103 Flight Crew/Flight Crew Support Team Summary Report,” October 22, 1968
6. “LTA-8 Crew Report,” May 10-11, 1968
7. “LTA-8 Crew Report, TV-3 (Cold Case),” circa 1968
8. “Crew Report: LTA-8 PLS Test,” June 5, 1968
9. “Crew Report Summary: LTA-8 Thermal Vacuum Test,” circa 1968
10. “Crew Report: TV-4 (Hot Case),” November 14, 1968 (2 copies, 1 undated)
11. “LTA-8/LM-5 Flight Crew Support Team Summary report, Thermal Vacuum Tests Numbers 3 and 4,” December 10, 1968

**Box 63** *Apollo Program – Mission Planning – Data Books, 1966-1969*

Folder

1. Apollo Program – Working Files – Mission Planning

Item

1. “Apollo Mission Modular Data Book, Block II Lunar Mission,” January 1, 1967

Folder

2. Apollo Program – Working Files – Mission Planning

Item

1. “Design Reference Mission IIA, Apollo Mission Planning Task Force, Volume II Pre-flight Operations,” October 30, 1966

Folder

3. Apollo Program – Working Files – Mission Planning

Item

1. “CSM/LM Space craft Operational Data Book, Vol. I CSM Data Book,” May 1968

Folder

4. Apollo Program – Working Files – Mission Planning

Item

1. "Internal Note No. 69-FM-5: Revision 1 to the Apollo Mission G Spacecraft Reference Trajectory, Volume 1, Reference Mission Profile (launched August 14, 1969," February 7, 1969

Folder

5. Apollo Program – Working Files – Mission Planning

Item

1. "Apollo Mission E (AS-504/CSM 104/LM-4) Spacecraft Reference Trajectory" March 19, 1968
2. "Spacecraft Reference Trajectory for Apollo Mission C – prime – Alternate 1," August 28, 1968

Folder

6. Apollo Program – Working Files – Mission Planning

Item

1. "Internal Note \_: Apollo Mission Techniques Mission C-Prime Lunar (Alternate 1) Transearth Injection, Midcourse Corrections and Entry, Volume 1, Techniques Description, Revision A, Rough Draft," undated

**Box 64** *Apollo Program – Mission Planning, 1968-1969*

Folder

1. Apollo Program – Working Files – Mission Planning

Item

1. "Aborts from powered descent on the lunar landing mission," May 14, 1968
2. "Aborts (PDI→TD + 2 min) [II]," undated
3. "Contingency Analysis Section Mission G data package," April 4, 1969
4. "Emergency repower of Lunar Module buses," May 14, 1969
5. "The effect of LPO stay time on lightning at earth landing for an Apollo Mission G launched July 16, 1969," April 11, 1969

Folder

2. Apollo Program – Working Files – Mission Planning

Item

1. "Aborting from the Hohlmann Descent in Mission G," March 3, 1969 (2 copies, 1 annotated)

Folder

3. Apollo Program – Working Files – Mission Planning

Item

1. "Apollo Mission Techniques, Mission G, Abort from Lunar powered Descent, Techniques description," with related memos February-May 1969

Folder

4. Apollo Program – Working Files – Mission Planning

Item

1. "Apollo Project memo #18-69: Decisions of the 29<sup>th</sup> Apollo Spacecraft Software Configuration Control Board Which Affect LUMINARY 1A," February 19, 1969

Folder

5. Apollo Program – Working Files – Mission Planning

Item

1. "Apollo Software Information Memo #2-69-25, Lunar Surface Alignment Program for LUMINARY 1," March 4, 1969
2. "Apollo Software Information Memo #3-69-26, Changes being made from LUMMINARY Revision 69 to LUMINARY 1A," March 10, 1969

Folder

6. Apollo Program – Working Files – Mission Planning

Item

1. "Apollo Trajectories," undated

Folder

7. Apollo Program – Working Files – Mission Planning

Item

1. "Apollo 10 Mission Failure and Anomaly Listing," June 1969

Folder

8. Apollo Program – Working Files – Mission Planning

Item

1. "Apollo 11 Launch Timeline," undated (2 copies)
2. "Apollo 11 Crew/Support Team 'G' Mission, CSM 107/LM-5," undated

Folder

9. Apollo Program – Working Files – Mission Planning

Item

1. "Apollo Stowage List, Mission AS 506 CM 107/LM-5, Apollo 11," May 20, 1969
2. "Apollo Stowage List, Mission AS 506 CM 107/LM-5, Apollo 11," June 3, 1969

Folder

10. Apollo Program – Working Files – Mission Planning

Item

1. "COLOSSUS Memo # 129: Operational Information on V99 and V97 for Revs. 237, 249," December 19, 1968
2. "COLOSSUS Memo # 139, Revision 1: Discussion of Anomaly COL 69 (Responses to V99/97 in P40)," February 3, 1969

Folder

11. Apollo Program – Working Files – Mission Planning

Item

1. "COLOSSUS program and operational notes, final edition for mission D, COLOSSUS 1A (Rev. 249)," February 10, 1969

Folder

12. Apollo Program – Working Files – Mission Planning

Item

1. "Crew Briefing, G mission – LM Descent and Ascent, Mission Planning and Analysis Division," May 8, 1969

Folder

13. Apollo Program – Working Files – Mission Planning

Item

1. "Crew preference decals and Velcro for LM-5," May 23, 1969

Folder

14. Apollo Program – Working Files – Mission Planning

Item

1. "Crew Training simulations for the entry phase of Apollo missions," June 3, 1969

Folder

15. Apollo Program – Working Files – Mission Planning

Item

1. "Configuration Control Board," May 28, 1969
2. "Configuration Control Board," June 6, 1969

Folder

16. Apollo Program – Working Files – Mission Planning

Item

1. "Contingency evasive maneuver sequence for Apollo Missions F and G," April 30, 1969
2. "LM 5 Configuration for Jettison," May 2, 1969

Folder

17. Apollo Program – Working Files – Mission Planning (Data Processing)

Item

1. "P37 crewchart for longitude control," March 27, 1969
2. "Colossus II P37 characteristics and limitations," March 27, 1969
3. "Checkout of P37 abort procedure at TLI + 90 minutes to a desired contingency landing area," March 26, 1969
4. "COLOSSUS 2A and LUMINARY 1A program and operational notes, first edition for mission G (COMANCHE 55 and LUMINARY 99)," June 11, 1969
5. "Some things about Ascent from the moon," April 8, 1969
6. "AGS alignments in lunar orbit and operations on the lunar surface," April 4, 1969
7. "Ascent newsletter," May 12, 1969
8. "CSM EECOM Go/No-Go Criteria," undated
9. "Landing radar flight instrument displays and DSKY lights," April 23, 1969

Folder

18. Apollo Program – Working Files – Mission Planning (Data Change)

Item

1. "Data Change Notification Form CSM/LM Spacecraft Operational Data: CSM-LM Relative Separation Velocity," May 12, 1969
2. "Data Change Notification Form CSM/LM Spacecraft Operational

Data: LM-CSM VHF Communication Modes, Range-Gain Plots, Antenna Patterns," May 15, 1969

Folder

19. Apollo Program – Working Files – Mission Planning (DPS Profiles)

Item

1. "DPS throttle profiles for LM DAP verification testing," April 5, 1968
2. "Typical Man-in-the-Loop DPS thrust profiles for the LM final approach and landing phases," March 18, 1968

Folder

20. Apollo Program – Working Files – Mission Planning

Item

1. "Descent Aborts and subsequent Rendezvous Mission Techniques," May 1, 1969
2. "Descent Monitoring at MCC," April 10, 1969
3. "Descent Monitoring Mission Techniques," May, 1969
4. Descent trajectory chart with notes, undated

**Box 65** *Apollo Program – Mission Planning, 1962-1969*

Folder

1. Apollo Program – Working Files – Mission Planning

Item

1. "Design Reference Mission 11A, Volume 1 Mission Description," October 30, 1966

Folder

2. Apollo Program – Working Files – Mission Planning

Item

1. "Directory of Standard Geodetic and Geophysical Constants for Gemini and Apollo," April 6, 1965

Folder

3. Apollo Program – Working Files – Mission Planning

Item

1. "Drug Testing Procedure (Addendum to Medical Requirements Document)," April 18, 1969

Folder

4. Apollo Program – Working Files – Mission Planning

Item

1. "FDAI angles for LM ascent," May 27, 1969

Folder

5. Apollo Program – Working Files – Mission Planning

Item

1. "GAEC Presentation G-Mission Critical Operations," March 25, 1969

Folder

6. Apollo Program – Working Files – Mission Planning

Item

1. "Guidance System Operations Plan for Manned CM Earth Orbital and Lunar Missions Using Program COLOSSUS 2 (MANCHE45, Rev. 2), Section 3 Digital Autopilots (Rev. 5)," April 1969

Folder

7. Apollo Program – Working Files – Mission Planning

Item

1. "General Operations Plan and Procedures for Recovery Quarantine Operations for a Lunar Landing Mission," June 18, 1969

Folder

8. Apollo Program – Working Files – Mission Planning

Item

1. "Human Performance and Tolerance Under Severe Complex Waveform Vibration with a Preliminary Historical Review of Flight Simulation," April, 1962

Folder

9. Apollo Program – Working Files – Mission Planning

Item

1. "Instrumentation Caution and Warning Items from LM-5 Crew Briefing," July 8, 1969

Folder

10. Apollo Program – Working Files – Mission Planning

Item

1. "Items for Discussion LM-5 Crew Briefing," undated

Folder

11. Apollo Program – Working Files – Mission Planning

Item

1. "Internal Note MSC-EG-68-08: Apollo Lunar Module Alinement Optical Telescope Evaluation," July 9, 1968

Folder

12. Apollo Program – Working Files – Mission Planning

Item

1. "Internal Note No. S-PA-9T-044A: Apollo Mission Techniques Missions F and G, Lunar Orbit Activities, Revision A, Volume 1, Techniques Description," May 7, 1969

**Box 66** *Apollo Program – Mission Planning, 1963-1969*

Folder

1. Apollo Program – Working Files – Mission Planning

Item

1. "Internal Note No. 68-FM-147: Apollo Mission D (AS-503/CSM-103/LM-3) Spacecraft Reference Trajectory Revision 1," June 24, 1968

Folder

2. Apollo Program – Working Files – Mission Planning (Midcourse Correction)  
Item

1. “Internal Note No. 68-FM-288: Onboard Midcourse Correction Targeting During the Transearth Coast Phase of a Lunar Mission,” December 3, 1968
2. “F/G cis-lunar midcourse correction mission techniques,” February 6, 1969
3. “F and G cis-lunar and abort plan,” January 21, 1969

Folder

3. Apollo Program – Working Files – Mission Planning

Item

1. “Internal Note No. 69-FM-25: Preliminary Alternate Mission Plan for Apollo Mission, Volume 1 – Earth Orbit,” February 3, 1969

Folder

4. Apollo Program – Working Files – Mission Planning

Item

1. “Internal Note No. 69-FM-106: Consumables Analysis for the Apollo 11 (Mission G) Spacecraft Operational Trajectory,” May 21, 1969

Folder

5. Apollo Program – Working Files – Mission Planning

Item

1. “Internal Note No. 69-FM-107: Views from the Spacecraft During Apollo 10 (Mission F) May 18, 1969 Launch Date,” April 22, 1969

Folder

6. Apollo Program – Working Files – Mission Planning

Item

1. “Internal Note No. 69-FM-197: Revision 1 to Views from the CM and LM During the Flight of Apollo 11 (Mission G),” July 3, 1969

Folder

7. Apollo Program – Working Files – Mission Planning

Item

1. “Internal Note 69-FM-203: Separation Procedures for Apollo 11 Nominal, Alternate, and Abort Missions,” July 11, 1969

Folder

8. Apollo Program – Working Files – Mission Planning (Trajectories)

Item

1. “Addendum to MSC Memorandum 69-FM22-39,” March 17, 1969
2. “Assessment of LM descent guidance with DPS thrust dispersions,” November 1, 1966
3. “Internal Note MSC-CF-R-68-20: The Effects of LM Rotational Hand Controller Scalings During Simulated Lunar Landings,” December 20, 1968
4. “Internal Note MSC-EG-69-9: Project Apollo, Guidance Laws for Controlling Off-Nominal LM Powered Descent Trajectories Back to the Nominal,” February 28, 1969

5. "Langley Working Paper: An Experimental Study of Lunar Touchdown Trajectories and Associated Piloting Problems," February 14, 1969
6. "Langley Working Paper: An Exploratory Investigation of the Piloting Problems Presented by Obstacle Avoidance with a Lunar Landing Type Vehicle," January 10, 1969

Folder

9. Apollo Program – Working Files – Mission Planning

Item

1. "The International Systems of Units: Physical Constants and Conversion Factors," circa 1964

Folder

10. Apollo Program – Working Files – Mission Planning

Item

1. "LEM-Active Docking," April 21, 1965
2. "Lunar Rendezvous Simulation (Langley, moving base)," October 6, 1964
3. "LEM Emergency Abort, Guidance System Study – General Information," February 11, 1963

Folder

11. Apollo Program – Working Files – Mission Planning

Item

1. "Launch Mission Rules, Apollo 11 (SA-506/CSM-107/LM-5) Revision A," June 20, 1969

Folder

12. Apollo Program – Working Files – Mission Planning

Item

1. "LUMINARY Memo #62: A Set of Lunar Landing Guidance Equations which Compensate for Computation, Throttle, and Attitude Control Lags," January 24, 1969
2. "LUMINARY Memo #64: Verb 87 – RR Antenna Line-of-Sight Display," February 4, 1969 (2 copies)
3. "LUMINARY Memo #66: Aborts from the Lunar Landing and Nominal Lunar Ascent Targeting," February 11, 1969
4. "LUMINARY Memo #67: LUMINARY Revisions 70-79," February 17, 1969
5. "LUMINARY Memo #68: Lunar Landing Guidance Equations Program Alarms," February 20, 1969
6. "COLOSSUS Memo #163, LUMINARY Memo #70: Accuracy of V83 (Range, Range Rate, Theta Display)," March 12, 1969

Folder

13. Apollo Program – Working Files – Mission Planning

Item

1. "COLOSSUS Memo #191, LUMINARY Memo #90: Memo Indexes," June 30, 1969
2. "LUMINARY Memo #91: LUMINARY Revisions 100-105," July 7,

- 1969
3. "LUMINARY Memo #92: LUMINARY Revision 106," July 10, 1969
4. "LUMINARY Memo #94: Revision 107," July 14, 1969
5. "LUMINARY Memo #95: Landing Radar Orientation," July 9, 1969
6. "Apollo Software Memos, Series: LUMINARY," November 1, 1967

Folder

14. Apollo Program – Working Files – Mission Planning

Item

1. Lunar landing take-off techniques, radar parameters, guidance and control modes with landing site designation information, March-June, 1969

**Box 66a OS** *Apollo Program – Mission Planning, 1969*

Folder

1. Various design drafts of Apollo 11 mission patch with correspondence, circa 1969

**Box 67** *Apollo Program – Mission Planning, 1966-1969*

Folder

1. Apollo Program – Working Files – Mission Planning (LM Ascent and Descent Trajectories)

Item

1. "Definition, for simulation use, of the latest LM descent trajectory and guidance logic, and some related problems," December 1, 1966
2. "LM-5 Checklist Status," May 12, 1969
3. "Procedures for controlling back contamination" May 15, 1969
4. "Apollo Trajectory Documentation Status Report as of May 12, 1969," May 21, 1969
5. "Visual cues for LM onboard ascent monitoring," May 21, 1969
6. "G mission propellant and  $\Delta V$  reserves," June 16, 1969
7. "Safe-orbit determination for post lunar ascent insertion," June 30, 1969
8. "Lunar Dust Disturbance on Descent," July 2, 1969

Folder

2. Apollo Program – Working Files – Mission Planning

Item

1. "LM-5; Emergency Procedures," May 7, 1969

Folder

3. Apollo Program – Working Files – Mission Planning

Item

1. "Lunar orbit sleep attitude for F and G lunar missions," February 19, 1969

Folder

4. Apollo Program – Working Files – Mission Planning (Medical Testing Schedule)

Item

1. Test Schedule Summaries (3 pages) circa 1969
2. "Immunizations," May 23, 1969
3. "Apollo 11 Food System," undated

Folder

5. Apollo Program – Working Files – Mission Planning (Memos)

Item

1. "ICBC Telephone Telephone Conference Summary and Action Items," May 21, 1969
2. "Remote Control Unit (RCU) Modification and Camera Mount," May 9, 1969

Folder

6. Apollo Program – Working Files – Mission Planning (Memos-LM ascent/descent)

Item

1. "Lunar rendezvous abort summary," March 18, 1969
2. LR data, undated
3. "[Luminary]," undated
4. "Lunar Surface 'Block' Data," June 26, 1969
5. "Apollo 11 LM Powered Descent" circa 1969 (OS chart with notation) See Apollo Oversized Materials, Flat Files, Drawer 4 "Flight and Space Exploration Archives," Folder 5
6. "Crew Procedures Change Request: LM Descent/Ascent Summary Document," May 22, 1969
7. "Crew Procedures Change Request: G & Subs ESD Final," May 15, 1969
8. "Mission techniques for the LM lunar stay go/no go," April 4, 1968
9. "'G' Mission Support Team Deployment to KSC," undated
10. "Open items affecting powered descent," June 6, 1969
11. "Descent Aborts," October 21, 1968
12. "Descent Aborts – Part II," October 25, 1968
13. "Radial LM navigation errors which lead to unsafe lunar descent trajectories," November 18, 1968
14. "LM DPS low level light fixing," November 25, 1968
15. "Descent Aborts – Part III," November 25, 1968
16. "3 $\sigma$  LM Position Accuracy at Powered Descent Initiation (Based on Orbiter III Tracking)," undated

Folder

7. Apollo Program – Working Files – Mission Planning (Memos-Russian Lunar Program)

Item

1. "Meeting Cosmonaut Major General Beregovoi in Helsinki, Finland," July 22, 1969
2. "Analysis of Unmanned Russian Rendezvous Mission," December 22, 1967

Folder

8. Apollo Program – Working Files – Mission Planning (Memos-Mission F & G Capabilities)

Item

1. "Spacecraft computer program newsletter," May 24, 1968
2. "Guidance and control systems interaction in P64 and P65," February 10, 1969
3. "LM descent constraints/performance trade-off study," February 17, 1969
4. "Status of LM RCS insertion capability," February 13, 1969
5. "Ability to fly F and G missions with CSM powered up," February 10, 1969
6. "F/G Mission Techniques – except for the lunar orbit phase – are ready to eat," February 11, 1969
7. "F/G Rendezvous Mission Techniques – mostly F," February 11, 1969
8. "F Rendezvous Navigation Mission Techniques Panel Meetings, April 10, 1969," April 17, 1969
9. "F Rendezvous Mission Techniques Clean-up," April 11, 1969

Folder

9. Apollo Program – Working Files – Mission Planning (Midcourse Phase Mission Techniques)

Item

1. "Preliminary G mission performance data for the last quarter of 1969," December 6, 1968
2. "Sixth Midcourse Phase Mission Techniques meeting," March 12, 1968
3. "Transearth midcourse correction philosophy – a major operational break through!" June 3, 1968

Folder

10. Apollo Program – Working Files – Mission Planning

Item

1. "Minutes of the COLOSSUS 2 Flight Software Readiness Review," May 9, 1968

Folder

11. Apollo Program – Working Files – Mission Planning

Item

1. "Mission Implementation Plan for the Apollo 11 (G) Mission (Apollo Lunar Landing Mission) Revision 4," July 3, 1969

Folder

12. Apollo Program – Working Files – Mission Planning

Item

1. "Mission Requirements 'F' Type Mission Lunar Orbit," May 23, 1968
2. "Mission Requirements 'G' Type Mission Lunar Landing," May 23, 1968

Folder

13. Apollo Program – Working Files – Mission Planning

Item

1. "Mission Requirements – G Type Mission – Lunar Landing," April 17, 1969
2. "Mission Summary for July Launch," May 15, 1969

Folder

14. Apollo Program – Working Files – Mission Planning

Item

1. "Mission Techniques Memo #36: Summary of 'G' Mission Techniques Items," June 24, 1969

Folder

15. Apollo Program – Working Files – Mission Planning

Item

1. "Optical Sighting Outline for Transearth Phase of Mission 'G'," January 19, 1968

Folder

16. Apollo Program – Working Files – Mission Planning

Item

1. Partial legal pad with handwritten, numbered notes (possibly part of Apollo 8 debriefing notes), undated

Folder

17. Apollo Program – Working Files – Mission Planning

Item

1. "The Physiological Basis of Space Cabin Atmosphere Selection for the Apollo Applications Program," January 1966

Folder

18. Apollo Program – Working Files – Mission Planning

Item

1. "Public Affairs access to Apollo 11/12 crews," May 12, 1969

Folder

19. Apollo Program – Working Files – Mission Planning

Item

1. "RR Timeline Nominal Mission," with landing site 2 profile, May 20, 1969

Folder

20. Apollo Program – Working Files – Mission Planning

Item

1. "Revision II to mission 'E' (AS-504/CSM 104/LM-4) Spacecraft Reference Trajectory," August 1, 1969

Folder

21. Apollo Program – Working Files – Mission Planning  
Item  
1. “Significant Rendezvous Radar Parameters – LM-5,” April, 1969

**Box 68** *Apollo Program – Mission Planning, 1968-1969*

Folder

1. Apollo Program – Working Files – Mission Planning  
Item  
1. Memos from the LM Propulsion and Power Division, December 1966

Folder

2. Apollo Program – Working Files – Mission Planning  
Item  
1. Small black binder with handwritten notes headed “LTA-8/LM-2 Differences,” undated

Folder

3. Apollo Program – Working Files – Mission Planning  
Item  
1. “Space Guidance Analysis Memo # 11-68: Recursive Navigation Theory Explained,” May 21, 1968

Folder

4. Apollo Program – Working Files – Mission Planning  
Item  
1. “Spacecraft Autopilot Development Memo #1-69: LUMINARY Autopilot Test 1.3.1\* Coasting Flight, Manual Attitude Maneuvers, Standard Performance, Digital Simulation,” January 7, 1969

Folder

5. Apollo Program – Working Files – Mission Planning  
Item  
1. “Summary of onboard overburn monitoring criteria for missions F and G,” May 7, 1969

Folder

6. Apollo Program – Working Files – Mission Planning  
Item  
1. “Technical Information Release[s]: Preliminary Data from LMS/LUMINARY 1A,” June 16-30, 1969

Folder

7. Apollo Program – Working Files – Mission Planning  
Item  
1. “Transposition and docking attitudes for July 1969 Apollo Mission F and G,” February 28, 1969

Folder

8. Apollo Program – Working Files – Mission Planning  
Item

1. Updates and additional program notes for the COLOSSUS 2 (F mission command module program," May 14, 1968

Folder

9. Apollo Program – Working Files – Mission Planning

Item

1. Working Papers: An Improved LM Descent Trajectory for the G Mission – Case 310," May 23, 1969

Folder

10. Apollo Program – Working Files – Mission Planning

Item

1. "10 Crew debriefing – 6/2," June, 1969

**Box 69** *Apollo Program – Mission Planning/Execution, June-July 1969*

Folder

1. Apollo Program – Working Files – "Apollo 11 CSM Lunar Landmark Maps, Part No. SKB32100080-322, S/N 1001," July 16, 1969
2. Apollo Program – Working Files – "Apollo 11 CSM Lunar Maps (Prototype), DWG No. SKB32100079-322, S/N N/A," circa 1969
3. Apollo Program – Working Files – "Apollo 11 CSM Systems Data, Part No. SKB32100080-340, S/N 1001," July 10, 1969
4. Apollo Program – Working Files – "Apollo 11 Entry Operations Checklist, Part No. SKB32100080-308, S/N 1001," circa 1969
5. Apollo Program – Working Files – "Apollo 11 Entry Operations Checklist, Part No. SKB32100080-308, S/N 1002," circa 1969 (labeled "Aldrin")
6. Apollo Program – Working Files – "Apollo 11 LM Data Card Book," June 21, 1969
7. Apollo Program – Working Files – "Apollo 11 Launch Operations Checklist, Part No. SKB32100080-306 S/N 1002," June 27, 1969 (labeled "Aldrin")
8. Apollo Program – Working Files – "LM Lunar Surface Checklist, SKB32100074-363, Quarters Copy," July 12, 1969

**Box 70** *Apollo Program – Mission Planning/Execution, June-July 1969*

Folder

1. Apollo Program – Working Files – "Apollo 11 LM Lunar Surface Maps, Part No. SKB32100080-371, S/N 1001," July 16, 1969
2. Apollo Program – Working Files – "Apollo 11 LM Lunar Surface Maps (Training) Part No. SKB32100080-371, S/N Training," July 16, 1969
3. Apollo Program – Working Files – "Apollo 11 LM Systems Data," circa 1969
4. Apollo Program – Working Files – "Apollo 11 LM Timeline Book," June 31, 1969
5. Apollo Program – Working Files – "Apollo 11 LM-5 Flight Crew G & N

- Dictionary," May 29, 1969
6. Apollo Program – Working Files – “Apollo 11 LM-5 Lunar Surface Checklist,” June 16, 1969 (Labeled “Anders”)

**Box 71** *Apollo Program – Mission Planning/Execution, 1968-1969*

Folder

1. Apollo Program – Working Files – “Flight Plan, Vol. 1,” Nov. 22, 1968
2. Apollo Program – Working Files – “Flight Operations,” April 15, 1969
3. Apollo Program – Working Files – “Kit, Pilot’s Preference, P/N SEB12100018-202, S/N 1052,” circa 1969
4. Apollo Program – Working Files – “LM Systems Activation Checklist, SKB32100080-360, Quarters Copy,” July 13, 1969
5. Apollo Program – Working Files – “RNDZ Charts & Graphs,” June 23, 1969
6. Apollo Program – Working Files – Software Data Cards for the Apollo 11 mission (10 cards), circa 1969

**Box 71a** *Apollo Program – Mission Planning/Execution, 1968-1969*

Item

1. Apollo Program – Artifacts – Blue Apollo 11 flight suit, with both NASA and Apollo 11 mission patches, signs of wear, circa 1969

**Box 71b** *NASA Orange Flight Suit, circa 1960s*

Item

1. Artifacts – NASA Orange Flight Suit, circa 1960s

**Sub-subseries 4. Results:** The Results files contain materials that document the conclusion of the Apollo mission and relate scientific findings made possible by those missions, as well as summaries and reports of the missions themselves. All of the materials related to the Apollo mission results remain in Mr. Armstrong’s original arrangement.

**Box 72** *Apollo Program – Results, 1969-1975*

Folder

1. Apollo Program – Working Files – Results [Apollo Program Results]

Item

1. “Apollo Program Summary Report,” April, 1975

Folder

2. Apollo Program – Working Files – Results [Apollo Program Results]

- Item
  1. "Apollo 8 Mission Report," February 1969
- Folder
  3. Apollo Program – Working Files – Results [Apollo Program Results]
    - Item
      1. "Apollo 12 Mission Report," March 1970
- Folder
  4. Apollo Program – Working Files – Results [Apollo Program Results]
    - Item
      1. "Apollo 12 Preliminary Science Report," circa 1970

**Box 73** *Apollo Program – Results, 1968-1970*

- Folder
  1. Apollo Program – Working Files – Results [Apollo 11 Flt. Results]
    - Item
      1. "Apollo 6 Mission Report," May 1968
- Folder
  2. Apollo Program – Working Files – Results [Apollo 11 Flt. Results]
    - Item
      1. "Apollo 7 Mission Report," December 1968
- Folder
  3. Apollo Program – Working Files – Results [Apollo 11 Flt. Results]
    - Item
      1. "Apollo Lunar descent and Ascent Trajectories," March 1970
      2. "Apollo 11 LM Descent Postflight Analysis," circa 1969
      3. "Advanced Space Suit Briefing Crew Systems Division," August 12, 1969, with note to Armstrong summarizing his EVA suit usage
      4. "Apollo 11 Mission, 5-Day Report," July, 1969
      5. "Apollo 11 postflight data review – SM RS propellant usage," September 29, 1969
      6. "Apollo 11, Problem and Discrepancy List," November 5, 1969
      7. "Apollo 11 strip charts for lunar descent and ascent," July 23, 1969
      8. "Automatic CSM Rendezvous," October 29, 1969
      9. "EVA data," August 20, 1969
- Folder
  4. Apollo Program – Working Files – Results [Apollo 11 Flt. Results]
    - Item
      1. "Final, Flight Plan, Apollo 7, AS 205/CSM 101," September 16, 1968
      2. "Final, Flight Plan, Apollo 8, AS-503/CSM-103," October 22, 1968
- Folder
  5. Apollo Program – Working Files – Results [Apollo 11 Flt. Results]
    - Item
      1. "Apollo 12 Lunar Sample Information," December 1970

**Box 74** *Apollo Program – Results, 1969-1972*

Folder

1. Apollo Program – Working Files – Results [Apollo 11 Flt. Results]

Item

1. Flight Plans, Apollo 11, March-April 1969

Folder

2. Apollo Program – Working Files – Results [Apollo 11 Flt. Results]

Item

1. “Internal Note No. 69-FM-270: The Apollo 11 Task,” October 27, 1969

Folder

3. Apollo Program – Working Files – Results [Apollo 11 Flt. Results]

Item

1. “LM altitude and terrain profile range history during the approach phase of Apollo 11 powered descent maneuver,” August 27, 1969
2. “LMMP Approach and Landing Performance” September 5, 1969
3. “Odor anomaly in Apollo 11,” September 26, 1969; “Investigation of odor detected in the spacecraft tunnel during the Apollo 11 flight,” September 29, 1969.
4. “Preliminary comparison of actual Apollo 11 consumables usage with preflight predictions,” July 30, 1969
5. “Postflight analysis of cislunar phases of Apollo 11” August 27, 1969
6. “Reconstruction of the Apollo 11 lunar terrain profile based on landing radar data,” September 3, 1969
7. “Technical Information Release: Results of Apollo 11/LMS Flight Performance Comparison,” January 6, 1970
8. “Visibility degradation due to lunar dust on landing,” March 10, 1970

Folder

4. Apollo Program – Working Files – Results [Apollo 11 Flt. Results]

Item

1. “On the Moon With Apollo 16,” April, 1972, (2 copies, 1 signed by Gene Cernan with Apollo 16 crew patch sticker)

Folder

5. Apollo Program – Working Files – Results [Apollo 11 Flt. Results]

Item

1. “On the Moon With Apollo 17,” December 1972, (2 copies), for poster see Apollo Oversized Materials, Flat Files, Drawer 4 “Flight and Space Exploration Archives,” Folder

Folder

6. Apollo Program – Working Files – Results [Apollo 11 Flt. Results]

Item

1. “Apollo 17 Scientific Experiments, Compiled from the Apollo 17 Mission Requirements Document,” undated

2. "Apollo 17, Traverse Planning Data (2<sup>nd</sup> Edition)," September 1, 1972

Folder

7. Apollo Program – Working Files – Results [Apollo 11 Flt. Results]; contents of folder [F Mission] folder 1 of 2

Item

1. "Addenda to MSC Memoranda 69-FM54-45 and 69-FM54-59: Ground Elapsed times at TEI," March 17, 1969
2. "All about F APS burn to depletion and landmark tracking," February 19, 1969
3. "Apollo (AS-505/CSM 106/LM-4) Preliminary Spacecraft Alternate Mission Plan. Volume II –Alternate Lunar Missions," February 14 1969
4. "Apollo 10 lunar orbit orientation change," March 2, 1969
5. "APS burn to depletion on Apollo Mission F," March 4, 1969
6. "Consideration of lunar landing sites data requirements and launch dates for Apollo X Mission," February 17, 1969
7. "Delta velocity requirements to achieve large easterly shifts in entry longitude and to control flight path angle at entry during the Apollo F transearth coast," February 19, 1969
8. "F Alternate Mission Review," March 13, 1969
9. "Internal Note MSC-CF-P-69-5: LM Descent/Phasing Summary Document, Mission F, Preliminary," February 19, 1969
10. "Internal Note No. 69-FM-56: TLI Ship Positioning and Coverage Data for Apollo Mission F Lunar Launch Opportunities for May 1969," March 3, 1969

Folder

8. Apollo Program – Working Files – Results [Apollo 11 Flt. Results]; contents of folder [F Mission] 2 of 2

Item

1. "Internal Note No. 69-FM-74: Views from the Spacecraft During Apollo 10 (Mission F)," March 21, 1969
2. "Launch window summary for May and June 1969 'F' Mission," February 18, 1969
3. "Preliminary crew maneuver monitoring procedures – F Mission," February 7, 1969
4. "Preliminary F mission LOU crew charts for a CSM only lunar orbit alternate mission," undated
5. "Preliminary F mission 10-minute crew charts for aborts during TLI," March 7, 1969
6. "Preliminary F mission 15-minute crew chart for aborts during LOI," February 20, 1969
7. "Priority for reproduction of microfilm for Mission F earth-moon terminator and horizon orientations," February 24, 1969
8. "TEI maneuvers for each lunar orbit for an Apollo F launched May 18, 1969," March 4, 1969

9. "Time critical aborts for the F mission," February 20, 1969

**Box 75** *Apollo Program – Results, 1958-1973*

Folder

1. Apollo Program – Working Files – Results [Physiology]

Item

1. "Behavioral, Psychiatric, and Sociological Problems of Long-Duration Space Missions," October 1971
2. "A Summary of the Medical Experience in the Apollo Program; Presented to the International Orbiting Laboratory and Space Sciences Conference of the International Academy of Astronautics, Cloudcroft, New Mexico, October 1969"

Folder

2. Apollo Program – Working Files – Results [Physiology]

Item

1. Request to speak to the University of Cincinnati Department of Psychology with notes on the psychological and physical effects of manned space flight, October 11, 1971

Folder

3. Apollo Program – Working Files – Results [Physiology]; contents of folder [Physiological Data] (folder 1 of 3)

Item

1. Letter from Dr. A. H. Schwichtenberg to Neil Armstrong, June 7, 1960
2. Letter from Dr. Robert L. Wick, Jr. to Neil Armstrong, August 15, 1962
3. Letter from Warren Burkett to Dr. Lawrence E. Lamb, December 16, 1962
4. Letter from Dr. Lawrence Lamb to Neil Armstrong, December 19, 1962
5. "Aerospace Medicine, Basic Science Lecture #4," January 7, 1963
6. "AGARDograph No. 170 on Spatial Disorientation in Flight: A Handbook for Aircrew by A. J. Benson and E. Burchard," September 1973
7. "Article Reprinted from Journal – Deleterious Effect on Astronaut Capability of Vestibulo-ocular Disturbance During Spacecraft Roll Acceleration," December 7, 1967
8. "Bioinstrumentation Meeting, June 12, 1963, MSC" June 17, 1963
9. "Body Measurements," with punch card data sheets, April, 1958
10. "Early Somatosensory Deprivation as an Ontogenetic Process in the Abnormal Development of the Brain and Behavior" 1971, with articles collected by Armstrong inserted into booklet

Folder

4. Apollo Program – Working Files – Results [Physiology]; contents of folder

[Physiological Data] (folder 2 of 3)

Item

1. "EMU Configuration Control Panel Meeting No. 24 Minutes," February 13, 1967
2. "'G' environment for future space systems," January 16, 1969
3. "How Bioastronautics Looks at the Moon," September 1962
4. "Human Vibration and Impact Isolation with a Full Length Airbag Restraint System," March 1963
5. "Man in Rarefied Atmospheres," May, 1973
6. "MC-2 Full Pressure Suit Flight Evaluation," November 1958
7. "Natural Gamma Activity of Human Subjects," April 27, 1961
8. "Pressure Suits," January 13, 1964
9. "Recommendation Maximum Concentrations of Atmospheric Contaminants," circa 1961
10. "Report on 'Second Symposium on Protection Against Radiation in Space'," November 5, 1964
11. "Results of the Gemini Medical Instrumentation Evaluation," November 10, 1964
12. Schedules for July 13-14, 1959 (with notes); and, April 23-28, 1961

Folder

5. Apollo Program – Working Files – Results [Physiology]; contents of folder [Physiological Data] (folder 3 of 3)

Item

1. "Some Effects of Acceleration on Human Subjects," September 30, 1958
2. "Test Pilot Instruction Sheet," with schedule, undated
3. "Weightlessness and Performance: A Review of the Literature," June, 1961
4. "X-15 Cockpit Fitting Study," undated
5. "X-15 Physiological Data," December 29, 1961(2 copies)

Folder

6. Apollo Program – Working Files – Results

Item

1. "Apollo 7 to 11 Medical Concerns and Results," November 1969

Folder

7. Apollo Program – Working Files – Results

Item

1. "Apollo 11 Crew Station/Equipment Evaluation" August 11, 1969

Folder

8. Apollo Program – Working Files – Results

Item

1. "Apollo IX July 1969" blue case with results "Radiogenic ages of lunar rocks from Tranquility Base;" and, "Cosmic ray exposure ages," undated

Folder

9. Apollo Program – Working Files – Results

Item

1. "Apollo 11 Lunar Science Conference – Abstracts," January 5-8, 1970

Folder

10. Apollo Program – Working Files – Results

Item

1. "Apollo 11 Mission Report," November 1969

Folder

11. Apollo Program – Working Files – Results

Item

1. "Apollo 11 Post mission report," August 8, 1969

**Box 76** *Apollo Program – Results, 1969-1994*

Folder

1. Apollo Program – Working Files – Results

Item

1. "Apollo 11 Post Mission Report," August 8, 1969

Folder

2. Apollo Program – Working Files – Results

Item

1. "Apollo 11 Spacecraft Commentary," July 16-24, 1969

Folder

3. Apollo Program – Working Files – Results [Apollo 14/15]

Item

1. "Apollo 14 (AS-509) Post Launch Mission Operation Report #1," February 22, 1971
2. "On the Moon with Apollo 15: A Guidebook to Hadley Rille and the Apennine Mountains," June, 1971

Folder

4. Apollo Program – Working Files – Results

Item

1. "Apollo 17 Preliminary Science Report," circa 1973

Folder

5. Apollo Program – Working Files – Results

Item

1. Cornell University News – Press release regarding the glazing of the moon's surface by solar explosions, September 26, 1969

Folder

6. Apollo Program – Working Files – Results

Item

1. "Internal Note No. 70-FM-30: Apollo 11 Entry Postflight Analysis," February 20, 1970

Folder

7. Apollo Program – Working Files – Results

Item

1. "Lunar Ranging Data Deposited in the National Space Science Data Center" Filtered Observations for 1969 September through 1970 June and Unfiltered Photon Detections for 1970 July through December," January 1972

Folder

8. Apollo Program – Working Files – Results

Item

1. "Draft: Apollo 11 Lunar Surface Journal," circa 1994

**Box 77** *Apollo Program – Results, 1963-1973*

Folder

1. Apollo Program – Working Files – Results

Item

1. "Manned Space Flight – 1963," circa 1963

Folder

2. Apollo Program – Working Files – Results

Item

1. "Preliminary Summary of Apollo 11 LM Ascent," August 1, 1969
2. "Preliminary Summary of Apollo 11 LM Descent," August 1, 1969

Folder

3. Apollo Program – Working Files – Results

Item

1. "Request for and Homologation of World Records for Manned Lunar Flight," October 1969

Folder

4. Apollo Program – Working Files – Results

Item

1. "[Review of Apollo 11]," circa 1969

Folder

5. Apollo Program – Working Files – Results

Item

1. "Review of Apollo 11," (2<sup>nd</sup> copy)

Folder

6. Apollo Program – Working Files – Results

Item

1. "General Electric Research and Development Center, Schenectady, N.Y., 12305 – R. T. Woods, K1 Rm 3C29," (Original Envelope)
2. "Proceedings of the Apollo 11 Lunar Science Conference, Vol. 3: The particle track record of the sea of Tranquility," February 1970 (7 copies)
3. "Science, Apollo 11 Lunar Science Conference: Particle Track, X-ray, Thermal, and Mass Spectrometric Studies of Lunar Material."

January 30, 1970

Folder

7. Apollo Program – Working Files – Results

Item

1. “Some Photographic Results of the Apollo 11 Mission,” February 27, 1970

Folder

8. Apollo Program – Working Files – Results

Item

1. Letter from Harm Buning, University of Michigan, College of Engineering, with memo “The Apparent Post TEEI Separation from the Moon,” December 10, 1969

Folder

9. Apollo Program – Working Files – Results – “Cosmogenic and Primordial Radionuclides in Lunar Samples by nondestructive Gamma-Ray Spectrometry,” January 1970

10. Apollo Program – Working Files – Results – Magazine articles about lunar science, solar system exploration, and the Apollo program, circa 1972-1974

11. Apollo Program – Working Files – Results

Item

1. “Named after an Astronaut,” article in Soviet state newspaper *Pravda* about the naming of a mineral in honor of Neil Armstrong with official translation on United Nations’ letterhead, May 4, 1973

2. “Доклады, Академии Наук СССР,” circa 1973

3. “Armalcolite: A new mineral from the Apollo 11 samples,” January 1970

4. “A new silicate of calcium and zirconium, armstrongite,” circa 1973

**Sub-subseries 5. Public Relations:** The Public Relations files contain materials related to NASA’s policies and procedures regarding the release of information to the press. In addition to informational materials designed for press release, the Public Relations files also contain documents which highlight the news coverage received by the Apollo missions, relevant accounts of tours that the astronauts participated in, as well as personal affects belonging to Mr. Armstrong as a result of his public responsibilities as a NASA employee.

**Box 78** *Apollo Program – Public Relations, 1969-1971*

Folder

1. Apollo Program – Working Files – Public Relations [Apollo P.R.]

Item

1. “Apollo New Conference – Apollo,” circa 1969

Folder

2. Apollo Program – Working Files – Public Relations [Apollo P.R.]  
Item  
1. “Apollo Spacecraft News Reference,” April 22, 1969 (personalized for “The Armstrong Family”)

Folder

3. Apollo Program – Working Files – Public Relations [Apollo P.R.]  
Item  
1. “Apollo Spacecraft News Reference – Command and Service Modules,” July, 1969

Folder

4. Apollo Program – Working Files – Public Relations [Apollo P.R.]  
Item  
1. “Apollo 11 F-11 Press Conference,” July 2, 1969

Folder

5. Apollo Program – Working Files – Public Relations [Apollo P.R.]  
Item  
1. “Apollo 11, The Lunar Landing,” (informational pamphlets) circa 1969

Folder

6. Apollo Program – Working Files – Public Relations  
Item  
1. “Apollo 11 Press Kit – Equipment Division Raytheon,” circa 1969

Folder

7. Apollo Program – Working Files – Public Relations [Apollo P.R.]  
Item  
1. “Apollo 11 Special Statement by Vice-President, 7-16-69”

Folder

8. Apollo Program – Working Files – Public Relations [Apollo P.R.]  
Item  
1. “Apollo 11 50 State Tour, 1970-71,” (3 copies) June 1971

Folder

9. Apollo Program – Working Files – Public Relations [Apollo P.R.]  
Item  
1. Arabic post-card from Aaron and Evelyn Blank, August 23, 1969

Folder

10. Apollo Program – Working Files – Public Relations [Apollo P.R.]  
Item  
1. “Prelaunch Briefing, Kennedy Space Center, 12:30 PM CDT,” July 15, 1969  
2. “Experimentors Briefing, Kennedy Space Center, 2:30 PM CDT,” July 15, 1969  
3. “Press Conference, July 16, 1969, 9:52 A.M. CDT”  
4. “Postlaunch Briefing, Kennedy Space Center, 1:24 PM,” July 16, 1969  
5. “Change of Shift Briefing,” July 16, 1969, 3:30 PM CDT  
6. “Apollo 11 Change of Shift Briefing” July 16, 1969 11:10 p.m.

7. "Apollo 11 Change of Shift Briefing," July 17, 1969, 11:20 PM
8. "Change of Shift Briefing," July 19, 1969, CDT: 2:30 PM
9. "Change of Shift Briefing," July 20, 1969, CDT: 8:25 a.m.
10. "Dr. Paine's Press Conference," July 20, 1969, CDT: 4:45 P.M.
11. "Apollo 11 Change of Shift Briefing," July 20, 1969, CDT: 5:30 PM

Folder

11. Apollo Program – Working Files – Public Relations [Apollo P.R.]

Item

1. "Department of Defense Support," circa 1969

Folder

12. Apollo Program – Working Files – Public Relations [Apollo P.R.]

Item

1. "Face the Nation, as broadcast over the CBS Television Network and the CBS Radio Network, Sunday, August 17, 1969 – 11:30 am-12:30 pm," Transcription circa 1969

Folder

- 13 Apollo Program – Working Files – Public Relations – "Apollo 11, Selected Pictures," (12 copies) circa 1969

Folder

14. Apollo Program – Working Files – Public Relations – "Log of Apollo 11," (10 copies) undated

**Box 79** *Apollo Program – Public Relations, 1965-1972*

Folder

1. Apollo Program – Working Files – Public Relations [Apollo P.R.]

Item

1. "First Man on the Moon – Historic Front Pages," circa 1972.

Folder

2. Apollo Program – Working Files – Public Relations [Apollo P.R.]

Item

1. "Gemini VIII Rendezvous and Docking Mission (Fact Sheet 291-E)," April 1966 (2 copies with photos).
2. Apollo 11 Crew Photos (signed by all three astronauts), circa 1969

Folder

3. Apollo Program – Working Files – Public Relations [Apollo P.R.]

Item

1. "Into Space with the Astronauts," circa 1965.

Folder

4. Apollo Program – Working Files – Public Relations [Apollo P.R.]

Item

1. Invitation to President's Dinner Honoring Apollo 11 Astronauts, circa 1969.

Folder

5. Apollo Program – Working Files – Mission Planning [Apollo P.R.]

- Item  
1. "Man Lands on the Moon – Newspapers Record History," circa 1969.
- Folder  
6. Apollo Program – Working Files – Public Relations [Apollo P.R.]
- Item  
1. "NASA Apollo 11 First Manned Lunar landing Mission Information Display, TRW Systems Group," circa 1969.
- Folder  
7. Apollo Program – Working Files – Public Relations [Apollo P.R.]
- Item  
1. "Nominal Mission Sequence of Events," with mission highlights circa 1969.
- Folder  
8. Apollo Program – Working Files – Public Relations [Apollo P.R.]
- Item  
1. "Ryan Apollo Lunar Landing Radar, Excerpts from Apollo Spacecraft News Reference," undated.
- Folder  
9. Apollo Program – Working Files – Public Relations [Apollo P.R.]
- Item  
1. "Saturn V Apollo Lunar Orbital Rendezvous Mode," April 29, 1969.
- Folder  
10. Apollo Program – Working Files – Public Relations [Apollo P.R.]
- Item  
1. "Selected Newspaper Clippings, Apollo 11 MSFN, Madrid, Spain, Spanish and Western European Press, July 16-24, 1969."
- Folder  
11. Apollo Program – Working Files – Public Relations [Apollo P.R.]
- Item  
1. "Space Suits for Project Apollo," ILC Industries, Inc, circa 1969.
- Folder  
12. Apollo Program – Working Files – Public Relations [Apollo P.R.]
- Item  
1. "Sperry Rand Engineering Review; Systems – Computer Applications 1969"
- Folder  
13. Apollo Program – Working Files – Public Relations [Apollo P.R.]
- Item  
1. "U.S.S. Hornet Apollo 11 Recovery Mission," undated.  
2. "USS Hornet CVS-12 Information Folder," circa 1969.
- Folder  
14. Apollo Program – Working Files – Public Relations [Apollo P.R.]
- Item  
1. "World Space Flight Records for the Apollo 11 Mission," June 20, 1969.

Folder

15. Apollo Program – Working Files – Public Relations (First Day Stamps)

Item

1. “Prime Crew of Fifth Manned Apollo Mission,” (signed photo with first day stamp) circa 1969.
2. “Neil A. Armstrong,” (photo with first day stamp) circa 1969.
3. “Treaty on the Non-Proliferation of Nuclear Weapons,” (copy of treaty with first day stamps) circa 1972.
4. “Astronaut places American flag on Moon, July 20, 1969,” (photo with first day stamp) circa 1969.
5. Photo of Apollo 11 crew in quarantine next to President Nixon, with quote from Nixon, Apollo 11 mission patch, and first day stamps, circa 1971.

**Box 80** *Apollo Program – Public Relations, 1959-1973*

Folder

1. Apollo Program – Working Files – Public Relations [Russian Stuff]

Item

1. Russian Vocabulary Flash-cards, undated

Folder

2. Apollo Program – Working Files – Public Relations [Russian Stuff]

Item

1. Russian Vocabulary Flash-cards, undated

Folder

3. Apollo Program – Working Files – Public Relations [Russian Stuff]

Item

1. “Leningrad,” travel brochure with oversized map and signed photo, circa 1967

Folder

4. Apollo Program – Working Files – Public Relations [Russian Stuff]

Item

1. “Basic Russian,” 1959

Folder

5. Apollo Program – Working Files – Mission Planning [Russian Stuff]

Item

1. *Simplified Russian Grammar, 2<sup>nd</sup> edition*, 1963 with copies of notes and newspaper clippings, undated

Folder

6. Apollo Program – Working Files – Public Relations [Russian Stuff]

Item

1. “HE 9901 – The Soviet SST,” May 7, 1971 with letter acknowledging Armstrong’s contribution

Folder

7. Apollo Program – Working Files – Public Relations [Russian Stuff]

- Item
  - 1. *Intermediate Russian: An Introduction to Russian Syntax*, undated.
- Folder
  - 8. Apollo Program – Working Files – Public Relations [Russian Stuff]
    - Item
      - 1. “The Soviet Space Effort – An Analysis,” reprinted from Air Force Magazine, June 1971
- Folder
  - 9. Apollo Program – Working Files – Public Relations [Russian Stuff]
    - Item
      - 1. “The Ant and the Astronaut,” 1973
- Folder
  - 10. Apollo Program – Working Files – Public Relations [Russian Stuff]
    - Item
      - 1. “Exchange of Lunar Samples in Moscow,” NASA Press Release, June 10, 1971
- Folder
  - 11. Apollo Program – Working Files – Public Relations [Russian Stuff]
    - Item
      - 1. “Trip with Soviet Cosmonauts,” November 19, 1969
- Folder
  - 12. Apollo Program – Working Files – Public Relations [Russian Stuff]
    - Item
      - 1. Letter from Vitality Sevastianov with translation, December 11, 1970
- Folder
  - 13. Apollo Program – Working Files – Public Relations [Russian Stuff]
    - Item
      - 1. “The Russian Approach to Aircraft Design,” March 1969
- Folder
  - 14. Apollo Program – Working Files – Public Relations [Russian Stuff]
    - Item
      - 1. “Guest Artist” copy of newspaper article about Mstislav Rostropovich, undated

**Box 81** *Apollo Program – Public Relations, 1960-1972*

- Folder
  - 1. Apollo Program – Working Files – Public Relations [Russian Stuff]
    - Item
      - 1. Scrapbook made for Armstrong by Igor Belov, undated
- Folder
  - 2. Apollo Program – Working Files – Public Relations [Russian Stuff]
    - Item
      - 1. Six articles reporting on a 1969 trip to the Soviet Union by Ray

McHugh, circa 1970

Folder

3. Apollo Program – Working Files – Public Relations [Russian Stuff]

Item

1. “US-Soviet Agreement,” NASA Press Release March 31, 1971

Folder

4. Apollo Program – Working Files – Public Relations [Russian Stuff]

Item

1. “Treaty Information – U.S. and U.S.S.R. Sign Exchanges Agreement for 1970-1971, Dept. of State Bulletin,” February 10, 1970

Folder

5. Apollo Program – Working Files – Mission Planning [Russian Stuff]

Item

1. Reports on Mr. Armstrong’s visit to the U.S.S.R. by William N. Harben and Walter A. Pannino, June 1970

Folder

6. Apollo Program – Working Files – Public Relations [Russian Stuff]

Item

1. “Proposed U.S. Civil Aeronautical Technical Team Visit to USSR,” April 3, 1970

Folder

7. Apollo Program – Working Files – Public Relations [Russian Stuff]

Item

1. “Notes concerning Trips to Soviet Union, May 19-24, 1970”

Folder

8. Apollo Program – Working Files – Public Relations [Russian Stuff]

Item

1. Envelope marked, [Russia – Slides etc.] (includes some clippings, itinerary for Russian Cosmonauts’ visit to the United States, October 18-28, 1970, Cosmonaut biographical data sheets, and pages from “Russia in Space,” by John Noble Wilford)
2. “Soviet Develops Direct Converter for Atomic Power,” (copy) *New York Times*, March 26, 1971
3. “Soviet Withholds Details on Salyut Space Station After Astronaut Gives Hint on Size,” (copy) *New York Times*, April 27, 1971

Folder

9. Apollo Program – Working Files – Public Relations [Russian Stuff]

Item

1. “Soviet Develops Direct Converter for Atomic Power,” (original) *New York Times*, March 26, 1971
2. “Soviet Withholds Details on Salyut Space Station After Astronaut Gives Hint on Size,” (original) *New York Times*, April 27, 1971

Folder

10. Apollo Program – Working Files – Public Relations [Russian Stuff]

Item

1. Library of Congress – Federal Research Division, Science and Technology News Alerts, Items Nos. 365, 375, 382, 395, 397, 421, 443, 446, and 448, April-July 1971

Folder

11. Apollo Program – Working Files – Public Relations [Russian Stuff]

Item

1. Library of Congress – Federal Research Division, Science and Technology News Items, September 1970-December 1971.

Folder

12. Apollo Program – Working Files – Public Relations [Russian Stuff]

Item

1. Photos from Armstrong's 1970 trip to the U.S.S.R.

Folder

13. Apollo Program – Working Files – Public Relations [Russian Stuff]

Item

1. "Letter from USSR," from A. S. Ostrer to "Ruth Doctor" April 13, 1972

Folder

14. Apollo Program – Working Files – Public Relations [Russian Stuff]

Item

1. [N.A. Russian, 798 Rhodes] Notebook with Russian language notes

Folder

15. Apollo Program – Working Files – Public Relations [Russian Stuff]

Item

1. "Workbook for Basic Russian, Book One," completed, 1960

Folder

16. Apollo Program – Working Files – Public Relations [Russian Stuff]

Item

1. "Workbook for Simplified Russian Grammar, 2<sup>nd</sup> Ed." Completed, 1965

Folder

17. Apollo Program – Working Files – Public Relations [Russian Stuff]

Item

1. "Soviet Life," February 1971
2. "Soviet Life," December 1972

**Box 82** *Apollo Program – Public Relations, 1969-1970*

Folder

1. Apollo Program – Working Files – Public Relations – Contents of binder containing information on frequently asked questions, arranged according to Armstrong's own subject headings, [Astronaut Training/Selection], [Lunar Receiving Laboratory], circa 1969-1970
2. Apollo Program – Working Files – Public Relations – Contents of binder

containing information on frequently asked questions, arranged according to Armstrong's own subject headings, [Apollo 11], [Apollo 12], [Apollo 13], circa 1969-1970

3. Apollo Program – Working Files – Public Relations – Contents of binder containing information on frequently asked questions, arranged according to Armstrong's own subject headings, [Benefits of Space Research], [Space Food], [Lunar Exploration], [Waste Management], [Biographical Data], [Space Suits], [Misc.], circa 1969-1970

**Box 83** *Apollo Program – Public Relations, 1967-1971*

Folder

1. Apollo Program – Working Files – Public Relations – Magazines and Journals with articles about Neil Armstrong or the Armstrong family at the time of Apollo 11 as arranged in a rust colored three-ring binder by Armstrong, circa 1967-1971 (folder 1 of 3)
2. Apollo Program – Working Files – Public Relations – Magazines and Journals with articles about Neil Armstrong or the Armstrong family at the time of Apollo 11 as arranged in a rust colored three-ring binder by Armstrong, circa 1967-1971 (folder 2 of 3)
3. Apollo Program – Working Files – Public Relations – Magazines and Journals with articles about Neil Armstrong or the Armstrong family at the time of Apollo 11 as arranged in a rust colored three-ring binder by Armstrong, circa 1967-1971 (folder 3 of 3)

**Box 84** *Apollo Program – Public Relations, 1962-1997*

Folder

1. Apollo Program – Working Files – Public Relations – Informational pamphlets on the Apollo manned mission emblems (crew patches), on the Gemini and Mercury programs generally, circa 1962-1972
2. Apollo Program – Working Files – Public Relations – Reprint of an article on Armstrong from *Fortune* magazine, November 1963
3. Apollo Program – Working Files – Public Relations – “National Geographic: Surveyor, Candid Camera on the Moon,” circa 1966
4. Apollo Program – Working Files – Public Relations – “TV Show of the Century: A Travelogue with No Atmosphere,” about the video camera used on Apollo 11, circa 1967
5. Apollo Program – Working Files – Public Relations – Depiction of Lunar Module lift-off from lunar surface and rendezvous with Command Module. Image from AP wire, July 1, 1969
6. Apollo Program – Working Files – Public Relations – “Living in the Space Age: The Age of Accelerated Change,” June 11, 1969
7. Apollo Program – Working Files – Public Relations – Translations of Italian

- articles on the Apollo 11 crew with a list of press photographs from the Gemini era, circa April-July 1969
8. Apollo Program – Working Files – Public Relations – “Congressional Record, Vol. 115, No. 148,” September 16, 1969
  9. Apollo Program – Working Files – Public Relations – Feature in the *Atlantic journal* on Jan Armstrong, circa July 14, 1969
  10. Apollo Program – Working Files – Public Relations – Letters and Interviews by Jan Armstrong, circa 1969
  11. Apollo Program – Working Files – Public Relations – Program for Columbus Day USA Pageant, circa October 1969
  12. Apollo Program – Working Files – Public Relations – “Mission Moon ’69,” circa 1969
  13. Apollo Program – Working Files – Public Relations – [Apollo 11 Background], newspaper clippings about Apollo 11, circa 1969-1972
  14. Apollo Program – Working Files – Public Relations – [Armstrong Personal], sleeve of newspaper clippings about Armstrong immediately after Apollo 11 and congratulatory correspondence on the occasion of Apollo 11 and its anniversaries, circa 1969-1978
  15. Apollo Program – Working Files – Public Relations – “Corriere Della Sera – Ritorno Dalla Luna,” photograph of the front page of Italian newspaper announcing, “Back from the Moon,” photograph undated
  16. Apollo Program – List of abbreviations – Mission Information Display (2), TRW Apollo 11 Mission Information Display, both circa 1969
  17. Apollo Program – Program from religious service at the White house, signed by David Eisenhower, Julie Nixon Eisenhower, and Tricia Nixon, July 1969
  18. Apollo Program – Launch complex 9 souvenir – fragment of linoleum from the white room floor at the spacecraft crew egress level during Gemini, with correspondence, November 1997

**Flat Files** *Apollo Program – Oversized, 1958-1969*

Folder

1. Apollo Program – Working Files – Oversized Diagram

Item

1. “Attitude Control System Functional Diagram,” Sheets 1-3 undated

Folder

2. Apollo Program – Working Files – Oversized Schematics, 1963-1964

Item

1. “Jet Stab. Ampl. Pitch & Roll Channel,” undated
2. “Power Amplifier,” undated
3. “Adjustment Potentiometers,” undated
4. “Auto Throttle Servo Amplifier for LLRV,” undated
5. “WT & Drag Computer,” undated

Folder

3. Apollo Program – Working Files – Oversized Schematics, 1963-1964

Item

1. “Auto Throttle Actuator,” undated
2. “input & Summation Circuitry,” undated
3. “Gyro Package,” undated
4. “Weight and Drag Computer Functional Block Diagram,” undated

Folder

4. Apollo Program – Working Files – Oversized

Item

1. “Preliminary Pictorial Representation of Lunar Landing Research Vehicle (LEM Test Configuration),” May 25, 1964

Folder

5. Apollo Program – Working Files – Oversized

Item

1. “Apollo 11 LM Powered Descent,” with handwritten corrections, circa 1969.  
“Apollo 11 LM Powered Descent (Site 2),” June 27, 1969  
“Apollo 11 LM Powered Descent (Site 2),” June 27, 1969  
“Apollo 11 LM Powered Descent (Site 2),” June 27, 1969 (signed copy)

Folder

6. Apollo Program – Working Files – Oversized

Item

1. “Saturn V Apollo Flight Configuration,” 1970 update (2 copies)

Folder

7. Apollo Program – Working Files – Oversized

Item

1. “Apollo Translunar/Transearth Trajectory Plotting Chart (ATT) Apollo Mission 11,” June 23, 1969

Folder

8. Apollo Program – Working Files – Oversized [Lunar Maps], 1961-1962

Item

1. “LAC 58 – Copernicus,” undated
2. “LAC 60 – Julius Caesar,” undated
3. “LAC 74 – Grimaldi,” undated
4. “LAC 75 – Letronne,” undated
5. “LAC 76 – Rhiphaeus,” undated
6. “LAC 93 – Mare Humororum,” undated

Folder

9. Apollo Program – Working Files – Oversized Maps [Apollo Geology]

Item

1. “Geologic Map of the Knoxville Quadrangle, Tennessee,” circa 1958 with 3 aerial photos and envelop

Folder

10. Apollo Program – Working Files – Oversized Maps [Apollo Geology]

Item

1. "Geology of the Rainer Mea Quadrangle, Nye County, Nevada," circa 1963
2. "Aeromagnetic Map of the Tippipah Spring Quadrangle and Parts of the Papoose Lake and Wheelbarrow Peak Quadrangle, Nye County, Nevada," circa 1963

Folder

11. Apollo Program – Working Files – Oversized Maps [Apollo Geology]

Item

1. "Geologic Maps and Sections of the Letronne Region of the Moon," circa 1963 w/ envelop

Folder

12. Apollo Program – Working Files – Oversized Maps [Apollo Geology]

Item

1. "Geologic Map and Sections of the Kepler Region of the Moon," circa 1962 (2 copies)

Folder

13. Apollo Program – Working Files – Orbital Charts, Apollo 11

Item

1. "LM Powered Descent" w/ handwritten notation, undated
2. "Apollo Lunar Orbit Chart (ALO), Apollo Mission 11, 1<sup>st</sup> and 30<sup>th</sup> Revolutions, 16 July 1969 Launch Date," June 20, 1969
3. "Apollo Lunar Orbit Chart (ALO), Apollo Mission 11, 1<sup>st</sup> and 30<sup>th</sup> Revolutions, 18 July 1969 Launch Date," June 20, 1969
4. "Apollo Lunar Orbit Chart (ALO), Apollo Mission 11, 1<sup>st</sup> and 30<sup>th</sup> Revolutions, 21 July 1969 Launch Date," June 20, 1969
5. "Apollo Earth Orbit Chart (AEO), Apollo Mission 11, Sheet 1 of 3" June 19, 1969 (2 copies)
6. "Apollo Earth Orbit Chart (AEO), Apollo Mission 11, Sheet 2 of 3" June 19, 1969 (2 copies)
7. "Apollo Earth Orbit Chart (AEO), Apollo Mission 11, Sheet 3 of 3" June 19, 1969 (2 copies)

Folder

14. Apollo Program – Working Files – Weather Chart

Item

1. "Spacecraft Weather Briefing Chart (NWB) 2," w/ handwritten notation, July 16, 1969

Folder

15. Apollo Program – Public relations – *Jours de France: En Route Pour la Lune*, July 26, 1969

**Flat Files (Box to be processed into Flat Files) Apollo Program – Oversized, 1969-2005**

Box  
35a

1. Apollo Program – Working Files – Oversized Maps

Item

1. “Apollo 11 Mission, 16 July 1969 Launch Date, Description of Photographic Targets of Opportunity,” with landscape photograph of “Lunar Landing Site Monitoring Photo Map (LM), Landing Site 2,” July 16, 1969
1. “Edition 1, LM Ascent Monitoring Chart – Sheet 3B, 16 July 1969 Launch Date – Landing Site No. 2”
2. “Lunar Landing Site Monitoring Photomap (LLM), Landing Site 2,” with handwritten notation, circa April 1969
3. “Edition 1 LM Descent Monitoring Chart – Sheet 3A, 16 July 1969 Launch Date – Landing Site 2,” together with “Edition 1, LM Descent Monitoring Chart – Sheet 2, 16 July 1969 Launch Date – Landing Site 2,” both items taped together to form one large map of the landing site and area below LM descent trajectory, circa 1969
4. This box also contains landscape photo proofs of Apollo 11 commemorative image collages by Nick T. Spark, entitled “One Small Step...” circa 2006
5. This box also contains one panoramic photograph of Armstrong working at the Modularized Equipment Stowage Assembly of the Lunar Landing Module during the Apollo 11 EVA, with correspondence from Mike Constantine, circa August 2005

Box  
35b

Apollo Program – Working Files – Oversized Schematics and Blueprints

Items

1. Blueprint for the Lunar Landing Research Vehicle in addition to schematics of the Apollo CSM and LLM systems, awaiting preservation treatment, circa 1968-1969

## **Sub-series 6. Deputy Administrator of Aeronautics, 1971-1972**

### **Working Files**

(4.6 cubic feet)

**Sub-series Description:** The Deputy Administrator of Aeronautics subseries contains material from the period immediately after Armstrong’s completion of spaceflight missions for NASA. Following the success of Apollo 11, Armstrong was assigned an administrative position in Washington, D.C., as the Deputy Administrator of Aeronautics, Armstrong was responsible for overseeing all NASA research involving the development of aeronautics and related technologies. Several publications concerning aeronautics can be found here, as well as a series of “programmed texts” on aeronautics that were used for training United States Air Force pilots who would be working with high speed aircraft. Of particular interest are a series of handwritten notes taken by Armstrong during his tenure as Deputy

Administrator of Aeronautics. These notes cover a variety of topics, from U.S.-Soviet relations, to the development of aeronautical technologies at U.S. universities.

**Box 85** *Deputy Administrator of Aeronautics – Working Files, 1970-1972*

Folder

1. Manuscript for “Interrogation, Recording and Location System (IRLS) Elk Experiment,” circa September 1970
2. Deputy Administrator of Aeronautics – Working Files – “Introduction to Aeronautics,” circa 1972.
3. Deputy Administrator of Aeronautics – Working Files – “Progress in regenerative Life Support Systems for a Lunar Laboratory,” circa 1972
4. Deputy Administrator of Aeronautics – Working Files – “Principles of Flight, Programmed Text,” December 1971
5. Deputy Administrator of Aeronautics – Working Files

Item

1. “Design of Airlift Vehicles, Volume I,” July, 1972
2. “Design of Airlift Vehicles, Volume II,” July, 1972

Folder

6. Deputy Administrator of Aeronautics – Working Files

Item

1. “Stability and Control, Part I,” December 1971
2. “Stability and Control, Part 2,” December 1971

Folder

7. Deputy Administrator of Aeronautics – Working Files – “Aerodynamics for the Fighter Pilot Approach, Programmed Text,” December 1971
8. Deputy Administrator of Aeronautics – Working Files

Item

1. “Aerodynamics for the Fighter Pilot, Landing, Part 1, Programmed Text” December 1971
2. “Aerodynamics for the Fighter Pilot, Landing, Part 2, Programmed Text” December 1971

Folder

9. Deputy Administrator of Aeronautics – Working Files

Item

1. “High Speed Aerodynamics, Part 1, Programmed Text,” December 1971
2. “High Speed Aerodynamics, Part 2, Programmed Text,” December 1971

Folder

10. Deputy Administrator of Aeronautics – Working Files – “Airplane Performance, Programmed Text,” December 1971
11. Deputy Administrator of Aeronautics – Working Files – “America In Space, The First Decade, Aeronautics,” circa 1970
12. Deputy Administrator of Aeronautics – Working Files – Copy of missive,

- “Sinmun Scores US Cultural, Ideological Infiltration,” July, 1971
13. Deputy Administrator of Aeronautics – Working Files – Set of notes taken by Neil Armstrong relating to various projects undertaken during his tenure as the Deputy Administrator of Aeronautics, circa September 1971-January 1971
  14. “The Advantages of Testing at the Arnold Engineering Development Center,” brochure, April 1970

**Box 86** *Deputy Administrator of Aeronautics – Working Files, 1968-1971*

Folder

1. Deputy Administrator of Aeronautics – Working Files – “Naval Test Pilot School Flight Test Manual, Fixed Wing Performance, theory and Flight Techniques,” July 28, 1972
2. Deputy Administrator of Aeronautics – Working Files – “Naval Test Pilot School Flight Test Manual, Fixed Wing Stability and Control, Theory and Flight Test Techniques,” August 1, 1969
3. Deputy Administrator of Aeronautics – Working Files – “Background Information and User Guide for MIL-F-8785B(ASG), ‘Military Specification – Flying Qualities of Piloted Airplanes’,” August 1969

**Box 87** *Deputy Administrator of Aeronautics – Working Files, 1969-1972*

Folder

1. Deputy Administrator of Aeronautics – Working Files – “FTC-TIH-68-1002, Stability and Control, USAF Aerospace Research Pilot School, Edwards Air Force Base, California,” September 1968 (folder 1 of 2)
2. Deputy Administrator of Aeronautics – Working Files – “FTC-TIH-68-1002, Stability and Control, USAF Aerospace Research Pilot School, Edwards Air Force Base, California,” September 1968 (folder 2 of 2)
3. Deputy Administrator of Aeronautics – Working Files – “FTC-TIH-70-1001, Performance, USAF Aerospace Research Pilot School, Edwards Air Force Base, California,” circa 1970 (folder 1 of 2)
4. Deputy Administrator of Aeronautics – Working Files – “FTC-TIH-70-1001, Performance, USAF Aerospace Research Pilot School, Edwards Air Force Base, California,” circa 1970 (folder 2 of 2)
5. Deputy Administrator of Aeronautics – Working Files – Press releases and an interview conducted at the time Armstrong retired from NASA in order to pursue a professorship at the University of Cincinnati, circa August 1971
6. Deputy Administrator of Aeronautics – Working Files – “Apollo Flight Crews (Prime, Backup, and Support Teams),” October 1971

**Box 88** *Deputy Administrator of Aeronautics – Working Files, 1969-1971*

## Folder

1. Deputy Administrator of Aeronautics – Working Files – Copies of “Source List” cataloging where people can obtain space-related material not available through NASA, circa the late 1960s
2. Deputy Administrator of Aeronautics – Working Files – “Apollo 11 selected pictures,” and “Apollo 11 70-mm Photographic Catalog,” circa 1969-1970
3. Deputy Administrator of Aeronautics – Working Files – “Transcript of Proceedings, NASA Long Range Planning Meeting: Lunar Exploration and Settlement,” June 12, 1970
4. Deputy Administrator of Aeronautics – Working Files – “Transcript of Proceedings, NASA Long Range Planning Meeting: Manned Planetary Exploration and Settlement,” June 13, 1970
5. Deputy Administrator of Aeronautics – Working Files – “Transcript of Proceedings, NASA Long Range Planning Meeting: Global Application Systems,” June 13, 1970
6. Deputy Administrator of Aeronautics – Working Files – “Transcript of Proceedings, NASA Long Range Planning Meeting: New Science Opportunities,” June 14, 1970
7. Deputy Administrator of Aeronautics – Working Files – “Transcript of Proceedings, NASA Long Range Planning Meeting: Orbital, Lunar, and Planetary Transportation Systems and Operations,” June 14, 1970
8. Deputy Administrator of Aeronautics – Working Files – “Transcript of Proceedings, NASA Long Range Planning Meeting,” June 20, 1970
9. Deputy Administrator of Aeronautics – Working Files – Notification for Personnel Action: Pay increase for Armstrong as Deputy Associate Administrator for Aeronautics, January 1971
10. Deputy Administrator of Aeronautics – Working Files – White House Invitation to Dinner in Honor of Apollo 14, February 24, 1971

## **Sub-series 7. Continuing NASA Involvement, 1970-2009**

### **Correspondence and Working Files**

(1.4 cubic ft.)

**Correspondence and Working Files Sub-series Description:** The Continuing NASA Involvement subseries spans the nearly four decades of Armstrong’s life following his resignation from NASA in 1971. After leaving his position as the Deputy Administrator of Aeronautics, Armstrong was no longer employed by NASA in any official capacity. However, Armstrong remained in touch with his many colleagues at NASA and continued to be involved in projects related to space flight and aeronautics. His continued commitment to the U.S. space program is reflected in a series of correspondence, presented here as Armstrong himself had arranged it. The subseries also contains work on which Armstrong collaborated with University of Arizona and Altair project members working on improvements to lunar lander technology, as well as materials documenting conferences on spaceflight that

Armstrong helped to plan and which he attended or participated. Conference materials include multimedia presentations delivered by Armstrong as part of a panel of experts in 2007. Correspondence related to the planning of these events has been preserved as Armstrong himself arranged it.

**Box 89** *Continuing NASA Involvement – Correspondence and Apollo Files, 1970-2001*

Folder

1. Continuing NASA Involvement – Correspondence – “Apollo 13 Mission Review – Hearing Before the Committee on Aeronautical and Space Sciences, United States Senate,” June 30, 1970
2. Continuing NASA Involvement – Correspondence – Annals of Exploration: An Accident in Space,” *New Yorker* article about Apollo 13, November 1972
3. Continuing NASA Involvement – Correspondence – “15 Years in Space: 1957-1972: TRW Space Log,” circa 1972. “TRW Apollo 16 Flight Data,” circa 1972
4. Continuing NASA Involvement – Correspondence – Photographs from Apollo 16/17 and NASA artist renditions of unmanned space probes, circa 1972-1981
5. Continuing NASA Involvement – Correspondence – “First Men on the Moon,” circa 1976
6. Continuing NASA Involvement – Correspondence – [Apollo Articles], news articles and magazine clippings related to the Apollo program, 1989-1995
7. Continuing NASA Involvement – Correspondence – Copies of reports from the *Lima News* about the Apollo 11 Lunar Landing, circa 1989-1997
8. Continuing NASA Involvement – Correspondence – “The Astronaut as Photographer: A Personal View of the Universe – An Exhibition,” 1995-1996
9. Continuing NASA Involvement – Correspondence – “NASA’s Microgravity Science Laboratory: Illuminating the Future,” circa 1996-1997
10. Continuing NASA Involvement – Correspondence – Copies of news items regarding lunar rocks and the Apollo 11 lunar landing with pictures of the USS Hornet, circa 1997
11. Continuing NASA Involvement – Correspondence – Magazine and newspaper clippings recounting the events and findings from Apollo 11, including “Apollo 11 Observations (1969),” circa 1999-2000
12. Continuing NASA Involvement – Correspondence – “how to Request Lunar Samples,” instructions for obtaining samples of lunar material on loan from NASA, September 2001

**Box 90** *Continuing NASA Involvement – Apollo 11 Anniversaries, 1970-2004*

Folder

1. Continuing NASA Involvement – Apollo 11 Anniversaries – First Anniversary of the Manned Lunar Landing, NASA press conference transcript, July 8, 1970
2. Continuing NASA Involvement – Apollo 11 Anniversaries – NASA publication, “First Anniversary, July 20, 1970,” circa 1970
3. Continuing NASA Involvement – Apollo 11 Anniversaries – Program for “For All Mankind,” an oratorio for Baritone, Soprano, Narrator SATB Chorus and Orchestra to celebrate the 10 Year Anniversary of Apollo 11, July 22, 1979
4. Continuing NASA Involvement – Apollo 11 Anniversaries – Letter and song from Ward Spring to Armstrong to commemorate the 20<sup>th</sup> Anniversary of Apollo 11, June 2, 1989
5. Continuing NASA Involvement – Apollo 11 Anniversaries – “Apollo 11 35<sup>th</sup> Anniversary Souvenir Edition: Apollo 11 Lunar Landing Mission Press Kit,” circa 2004

**Box 91** *Continuing NASA Involvement – Correspondence, 1972-1997*

Folder

1. Continuing NASA Involvement – Correspondence – [N.A. ↔ NASA Correspondence, 1972-1978]
2. Continuing NASA Involvement – Correspondence – [N.A. ↔ NASA Correspondence, 1978-1997]

**Box 92** *Continuing NASA Involvement – Correspondence and Working Files, 1999-2008*

Folder

1. Continuing NASA Involvement – Correspondence and Working Files

Item

1. Correspondence between C. W. Ottinger and Neil Armstrong regarding the LLRV development of and conference for the Altair project, with copy of *The X-Press* (October 29, 1999), July 2000-August 2002

Folder

2. Continuing NASA Involvement – Correspondence and Working Files

Item

1. Letter from James P. Bigham on the LLRV and Bigham’s role in development with and LLRV article also by Bigham, November 11, 2005

Folder

3. Continuing NASA Involvement – Correspondence and Working Files

Item

1. "Rendezvous – March 1969 – Year of the Moon Men" (Reprint), circa 2006/2008

Folder

4 Continuing NASA Involvement – Correspondence and Working Files

Item

1. Correspondence regarding the Apollo medical operations summit, with CD-ROM, October 2006-December 2007

Folder

5. Continuing NASA Involvement –Correspondence and Working Files

Item

1. "The Apollo Medical Operations Project: Recommendations to Improve Crew Health and Performance for Future Exploration Missions and Lunar Surface Operations," September 2007

Folder

6. Continuing NASA Involvement – Correspondence and Working Files

Item

1. Letter from C. W. Ottinger to Neil Armstrong regarding the Altair conference at Arizona State, September 8, 2007

Folder

7. Continuing NASA Involvement – Correspondence and Working Files

Item

1. "Lunar lander Training Vehicle Trade Study Interim Report to the Lunar lander Project office," Vols. 1 and 2, October 16, 2008

Folder

8. Continuing NASA Involvement – Correspondence and Working Files

Item

1. "Unconventional, Contrary, and Ugly: The Lunar Landing Research Vehicle," by G. J. Matranga, C. W. Ottinger, and C. R. Jarvis, with a forward by Neil Armstrong, circa 2006

**Box 93** *Continuing NASA Involvement – Correspondence and Working Files, 1977-2008*

Folder

1. Continuing NASA Involvement – Correspondence and Working Files

Item

1. Letter from C. W. Ottinger to Neil Armstrong with a proposal for the Altair LLRV porject and subsequent note by Mr. Armstrong, circa 2007

Folder

2. Continuing NASA Involvement – Correspondence and Working Files

Item

1. "LLTV Expert Panel Review, Dryden Flight Research Center, Expert Panel Review, Houston, TX," December 9, 2008

Folder

3. Continuing NASA Involvement – Correspondence and Working Files  
Item  
1. “Go for Lunar Landing from Terminal Descent to Touchdown Conference,” Conference Program, Report, and Panel no. 1 – Apollo Team engineering guide to documentation and downloads, with DVD, March 2008

Folder

4. Continuing NASA Involvement – Correspondence and Working Files  
Item  
1. “Johnson Space Center, Telephone Directory,” September, 1977

Folder

5. Continuing NASA Involvement – Correspondence and Working Files  
Item  
1. Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched Into Outer Space, © published by S.M. Kessler, Hicksville, New York, undated

## **Sub-series 8. NASA Publications, 1951-1989**

### **Personal and Working Files**

(3.4 cubic feet)

**Sub-series Description:** The NASA Publications subseries contains books and other documents published by NASA and collected by Armstrong when he was employed by NASA, as well as a smaller number of NASA publications collected after Armstrong’s retirement. The materials reflect Armstrong’s involvement in the U.S. space program and contain published information related to space flight, experimental aircraft, and the various NASA programs from Mercury to Apollo. Many of these publications are reports on the results of NASA missions, including extensive materials on the scientific impact of the Apollo lunar landing missions. Also found in this subseries are informational publications intended for press releases or public consumption, which reflect NASA’s sustained public relations campaign throughout the 1960s.

#### **Box 94** *NASA Papers – Publications, 1951-1967*

Folder

1. NASA Papers – Publications – “Strength of Metal Aircraft Elements,” June 1951  
2. NASA Papers – Publications – “Proceedings of the NASA-University Conference on the Science and Technology of Space Exploration – Vol. 1,” November 1962  
3. NASA Papers – Publications – “Proceedings of the NASA-University Conference on the Science and Technology of Space Exploration – Vol. 2,” November 1962

4. NASA Papers – Publications – “NASA-Industry Conference, Program Plans,” February 11-12, 1963
5. NASA Papers – Publications – Group of publication on NASA flight research assembled by Armstrong, published circa 1963-1972
6. NASA Papers – Publications – “What’s Up There?,” with teacher’s edition, circa 1964
7. NASA Papers – Publications – “Propellant Safety Handbook,” circa 1964
8. NASA Papers – Publications – “Conference on nutrition in Space and related Waste Problems,” April 1964
9. NASA Papers – Publications – “AIAA/NASA Third Manned Space Flight Meeting,” November 1964 (2 copies)
10. NASA Papers – Publications – “Aerospace Conference Proceedings 1965,” June, 1965
11. NASA Papers – Publications – “NASA 1965 Summer Conference on Lunar Exploration and Science,” 1965
12. NASA Papers – Publications – “The Planetarium – An Elementary School Teaching Resource,” February 1966
13. NASA Papers – Publications – “Life Support System for Space Flights of Extended Time Periods,” November 1966
14. NASA Papers – Publications – “Clinical Space Medicine: A Prospective Look at medical Problems from Hazards of Space Operations,” July 1967.
15. NASA Papers – Publications – “Historical Perspectives on Apollo,” October 24, 1967
16. NASA Papers – Publications – “1967 Summer Study of Lunar Science and Exploration, July-August 1967,” (2 Copies)

**Box 95** *NASA Papers – Publications, 1968-1970*

Folder

1. NASA Papers – Publications – “Hearings Before the Subcommittee on Advanced Research and Technology of the Committee on Science and Astronautics U.S. House of Representatives,” September-October 1968
2. NASA Papers – Publications – Booklet series “America in Space/The First Decade,” five titles, all circa October 1968
3. NASA Papers – Publications – “The Moon: It’s geology and geography,” circa 1968
4. NASA Papers – Publications – “Compendium of Human Responses to the Aerospace Environment, Vol. 1,” November 1968
5. NASA Papers – Publications – “Compendium of Human Responses to the Aerospace Environment, Vol. 2,” November 1968
6. NASA Papers – Publications – “Compendium of Human Responses to the Aerospace Environment, Vol. 3,” November 1968
7. NASA Papers – Publications – “What Makes a Rocket Go?” A teacher’s film guide circa 1968
8. NASA Papers – Publications – “Apollo 8: Man Around the Moon,” circa

- 1968
9. NASA Papers – Publications – “Astronautics and Aeronautics, 1968: Chronology on Science, Technology, and Policy,” 1969
  10. NASA Papers – Publications – “Technical Report 32-1265: Surveyor Project Final Report Part I: Project Description and Performance Volume I,” July 1, 1969
  11. NASA Papers – Publications – “Technical Report 32-1265: Surveyor Project Final Report Part I: Project Description and Performance Volume II,” July 1, 1969
  12. NASA Papers – Publications – “Technical Report 32-1265: Surveyor Project Final Report Part II: Science Results,” June 9, 1969
  13. NASA Papers – Publications – “Aerospace Food Technology – A conference held at the University of South Florida; Tampa, Florida, April 15-17, 1969”
  14. NASA Papers – Publications – “NASA’s Implementation of the Lunar Landing Decision,” circa August 1969
  15. NASA Papers – Publications – “Goals and Objectives for America’s Next Decades in Space,” September 1969
  16. NASA Papers – Publications – “The Post-Apollo Space Program: Directions for the Future,” with “Integrated Advanced Program Planning Guide,” September 1969
  17. NASA Papers – Publications – “Man on the Moon: A Picture Chronology of Man in Space,” circa 1969
  18. NASA Papers – Publications – “NASA Facts,” brochures on space navigation, electric power generation in space, Biosatellite II, and solar cells, all circa 1969
  19. NASA Papers – Publications – “Project Gemini,” an information pamphlet from the Manned Space Center in Houston with photographs of a first day stamp and Apollo 11 landing sites, circa 1969
  20. NASA Papers – Publications – “Ecological Surveys from Space,” circa 1970
  21. NASA Papers – Publications – “Apollo 13: Houston, We’ve Got a Problem,” circa 1970

**Box 96** *NASA Papers – Publications, 1970-1983*

1. NASA Papers – Publications – “Hearings Before the Committee on Aeronautical and Space Sciences, United States Senate, NASA Authorization for Fiscal Year 1970, Part 1”
2. NASA Papers – Publications – “Hearings Before the Committee on Aeronautical and Space Sciences, United States Senate, NASA Authorization for Fiscal Year 1970, Part 2”
3. NASA Papers – Publications – “Hearings Before the Subcommittee on Advanced Research and Technology of the Committee on Science and Astronautics, U.S. House of Representatives, 1970 NASA Authorization, Part 4”

4. NASA Papers – Publications – “Quotes that Failed: A Chronology of Unhelpful Utterance,” June 1971
5. NASA Papers – Publications – “Voyage of Apollo 15,” October 20, 1971
6. NASA Papers – Publications – Two editions of “Space in the 70s,” on aeronautics and Earth orbital science, both circa 1971
7. NASA Papers – Publications – “Information for Teachers: SkyLab Student Project,” November 1972
8. NASA Papers – Publications – “Solar Sea Power Plants (SSPP): A Critical Review and Survey,” circa 1974
9. NASA Papers – Publications – “NASA, Johnson Space Center Film Catalog,” January 1979
10. NASA Papers – Publications – “Space Lab,” informational brochure from the Marchall Space Flight Center, circa 1982
11. NASA Papers – Publications – “Mission Report,” circa 1983

**Box 97** *NASA Papers – Publications, 1984-2008*

1. NASA Papers – Publications – “Aeronautics and Space Report of the President, 1984 Activities”
2. NASA Papers – Publications – “NASA Leadership and America’s Future in Space Flight,” August 1987
3. NASA Papers – Publications – “Issues in NASA Program and Project Management,” circa 1989
4. NASA Papers – Publications – “STS-35, Columbia OV-102,” September 1990
5. NASA Papers – Publications – “NASA Activities,” Vol. 21, No. 5/6, circa 1990.
6. NASA Papers – Publications – “Report of the Advisory Committee on the Future of the U.S. Space Program,” circa 1990
7. NASA Papers – Publications – “Lunar News,” Nos. 57, 59-61, July 1994-September 1997
8. NASA Papers – Publications – “NASA Alumni League News,” Vol. 9, No. 1, Winter 1998
9. NASA Papers – Publications – “NASA: 50 Years of Exploration and Discovery,” circa 2008
10. NASA Papers – Publications – “NASA: 50 Years of Exploration and Discovery,” circa 2008

**Box 98** *NASA Papers – Publications, Newsletters and Miscellany, 1991-2002*

Folder

1. NASA Papers – Publications – French Instructional Pamphlet for the sequence of assembly for the International Space Station, circa 2002
2. NASA Papers – Publications – *Space News Roundup*, Vol. 30, No. 37 and

- 43, 1991
3. NASA Papers – Publications – *Space News Roundup*, Vol. 31, April-December, 1992
4. NASA Papers – Publications – *Space News Roundup*, Vol. 32, January-December, 1993
5. NASA Papers – Publications – *Space News Roundup*, Vol. 33, January-December, 1994
6. NASA Papers – Publications – *Space News Roundup*, Vol. 34, January-February, 1995
7. NASA Papers – Publications – *Space News Roundup*, Vol. 36, May-December, 1997
8. NASA Papers – Publications – *Space News Roundup*, Vol. 37, February, 1998
9. NASA Papers – Publications – *Mission Report*, nos. 10-12, and *Lunar News*, no.62, February 1998
10. NASA Papers – Publications – *Space Log*, Vol. 12, No. 3, September, 1995
11. NASA Papers – Publications – *Space Watch*, Vol. 12, No. 7, July 1995.
12. NASA Papers – Publications – *NASA Notes*, “X-33/X-34 Update,” and “Lunar Prospector,” circa 1998

**Box 99** *NASA Papers – Publications, 1967-1981*

Folder

1. NASA Papers – Publications – “Life Special Issue: Off to the Moon!” July 4, 1969
2. NASA Papers – Publications – “RCA Apollo 15 Info Packet,” circa 1971
3. NASA Papers – Publications – *Soviet Life*, 20<sup>th</sup> Anniversary of First Manned Space Flight, Yuri Gagarin, April 1981
4. NASA Papers – Publications – Abstracts, summaries, and reports on geological research related to Apollo 11, circa 1933-1969
5. NASA Papers – Publications – Copy of newspaper clipping, *Sunday Star-Bulletin & Advertiser*, “Science Panel Says Space Voyages Will Shorten ‘Astronauts’ Lives,” August 6, 1967

**Box 99a** *NASA Papers – Oversized Publications, 1969-1973*

Folder

1. NASA Papers – Publications – *Au terme de l’annee 1969... a* commemorative, special edition French booklet with correspondence from Robert Don Levine, Deputy Public Affairs Officer at the U.S. Embassy in Paris, circa 1970
2. NASA Papers – Publications – “Apollo 17 at Taurus-Littrow,” circa 1973
3. NASA Papers – Publications – “Apollo 15 at Hadley Base,” circa 1971

4. NASA Papers – Publications – “A Nice Flying Machuine,” booklet on the Manned Maneuvering Unit (MMU), circa 1984
5. NASA Papers – Publications – “To the Moon and Beyond,” magazine, undated
6. NASA Papers – Publications – “Exploring Earth Resources from Space,” booklet circa 1971

## **Series 2. Family Papers, 1934-2007**

(2.20 cubic feet)

**Series Description:** The Family Papers series contains materials collected or created by Neil Armstrong’s family members, collected genealogy materials, and Boy Scouts of America items. Of particular note, is a scrapbook compiled by his mother, Viola L. Armstrong which contains items related to Armstrong’s youth such as his grade school report cards, academic awards, and homework assignments. The series also includes letters from his father, Stephen K. Armstrong, clippings, photographs, and papers his parents compiled as Armstrong’s NASA career progressed and he became a public figure. Also included are materials from Armstrong’s participation in the Boy Scouts of America. These papers were in Armstrong’s possession at the time of his death and were transferred as part of his bequest. The Family Papers series is comprised of 4 sub-series; Viola L. Armstrong, Stephen Koenig Armstrong, [Armstrong] Genealogy, and Boy Scouts.

### **Sub-series 1. Viola L. Armstrong, 1934-2007**

(1.15 cubic feet)

**Sub-series Description:** This sub-series contains materials collected and compiled by Viola L. Armstrong about or related to her son, Neil A. Armstrong. Of note is a scrapbook which contains significant items from Armstrong’s childhood, teenage years and beyond. Among the items in the scrapbook are Armstrong’s first grade artwork, cards, clippings, elementary and high school grades, certificates, programs from school events, membership cards, scout history, a common logarithms notebook, a history assignment, war ration books and a few items from his early Navy days. Other items are a Valentine from Armstrong’s son, Ricky to his grandmother, Viola, a booklet featuring Purdue fraternities, a program from the Purdue convocation when Armstrong was conferred with an honorary doctorate, miscellaneous thumbnail photographs from NASA, many featuring Armstrong and Apollo 11. There are also items from Armstrong’s community service efforts; a Lions Club calendar featuring honorary member Armstrong on the cover and a 1973 Easter Seals newsletter containing an article about Armstrong’s efforts to launch the Ohio campaign. Viola Armstrong also placed poetry written by Armstrong’s brother, Dean in the scrapbook, a family history she had written, various letters, some written by Armstrong in his youth, and miscellaneous family mementos. The page content is

grouped as it was found but has been placed in chronological order within each group. The material has been placed in archival sleeves for preservation purposes.

Box two contains manuscripts by Viola Armstrong, correspondence, clippings, a photo album from a plaque dedication and a sketch of Armstrong and his parents done by Richard Chadwick, a Wapakoneta art teacher. The "Individual High School Report," cards from Upper Sandusky High School were not originally with the family material. They were placed in the series for ease of use by researchers. The "Apollo 11" binder material remains in original order, but it was removed from the binder for preservation purposes. The material is composed of items related to Apollo 11 that Viola Armstrong had collected; correspondence, cards, clippings, pamphlets, brochures, prayers and miscellaneous items. Of special note are 4 small slips of paper Viola had written on as the day progressed on July 20, 1969. It provides insight into her thoughts that day as the Apollo 11 Lunar Lander approached the lunar surface. Also found among the binder material is a signed proclamation by the President of the United States of America, Gerald Ford, declaring Space Exploration Day, 1976.

The second binder included in this series is the "Museum" binder. The binder material has been removed from the binder but retained in its original order. Its contents relate to the Neil A. Armstrong Museum, Wapakoneta, Ohio and various events held at the museum. Among the items is correspondence, including a letter on White House stationery from Pat Nixon to Mrs. Stephen K. Armstrong; lists of items on loan to the museum; numerous clippings, some related to Apollo 11 anniversary events held at the museum or in Wapakoneta; newsletters; news releases; pamphlets, museum stationery and miscellaneous ephemera.

### **Box 100** *Scrapbook Pages, 1934-1999*

#### Page/ Folder

1. Clipping; "Lima Bank Teller," Photo caption; "Crash Kills Youth," 1947
2. Clipping; "Killed in Crash: Frederick C. Lange Victim of Accident," (died in Armstrong's arms), July 27, 1947
3. Advertisement; "Giant Airshow, Port Koneta Airport, Wapakoneta, Ohio, Sunday, June 13, 1948
4. Scrapbook, Miscellaneous Items, 1938-1986

#### Item

1. Grades - Pupil Progress Report, St. Mary's Public Schools, Neil Armstrong, Fourth Grade, 1938-1939
2. United States of America War Ration Book One and Two, 1942
3. Program, "The Mad Hatters," Presented by the Junior Class of Blume High School, Wapakoneta, Ohio, November 16, 1945 (Neil Armstrong as "Bunny")
4. "Scout History - N.A. Armstrong," 1943-44, 1946-47, 1956-1957

5. Membership cards for Buckeye Boys State Incorporated, 1946 and The Fisher Body Craftsman's Guild, circa 1946
6. Card - Congratulations on earning wings, Pratt & Whitney Aircraft, August 9, 1950
7. Valentine from Ricky, to "G.G.," 1962
8. Memorial booklet, Karen Anne Armstrong, January 28, 1962 (2 copies)
9. Receipt for flowers and thank-you note to "G.G. and Pa Pa," 1962
10. Note from Jan and Neil to "G.G.," 1962
11. Note from Piel Bros. Clothing Company, Wapakoneta, Ohio, February 18, 1964 (refers to enclosed news item, no longer with letter)
12. Letter to Mrs. Stephen Armstrong from Bill Van Fossan, September 2, 1969
13. Clippings, "Poet's Corner - A New Theory," by Mabel Baird, Jeffersonville, undated and "Moon Update," 1986
14. Poem, "High Flight," by John Gillespie Magee, Jr., inscribed, "With love to Neil From Mother," undated
15. "The American Flag, Dean Armstrong, 9<sup>th</sup> grade," undated
16. "Rain On The Rooftop, Dean Armstrong, Junior at Blume High," undated
17. [Dean's Poem] "Show Me Thy Way," undated
5. Scrapbook, Miscellaneous Items, 1934-1999
  - Item
  - 1. Birthday card, from "Cradle Roll Dept., First Reformed S.S.," 1934
  - 2. Artwork, [Neil's artwork when he was in 1<sup>st</sup> grade in Jefferson, Ohio] (2 water scenes), undated
  - 3. Notebook with collie on front [Common Logarithms (E.M. 309) Armstrong], undated
  - 4. Note, [Midshipman Neil Alden Armstrong USN], circa 1949
  - 5. Booklet, Purdue Fraternities, 1953
  - 6. Miscellaneous thumbnail photographs, NASA, Armstrong, Apollo 11, April 9, 1999
6. ["Richley Blest," With all my love, Viola L. Armstrong], March 23, 1982
7. Issue of *Armstrong Orbit*, volume 1, number 6, June 7<sup>th</sup>, 1971 (contains various images of Armstrong)
8. Lions Club, Wapakoneta Community Birthday Calendar (picture of honorary member Armstrong on the front), circa 1969
9. Issue of Easter Seals, *The Helping Hand*, volume 38, front page article, "Edwards, Armstrong To Open 1973 Ohio Annual Campaign," February 1973
10. Scrapbook, Miscellaneous Items, 1947-1983
  - Item
  - 1. Clipping, "Blume High Band to Present Annual Concert on Friday Evening, April 8, 1947 (includes picture of band)
  - 2. Cover page from the *Observer*, "Wish You Were Here: travel guide

- for the first tripper to take a ticket to the moon," July 13, 1969
3. Clipping, "Pray for mission's safety: Two women here played role in life of Neil Armstrong," by Glenn Schotten, July 15, 1969
  4. Program, "Convocation Purdue University, January 9, 1970," (program from exercises for conferring of Armstrong's honorary doctorate)
  5. Letters to the Editor: Chrysler Looks to the Future, July 31, 1980
  6. Church bulletin, St. Paul United Church of Christ, Wapakoneta, Ohio, February 24, 1982
  7. Church bulletin, titled, "Take hold of the eternal life to which you were called," St. Paul United Church of Christ, Wapakoneta, Ohio, October 2, 1983
  8. Card signed "Neil," undated
  9. Church bulletin, titled, "That's One Small Step For Man... One Giant Leap For Mankind!" undated
11. Scrapbook, Card, Grades, 1937-1947
- Item
1. Christmas card, "Merry Christmas to you Neil," from M.F. Taylor, 1937
  2. Grades - Report, Upper Sandusky Public Schools, Sixth Grade, May 28, 1941
  3. Grades - Report to Student and Parents, Blume High School, Wapakoneta, Ohio, Algebra I, 1943-1944
  4. Grades - Report to Student and Parents, Blume High School, Wapakoneta, Ohio, Communications I, 1943-1944
  5. Grades - Report to Student and Parents, Blume High School, Wapakoneta, Ohio, Physical Education, undated
  6. Grades - Report to Student and Parents, Blume High School, Wapakoneta, Ohio, Latin I, undated
  7. Grades - Report to Student and Parents, Blume High School, Wapakoneta, Ohio, Physical Education, 1944-1945
  8. Grades - Report to Student and Parents, Blume High School, Wapakoneta, Ohio, Social Studies II-C, 1944-1945
  9. Grades - Report to Student and Parents, Blume High School, Wapakoneta, Ohio, Communications II-C, 1944-1945
  10. Grades - Report to Student and Parents, Blume High School, Wapakoneta, Ohio, Latin II, 1944-1945
  11. Grades - Report to Student and Parents, Blume High School, Wapakoneta, Ohio, Plane Geometry, 1944-1945
  12. Grades - Report to Student and Parents, Blume High School, Wapakoneta, Ohio, Social Studies, 1945-1946
  13. Grades - Report to Student and Parents, Blume High School, Wapakoneta, Ohio, Typing, 1945-1946
  14. Grades - Report to Student and Parents, Blume High School, Wapakoneta, Ohio, Advanced Mathematics, 1945-1946
  15. Grades - Report to Student and Parents, Blume High School,

- 16. Wapakoneta, Ohio, Physical Educations, 1945-1946  
Grades - Report to Student and Parents, Blume High School, Wapakoneta, Ohio, Chemistry, 1945-1946
  - 17. Grades - Report to Student and Parents, Blume High School, Wapakoneta, Ohio, Communications, 1945-1946
  - 18. Grades - Report to Student and Parents, Blume High School, Wapakoneta, Ohio, English 7A, 1945-1946 (June Armstrong's card)
  - 19. Grades - Report to Student and Parents, Blume High School, Wapakoneta, Ohio, Metal Work, 1946-1947
  - 20. Grades - Report to Student and Parents, Blume High School, Wapakoneta, Ohio, Physics, 1946-1947
  - 21. Grades - Report to Student and Parents, Blume High School, Wapakoneta, Ohio, Advanced Drawing, 1946-1947
  - 22. Grades - Report to Student and Parents, Blume High School, Wapakoneta, Ohio, Senior Civics, 1946-1947
  - 23. Clipping, "Scout Troop 14 Spending Week In Camp Shawnee," undated
12. Scrapbook, Miscellaneous Items, 1936-1947
- Item
- 1. Promotion Certificate, Neil Armstrong, First Reformed Church School, Warren, Ohio, September 27, 1936
  - 2. Grades - Neil Armstrong, Trumbull County Public Schools, Grade One, undated
  - 3. Quarterly Grades And Annual Standings, Neil Armstrong, Ashtabula County Schools, Elementary, Grade One, 1936-1937
  - 4. Grades - Report to Parents, Auglaize County Public Schools, Neil Armstrong, Grade 2, 1937-1938
  - 5. Grades - Pupil Progress Report, Neil Armstrong, St. Mary's Public Schools, Third Grade, 1937-1938
  - 6. Grades - Pupil Progress Report, Neil Armstrong, St. Mary's Public Schools, Fifth Grade, 1939-1940
  - 7. History assignment, "Neil A," marked "Excellent," February 14, 1940
  - 8. Credit Classification Report, Neil Armstrong, Blume High School, Wapakoneta, Ohio, (sophomore), 1944-1945
  - 9. Credit Classification Report, Neil Armstrong, Blume High School, Wapakoneta, Ohio, 1945-1946
  - 10. Credit Classification Report, Neil Armstrong, Blume High School, Wapakoneta, Ohio, (senior), 1946-1947
  - 11. Certificate, Blume High School, Wapakoneta, Ohio, In Recognition of Outstanding Work in Band (3 years), Neil Armstrong, May 16, 1946
  - 12. Certificate, Blume High School, Wapakoneta, Ohio, In Recognition of Outstanding Work in Appointment to Boys State, Neil Armstrong, May 16, 1946
  - 13. Certificate of Award, Neil Armstrong, State Department of Education, Honorable Mention in The Bowling Green State University District, General Scholarship Test for High School Seniors, March 7-8, 1947

14. Certificate of Award, Neil Armstrong, State Department of Education, Sixth in Auglaize County, General Scholarship Test for High School Seniors, March 7-8, 1947
15. Certificate of Award, Neil Armstrong, State Department of Education, The Bowling Green State University District, Ninth - Division II in Physics, May 3, 1947
16. Letter from Armstrong to, "Dear mother an all," undated (childhood letters Armstrong wrote while staying at his grandparent's home)
17. Letter from Armstrong to, "Dear mother an all," undated
18. Letter from Armstrong's grandmother to his parents, while Neil was staying with them, undated
19. Note, "A gold star for getting the most red stars on the blackboard," undated
20. Cursive note, written by Armstrong, with letter grade of an A, "Neil dog cat K.O.G.," undated
21. Cursive note, written by Armstrong, with letter grade of an A+, "Neil dog apple cat," undated
22. Daily Schedule Card, Neil Armstrong, Grade 9, Blume High School, Wapakoneta, Ohio, undated
23. Poem, "The Star of Christmas," [Recitation, Neil], undated
13. Scrapbook, Miscellaneous Items, 1947-circa, 1990
  - Item
  - 1. Address card from The Commandant, Ninth Naval District, Great Lakes, Illinois, August 26, 1948
  - 2. Correspondence to Mr. S.K. Armstrong from Robert F. Jones, Congress of the United States of America, House of Representatives, 4<sup>th</sup> District, Ohio, thanking Armstrong for clipping about Neil, July 2, 1947
  - 3. Bulletin of Information, U.S. Navy - U.S. Marine Corps, College Training Programs, Naval Reserve Officers Training Corps and Naval Aviation College Program, 1947
  - 4. Public Auction sale bill, picture of farm inside with note, "This is where I lived with my grandparents, 1909-1916, VA.," November 9, 1985
  - 5. Poem, "Viola," by Edie Kirk and "Neil Armstrong's Boyhood Crisis," by Mrs. Stephen Armstrong, as told to Lorraine Wetzel, *Guideposts*, magazine, circa 1990
14. Letter to "Dear Steve and Family," from "Fred & Diane Pepple," undated
15. Original binder

**Box 101** *Grades, Manuscripts, Correspondence, Clipping, Photo Album - Church Plaque Dedication and Sketch, "Apollo 11" Binder Material and "Museum" Binder Material, 1941-2007*

Folder

1. "Individual High School Report," Upper Sandusky High School, Upper Sandusky, Ohio, 1941-1942 (grade 7 classes, 7 cards)
2. "Individual High School Report," Upper Sandusky High School, Upper Sandusky, Ohio, 1942-1943 (grade 8 classes, 7 cards)
3. "Individual High School Report," Upper Sandusky High School, Upper Sandusky, Ohio, 1943-1944 (grade 9 classes, 4 cards)
4. Manuscript, Correspondence and Clipping, 1969-1971
  - Item
  - 1. "Memories," manuscript by Viola Armstrong, June 1969
  - 2. Correspondence from Viola Armstrong to Lorraine Wetzel, *Guideposts* magazine, October 13, 1969
  - 3. Draft manuscript, "The mother of the first man to set foot on the moon tells a poignant story of Neil Armstrong's boyhood crisis," "Untitled Manuscript, by Mrs. Stephen Armstrong, as told to Lorraine Wetzel," 1969
  - 4. *Guideposts* article, Neil Armstrong's Boyhood Crisis, by Mrs. Stephen Armstrong, as told to Lorraine Wetzel, February 1970
  - 5. Copy of poem, "A Mother's Poem," and correspondence from Viola Armstrong, to the author, Fran Rydzewski, September 8, 1970
  - 6. Clipping from Tazewell Courier, photograph of Viola Armstrong during school dedication ceremonies, circa 1971
5. Photo album, program, correspondence and speech, dedication of Neil A. Armstrong plaque and celebration of reunion of Armstrong's confirmation class, Trinity United Church of Christ, Upper Sandusky, Ohio, June 13, 1971
6. Sketch by Richard Chadwick of Armstrong and his parents, undated
7. "Apollo 11" binder material, 1968-2007 (original order retained)
  - Item
  - 1. Christmas cards, 2 cards with the moon on the front, circa 1969
  - 2. "Apollo-Saturn Manned Flight To The Moon," © 1968 Monogram Models, Incorporated, Morton Grove, Illinois
  - 3. NASA Biographical Date sheet for Armstrong, Manned Spacecraft Center, Houston, Texas, July 1968
  - 4. 4 small sheets of paper Viola Armstrong wrote on as the day progressed on July 20, 1969
  - 5. 4 nametags for "Astronaut Neil A Armstrong, Mrs. Neil A. Armstrong, Mr. Stephen K. Armstrong and Mrs. Stephen K. Armstrong, circa 1969
  - 6. Pamphlet, "The Flag I Love," Good News Publishers, Westchester, Illinois 60153, undated
  - 7. Wilford, J.N. (1969, July 24). Apollo 11 To Splashdown Today; Nixon Is Flying To Site In Pacific; Astronauts Send A Final Report. *The New York Times*, p. 1 (includes photograph of Armstrong from final Apollo 11 telecast)
  - 8. Lelyveld, J. (1969, July 24). Officials in Kennedy Case Rounding Up Statements. *The New York Times*, p. 16
  - 9. Ad - "Be Among The First To Wear the official Apollo 11 Emblem," *The New York Times*, p. 18; on back side of paper - Weaver, W. Jr.,

- (1969, July 24). Guest at Kennedy Party Says She Did Not Know of Death Until Morning. *The New York Times*, p. 17
10. *The American Legion Magazine*, cover, December 1975 (features photo taken by Armstrong during Apollo 11; "...earth turning its face to the constant sun and dramatizes the promise of solar energy.")
  11. Paper placemat, "July 20-1969, Man Walks on the Moon At 10:56 P.M. - EDT., Earth To Moon Aboard The Apollo Taxi," 1969
  12. "A Prayer for The Apollo 11 Astronauts," on stationery from St. Paul United Church of Christ, Wapakoneta, Ohio, 1969
  13. Prayer for the parents of the Apollo 11 crew, on stationery from St. Paul United Church of Christ, Wapakoneta, Ohio, signed by Pastor Weber and Members of the Church Council, 1969
  14. Stoll, D.L. (1969, October 19). Hero's Home Town, I'm Proud of My Town! *Grit News Section*, p. 6. (in regards to Wapakoneta, Ohio and Armstrong after moon landing)
  15. Fan letter from Tranquilino F. Martinez, Nogales, Sonora, Mexico, to Mr. and Mrs. Stephen K. Armstrong, September 5, 1969
  16. Letter to Tranquilino F. Martinez, Nogales, Sonora, Mexico, from "Hon. City Council, Wapakoneta, Ohio," conferring honorary citizenship of Wapakoneta, Ohio, January 8, 1970
  17. Clippings about Tranquilino F. Martinez, 1970
  18. Catalog & Price List, Space Photos, Gemini IV, V, VI, VII, VIII, IX, X, XI, XII, undated
  19. (1970, July 29). "Pastor Resigns" (Rev. Herman J. Weber). *The Enterprise*
  20. "A Mother's Poem" and "Dear Astronauts," by Fran Rydzewski, *South End Reporter*, Sunday, December 21, 1969
  21. MacLeish, A. (1968). *Riders on the Earth Together*. The New York Times Company. Reprinted by permission.
  22. NASA, Apollo 11, 5<sup>th</sup> Anniversary data sheet, 1974
  23. A Proclamation, by the President of the United States of America, Space Exploration Day, 1976 (copy, signed by Gerald R. Ford)
  24. "9<sup>th</sup> Congress, 2d Session, S. Con. Res. 47," In The Senate Of The United State, September 30, 1976, Ordered to be printed as passed; "Resolved by the Senate (the House of Representatives concurring), That the President is requested to issue a proclamation designating the period of July 16 through 24 as "United States Space Observance," and calling upon the people of the United States to observe such period with appropriate ceremonies and activities."
  25. Correspondence about astronauts and "waste" disposal, 1984
  26. Clippings; "Weatherman Zint gave Armstrong telescopic views of the moon," and "Veterans Day snowfall surprising say Wapak weatherman Zint," circa 1984
  27. Pamphlet, Gatlinburg's American Historical Wax Museum, features wax figure of Armstrong on cover, undated
  28. Fisher, J. (1984, July 20). U.S. Base on Moon Predicted by Year

2007. *The Hartford Courant*, no page noted.
29. Clipping; photo with caption; Mural Depicts Moon Mission. *The Hartford Courant*, April 22, 1975.
  30. Clipping; photo with caption; The Most Historic Call. *The Wapakoneta Daily News*, November 15, 1969 (Nixon on phone to lunar astronauts Armstrong and Aldrin)
  31. Cartoon featuring Armstrong and Aldrin. *Buenos Aires Herald*, September 23, 1986
  32. Brochure, "The National Space Institute announces The Official American Space Flight Silver Anniversary Medals," 1986
8. "Museum" binder material, 1967-1976 (original order retained, folder 1 of 16)  
Item
1. Lists of "Loan Items," (articles relative to Armstrong on loan to museum), circa 1976
  2. Correspondence (on NASA stationery) from Armstrong listing the items to be transferred to the Ohio Historical Society, specifically for use at the Neil Armstrong Museum, also includes a pamphlet from the museum, December 18, 1969
  3. Color photograph of "F-D Skylancer" at Neil Armstrong Museum and photograph of the museum at night; label, Armstrong Air and Space Museum, The Ohio Historical Society, circa 1969
  4. Correspondence in regards to dedication of Neil Armstrong Airport, Auglaize County, Wapakoneta, Ohio, September 22, 1967
  5. Clippings; (1969, September 17). Marathon gives \$5,000 To Museum. *The EVENING LEADER, St. Marys, O.*, p. 2; Photograph with caption, (1971, September 11) Museum Dome In Place. Publication information not available; Photograph with caption, (1971, September 10). Neil Armstrong Museum Dome. *Wapakoneta Daily News* (no page number available)
  6. Newsletter; *Moon Talk*. Columbus, Ohio: The Ohio Historical Society. January 5, 1972 ("a newsletter published exclusively for the information of members of The Neil A. Armstrong Museum Association")
  7. Correspondence, The Ohio Historical Society, March-December 1972 (letters in regards to donations)
  8. News release, The Ohio Historical Society, "Neil Armstrong Museum To Open - Formal Dedication To Be Set Later," June 16, 1972 (official opening on 3<sup>rd</sup> anniversary of moon landing, July 20, 1972)
9. "Museum" binder material, 1969 (original order retained, folder 2 of 16)  
Item
1. Correspondence (museum donation related) sent to Mr. and Mrs. Stephen K. Armstrong, July-September, 1969
10. "Museum" binder material, 1967-1979 (original order retained, folder 3 of 16)  
Item
1. Picture of Armstrong cut from Airport Authority, Auglaize County, Wapakoneta, Ohio stationery, circa 1969

2. Nametag, "I Live In Wapakoneta May I Help You?" circa 1969
  3. "Donations To The Neil Armstrong Space Museum – Wapakoneta, Ohio," slip of paper, circa 1969
  4. Pamphlets, "Armstrong Air and Space Museum, The Ohio Historical Society," 12 designs, circa 1969
  5. Pamphlet, "Welcome to Wapakoneta...The Friendly City," undated
  6. Letter on White House stationery from Pat Nixon to Mrs. Stephen K. Armstrong, August 1, 1972
  7. Letter seeking donations for Neil Armstrong Airport, Auglaize County, Wapakoneta, Ohio, circa 1967
  8. Wapakoneta Community Birthday Calendar, "Home Of Neil Armstrong, First Man On The Moon," features the Neil Armstrong Museum on the front, 1972
  9. Correspondence, The Ohio Historical Society, Incorporated, to Mr. and Mrs. Stephen K. Armstrong, in regards to acting museum manager, January 19, 1979
11. "Museum" binder material, 1973-1981 (original order retained, folder 4 of 16)  
Item
1. Clipping, photograph with caption, "Festival of Flight balloon exhibit "gets off the ground" this morning as Wapakoneta gets into "remembering" Neil's first step on the moon." (publication information not available), Saturday, July 18, 1981
  2. Clipping, "Rockets to be Launched at Armstrong," *Echoes*, July 1976 (model rocket launch at museum)
  3. Clipping, "Moon Rock Now on Display at Armstrong," (publication information not available), circa 1973
  4. Clippings, (1981, July 20) "12<sup>th</sup> Annual Wapakoneta Festival of Flight," and "'Fun, Food, Friends Highlight Flight Fest 'Fare,'" *The Wapakoneta Daily News*, pp. 10-11 (picture sections)
12. "Museum" binder material, 1971-1982 (original order retained, folder 5 of 16)  
Item
1. Clippings, various clippings in regards to the Festival of Flight, July 1982; 2 articles that feature the Neil Armstrong Air and Space Museum curator, Kathy Minkin, circa 1973-1978 and other museum clippings, circa 1980
  2. 2 articles that feature the Neil Armstrong Air and Space Museum curator, Kathy Minkin, circa 1973-1978
  3. Clippings, miscellaneous museum, circa 1980
  4. Pamphlet, Neil Armstrong Air And Space Museum, 1982
  5. 2 color photographs of Stephen and Viola Armstrong with young couple, note on envelope; "Must find address for Alfredo – Marion, Ohio," 1971
13. "Museum" binder material, 1974-1983 (original order retained, folder 6 of 16)  
Item
1. NASA, Fifth Anniversary of Apollo 11, information card, United States Government Printing Office, 1974

2. Ad, "Visit Neil Armstrong Museum, undated
  3. Clipping, "Museums Reopen," publication information unavailable, March 1983
  4. Clipping, "A Brief History of St. Marys," publication information unavailable, undated
14. "Museum" binder material, circa 1970-1976 (original order retained, folder 7 of 16)
- Item
1. Clipping, "John A. Zwez graduates from United Electronics, "10 years ago," August 18, 1971 (publication information unavailable)
  2. Birthday card, "Love Nita," undated
  3. List, "Given to Museum on," circa 1976
  4. Receipt, "Eagle Painting," The Ohio Historical Society/Ohio Historical Center, Columbus, Ohio, 1973
  5. Cards, "Eagle to the Moon," by John A. Ruthven, envelopes dated 1972 (3 copies)
  6. Booklet, "Armstrong Air and Space Museum, 10 Different Color Snapshots," Administered by The Ohio Historical Society, circa 1970s
15. "Museum" binder material, 1981 (original order retained, folder 8 of 16)
- Item
1. Map and recreation information sheet, "Wapakoneta, Ohio: Indian lore, footsteps on the moon are brothers in Wapakoneta," published by the Wapakoneta Area Chamber of Commerce, 1981 (2 copies)
16. "Museum" binder material, 1983-1984 (original order retained, folder 9 of 16)
- Item
1. Numerous clippings, related to "Festival of Flight," Neil Armstrong Air and Space Museum, 1983
  2. Entry sheets, "5<sup>th</sup> Annual Run to the Moon," Wapakoneta, Ohio, July 16, 1983 (2 forms)
  3. Clipping, "Wapakoneta, Ohio: Key City of Auglaize County," *Lima News*, February 26, 1984
  4. Clipping, photograph with caption, "Flag Presentation," WDN photo by Lori Nims," September 27, 1983
  5. Clipping, photograph with caption, "Official Race Shirt," WDN photo by Rusty Geiger, July 7, 1983
  6. Clipping, advertisement, "Wapakoneta "Wapak" "The Greatest Little Town In Ohio..." *Lima Allen Advertiser*, September 27, 1983
17. "Museum" binder material, 1983-1984 (original order retained, folder 10 of 16)
- Item
1. Thank-you card, to Viola and Steve Armstrong, from John and Adele, July 20, 1983
  2. Clipping, "The Spirit Of Success In Our Community Started With First Steps..." Carrier Day and Newspaper Week, *The Wapakoneta Daily News*, October 13, 1984 (full page, features photograph of The Neil Armstrong Museum)

3. Information sheet, "The Shawnee Indians at Wapakoneta, Chief Black Hoof, 1721-1831, Wapakoneta Area Chamber of Commerce," undated
18. "Museum" binder material, 1980-1982 (original order retained, folder 11 of 16)  
Item
  1. Commemorative Book, "Wapakoneta Area Chamber of Commerce Presents 11<sup>th</sup> Anniversary of The First Moon Landing," *Wapakoneta Daily News*, July 14, 1980
  2. Program, Festival of Flight, 13<sup>th</sup> Anniversary Moon Landing, 10<sup>th</sup> Anniversary Neil Armstrong Space Museum, July 17-18, 1982
19. "Museum" binder material, 1982-1984 (original order retained, folder 12 of 16)  
Item
  1. Clipping, "For Museum: Improvements over \$400,000," *The Wapakoneta Daily News*, March 1, 1984
  2. Miller, H. (1984, May 9). Balloon to bring surprise to Indiana school girl. *St. Mary's Evening Leader*, p. 5
  3. Card, Apollo 11, 13<sup>th</sup> anniversary, to Viola and Steve, from John and Adele, July 20, 1982
20. "Museum" binder material, 1984 (original order retained, folder 13 of 16)  
Item
  1. Clipping, Lawson, F. (1984, July 15). Hero seeks privacy after moon walk. *Dayton Daily News*, p. 1A, 10-A
21. "Museum" binder material, 1969-1983 (original order retained, folder 14 of 16)  
Item
  1. Clippings, numerous miscellaneous, Apollo 11, 15<sup>th</sup> anniversary, 1984
  2. Correspondence, The Ohio Historical Society, thanking Mr. and Mrs. Stephen K. Armstrong for donation, October 24, 1969
  3. Pamphlet, Rotary Club of Wapakoneta, Ohio, 1983 (3 copies, features Neil Armstrong Museum on front)
  4. Pamphlet, The Kansas Cosmosphere and Discovery Center, circa 1980 (2 copies, features photograph of Armstrong reflected in Aldrin's helmet on moon)
22. "Museum" binder material, 1985-1986 (original order retained, folder 15 of 16)  
Item
  1. Clippings, numerous miscellaneous, including Apollo 11, 16<sup>th</sup> anniversary, 1985
  2. Correspondence, Howard B. Cooper, AFS (American Field Service) to Mrs. Armstrong, May 23, 1986
23. "Museum" binder material, 1966-1987 (original order retained, folder 16 of 16)  
Item
  1. Clippings, numerous miscellaneous, including Gemini VIII parade and Apollo 11, 17<sup>th</sup> anniversary, 1966-1987

2. Stationery, Neil Armstrong Air And Space Museum, circa 1980
3. Program, The Armstrong Air and Space Museum's Festival of Flight, Wapakoneta, Ohio, July 19-20, 1986 (4 copies)
4. Newsletter, *Echoes*, Ohio Historical Society, Volume 25, Number 3, March 1986; Volume 26, Number 1 and 2, January-February, 1987
5. *Legacy Letter*, a publication of the Ohio Historical Foundation, Volume 1, April 1987
6. Correspondence in regards to and article, "Communion in Space," by Buzz Aldrin, reprinted by permission from *Guideposts Magazine*, 1972

## Sub-series 2. Stephen Koenig Armstrong, 1951-1989

(0.2 cubic feet)

**Sub-series Description:** This sub-series contains material found together which relates primarily to Neil A. Armstrong's father, Stephen Koenig Armstrong. The five letters from Stephen Koenig Armstrong were found in a folder labeled [Armstrong]. Three were sent to Armstrong while he served in the United States Navy, one is in reference to a Scout camp named in Armstrong's honor in 1970, and one was sent in 1970 from his father and mother. The letters have been placed in archival sleeves, and copies have been made on archival paper for research purposes. Also included is an issue of the *Wapakoneta Daily News* featuring a picture of Mr. and Mrs. Stephen Armstrong shortly after the moon landing and three binders containing collections of newspaper front pages celebrating the 20<sup>th</sup> anniversary of the first moon landing. The binders were compiled by "John and Adele Moreau," friends of the Armstrongs. There are also various clippings featuring the Armstrongs and a few letters from Armstrong's sister, June. Lastly, Stephen Armstrong's wallet containing his Ohio driver's license, membership cards, and additional ID can be found here.

**Box 102** *Letters to Neil Armstrong from his Father and Mother, July 1969 Issue of Wapakoneta Daily News, 20<sup>th</sup> Anniversary of Moon Landing Newspaper Front Pages, Clippings, Letters from Armstrong's sister June, 1951-2004*

### Folder

1. Letters and clippings, 1951-1970

#### Item

1. Letter to Armstrong from his father, September 24, 1951 (letter is torn and fire damage)
2. Letter to Armstrong from his father and sister, June, November 17, 1951 (letter is torn)
3. Letter to Armstrong from his father, January 14, 1952 (letter is torn and fire damage)
4. *Wapakoneta Daily News*, features a photograph of Mr. and Mrs. Stephen Armstrong on the cover, July 21, 1969
5. Letter to Armstrong from his father, March 18, 1970

6. Letter to Armstrong from his father and mother, August 16, 1970
2. Clippings (featuring Mr. and Mrs. Stephen Armstrong) and program from dedication of Neil A. Armstrong-Oakview Elementary School, March 21, 1971
3. Clippings, 1970-1971
  - Item
  - 1. Clipping, "Neil's Parents Attend Special Ceremony, Express Appreciation: Armstrong 'First Flight' Painting Unveiled Here," from *Tribune Chronicle*, Warren, Ohio, November 2, 1970
  - 2. Clipping, "Celebration planned: 'Neil Armstrong Day, 1971,'" July 14, 1971
4. Handwriting analysis booklet and binders of newspaper front pages commemorating the 20<sup>th</sup> Anniversary of the First Moonwalk, 1978-1989
  - Item
  - 1. Booklet, Paterson, Jane (1978). Know yourself through your HANDWRITING. London: The Reader's Digest Association Limited.
  - 2. Three binders of newspaper front pages commemorating the 20<sup>th</sup> Anniversary of the First Moonwalk, 1989
5. Letters to Armstrong from his sister, June, 1969-2004
  - Item
  - 1. Letter from June to Neil, July 11, 1969
  - 2. Note and clipping from June to Neil, 2000
  - 3. Letter from Mildred Moell to June and follow-up letter from Armstrong to Moell, 2004
6. Leather wallet with Stephen K. Armstrong's Ohio driver's license, membership cards and other ID

### **Sub-series 3. [Armstrong] Genealogy, 1969-2001** (0.2 cubic feet)

**Sub-series Description:** This series is mainly comprised of correspondence relating to Armstrong genealogy. There are a few Armstrong biographies and clippings among the correspondence that had been sent to Neil Armstrong by those interested in and seeking verification of lineage. Also included is correspondence related to a visit Armstrong made to Langholm, Dumfriesshire and Edinburgh, (Southern Scotland) in 1972. There is an issue of *Current Biography* (volume 30, Number 9, October 1969) which contains information on Neil A. Armstrong. A few photographs can be found among the correspondence.

**Box 103** *Correspondence, Photographs and Publications, Armstrong related, 1969-2001*

#### Folder

1. Correspondence and publications, Armstrong related, 1994-2001

2. Correspondence and publication, Armstrong related, 1980-1992
3. Correspondence, photographs and publication, Armstrong related, 1969-1979

#### **Sub-series 4. Boy Scouts, circa 1940s-1971**

(0.65 cubic feet)

**Sub-series Description:** This sub-series includes Boy Scouts of America related items primarily from Neil A. Armstrong's participation in the organization as a youth. A few items relate to Armstrong's continued interactions with the Boy Scouts organization during and following his NASA career.

Among Armstrong's Boy Scout items are various certificates; merit badge certificates and applications, including a "space exploration," certificate issued September 1969, First Class Scout, Second Class Scout, Star Scout, Life Scout and Order of the Arrow/Honor Camper, and a High School Member of the American Junior Red Cross and his Distinguished Eagle Scout medal. There are 9 small sheets of paper Armstrong took notes on for his bird study badge. Also included are member in good standing records, along with cloth badges, scout pins and scarves; some personal, some given as gifts. There are other miscellaneous gifts, correspondence from scouts around the world and a few photographs, including 3 of Armstrong, Aldrin and Collins receiving an award in Thailand. Since these photos were found among Armstrong's scout material, it was processed as such.

**Box 104** *Certificates, Pins, Badges, Eagle Scout Medal, Scarves and Miscellaneous Items, circa 1940s-1971*

##### Item

1. Certificate, High School member of the American Junior Red Cross, 1941
2. Merit badge certificates, including "space exploration" certificate issued September 1969, 1943-1967
3. Certificates, First Class Scout, Second Class Scout, Star Scout, Life Scout and Order of The Arrow/Honor Camper, 1943-1944
4. Member in good standing records, 1943-1947
5. Eagle Scout Medal with original boxes, circa 1947
6. Boy Scout Pins, including "Be Prepared" First Class, War Service, South American tapir and National Jamboree, circa 1942-1969
7. Various cloth badges, circa 1940s-1971
8. Various scarves, including Troop 306, End of the Trail, Lorain, Ohio; National Jamboree, 1969 and 1971;
9. Pennant, "Scouts Argentinos," circa 1969
10. Plaque, City Boy Scout Commission, Bangkok, October 28, 1969
11. Paperweight, "35,000 Scouts and Leaders at 7<sup>th</sup> National Jamboree Salute

Neil A. Armstrong On His Epic Moon Mission," 1969

**Box 105** *Merit Badge Information, Correspondence, Photographs and Miscellaneous Material, 1944-1970*

Folder

1. Merit badge applications (camping, astronomy, bird study and canoeing), Shawnee Council, Incorporated, Boy Scouts of America; 9 small sheets of notes Armstrong took for his bird study badge; note from camp counselor, J.R. Needles stating Armstrong met requirements for athletics merit badge, 1944-1947
2. Correspondence to Armstrong from scouts around the world, 1969-1970 (some have badges, bookmarks, etc. attached)
3. Boys Scouts of America Troop Leaders Warrant, scout Neil Armstrong, Jr. Assistant Scoutmaster, approved, Shawnee Council, October 31, 1946
4. Philmont Scout Ranch map, circa 1940s
5. Photograph, black and white, "Your Pal "Gus"" September 13, 1946 (Gus in scout uniform)
6. Photographs (3), black and white, Armstrong, Aldrin and Collins receiving awards in Thailand (?), circa 1969 (in Armstrong's file with scout material)
7. Certificate, Shawnee Council No. 452, Boy Scouts of America, Lima, Ohio, "Camp Neil Armstrong," September 4, 1969
8. Eagle Scout medal from the Boy Scouts of Japan, circa 1969

**Series 3. Education, 1947-1970**

(5.2 cubic feet)

**Series Description:** This series contains some coursework, notebooks, grade reports, and textbooks from Neil Armstrong's undergraduate aeronautical engineering studies at Purdue University. Armstrong was a student at Purdue from 1947-1949 and then was called to active service in the Navy. He returned to Purdue in 1952 and graduated with a Bachelor of Science degree in Aeronautical Engineering in 1955. Also included in the Education Series are materials from his master's degree work at the University of Southern California. Armstrong began research for his master's in 1960, but due to other aspects of his career, he did not receive his master's degree until 1970. The series is divided into two sub-series, Purdue University and the University of Southern California. Of note in the Purdue University series are papers related to Armstrong's participation in the Purdue musical, "Varsity Varieties". One can find his diplomas at the end of each respective series. For papers related to Armstrong's elementary and high school education, please see Series 2. Family Papers. To respect original order, they were left as found among his mother Viola's scrapbook.

## Sub-series 1. Purdue University, circa 1947-1955

(3.6 cubic feet)

**Sub-series Description:** The Purdue University sub-series contains Neil Armstrong's grade reports for 1948, a spiral bound notebook, various folders and two, three-ring binders which held Armstrong's class notes, assignments, labs, along with some quizzes, tests and finals from Engineering classes taken in pursuit of his undergraduate degree. Included are materials for Aeronautical Engineering, 310; 320 - Aircraft Windtunnel; 320-A - Aircraft Windtunnel Lab; 340; 350-A; Armstrong's experiment for 420 - "Preliminary Design Analysis Execution Transport;" 471 - "Aircraft Powerplants;" 481 and 481-A - "Aircraft Powerplants Laboratory;" an "Aircraft Vibrations" class taught by Dr. Hsu Lo and a "Subsonic Flow" class. The Mechanical Engineering courses include, M.E. 109; 521; 530 A and B - Advanced Heat Transfer. Math 523 is also included. The [G.E. 224] folder contains various handouts for [Aero. ED] courses. Additional material Armstrong placed in the binders are laminar flow calculations, "Canons of Ethics for Engineers," a booklet titled, *Ratio of Total and Static Pressures for Mach Numbers* and catapult diagrams and guide for carrier suitability testing. The catapult material appears to be from the Naval Air Test Center, United States Naval Air Station, Patuxent River, Maryland but was in a binder with Purdue class notes.

Located at the back of the second three-ring binder are Purdue "Varsity Varieties" papers from 1953-1954. The "Varsity Varieties" were an all-student revue, and Armstrong wrote and co-directed the short musicals in 1953 and 1954. Most of the notes are for his 1954 production, which he entitled, "The Land of Egelloc" (college spelled backwards). Lyrics for the short musicals are included.

The class material has been removed from the original folders and binders, maintained in original order and placed in archival folders for preservation purposes. Photocopies of the material have been made for use by researchers and are located in the archival folders following the original notes for each class. The original binders have been retained, are wrapped in archival tissue and placed at the back of each respective archival manuscript box.

The textbooks have been placed in chronological order. Some of the textbooks have suffered smoke and water damage. The first box contains a textbook from Wapakoneta City Schools. The additional descriptive notes for each text book indicate which books Armstrong signed his name in, made notations in, originally placed pages of notes in, professor's name for the course or other pertinent information. If pages of notes were found in the textbook, it is noted which pages they were found on. The notes were removed and placed in folders for preservation purposes. Archival copies have been made of the notes and placed in individual folders for ease of use by researchers.

The 22" x 17 ½" design sheets in box 9 are very fragile and have been wrapped in tissue and housed in an archival box.

**Box 106** *Purdue Grade Reports, Folders Containing Purdue Class Notes, Assignments, Labs, Quizzes, Tests and Finals, 1948-1955*

Folder

1. Grade Reports, Purdue University, for the semesters ending January 30, 1948, August 14, 1948 and February 4, 1949
2. Purdue Class Notes, [Calculus I], 1948 (1 class assignment and one sheet of notes found in the notebook have been sleeved and placed in the folder)
3. [Purdue Class Notes] ([M.E. 521, Department of General Engineering] noted on top of some pages. The original folder is in the back of the box), circa 1953-1954
4. Archival copies of [Purdue Class Notes] ([M.E. 521, Department of General Engineering] noted on top of some pages), circa 1952-1955
5. [Aircraft Vibrations, Dr. Hsu Lo] (original was in metal prong folder, cover was retained), circa 1952-1955
6. [Subsonic Flow], (original state retained), circa 1952-1955
7. Purdue University [Title of Experiment: Preliminary Design Analysis Executive Transport; Reported By: Neil Armstrong; School: Aeronautical Engineering; Department: A.E. 420] (in original Purdue folder), January 24, 1955
8. Archival copies of Purdue University [Title of Experiment: Preliminary Design Analysis Executive Transport; Reported By, Neil Armstrong; School: Aeronautical Engineering; Department: A.E. 420], January 24, 1955
9. [Aircraft Windtunnel Lab, Aircraft Powerplants Lab] (A.E. 320, 320-A, 350-A, 481 and 481-A all noted on various assignments and tests, originally in metal prong folder within three-ring binder. The original folder cover has been retained), 1953-1954
10. Archival copies of [Aircraft Windtunnel Lab, Aircraft Powerplants Lab] (A.E. 320, 320-A, 350-A, 481 and 481-A all noted on various assignments and tests), 1953-1954
11. [Armstrong G.E. 224] (contains handouts for various [Aero. ED] courses, archival copies made of Armstrong's drawings), circa 1950s

**Box 107** *Binder 1, Purdue Class Notes, Assignments, Quizzes, Tests and Finals, 1952-1955*

Folder

1. Purdue class notes (originally located in an angle tab folder in a binder marked [NAA  $\Phi\Delta\Theta$  ]), circa 1952-1955
2. Archival copies of Purdue class notes (originally located in an angle tab folder in a binder marked [NAA  $\Phi\Delta\Theta$  ]), circa 1952-1955
3. Laminar flow calculations, along with archival copies, (originally loose pages in the three-ring binder), circa 1952-1955
4. M.E. 530 A&B, Advanced Heat Transfer, class notes, tests and final, (were originally in the three-ring binder), circa 1955

5. Archival copies of M.E. 530 A&B, Advanced Heat Transfer, class notes, tests and final, circa 1955
6. Original binder marked [NAA ΦΔΘ], circa 1955

**Box 108** *Binder 2, Purdue Class Notes, Assignments, Labs, Quizzes, Tests and Finals, 1947-1955*

Folder

1. "Canons of Ethics for Engineers," (originally loose page in back of binder), 1947
2. Booklet, "Ratio of Total and Static Pressures for Mach Numbers," May 5, 1952
3. Math 523, (originally in the three-ring binder), 1954
4. Archival copies of Math 523, 1954
5. [A.E. 340 and M.E. 109] (originally in the three-ring binder), circa 1955
6. Archival copies of [A.E. 340 and M.E. 109], circa 1955
7. [A.E. 310] (originally in the three-ring binder), 1953
8. Archival copies of [A.E. 310], 1953
9. Catapult diagrams and guide for carrier suitability testing, Naval Air Test Center, United States Naval Air Station, Patuxent River, Maryland (in binder with Purdue class notes), 1953-1954
10. A.E. 471 - Aircraft Powerplants, (originally in the three-ring binder), circa 1953
11. Archival copies of A.E. 471 - Aircraft Powerplants, circa 1953
12. A.E. 481 - Aircraft Powerplant Laboratory, (originally in the three-ring binder), 1954
13. Archival copies of A.E. 481 - Aircraft Powerplant Laboratory, 1954
14. Purdue Varsity Varieties papers, (originally in the three-ring binder), 1953-1954
15. Original binder marked [Neil Armstrong] on cover, circa 1954

**Box 109** *Wapakoneta High School Textbook and Purdue Textbooks, 1944-1948*

Folder

1. Liston, Joseph (1942). *Aircraft Engine Design* (1<sup>st</sup> edition, 2<sup>nd</sup> impression). New York: McGraw-Hill Book Company, Incorporated. (Joseph Liston was a professor at Purdue University).
2. French, Thomas E. and Carl L. Svensen (1944). *Mechanical Drawing: A Text With Problem Layouts* (4<sup>th</sup> edition). New York: McGraw-Hill Book Company, Incorporated. (Stamp and label from Wapakoneta City Schools inside front cover. Book shows smoke damage from fire. Some pages are also stuck together, presumably resulting from water damage from the fire; this book requires staff assistance for patron use).
3. Luzadder, Warren J. (1946). *Fundamentals of Engineering Drawing for*

*Technical Students and Professional Draftsmen* (rev. ed.). New York: Prentice-Hall, Incorporated. (The name Bob Oslan is handwritten inside the front cover. There are some handwritten notes inside the book, along with a page adhered to back cover from Purdue University class on Engineering Drawing GE 12, which offers instruction for uniform grading of screw threads and fasteners, dated March 10, 1947). Also in the folder are two loose pages found in the book on composing letter forms. They have been separated and sleeved.

4. Fairman, Seibert and Cutshall, Chester S. (1946). *Engineering Mechanics* (2<sup>nd</sup> edition). New York: John Wiley and Sons, Incorporated. (Armstrong's name handwritten inside front cover. The book is in poor condition and shows smoke damage.

### **Box 110** *Purdue Textbooks, 1948-1949*

#### Folder

1. Murphy, Glenn (1948). *Mechanics of Materials* (rev. ed.). New York: The Ronald Press Company. (Armstrong's name is written inside front cover, some notes are also written in the book.)
2. Loose pages of notes removed for preservation purposes from *Mechanics of Materials* (Notations indicate where the original notes were within the volume.), 1948
3. Archival copies of loose pages of notes removed for preservation purposes from *Mechanics of Materials* (notations indicate where the original notes were within the volume), 1948
4. Binder, R. C. (1949). *Fluid Mechanics* (2<sup>nd</sup> edition). New York: Prentice-Hall, Incorporated. (Armstrong's name is written inside front cover. Some handwritten notes inside book. R. C. Binder was a professor of Armstrong's at Purdue University.)
5. Hill, W. Ryland (1949). *Electronics in Engineering* (1<sup>st</sup> edition, 2<sup>nd</sup> impression). New York: McGraw-Hill Book Company, Incorporated. (Armstrong's name is written inside front cover. Notes found in the textbook are in the folders that follow.)
6. Notes found on pages 52-53 of *Electronics in Engineering*, ([Aero Eng 501] noted at the top of the pages.), 1949
7. Archival copies of notes found on pages 52-53 of *Electronics in Engineering*, ([Aero Eng 501] noted at the top of the pages.), 1949

### **Box 111** *Purdue Textbooks, 1950-1951*

#### Folder

1. Golomb, Michael and Shanks, Merrill (1950). *Elements of Ordinary Differential Equations*. New York: McGraw-Hill, Book Company, Incorporated. (Armstrong's name is written inside front cover, some

- handwritten notes inside book. Merrill Shanks was a professor at Purdue University. A packet of handwritten equations was found inside the book between pages 166 and 167. These notes have been removed for preservation purposes and are in the folders that follow.)
2. Notes removed from *Elements of Ordinary Differential Equations*, between pages 166 and 167, 1950
  3. Archival copies of notes removed from *Elements of Ordinary Differential Equations*, between pages 166 and 167, 1950
  4. Church, Austin H. (1950). *Guillet's Kinematics of Machines* (5<sup>th</sup> edition). New York: John Wiley and Sons, Incorporated. (Armstrong's name is written inside front cover. Some text is underlined.)
  5. Hawkins, George (1951). *Thermodynamics* (2<sup>nd</sup> edition). New York: John Wiley and Sons. (Armstrong's name is written inside front cover. Some handwritten notes inside book. George Hawkins was a professor at Purdue University.)

**Box 112** *Purdue Textbooks, 1951-1953*

Folder

1. Norman, C.A.; Ault, E.S. and Zarobsky, I.F. (1951). *Fundamentals of Machine Design*. New York: The Macmillan Company. (Armstrong's name is written inside front cover. Some handwritten notes inside book.)
2. Dommasch, Daniel O.; Sherby, Sydney S. and Connolly, Thomas F. (1951). *Airplane Aerodynamics*. New York: Pitman Publishing Corporation. (Armstrong's name is written inside front cover. Some handwritten notes inside book. Poster on characteristics of the earth's atmosphere adhered inside back cover.)
3. Hansen, H.M. and Chenea, Paul F. (1952). *Mechanics of Vibration*. New York: John Wiley and Sons, Incorporated. (Armstrong's name and Purdue are written inside front cover. One page of notes found between pages 266 and 267. These notes have been removed and sleeved for preservation purposes and are in the folder that follows.)
4. One page of notes removed from *Mechanics of Vibration*, between pages 266 and 267, 1952

**Box 113** *Purdue Textbooks, 1952-1953*

Folder

1. Bruhn, E.F. (1952). *Analysis and Design of Airplane Structures*. Cincinnati, Ohio: Tri-State Offset Company. (E.F. Bruhn was a professor at Purdue University. Some moisture damage to book.)
2. Liston, Joseph (1953). *Power Plants for Aircraft*. New York: McGraw-Hill Book Company, Incorporated. (Some handwritten notes included inside book. Joseph Liston was a professor at Purdue University.)

3. Diploma, Purdue University, Degree of Bachelor of Science in Aeronautical Engineering, conferred January 29, 1955 (some fire damage)

**Box 114 OS**, *Purdue, Aircraft Design Sheets, circa 1950s*

Folder

1. Design sheets, 22" x 17 ½", 9 sheets (very fragile, assistance needed when handling), circa 1950s

**Sub-series 2. University of Southern California, 1959-1970**

(1.6 cubic feet)

**Sub-series Description:** The University of Southern California sub-series contains a few class notes from Armstrong's time as an Aerospace Engineering masters' student. Included is a receipt for his tuition, training leave agreement to attend for the spring 1960 semester, Mechanical Engineering 530b notes, Aerospace Engineering 580 textbook and notes, correspondence in regards to his master's program, admission, course credit, thesis update document, and thesis content information. Also found among the material is a University of Southern California promotional pamphlet that features Armstrong on the cover.

The textbooks have University of Southern California bookplates in the inside front cover. One book had an index card relating to Armstrong's admission to the University of Southern California. It has been removed and sleeved for preservation purposes but left in the folder housing the textbook. One textbook had an article inside it, and this too has been removed for preservation purposes but retained in the folder with the book.

**Box 115** *University of Southern California Training Agreement, ME 530b, AE 580, Correspondence and Promotional Pamphlet, 1959-1970*

Folder

1. Purchase Order, National Aeronautics and Space Administration, Neil Armstrong, tuition for one semester at University of Southern California, October 14, 1959
2. Training Agreement, Neil A. Armstrong, under the provisions of Public Law 85-507, authorized to use training leave to the extent indicated for attending University of Southern California, February 1960-June 1960
3. ME 530b, Spring 1960, Test #2, along with one sheet of notes, 1960
4. Textbook; Herrick, Samuel (1958). *Notes on Astrodynamic and Rocket Navigation*. Los Angeles, California: Department of Astronomy, University of California.
5. Notes for AE 580 - Orbital Mechanics or Astrodynamics, (were found in the

- Herrick textbook), circa 1960
6. Archival copies of Notes for AE 580 - Orbital Mechanics or Astrodynamics, (were found in the Herrick textbook), circa 1960
  7. Correspondence from Armstrong to Professor E. K. Springer, School of Engineering, University of Southern California, (in regards to Armstrong's Master's degree), April 5, 1963
  8. University of Southern California promotional pamphlet, features Armstrong on the front cover, circa 1970

**Box 116** *Binder contents - University of Southern California, Master of Science Degree Admission, Course Credit, Thesis Update and Content Information, circa 1959*

Folder

1. University of Southern California, Master of Science Degree admission, course credit, thesis update and content information, circa 1959
2. Thesis content information, circa 1959 and booklet from AGARD (The Advisory Group for Aeronautical Research and Development) Twelfth General Assembly, 1952-1962
3. Original binder with [Neil Armstrong, ΦΔΘ] printed in red inside front cover, circa 1959

**Box 117** *University of Southern California Textbooks, 1955-1958*

Folder

1. Sears, Francis Weston (1955). *An Introduction to Thermodynamics, the Kinetic Theory of Gases, and Statistical Mechanics* (2<sup>nd</sup> edition). Cambridge 42, Massachusetts: Addison-Wesley Publishing Company, Incorporated. (Includes University of Southern California bookplate. Included inside book was an index card relating to Armstrong's admission to the University of Southern California, found between pages 156 and 157. This card has been separated from the book for preservation purposes, but can be found in this folder.)
2. Sutton, George P. (1956). *Rocket Propulsion Elements: An Introduction to the Engineering of Rockets* (2<sup>nd</sup> edition). New York: John Wiley and Sons. (Armstrong's name is written inside front cover, along with a University of Southern California bookplate. Some handwritten notes inside book.)
3. Liepmann, H.W. and Roshko, A. (1957). *Elements of Gasdynamics: Galcit Aeronautical Series*. New York: John Wiley and Sons, Incorporated. (Includes University of Southern California bookplate.)
4. Jakob, Max (1958). *Heat Transfer: Vol 1*. (6<sup>th</sup> printing). New York: John Wiley and Sons. (Includes University of Southern California bookplate.)

## Box 118 *University of Southern California Textbooks, 1959-1970*

### Folder

1. Etkin, Bernard (1959). *Dynamics of Flight: Stability and Control*. New York: John Wiley and Sons Incorporated. (Includes University of Southern California bookplate. Some moisture damage to book.)
2. DiStefano, Joseph J.; Stubberud, Allen R.; Williams, Ivan L. (1967). *Theory and Problems of Feedback and Control Systems*. Schaum's Outline Series. New York: McGraw-Hill Book Company. (Included inside is a loose journal article; Flugge-Lotz, I. (1972). Trends in the field of Automatic Control in the Last Two Decades. *AIAA*, 10(6), 721-726.)
3. Diploma, University of Southern California, Master of Science in Aerospace Engineering, conferred on January 28, 1970

## Series 4. Military Records, 1946-2009

(1 cubic foot)

**Series Description:** This series contains Neil Armstrong's United States Navy Officer Service Record, and includes everything from his "Orders; chargeable against appropriation 'Officer Candidate Training,' April 18, 1949" through "Certificate, Honorable Discharge from the Armed Forces of the United States of America, United States Navy, October 21, 1960." The material has been removed from the original file for preservation purposes, but the order has been retained as set forth in Navy regulations (see folder 3, item 7). This file was placed at the beginning of the series, to provide researcher's with an overall view of his military record.

Located in folder 5 are photocopies of Armstrong's [CNATRA] (Chief of Naval Air Training) - Aviation Training Summaries and Evaluations, 1949-1950. The summaries and evaluations give a detailed account of his training and progression as an aviator at this time and include comments from his instructors. Also of note are various Navy papers found in folder 1 of box 2. These range from letters of appointment, certificates, citations and correspondence. The items were left in their original order, and due to fire damage, they have been sleeved for preservation purposes.

After his military service, Armstrong maintained ties to his military colleagues. The last folders in this series contain correspondence, including e-mails from some of these fellow servicemen. One folder is dedicated to the VF-51 squadron of which he was a member and includes an official "Fighting Fifty One" patch and reunion information from this squadron. Of special note in this folder is a spiral bound document; "Korean Log, Bob (Bottle) Kaps, VF-51, USS Essex, 28 June 1951 to 25 March 1952, USS Valley Forge (CV-45), 20 November 1952 to 12 April 1953," which provides a unique look at the activities aboard the carriers. Also found in the [Navy] folder is correspondence in regards to "The Brown Shoes" History Project (subtitled "Personal Histories of the Flying Midshipmen and other Naval Aviators of the Korean War Era"), a project undertaken by the University of Virginia. Included is Armstrong's personal account, "carrier based fighter escort of B29/B50 raid on Rashin," written for the project. There are also a few photographs, obituaries and miscellaneous items.

The few photographs were left in this series in order to retain their significance, since most were sent with correspondence from Navy colleagues. More Navy photographs featuring Armstrong can be found in Series XVI. Photographs.

**Box 119** *United States Navy Officer Service Record (File), [CNATRA files] (Chief of Naval Air Training) - Aviation Training Summaries and Evaluations, [Navy] - [VF-51] Files, 1946-1961*

Folder

1. U.S. Navy Officer Service Record, original folder, undated

Folder

2. From left side of file, per Navy regulations (see Folder 2, item 7), 1949-1958

Item

1. Key punch card for "LTJG N A ARMSTRONG, R R 1 BOX 37-G, LITTLE ROCK CALIF," undated
2. "Navy Unit Commendation awarded to USS ESSEX (CVA-9)" January 21, 1959
3. Key punch card for "LTJG N A ARMSTRONG, R R 1 BOX 37-G, LITTLE ROCK CALIF," "PERS ACCOUNTING," November 3, 1958
4. FIRST – FIFTH "ENDORSEMENT on LTJG Neil A. Armstrong, USNR-R, 505129/1315 ltr of," includes request for Naval service transcript, July – October, 1959 (originals had been stapled together, removed for preservation)
5. FIRST – FOURTH "ENDORSEMENT on COMFOUR LTR Code 124c QR/L16/MM Ser: 67043 jd of," August – September, 1958 (originals had been stapled together, removed for preservation)
6. Recommendation for promotion to the grade of Lieutenant; FIRST – THIRD "ENDORSEMENT on BUPFRS ltr Pers-B84/Sel-58/ BJJ of," June 1958 (originals had been stapled together, removed for preservation)
7. "Records Transmittal" form, April 8, 1956
8. Verification of Officer's Service Record, September 25, 1954 and September 28, 1955
9. Medical Officer, First Endorsement, U.S. Naval Air Station Los Alamitos, Long Beach, California, October 22, 1955
10. Record of Emergency Data, February 11, 1956
11. Officers' Service Record Check Sheet, Squadron VF-724, September 28, 1955
12. FIRST – THIRD "ENDORSEMENT on LTJG Neil A. Armstrong, USNR-R, 505129/1315 ltr of," August 1955
13. "N.A.R. Pay Unit Assignment Request," August 27, 1955 (originals had been stapled together, removed for preservation)
14. Transfer between units of the Organized Naval Reserve, September 29, 1955
15. "THIRD ENDORSEMENT on LTJG Neil A. Armstrong, USNR-R,

- 505129/1315 ltr of 26 AUG 1955”
16. “Orders to Repeated Periods of Training Duty WITHOUT pay and allowances, request for,” February 18, 1955
  17. Record Of Emergency Data For The Armed Forces Of The United States, August 15, 1951
  18. Active Duty For Training Orders Involving Flying, February 1, 1955
  19. Letter of Appointment to the grade of Lieutenant (junior grade) October 14, 1954
  20. “A-F-F-I-D-A-V-I-T,” (in regards to civilian employment) December 19, 1954
  21. “Disability Compensation And Allowances Affidavit,” November 13, 1953
  22. “NAVPERS 500 Card,” undated
  23. Permission to travel and reside abroad, May 20, 1954
  24. “FIRST ENDORSEMENT on CNARESTRA ltr NE/3/N-1.23:wt Ser PE-31553 of 3,” June 1954
  25. FIRST ENDORSEMENT, Permission to travel and reside abroad, May 20, 1954
  26. “THIRD ENDORSEMENT on LTJG Neil A. Armstrong, USNR-R, 505129/1315 ltr of 31 MAR 1954”
  27. Agreement to remain in the Ready Reserve, March 31, 1954
  28. “ATTACHMENT TO NAVAL RESERVE PAY UNIT,” February 17, 1954
  29. “INACTIVE DUTY TRAINING ORDERS - OFFICER ASSOCIATE IN AIR UNITS,” (Naval Reserve Aviation VF Squadron 724) January 14, 1954
  30. First and Second Endorsement for inactive duty and attachment with VF 724, December 29, 1953
  31. Naval Air Reserve Pay Unit; request for Assignment, November 7, 1953
  32. Key punch cards, 2, undated
  33. “Officer’s Leave Record,” 1949-1952
  34. Permission to travel and reside abroad, May 24, 1954 (2 forms, (originals had been stapled together, removed for preservation)
  35. “LTJG Neil A. Armstrong, USNR-R, 505129/1315 physical fitness in the case of,” February 24, 1954
  36. “ACCEPTANCE AND OATH OF OFFICE,” July 27, 1953
  37. Certification of Physical Fitness, (Fourth Naval District) July 27, 1953
  38. Promotion to the grade of Lieutenant (jg), U.S. Naval Reserve, July 15, 1953
  39. Promotion to the grade of Lieutenant (junior grade) July 3, 1953
  40. Temporary Appointment, Lieutenant (junior grade) in the Naval Reserve, May 9, 1953
  41. “Medical Record(s), forwarding of,” February 16, 1953
  42. “NOTIFICATION OF READY RESERVE STATUS UNDER THE ARMED FORCES RSERVE ACT OF 1952,” February 10, 1953

43. "Presentation of Award," A Gold Star in lieu of the Air Medal, Third Award, and Temporary Citation, December 1, 1952 (4 related pages, originally stapled together, staple removed for preservation)
44. "STATEMENT OF TRAVEL TO BE FILLED OUT IN TRIPLICATE BY TRAVELER," undated
45. Release from active duty (Third Endorsement) August 15, 1952
46. "REPORT OF SEPARATION FROM THE ARMED FORCES OF THE UNITED STATES," August 23, 1952
47. "NAVAL RESERVE OFFICER'S REQUEST FOR RELEASE FROM ACTIVE DUTY," May 16, 1949
48. Change of Duty, May 21, 1952 (2 forms, originals had been stapled together, removed for preservation)
49. "LETTER OF COMMENDATION (with ribbon)," March 7, 1952 (2 forms, originals had been stapled together, removed for preservation)
50. Recommendation for the Gold Star in lieu of the Air Medal, Third Award; recommendation for, February 27, 1952
51. Termination of present commission and reappointment in the U.S. Naval Reserve, February 1, 1952 (2 forms, originals had been stapled together, removed for preservation)
52. Appointment in Naval Reserve, January 25, 1952
53. "GOLD STAR in lieu of the AIR MEDAL, Second Award; recommendation for," December 11, 1951 (2 forms, originals had been stapled together, removed for preservation)
54. "AIR MEDAL, First Award; recommendation for," October 11, 1951
55. Pay entry base date; request for, August 3, 1951
56. "ACCEPTANCE AND OATH OF OFFICE," February 24, 1951
57. Certification as to service in the Korean Combat Zone during calendar year 1951
58. Orders, Naval Air Basic Training Command, Naval Air Station, Pensacola, Florida, March 7, 1950
59. "Reported for temporary duty under instruction this date," June 24, 1949
60. Orders; chargeable against appropriation "Officer Candidate Training," April 18, 1949
61. "ACCEPTANCE AND OATH OF OFFICE FOR MIDSHIPMEN APPOINTED PURSUANT TO PUBLIC LAW 729 - 79<sup>TH</sup> CONGRESS," February 24, 1949
62. Photograph, Armstrong in Navy uniform, 4" x 5", black and white, along with negative and original photograph envelope, circa 1949

Folder

3. From right side of original file, per Navy regulations (see item 7), 1949-1958

Item

1. Annual Qualifications Questionnaire (includes Civilian or Navy experience during past 12 months) p. 1, October 24, 1958
2. Annual Qualifications Questionnaire (includes Civilian or Navy experience during past 12 months) p. 2, October 24, 1958

3. "Notice, this jacket has been checked and found to be complete this date: 4-17-56"
4. Annual Qualifications Questionnaire (includes Civilian or Navy experience during past 12 months) p. 2, October 4, 1956
5. Officer Data Record, on card, January 1, 1956 (ink blurred on card)
6. Check-In Slip, Squadron VF-773, U.S. Naval Air Station Los Alamitos, Long Beach, California, October 22, 1955
7. Sheet describing order of papers and check-list, September 28, 1955
8. Officer Data Record, on card, August 26, 1955 (includes total pilot hours to date)
9. Officer Data Record, on card, November 20, 1954 (includes total pilot hours to date)
10. Annual Qualifications Questionnaire Inactive Reserve, June 30, 1955
11. Annual Qualifications Questionnaire Inactive Reserve, February 1, 1954
12. Annual Qualifications Questionnaire Inactive Reserve, June 3, 1953
13. Training School Report – Officer's Qualification Record, February 21, 1950
14. Officers Biography Sheet, February 20, 1955
15. Record of Duties Performed, June 30, 1951
16. Officer Qualifications Questionnaire, October 22, 1955
17. Officer Qualifications Questionnaire, February 17, 1949
18. Officer Qualifications Record – Jacket Copy, June 30, 1951
19. Officer Qualifications Record – Jacket Copy, December 5, 1950

Folder

4. Items originally located in the middle of U.S. Navy Officer Service Record file, 1950-1961

Item

1. "REPORT OF SEPARATION FROM THE ARMED FORCES OF THE UNITED STATES," U.S. Navy, August 23, 1952
2. Promotion to the grade of Lieutenant (junior grade), department of the Navy, Bureau of Naval Personnel, Washington, D.C., July 3, 1953
3. Promotion to the grade of Lieutenant (Junior grade), U.S. Naval Reserve, Fourth Naval District, District Staff Headquarters, U.S. Naval Base, "Phila. 12, Penna," July 15, 1953
4. Transfer between units of the Organized Naval Reserve, Headquarters, Naval Air Reserve Training Command, U.S. Naval Air Station, Glenview, Illinois, September 29, 1955
5. Forwarding of correspondence, includes 5 "original" copies of dispatches, 1952-1954
6. Recommendation for promotion to the grade of Lieutenant, Second and Third Endorsements, June 1958
7. Navy Unit Commendation awarded to USS ESSEX (CVA-9), January 21, 1959 (includes citation from The Secretary of the Navy)
8. State bonus; information concerning, original letter of inquiry and First - Fourth Endorsement, November 1957 - September 1958

9. "Korean Conflict Compensation Fund," correspondence, October 7 and 15, 1958
10. "NOTIFICATION OF READY RESERVE STATUS UNDER THE ARMED FORCES RESERVE ACT OF 1952," February 10, 1953
11. Squadron VF 724 Mailing List, December 6, 1953
12. "In the name of the President of the United States the Commander Seventh Fleet, takes pride in presenting a Gold Star in lieu of the Air Medal, Third Award, to Ensign Neil A. Armstrong, United States Naval Reserve," December 1, 1952 (actual Gold Star attached to correspondence)
13. Designation as Naval Aviator, August 16, 1950
14. "Pay entry base date; establishment of," May 6, 1952
15. "LTJG Neil A. Armstrong, USNR-R, 505129/1315, physical fitness in the case of, February 24, 1954
16. Release from active duty, Administrative Unit, ComAirPac, Separation Center, Naval Air Station, San Diego, California, paperwork, August, 1952
17. "Duties; assignment of, Primary duties: Pilot; Collateral duties: Electronics," paperwork, Department of the Navy, Bureau of Naval Personnel, Washington, D.C. Via: Commanding Officer, Fighter Squadron Fifty-One (VF 51), % Fleet Post Office, San Francisco, California, 1950-1955
18. Identification Card, Return of, January 16, 1961
19. Acceptance of resignation from the U.S. Naval Reserve, Secretary of the Navy, October 21, 1960 (torn page)
20. Certificate, Honorable Discharge from the Armed Forces of the United States of America, United States Navy, October 21, 1960

Folder

5. [CNATRA files] (Chief of Naval Air Training) - Aviation Training Summaries and Evaluations (photocopies of originals) 1949-1951

Item

1. "Aviation Training Summary," 1949-1950
2. "Officer-Like Qualities Report," June 18, 1949-August 11, 1950
3. "Ground Training-Pre-Flight, Basic, And Advanced," June 1949-June 1950
4. "Delinquency Report, Flight Violations, Down-Checks," 1949-1950
5. Evaluations "Delinquency Report, Flight Violations, Unsatisfactory Flights," June 1950
6. "Basic SNJ-Stage "A", Primary Solo," July 1949-September 1949
7. "Basic SNJ-Stage "B", Precision," September 1949
8. "Instrument And Acrobatic-Stage "C", Acrobatics," October 1949
9. "Instrument and Acrobatic-Stage "D", Instruments," October-November 1949
10. "Basic Instrument And Acrobatic-Stage "D", Radio," November 1949  
"Basic Instrument And Acrobatic-Stage "E", Night," November 1949
11. "Stages "D" & "E", Flight Calendar," September-November 1949

12. "Tactical-Stage "F", Area Check Out And Formation," November 1949-January 1950
13. "Tactical-Stage "F", Instrument Review," January 30, 1950
14. "Tactical-Stage "H", Primary Combat," January 1950
15. "Tactical-Stage "I", Cross Country Navigation," January 23-25, 1950
16. "Tactical-Stage "G", Gunnery," February 1950
17. "Tactical-Stage "G", Instrument And Acrobatic Review," January-February 1950
18. "Carrier Qualifications-Basic And Advanced," February-August 1950
19. "Stages "K" & "L", February-March 1950
20. "Adv. Single Engine (VF-VA)-Fam., Nav. & Formation," April-June 1950
21. "Adv. Single Engine (VF-VA)-Gunnery & Tactics," May-June 1950
22. "Adv. Single Engine (VF-VA)-Instruments," April 1950
23. "Delinquency Report, Pre-Flight," March 31, 1949
24. "Fighter Squadron Fifty One, Public Information Roster," November 25, 1951

Folder

6. Textbook; Jones, B. (1942). *Elements of practical aerodynamics* (3<sup>rd</sup> edition). New York: John Wiley & Sons, Incorporated. (stamped inside front cover, "Corry Field, Library, U.S. Naval Air Training Center, Pensacola, FLA")

Folder

7. Various Navy items; identification card, correspondence and diploma, 1946-1950

Item

1. Correspondence, Bureau of Naval Personnel, Navy Department, Office of Naval Officer Procurement, Cincinnati, Ohio - letter requesting Armstrong to wait a year, because of age requirements, to apply for NROTC; letter suggests he attend college for one year, December 17, 1946
2. Correspondence, Navy Department, Bureau of Naval Personnel, Washington, 25, D.C. - letter of acceptance, Naval Aviation College Program, for term beginning in the fall of 1947, May 14, 1947
3. Identification Card, United States Naval Reserve (Inactive), date issues, August 25, 1947
4. Contract, Naval Aviation Officer Candidate Program, December 1, 1947
5. Correspondence, Assignment to Active Duty, Headquarters, Ninth Naval District, Great Lakes, Illinois, January 17, 1949
6. Diploma, United States Navy Naval Air Training Command, designated Naval Aviator, August 16, 1950

Folder

8. "U.S.S. Essex CV-9, Austin W. Wheelock, Captain USN Commanding, Prepared in Radio One," circa 1951

Folder

9. [ARMSTRONG, N.A. VR-32] binder (items removed for preservation)

purposes, see folder 9, 10 and 11) circa 1952

Item

1. Right side of original folder; United States Atlantic Fleet, Fleet Logistic Air Wing Atlantic/Continental, Air Transportation Squadron Thirty-Two, United States Naval Air Station, San Diego, California, Flight Proficiency Sheets, 1952 Flight Proficiency/Pilot Check Off Sheets; Aircraft Qualified in: "SNJ, SNB, F6F, F8F, AD, F4U, TBM, F9F, TV-2, May-August, 1952
2. Left side of original folder; Fleet Logistic Support Wings, Atlantic Air Transport Squadron Thirty Two, United States Naval Air Station, San Diego, California, "Examination for single and lead ferry pilots and VR-32 Pilot Performance" sheets, June-July, 1952 (includes receipts and purchase issues for "Av Gas")

Folder

10. Flight Charts from [ARMSTRONG, N.A. VR-32] binder, circa 1952

Item

1. Indianapolis to Oklahoma City, "FC 231," circa 1952
2. Atlanta to Chicago, "FC 229," circa 1952
3. Detroit to Nashville, "FC 188," circa 1952
4. Oklahoma City to Albuquerque, "FC 232," circa 1952
5. Albuquerque to Los Angeles, "FC 233," circa 1952

Folder

11. Photograph, 10" x 8", black and white, of Navy plane, circa 1952

Folder

12. Original [ARMSTRONG, N.A. VR-32] binder (items removed for preservation purposes, see folders 9, 10 and 11) circa 1952

**Box 120** *Various Navy Papers, Certificates, Citations, Correspondence; [Navy] - [VF-51] Material and [Navy] Correspondence from Armstrong's Former Navy Colleagues and Miscellaneous Material, 1947-2009*

Folder

1. Various Navy Papers, Certificates, Citations, Correspondence, 1947-1955 (original order retained)

Item

1. Appointment, by The President of the United States of America; Neil Alden Armstrong to a Lieutenant (Junior Grade) October 4, 1954
2. Memo, To: Personnel Officer VF 724, September 28, 1955
3. Duty For Training Order Involving Flying, February 1, 1955
4. "First Endorsement, VF-724," November 20, 1954
5. "Third Endorsement on LTJG Neil A. Armstrong, USNR-R, 505129/1315 ltr of," December 29, 1953
6. Bureau of Naval Personnel, Inactive Duty Training; Attachment to Pay Unit of the Naval Reserve, February 17, 1954
7. Headquarters Ninth Naval District, Great Lakes, Illinois; Transfer of records of officers assigned to, or associated with drilling units of the

- aviation component, October 15, 1954
8. Correspondence in regards to officer's service record jacket and officer's qualification card, February 19, 1954
  9. Appointment in Naval Reserve, January 25, 1952
  10. Waiver of Premiums for Term Insurance, Fighter Squadron Fifty One, % Fleet Post Office, San Francisco, California, August 1, 1951
  11. VF-51 Personnel History Form, February 19, 1950
  12. Department of the Navy, Bureau of Naval Personnel, Washington 25, D.C., Applications For Retention as Permanent Officers, October 12, 1949
  13. Application For National Service Life Insurance, February 24, 1949
  14. Report of Pilot Time (2) 1951-1952
  15. Report of Pilot Time (2) 1951-1952
  16. Student Training Record, February 27, 1949 - August 14, 1950
  17. "Naval Air Training Command Order No. 2-48; Service Record of Midshipmen, USN (Public Law 729, 79<sup>th</sup> Congress-Holloway Plan)" January 16, 1948
  18. Citation, The Secretary Of The Navy, "The President of the United States takes pleasure in presenting the GOLD STAR in lieu of the Third Air Medal to Ensign Neil Alden Armstrong, United States Naval Reserve... during operations against enemy aggressor forces in Korea from 11 December 1951 to 25 February 1952
  19. Permanent Citation awarding, GOLD STAR IN LIEU OF THE THIRD AIR MEDAL, January 8, 1953
  20. Citation, The Secretary Of The Navy, "The President of the United States takes pleasure in presenting the GOLD STAR in lieu of the Second Air Medal to Ensign Neil Alden Armstrong, United States Naval Reserve...during operations against enemy aggressor forces in Korea from 11 October to 10 December 1951"
  21. Permanent Citations awarding AIR MEDAL AND GOLD STAR IN LIEU OF THE SECOND AIR MEDAL, December 20, 1952
  22. Citation: The Secretary Of The Navy, Washington, "The President of the United States takes pleasure in presenting the Air Medal to, Ensign Neil Alden Armstrong, United States Naval Reserve, during operations against enemy aggressor forces in Korea from 21 August to 9 October 1951"
  23. Report of Separation From The Armed Forces Of The United States, U.S. Navy, Honorable Discharge, August 23, 1952
  24. Record of Duties Performed, Air Transport Squadron Thirty-two, Ferry Pilot, August 8, 1952
  25. Letter of Congratulations, John W. Bricker, United States Senate, Washington, D.C., to Armstrong "upon selection for the NACP," May 21, 1947
  26. Navy Department, Bureau of Naval Personnel, Washington 25, D.C. letter of acceptance for enrollment in the Naval Aviation College Program for the term beginning fall of 1947

27. Form W-2, 1951
28. Release from active duty, August 15, 1952
29. Citation: United States Pacific Fleet, Commander Seventh Fleet, "In the name of the President of the United States the Commander Seventh Fleet, takes pride in presenting The Air Medal to Ensign Neil A. Armstrong, United States Navy, ...In attacks on hostile North Korean and Chinese Communist forces...During the period from 21 August 1951 to 9 October 1951..."
30. Correspondence, United States Atlantic Fleet, Fleet Logistic Air Wing Atlantic/Continental Air Transport Squadron Thirty-Two, U.S. Naval Air Station, San Diego, California, Gold Star in lieu of Air Medal, Third Award in the case of Ensign Neil A. Armstrong, USNR, November 24, 1952
31. Citation, United States Pacific Fleet, Commander Seventh Fleet, "...In the name of the President of the United States the Commander Seventh Fleet, takes pride in presenting a Gold Star in lieu of the Air Medal, Second Award, to Ensign Neil A. Armstrong, United States Navy...in attacks on hostile North Korean and Chinese Communist forces. During the period from 11 October 1951 to 10 December 1951..."
32. Release from active duty, "First Endorsement on CO, VR-32 Ords Ser 620 of August 8, 1952"
33. Department of The Navy, Bureau Of Naval Personnel, Washington 25, D.C., Commission in the Regular Navy, March 20, 1951
34. Commissioning Certificate, "The President Of The United States of America, ...Neil A. Armstrong I do appoint him, by and with the advice and consent of the Senate, an Ensign in the United States Navy..." January 16, 1951
35. Notes written on Beverly Hilton paper, undated

Folder

2. [Navy] - [VF-51] circa 1951-2009

Item

1. "Fighting Fifty One" patch, undated
  2. "Korean Log, Bob (Bottle) Kaps, VF-51, USS Essex, 28 June 1951 to 25 March 1952, USS Valley Forge (CV-45), 20 November 1952 to 12 April 1953"
  3. Correspondence, including e-mails, in regards to squadron reunions and general correspondence from squadron members, circa 1969-2009
  4. Several black and white and color photographs of squadron members or spouses, circa 1951-2009
  5. Obituaries of squadron members, circa 1990s-2002
  6. Miscellaneous material, circa 1990s-2000s
3. [Navy] Correspondence from Armstrong's former Navy colleagues and miscellaneous material, includes a black and white photograph of "Thirsty Flight" crew - Opa-Lacka, Florida, a color photograph of Armstrong, reunion

- information and flights poems and Navy reminiscences written by colleagues, circa 1946-1998 (folder 1 of 2)
4. [Navy] Correspondence from Armstrong's former Navy colleagues and miscellaneous material, includes some color photographs of Armstrong with colleagues, reunion information, information on Goodell "Goody" Parker Warren and "The Brown Shoes History Project" information, circa 1999-2002 (folder 2 of 2)
  5. Fighter Squadron 51 – foul weather procedures, general information of interest to carrier air group anticipating duty in the orient, "dope sheets – For Liberty," strike photographs, and packet marked, "Restricted, U.S.S. Valley Forge, Dottie Flak Study 8 Touraid," 1951-1952
  6. Compiled book, "The United States Ship Essex: Cruise book, 1950-1951, with note "From Kayla," and copies of related news stories, circa 2002

### **Series 5. Teaching, 1961-2004** (4 cubic feet)

**Series Description:** This series consists of items from Neil Armstrong's work as a professor at the University of Cincinnati. The first box contains miscellaneous University of Cincinnati material that Armstrong had placed in various folders. These include a press release of his appointment as Professor of Engineering, teaching contracts, campus maps, clippings, correspondence, publications, and resolution upon his retirement from teaching in 1980.

The remaining boxes contain the contents of individual folders and eleven binders and remain as Armstrong had arranged them. The courses include Aircraft Flight Test II, Aircraft Performance, Dynamics I, and Aerospace Engineering, 351, 541, 611, 612, 613, 660, 661 and 823. Also included is course material from an Experimental Flight Mechanics short course he taught at the University of Tennessee Space Institute.

The material ranges from prep material, lecture notes, handouts, assignments, readings, problems, student's homework/projects, quizzes, tests and final exams. The ninth binder contains the master copies of problems, quizzes, exams and finals for Aerospace Engineering 660, 661 and 662 (one quiz). Some boxes are restricted, due to student information and personal information.

**Box 121** *RESTRICTED, Contains Student and Teaching Contract Information Various Folders, University of Cincinnati, Press Release of Armstrong's Appointment, Textbook and workbook, Aerospace Engineering 351 - Dynamics I, Miscellaneous University of Cincinnati Material and "Aircraft Flight Test II" and "AP Aircraft Performance" Class Material, 1969-2004*

#### Folder

1. Press release, University of Cincinnati, Neil A. Armstrong appointed

- University Professor of Engineering, August 25, 1971
2. Textbook and workbook, Aerospace Engineering 351 - Dynamics I, Work, C.E. (1969). *A programmed introduction to dynamics: Reference text*. New York: McGraw-Hill Book Company. (includes master copies of quizzes and problem notations in textbook)
  3. [U.C.] Miscellaneous material; campus maps, contracts and related correspondence, clippings (including, "Armstrong Teaching Praised," by Tom Holden, *The Cincinnati Enquirer*, p. D-3, January 19, 1980) and publication - *Celebrating 75 Years of Excellence Aerospace Engineering at the University of Cincinnati: Co-operative Education and Research, 1977-2004*
  4. Lecture notes, lists/grades, class photograph, handouts and student assignments with notations for "Aircraft Flight Test II" and "AP Aircraft Performance," 1973 (1995 *Learjet 45* preliminary specification and description in folder)
  5. Resolution upon Armstrong's retirement from teaching, University of Cincinnati, March 20, 1980, signed by Charles M. Barrett, M.D., Chairman, Board of Trustees

**Box 122** *RESTRICTED, Contains Student Information Binders 1 and 2, University of Cincinnati, Aerospace Engineering 382 and 660 Class Materials, 1971-1975*

Folder

1. **RESTRICTED, includes student information** – [AsE 382], Applied Aircraft Performance, folder within binder, 1971-1975 (includes course outline, exams, quizzes, and solutions to problems)
2. Binder 1, Applied Aircraft Performance, 1972-1975 (includes AsE 382 lecture notes, master copies of exams and quizzes, "optional problems" and notations)
3. **RESTRICTED, includes student information** - [AsE 660], Aircraft Flight Test I, folder within binder, 1977-1979 (includes master copies of quizzes and assignments)
4. **RESTRICTED, includes student information** - Binder 2, Aircraft Flight Test I, 1973-1979 (includes class lists, lecture notes, and notations)

**Box 123** *Binder 3, University of Cincinnati, Aerospace Engineering 660 and 661 Class Materials, 1970-1978*

Folder

1. [BD-5], 1973-1974 (correspondence in regards to BD-5 engine and hand-drawn diagram)
2. [660 Position Error Problems], 1978 ("Home Problem #1" and student's answers)
3. [660 - Drag Polar Problems], 1978 ("Home Problem #2" and student's answers)
4. [660 - Cruise Performance Prob.], 1978 ("Home Problem #3" and student's

- answers)
5. [660 - Ps Problem], 1977-1978 (master copies of "Home Problems," and student's answers to Problem #4)
  6. [660 - Landing Prob.], 1978 (master copy and answer for "Home Problem #5")
  7. [660 - Handouts, Graphs], 1978
  8. [FLT Test Papers] [N.A.'s "Backstop" File], circa 1970-1976
  9. [661 - Longitudinal Maneuvering Prob.], 1978 (master copy of problem and solution)
  10. [661 - Phugoid Problems], 1978 (master copy of problem and solution)
  11. [661 - LAT/DIR & DYN. PROB], (Lateral Directional Dynamics Problem), 1978 (master copy of problem and solution)
  12. [661 - ENG. OUT PROB.], (Engine Out Problem), 1978

**Box 124** *RESTRICTED, Contains Student Information* - Binder 4, University of Cincinnati, Aerospace Engineering 661 and 351 Class Materials, 1961-1978

Folder

1. [661 - STALL/SEP PROBS.], (Stall and Separation Problems), 1978
2. [661 Problems], 1978 (includes master copies of "Home Problems" and student's answers)
3. [Handling Qualities] (4 publications), 1961-1973
4. [661 - LONG, STAB, PROBLEMS] (Longitudinal Stability Problems), 1978 (includes master copies of "Home Problem #1" and student's answers)
5. Solutions Manual; Higdon and Stiles (1963). *Engineering Mechanics* (Vector Edition). Englewood Cliffs, New Jersey.
6. [Dynamics] (quizzes, tests and final exam from As.E. 351, and Armstrong's solutions), 1972
7. **RESTRICTED, contains student information** - Dynamics I, class lists, lecture notes, overheads, and miscellaneous material, 1972

**Box 125** *RESTRICTED, Contains Student Information* - Notebook and Binder 5, University of Cincinnati, Aerospace Engineering 516, 541, 611, 612, 613, 661, 662 Class Materials, 1970-1972

Folder

1. Readings, notes and handouts - roll performance, controllability, maneuverability and airworthiness standards (all were in one, unmarked folder), circa 1970s
2. Notebook with lecture notes for Aerospace Engineering 516, circa 1970s (includes some speech notes in the back of the notebook)
3. **RESTRICTED, contains student information** for 1973-1979 - Lecture notes - Aerospace Engineering 661 (folder 1), circa 1970s
4. **RESTRICTED, contains student information** - Lecture notes - Aerospace Engineering 661, 662, 541 (folder 2), circa 1970s

5. Lecture notes, exams, homework solutions - Aerospace Engineering 823 and 611, 1971-1972
6. Lecture notes - Aerospace Engineering 612 and 613, circa 1972

**Box 126** *Binder 9, University of Cincinnati, "Master" Copies of Problems, Quizzes and Final Exams for Aerospace Engineering 660, 661 and 662, 1973-1979*

Folder

1. "Master" Copies of Quizzes and Final Exams for Aerospace Engineering 660 and 661 (Flight Testing), 1973-1979
2. "Master" Copies of Quizzes, Final Exams and Problems for Aerospace Engineering 660, 1977-1979
3. "Master" Copies of Problems, Quizzes and Final Exams for Aerospace Engineering 660, 662 (one quiz), 661, 1973-1978

**Box 127** *RESTRICTED, Contains Student Information - Binders 6 - 8, University of Cincinnati, Aerospace Design Class Materials and Experimental Flight Mechanics, the University of Tennessee Space Institute 1972-1978*

Folder

1. **RESTRICTED, contains student information** - Aerospace Design (related documents/reading material), loose items in Binder 6, 1974-1976
2. **RESTRICTED, contains student information** - Aerospace Design (related documents/reading material) , loose items in Binder 6, 1974-1976
3. **RESTRICTED, contains student information** - Binder 6, Aerospace Design, 1974-1976 (includes lecture notes and notations)
4. "Apollo Double Diaphragm Pump for Use in Artificial Heart-Lung Systems," H.A.R.P. - Paper presented at the Association for the Advancement of Medical Instrumentation, Boston, Massachusetts, March 20, 1975
5. Experimental Flight Mechanics, the University of Tennessee Space Institute, (Course Director: Sean Roberts) June 12-23, 1972 (loose items in binder, includes a photograph of class members and notations)
6. Binder 7, Experimental Flight Mechanics, the University of Tennessee Space Institute, (Course Director: Sean Roberts), June 12-23, 1972 (includes lecture notes and notations)
7. Binder 8, "Navigation Systems – W. Vandervelde, MIT" and "Intro to Aerospace Engineering, A.E. 241," circa 1971-1977 (includes notes)
8. Experimental Flight Mechanics, the University of Tennessee Space Institute, letter with photographs from C. H. Weaver, July 5, 1978

**Box 128** *Binder 10 and 11, Military Specifications, Flying Qualities, 1969-1970*

Folder

1. Background Information And User Guide For MIL-F-8785B (ASG), "Military

- Specification – Flying Qualities of Piloted Airplanes,” August 1969
2. Military Specification, Flying Qualities of Piloted V/STOL Aircraft, December 31, 1970 (2 copies)
3. Metrication Material, circa 1970s

## **Series 6. Boards, Commissions, and Consulting, circa 1970s-2009** (12.8 cubic feet)

**Series Description:** The series contains Neil Armstrong’s collection of widely varied business cards. The corporate board information includes annual reports, meeting minutes, correspondence, retirement celebration material, minimal subject files, and member photographs for the various boards of which Neil Armstrong was a member. The boards include, Cardwell International; Cincinnati Gas and Electric Company; CINergy Corporation; Cordant and Morton Thiokol, Incorporated; Eagle-Picher Technologies, LLC; Cincinnati Milacron; Fifth Third Bank; Gates Learjet Corporation; Marathon Oil Company; Taft Broadcasting Company; United Airlines; U.S. Steel Corporation; Space Industries International; Space.com; Veridian; AIL Systems Incorporated (Subsidiary of Eaton Corporation); EDO Corporation; RMI Titanium Company; Fiduciary Trust Company of New York, background information; miscellaneous documents, and a Board of Directors subject file used by Armstrong. Due to the nature of the corporate board material, it is restricted.

The second part of the series contains minutes, correspondence, presentations, reports, clippings, and miscellaneous documents for the Commissions Armstrong was appointed. The Commissions include the Academy of the Kingdom of Morocco. The “Dahir” or Law proclaiming the creation of the Academy states that, “Considering Morocco’s geographical situation, at the crossroads of the continents, which has determined its historic vocation and necessitates that it continuously plays a part in the communication, liaison and synthesis between the peoples and civilisations of Europe and Africa, of the Mediterranean and Atlantic worlds... Desire that this Academy should be composed of men who by their works and studies are the most eminent and the most qualified, in all branches of learning, who have rendered the greatest service to the country or acquired the highest prestige, recruited freely without any consideration except personal merit and with no other condition to the validity of their election than Our Consent...” “Total membership in the Academy shall be thirty resident members and thirty non-resident members.” Dr. Henry Kissinger and Armstrong were the only initial members from the United States. Also included among the material from Armstrong’s work with the Academy are a rare collection of conference proceedings and publications compiled by the members of the Academy.

Documents in this series also include material from the Presidential Commission on the Space Shuttle Challenger Accident, for which Armstrong was Vice Chair. In 1985 he was appointed to the National Commission on Space, created to study long-term space policy and goals, and one can also find material from this work. In 2005 Armstrong was appointed to the NASA Advisory Council, for which he was Chair of

the Aeronautics Committee. The Council drew on the expertise of its members and other sources to provide advice and make recommendations to the NASA Administrator on Agency programs, policies, plans, financial controls and other matters pertinent to the Agency's responsibilities.

Some material includes Armstrong's reference resources related to the various Boards and Commissions, along with miscellaneous consulting material.

**Box 129** *Collected Business Cards, circa 1990s-2000s*

Folder

1. Business cards in organizer, circa 1990s-2000s (folder 1 of 4)
2. Business cards in organizer, circa 1990s-2000s (folder 2 of 4)
3. Business cards in organizer, circa 1990s-2000s (folder 3 of 4)
4. Business cards in organizer, circa 1990s-2000s (folder 4 of 4)

**Box 130** ***RESTRICTED MATERIAL*** - *Corporate Boards, [Cardwell Intl.] Cardwell International, 1979-1983*

Folder

1. [Cardwell Intl.], business correspondence, handwritten notes, and financial documents, February - May, 1982
2. [Cardwell Intl.], includes informational pamphlets, business correspondence, and budget documents with photographs, 1980-1983 (folder 1 of 2)
3. [Cardwell Intl.], includes informational pamphlets, business correspondence, and budget documents with photographs, 1980-1983 (folder 2 of 2)
4. [Cardwell Intl.], correspondence and balance sheets for International Petroleum Services, Incorporated, 1981-1982
5. [Cardwell Intl.], business correspondence, contracts, and reports, 1980-1981
6. [Cardwell Intl.] [The Appalachian Company, Sy Orlofsky], business correspondence and newspaper clipping, 1980-1981
7. [Cardwell Intl.], business correspondence and quotation related to the sale of drilling equipment to APEX Drilling Company, April 1981
8. [Cardwell Intl.], business correspondence related to potential partnership with Armco, 1980-1981
9. [Cardwell Intl.], business correspondence relating to transaction with and collection of debt from African Drilling Company, 1979
10. [Cardwell Intl.], business correspondence, loan documents, and lease agreements, 1980-1982

**Box 131** ***RESTRICTED MATERIAL*** - *Corporate Boards, Cardwell International, Business Related Transactions, 1981-1982*

Folder

1. [Tanknology], "Development of a Tank Leak Detecting System by Athabasca Research Corporation Ltd," May 1982 and "Armada Inaugural Meeting," June 12, 1981
2. [Tanknology], business correspondence, April 1981-November, 1982
3. [Tanknology], contract with Athabasca Research Corporation Ltd, 1982
4. [Tanknology], notes on meetings written in Armstrong's hand, with business correspondence, August 1981-April 1982
5. [Tanknology], business correspondence and draft contracts, December 1981 and January 1982
6. [Tanknology], "Proceedings Underground Tank Testing Symposium," May 1982
7. [Tanknology], folder containing business documents, correspondence and notes on underground tank technology, circa 1982

**Box 132** *RESTRICTED MATERIAL* - Corporate Boards, Gates Learjet Corporation, Cincinnati Gas and Electric Company and CInergy Corporation, Cordant and Morton Thiokol, Incorporated, Eagle-Picher Technologies, LLC, Cincinnati Milacron, circa 1970s-2000s

Folder

1. Gates Learjet Corporation, 1973-1979
2. [CIN] (Cincinnati Gas and Electric Company and CInergy Corporation), 1973-1997
3. [CIN – NAA] (Cinergy Corporation) and [Compensation Committee], circa 1970s-2001
4. [CIN – ORG], circa 1980s-1990s
5. [CORDANT] and [THK], (Morton Thiokol, Incorporated), 1988-2004
6. [Eagle-Pitcher] (Eagle-Picher Technologies, LLC), 1998-2001
7. [EP Security] (Eagle-Picher Technologies, LLC, Government Security Committee, meeting minutes) and correspondence, 1998-2001
8. [ANN RPT - CMZ], Cincinnati Milacron, circa 1970s-1980s

**Box 133** *RESTRICTED MATERIAL* - Corporate Boards, Cincinnati Milacron, Fifth Third Bank, Marathon Oil Company, Taft Broadcasting Company, and United Airlines, circa 1977-2000s

Folder

1. [ORG - CMZ], Cincinnati Milacron, circa 1990s
2. [CMZ - CURRENT], Cincinnati Milacron, 1987, circa 2000s
3. Fifth Third Bank, 2002
4. Marathon Oil Company, 1983, 2002
5. Taft Broadcasting Company/Great American Communications Company, 1976, 1985, 1987-1988

6. [United Airlines] - includes [Bankruptcy], [UAL Stock] and [Neil Armstrong] material, circa 1980s-2000s
7. [United], 1977-2004
8. [UAL Legal], circa 1989-2003
9. [UAL – Retirement], circa, 1993-1994
10. [UAL Travel], circa 1980-1999 (folder 1 of 2)
11. [UAL Travel], 2000-2003 (folder 2 of 2),

**Box 134** *RESTRICTED MATERIAL* - Corporate Boards, [USX] U.S. Steel Corporation, [Veridian], [SPACE IND.] Space Industries International, [DIRECTOR'S INFO.] and [Financial Literacy], circa 1970s-2004

Folder

1. [USX], U.S. Steel Corporation, circa 1998-2004
2. [USX - ORG], circa 1992-2004
3. [USX BD MTGS], minutes, 1984-2001
4. [Veridian], 1995-2004
5. [Veridian] and [SPACE IND.], Space Industries International, Incorporated, circa 1995-2001
6. [DIRECTOR'S INFO.], (removed from original binder, 1 of 2), circa 1970s-1990s
7. [DIRECTOR'S INFO.], (removed from original binder, 2 of 2), circa 1970s-1990s
8. [Financial Literacy], (a financial literacy quiz), undated

**Box 135** *RESTRICTED MATERIAL* - Corporate Boards, [SPACE.COM], 2000-2001 and [AIL] AIL Systems Incorporated, 1987-1997

Folder

1. [SPACE.COM] and [Bus. Combinations], 2000-2001
2. "The History of the Eaton Corporation, 1911-1985," personalized, 1986
3. AIL Systems Incorporated (Subsidiary of Eaton Corporation), 1987-1991 (includes Armstrong's AIL identification card, and black and white photograph of board members)
4. AIL Systems Incorporated - [B-1], 1991
5. AIL Systems Incorporated, annual reports, 1989-1993
6. "AIL Systems Inc." folder, left as Armstrong had arranged it, (includes Armstrong's notations), 1995-1997
7. "AIL Systems Inc." folder, left as Armstrong had arranged it, 1996
8. [EMPL. AGRMTS], correspondence and documents, 1996-1997
9. [N.A. - Exec. Comp.], (correspondence, executive compensation plans), 1997

**Box 136** *RESTRICTED MATERIAL* - Corporate Boards, [AIL] AIL Systems Incorporated, 1993-2004

Folder

1. "AIL Systems Inc." folder, left as Armstrong had arranged it (includes all staff member meeting information and correspondence), 1997
2. "AIL Technologies Inc. - Closing Documents, September 26, 1997" binder, left as Armstrong had arranged it, 1996-1997
3. AIL Systems Incorporated, Surveillance Products folder; joint proxy statement/prospectus; Armstrong, AIL/EDO Corporation, retirement information, 1994-2002
4. [AIL - Current] and [Sale], 1993-2000
5. [ORG] AIL Systems Incorporated (Subsidiary of Eaton Corporation), 2000-2004

**Box 137** *RESTRICTED MATERIAL* - Corporate Boards, [AIL] AIL Systems Incorporated, [Awards - Bert Fowler] and [Bert Fowler/History], [EDO Corp. Board Minutes] and EDO Corporation, Armstrong retirement, 1989-2004

Folder

1. AIL Systems Incorporated (Subsidiary of Eaton Corporation), [Awards - Bert Fowler] and [Bert Fowler/History], 1990-1995
2. [CORRESP. - (AIL)], various business correspondence, 1992-2002
3. [MERGE/SALE] AIL Systems Incorporated, (folder 1 of 2), August 1992-September 1993
4. [MERGE/SALE] AIL Systems Incorporated, (folder 2 of 2), October 1993-March 2001
5. [AIL Systems Board Meeting Minutes], 1989-1993 (folder 1 of 2)
6. [AIL Systems Board Meeting Minutes], 1994-2000 (folder 2 of 2)
7. [EDO Corp. Board Minutes], 2000-2002
8. EDO Corporation, Armstrong retirement, 2000-2004

**Box 138** *RESTRICTED MATERIAL* - Corporate Boards, [RMI - Current], [VISITS/PHOTOS], [B.O.D. Min. – RMI] Board of Directors Minutes – RMI Titanium Company, 1989-2006

Folder

1. [RMI - Current], 1999-2005
2. [VISITS/PHOTOS], circa 1990-1996
3. [BD MTGS 88-95] Board of Directors Minutes – RMI Titanium Company, 1990-1991 (folder 1 of 2)
4. [BD MTGS 88-95] Board of Directors Minutes – RMI Titanium Company, 1992-1995 (folder 2 of 2)

**Box 139** *RESTRICTED MATERIAL - Corporate Boards, [B.O.D. Min. – RMI] Board of Directors Minutes, [AUDIT], [COMP STUFF] – RMI Titanium Company and RTI International Metals, Incorporated, and Fiduciary Trust Company of New York, background information, and Board of Directors subject file, circa 1980s-2006*

Folder

1. [B.O.D. Min. – RMI] Board of Directors Minutes – RMI Titanium Company and RTI International Metals, Incorporated, 1989-1999 (folder 1 of 3)
2. [B.O.D. Min. – RMI] Board of Directors Minutes – RMI Titanium Company and RTI International Metals, Incorporated, 1999-2002 (folder 2 of 3)
3. [B.O.D. Min. – RMI] Board of Directors Minutes – RMI Titanium Company and RTI International Metals, Incorporated, 2003-2006 (folder 3 of 3)
4. [AUDIT] RTI International Metals, Incorporated, Minutes of Meeting of Audit Committee, 2003-2004
5. [COMP STUFF] RMI Titanium Company, Organization and Compensation Committee of the Board of Directors, 1989-1996
6. Fiduciary Trust Company of New York, background information, 1980
7. Board of Directors subject file, circa 1980s-1990s

**Box 140** *Academy of the Kingdom of Morocco, 1977-2009*

Folder

1. Copy of “Dahir” or Law proclaiming the creation of the Academy, Armstrong’s invitation of membership in the Academy, Armstrong’s acceptance letter to King Hassan II and thank-you letter upon nomination/welcome into the Academy, 1978-1980
2. Official Academy of Kingdom of Morocco stationery, circa 1979
3. Documents from 1993 (“first session”), 1996 (“second session”), 2001 (autumn session) and correspondence in regards to 2002 (spring session)
4. [MOROCCO – GEN.] – [CHALFONT], (includes correspondence from “Rt. Hon., The Lord Chalfont,” member of the Academy) 1998-2009
5. [MOROCCO – GEN.] – [ADMIN], (initial Academy documents, a few notes, business cards and correspondence), 1977-2004
6. [AMBROGGI] includes correspondence between Armstrong and Mr. and Mrs. Robert Ambroggi, 1984-2002
7. [MOROCCO – GEN.] – miscellaneous correspondence between Armstrong and Academy members, also includes 3 color photographs of Armstrong with Academy members, circa 1989-2002

**Box 141** *Academy of the Kingdom of Morocco, 1979-2003*

Folder

1. [Moroccan Academy Correspondence, 1979-1989], (includes minutes from the founding meeting of the Academy)

2. [Moroccan Academy Correspondence, 1990-2003]
3. [MOROCCO CORRESP. 90-Now] contains information from sessions, no correspondence, as marked on file, 1981-1984 (folder 1 of 3)
4. [MOROCCO CORRESP. 90-Now] contains information from sessions, no correspondence, as marked on file, 1985-1989 (folder 2 of 3)
5. [MOROCCO CORRESP. 90-Now] contains information from sessions, no correspondence, as marked on file, 1992-2001 (folder 3 of 3)

**Box 142** *Academy of the Kingdom of Morocco - Publications, 1985-1992*

Folder

1. Drought, water management and food production, Conference Proceedings, Agadir (Morocco), November 21-24, 1985
2. Mesures a decider et a mettre en oeuvre en cas d'accident nucleaire: session II, Paris, June 10-11, 1987
3. Universite, recherché, developpement, Paris, June 5-7, 1989 (includes a publication by Armstrong; "Research values in contemporary society," pp. 89-95)
4. De la nécessité de l'homo oeconomicus pour le décollage économique de l'europe de l'est: Fez, May 7-9,1990
5. Le patrimoine commun hispano-mauresque, Grenade, April 21 - 23,1992

**Box 143** *Academy of the Kingdom of Morocco - Publications, 1992-1994*

Folder

1. L'Europe des Douze et les autres: Rabat, November 19-21, 1992
2. Academia: revue de l'Academie du Royaume du Maroc, No. 9, 1992
3. Protectionnisme économique et politique d'immigration: thème de la deuxième session 1993, Rabat, December 6-7,1993
4. Connaissance et technologie: Casablanca, May 10-12, 1993
5. Academia: revue de l'Academie du Royaume du Maroc, No. 11, 1994
6. Les pays en voie de développement entre l'exigence démocratique et la priorité économique: thème de la deuxième session 1994: Rabat, November 20-30, 1994

**Box 144** *Academy of the Kingdom of Morocco - Publications, 1995-1997*

Folder

1. Quel avenir pour le bassin mediterranéen et l'Union européenne?: thème de la 1° session, 1995, Lisbonne, May 1995
2. Academia: revue de l'Academie du Royaume du Maroc, No. 12, 1995
3. Academia: revue de l'Academie du Royaume du Maroc, No. 13, 1996
4. Et si le processus de paix au moyen-Orient devait échouer?: thème de la 2°

- session 1996 : Amman, December 10-12, 1996
5. Academie Du Royaume Du Maroc, Theme De La Deuxieme Session, Amman, December 1996
  6. Mondialisation et identité: thème de la 1 session 1997, Rabat, May 5-7, 1997

**Box 145** *Academy of the Kingdom of Morocco - Publications, 1997, 1998, 2001*

Folder

1. Droits de l'homme et manipulations génétiques: thème de la 2° session, Rabat, November 24-26, 1997
2. Pourquoi les dragons d'Asie ont-ils pris feu?: thème de la 1 session 1998 : Fès 4, May 5-6, 1998
3. Academia: revue de l'Academie du Royaume du Maroc, No. 18, 2001

**Box 146** *Presidential Commission on the Space Shuttle Challenger Accident, 1981-1986*

Folder

1. Working file document - "The First "A" In NASA - Hearing Before The Subcommittee On Transportation, Aviation And Materials, by the Committee On Science and Technology, U.S. House of Representatives, Ninety-Seventh Congress," December 8, 1981
2. Timeline, "Joint DOD/NASA Study Advanced Launch Systems," and "Solid Rocket Motor Reliability," circa 1984-1985
3. Organizational charts, National Aeronautics and Space Administration, September 20, 1985
4. Armstrong's Commission introduction speech, 1986
5. L-1 Day Crew briefing documents and STS-51-L Mission Management Team, L-1 Day Review document, January 1986
6. Presentation to the Presidential Commission on the Space Shuttle Challenger Accident, National Aeronautics and Space Administration, February 6, 1986 (folder 1 of 2)
7. Presentation to the Presidential Commission on the Space Shuttle Challenger Accident, National Aeronautics and Space Administration, February 6, 1986 (folder 2 of 2)
8. Erosion of SRM Pressure Seals, Presentation to NASA Headquarters, "Updated from 19 August 1985 - Revisions in Blue, February 10, 1986"
9. Presentation to the Presidential Commission on the Space Shuttle Challenger Accident, National Aeronautics and Space Administration, February 10, 1986 (folder 1 of 2)
10. Presentation to the Presidential Commission on the Space Shuttle Challenger Accident, National Aeronautics and Space Administration, February 10, 1986 (folder 2 of 2)
11. Status Report to 51-L Data & Design Analysis Task Force, February 11,

1986

**Box 147** *Presidential Commission on the Space Shuttle Challenger Accident, February 12, 1986 - February 25, 1986*

Folder

1. Documents/Supporting Information, "The Events Leading Up To and Through the Telecon On Temperature Effect on O-Ring Performance," Prepared by K. Spears, *Ballistics*, February 12, 1986
2. "Failure Scenario Team, Thomas L. Moser," February 13, 1986
3. Official Transcript Proceedings Before Presidential Commission on the Space Shuttle Challenger Accident, Kennedy Space Center, Cape Canaveral, Florida, pages 1063-1249, Friday, February 14, 1986
4. Transcripts for various participants, February, 1986 (folder 1 of 2)
5. Transcripts for various participants, February-March, 1986 (folder 2 of 2)
6. Stenographic Transcript of Hearings Before the Subcommittee on Science, Technology and Space of the Committee on Commerce, Science and Transportation, United States Senate, The Space Shuttle Challenger Accident, Washington, D.C., February 18, 1986
7. Statement To The Presidential Commission On The Space Shuttle Challenger Accident, S.R. Reinartz, February 25, 1986

**Box 148** *Presidential Commission on the Space Shuttle Challenger Accident, February 25, 1986 - March 13, 1986*

Folder

1. Space Shuttle Joint Review, February 25, 1986 (includes 3, black and white photographs, 3 pages of Armstrong's handwritten notes and "Commission Panels" information)
2. Presidential Commission on the Space Shuttle Challenger Accident, Open Hearing, State Department Auditorium, February 27, 1986
3. "Marshall Space Flight Center Presentation To Commission Members," March 3-5, 1986
4. Presidential Commission Open Hearing, Friday, March 7, 1986
5. "STS 51-L Data And Design Analyses Task Force Presentation, Marshall Space Flight Center," March 12-13, 1986
6. "STS 51-L Data And Design Analyses Task Force Presentation," March 13, 1986

**Box 149** *Presidential Commission on the Space Shuttle Challenger Accident, March 21, 1986 - April 30, 1986*

Folder

1. "Presidential Commission On The Space Shuttle Challenger Accident, Open Hearings, STS 51-L Data & Design Analysis Task Force Presentations," March 21, 1986 and "STS 51-L Incident Report Orbiter, GFE, and Timeline," March 1986 (includes list of witnesses)
2. "STS 51-L Data and Design Analyses Task Force Presentation," March 26, 1986
3. "Unresolved Issues Or What Must Be Done To Achieve A Viable STS Program," H. Hartsfield, April 2, 1986
4. "Astronaut Office Involvement In The Launch & Mission Decision Process," April 3, 1986
5. "STS 51-L Data And Design Analysis Task Force Presentation," April 10, 1986
6. Documents, Presidential Commission on the Space Shuttle Challenger Accident - Commissioners and Staff, April 11, 1986
7. "Independent Observer Team Report To The Presidential Commission On The Space Shuttle Challenger Accident," April 30, 1986
8. "The Space Shuttle Program: A Policy Failure?" "Revision 3, May Not Be Reproduced, Copied or Quoted Without The Author's Permission," By John M. Logsdon, Director, Graduate Program in Science, Technology, and Public Policy, The George Washington University, Washington, D.C., April 1986
9. Miscellaneous supporting documents, circa 1986 (folder 1 of 2, includes one sheet of Armstrong notes)
10. Miscellaneous supporting documents - "Technical Activities And Publications Information Manual," 1985-1986 (folder 2 of 2)
11. Notes and copies of reports for Apollo 204 and Apollo 13 Review Boards, 1986

**Box 150** *Presidential Commission on the Space Shuttle Challenger Accident, Correspondence, Draft and Interim Reports, Briefings and Clippings, 1986*

Folder

1. Correspondence, Draft and Interim Reports, and Briefings, March - October, 1986
2. "Current News: Supplemental Clips, Special Edition/Space Program," June 10-13, 1986
3. "NASA Activities," National Aeronautics and Space Administration, Special Edition, Volume 17, No. 6 & 7, June-July, 1986
4. Clippings, (copies), February, 1985-May, 1986
5. Clippings, (originals), February, 1985 - May, 1986
6. Clippings, (copies), June-December, 1986
7. Clippings, (originals), June-December, 1986

**Box 151 OS** - *Presidential Commission on the Space Shuttle Challenger Accident, Correspondence, Clippings, 1986*

Folder

1. Oversized clippings and front page articles related to the Challenger accident, 1986

**Box 152** *Report of the Presidential Commission on the Space Shuttle Challenger Accident, Volume IV and V, February 26 - May 2, 1986*

Folder

1. Report of the Presidential Commission on the Space Shuttle Challenger Accident, Volume IV, February 26 - May 2, 1986
2. Report of the Presidential Commission on the Space Shuttle Challenger Accident, Volume V, February 26 - May 2, 1986

**Box 153** *Report of the Presidential Commission on the Space Shuttle Challenger Accident, Volume IV and V, February 26 - May 2, 1986 (Sealed Package, 2 volume set)*

Items

1. Report of the Presidential Commission on the Space Shuttle Challenger Accident, Volume IV, February 26 - May 2, 1986 (in sealed package with volume V)
2. Report of the Presidential Commission on the Space Shuttle Challenger Accident, Volume V, February 26 - May 2, 1986 (in sealed package with volume IV)

**Box 154** *Report of the Presidential Commission on the Space Shuttle Challenger Accident, Volume IV and V, February 26 - May 2, 1986 (Sealed Package, 2 volume set), Correspondence and Clippings, 1987*

Items

1. Report of the Presidential Commission on the Space Shuttle Challenger Accident, Volume IV, February 26 - May 2, 1986 (in sealed package with volume V)
2. Report of the Presidential Commission on the Space Shuttle Challenger Accident, Volume V, February 26 - May 2, 1986 (in sealed package with volume IV)
3. Correspondence and Clippings, 1987

**Box 155** *National Commission on Space, 1984-1985*

Folder

1. National Commission on Space, congratulatory correspondence in regards to appointment, 1985
2. Correspondence, "Notice To All Commissioners," in regards to executive session on July 26, dated July 15, 1985
3. Document, National Commission on Space, July 24, 1985
4. "Space Station Presentation to President's National Commission on Space, Lyndon B. Johnson Space Center, July 25-26, 1985" (2 copies of documents, folder 1 of 3)
5. Space Station Presentation to President's National Commission on Space, Lyndon B. Johnson Space Center, July 25-26, 1985 (folder 2 of 3)

Item

1. "Space: Exploration-Exploitation And The Role Of Man," by Joseph P. Loftus, Jr., Assistant Director, NASA Johnson Space Center, Houston Texas, 77058
2. "Advanced Missions Studies, Presentation for the National Commission on Space," by Robert C. Reid, Advanced Programs Office; Michael B. Duke, Solar System Exploration Division, NASA Johnson Space Center, July 26, 1985
3. "Advanced Missions Studies, Presentation for the National Commission on Space," by Robert C. Ried, Advanced Programs Office and Michael B. Duke, Solar System Exploration Division, July 26, 1985
4. "The Development Status of Life Support Technology for Future Missions," by Frank H. Samonski, Jr.
6. Space Station Presentation to President's National Commission on Space, Lyndon B. Johnson Space Center, July 25-26, 1985 (folder 3 of 3)

Item

1. "A Summary of Studies on STS Management Strategy," by Donna Blackshear and Herbert Rocha, September 1984
2. "Report of the Shuttle Operations, Strategic Planning Group," March 7, 1985
3. Agenda, National Commission on Space, NASA Johnson Space Center, Houston Texas, July 25 and 26, 1985
4. National Commission on Space, Manned Flight Operations Summary, July 25, 1985 (2 copies)
7. National Commission on Space, by John F. Yardley, President McDonnell Douglas Astronautics Company, December 16, 1985

**Box 156** *[NCOS] National Commission on Space, 1975-1986*

Folder

1. Contents of "Space Studies Institute" folder, includes papers: "New Routes in Manufacturing in Space," by G. O'Neill; G. Driggers and B. O'Leary and "Low-Cost Lunar Polar Missions," by J.R. French, 1980-1985
2. "National Space Transportation and Support Study, Volume 1, Civil Needs,

- Final Report," October 30, 1985
3. "Aerospace Daily: Joint Mars Mission Seen Boosting International Cooperation," July 18, 1985
  4. "Earth Materials and Earth Processes: An introduction, Preliminary Edition," with material Armstrong had filed behind front cover, circa 1975
  5. "Space Markets" and "Intelsat" magazines, with draft correspondence regarding development of private space exploration, 1984-1985
  6. Summaries of presentations to the National Commission on Space on potential future projects, circa 1985
  7. "DoD Space Transportation Mission Requirements Definition, Volume I: Discussion," prepared by Space Transportation Plans and Architecture Directorate," October 25, 1985
  8. "Space Markets," November 1985 and clippings from magazines on industrial space technology, December 1985-January 1986
  9. "Solar Power Satellite Built of Lunar Materials," September 21, 1985
  10. "Anti-Satellite Weapons, Countermeasures, and Arms Control," September 1985 and "Ballistic Missile Defense Technologies," September 1985
  11. "Qualitative Research Study: Public Opinion Regarding Outer Space Exploration, Commercialization and Tourism," and "Quantitative Research Study: Leadership Attitudes Toward Space Exploration," Research and Decisions Corporation, November 1985
  12. Summaries: "Ballistic Missile Defense Technologies, "Anti-Satellite Weapons, Countermeasures, and Arms Control," Thurmond Institute Lectures: The NASA Mission: Present and Future," by James M. Beggs, and "Space Manufacturing, The Princeton University Conference," May 8-11, 1985

**Box 157** *[NCOS] National Commission on Space, 1985-1987*

Folder

1. NASA reports on the requirements for and feasibility of long-term, deep-space manned missions, i.e. to Mars, 1985-1986
2. Magazine articles on state of NASA and manned space flight in the late 1980s, circa 1986-1987
3. [Mr. Armstrong/To Lebanon], correspondence and minutes of meetings of the National Commission on Space, 1985-1986
4. "Final Report - The Next Giant Leap in Space: An Agenda for International Cooperation," The Multilateral Project, The United Nations Association of the United States of America, 1986
5. Reports, magazine clippings and correspondence relating to Armstrong's involvement with the National Committee on Space, 1985-1987
6. "Report of the National Commission on Space - Hearing Before the Subcommittee on Science, Technology, And Space of the Committee on Commerce, Science, and Transportation, United States Senate," July 22, 1986

7. "Projections of Space Systems Opportunities and Technologies for the 2000 to 2030 Time Period - An Ad Hoc Committee Report to the American Institute of Aeronautics and Astronautics for Submission to the National Commission on Space," November 19, 1985

**Box 158** *[NCOS] National Commission on Space, 1984-1993*

Folder

1. "International Cooperation and Competition in Civilian Space Activities," July 1985
2. "Minutes and Abstracts of the National Commission on Space, August 21-22, 1985, Jet Propulsion Laboratory"
3. "Space Station," presentation outline with photographs, circa 1984
4. "ESA - Scientific Projects Under Development," undated
5. "An Implementation Plan for Priorities in Solar-System Space Physics, Executive Summary," August 1985
6. "Thurmond Institute Lectures - The NASA Mission: Present and Future," by James M. Beggs, 1986
7. "A General Dynamics Perspective on the Future of the United States Space Program," presented to the National Commission on Space, Washington, D.C., September 18, 1985
8. "United States Space Foundation, Symposium Report, Space, the Next Ten Years," November 26-28, 1984
9. "The Space Settlement Papers, a submission to the National Commission on Space, Thomas O. Paine, Chairman," 1985
10. "A Millenium Project: Mars 2000," by Harrison H. Schmitt, Summer 1985
11. "Spaceflight," published by the British Interplanetary Society, September/October, 1985
12. "A Method of Maximizing Return on Investment," December 1985
13. Reports to Space Science Board, National Academy of Sciences, National Research Council, December 1984-August 1985
14. "Remarks of the President to the National Space Club Luncheon," March 29, 1985
15. "Leo, Luna and Mars," Dr. Thomas O. Paine, NASA Symposium on Lunar Bases and Space Activities of the 21<sup>st</sup> Century, October 29-31, 1984
16. Handwritten notes on various presentations, unknown occasion, undated
17. "Impressions received in Moscow relating to the future direction of the Soviet Space Program," Dr. Thomas O. Paine, Chairman, October 26, 1985
18. "Presentation to the National Commission on Space - Solar System Space Physics," by S.M. Krimigis, Chairman, October 22, 1985
19. "JSC Internal Note: A Table and Reference List Documenting Observations of the Earth from Manned Earth Orbital and Suborbital Spaceflight Missions Including the Unmanned Apollo-Saturn 4 and 6 Missions (Mercury Program Through Apollo-Soyuz Test Project)," December 1976
20. "Humans to Mars: A Space Leadership Initiative," presented by John Niehoff,

- NASA Headquarters, March 18, 1987
21. "The Expanding European Space Program," and other articles from latter part unidentified magazine, undated
  22. "The Pioneer," a publication of the Cincinnati L5 Society, Spring 1983
  23. "The Colonist," newsletter of the Piedmont Advocacy for Space, Summer 1982-August 1983

**Box 159** *NASA Advisory Council and Miscellaneous Consulting, 1979-2007*

Folder

1. "Planetary Exploration Through Year 2000," "An Augmented Program, Draft – Part Two Of A Report By The Solar System Exploration Committee Of The NASA Advisory Council," August 16, 1985
2. Space Studies Institute, Report on Space Shuttle External Tank Applications, by J. Alex Gimarc, and Stirling Engines as Power Converters for Earth Orbiting Space Stations, by Thom Person and D.A. Renfroe, 1985
2. Binder, NASA Advisory Council, includes member information, charter, minutes, recommendations, common NASA acronyms and miscellaneous information, circa 2005-2007
3. "Aeronautics Committee Report to the NASA Advisory Council, " April 19, 2007 (includes 3 pages of handwritten notes by Armstrong)
4. Correspondence, contracts and scripts related to Nippon Hoso Kyokai (Japan Broadcasting Corporation) "Man in Motion" television series, 1979

**Series 7. Memberships and Advisory Groups, 1971-2012**

(0.8 cubic feet)

**Series Description:** This series contains material pertaining to advisory groups and memberships for which Neil Armstrong had a role. Types of material include, but are not limited to correspondence, certificates of appreciation, directories, documents, draft proposals, itineraries, meeting schedules and minutes, reports and other miscellaneous items.

The first box contains information from Armstrong's 1971-1973 tenure as Chairman of the Presidential Advisory Committee for the Peace Corps, specifically his trip to Korea, along with initial planning documents for the Aviation Safety Institute for which Armstrong served in an advisory capacity in the early 1970s. Also included is correspondence, guides, brochures and miscellaneous items from his membership in the Royal and Ancient Golf Club of St. Andrews. The last folder contains private, third party papers related to the National Aviation Hall of Fame, Combs Award entries which Armstrong reviewed, and the folder is restricted.

The second box contains material related to the Commonwealth Club and Commercial Club of Cincinnati for which Armstrong was a member. According to

printed material in this series, the two clubs worked to exchange ideas, educate and inform its members in matters of commercial, cultural and civic importance, with the goal that such an organization would be a force for good in Greater Cincinnati.

**Box 160** *Folder 8 RESTRICTED - President's Advisory Council on the Peace Corps (Chairman), [Galipault] - Aviation Safety Institute, The Royal and Ancient Golf Club of St. Andrews, National Aviation Hall of Fame, 1971-2003*

Folder

1. President's Advisory Council on the Peace Corps (Chairman), Korea visit, August 1971
2. [Galipault] - Aviation Safety Institute, 1972-1974
3. The Royal and Ancient Golf Club of St. Andrews, 1983-1999
4. Space Studies Institute, Report on Space Shuttle External Tank Applications, by J. Alex Gimarc and Stirling Engines as Power Converters for Earth Orbiting Space Stations, by Thom Person and D.A. Renfro, 1985
5. Certificate of Appreciation, Distinguished Professional Member of the Purdue University Engineering Visiting Committee, 1995
6. Cloudbusters Model Airplane Club of Michigan, Certificate, Life Achievement Award, 1997
7. Certificate of Lifetime Membership, Associate Member, NFL Alumni, 1999
8. **RESTRICTED** - Combs Award entries for Armstrong's review, from the National Aviation Hall of Fame, 2003
9. Correspondence, Selection Committee for the Howard Hughes Memorial Award, July 25, 2004

**Box 161** *The Commonwealth Club - Cincinnati and The Commercial Club - Cincinnati, 1988-2012*

Folder

1. "The Unnoticed Victory," Hans H. Angermueller, Vice Chairman, Citicorp/Citibank, Joint Meeting of Commonwealth and Commercial Clubs, Cincinnati, Ohio, November 10, 1988
2. The Commonwealth Club - Cincinnati, Directory, September 2010
3. The Commonwealth Club - Cincinnati, Correspondence (announcing new members), October 31, 2005 - December 9, 2011
4. The Commercial Club - Cincinnati, Directory, circa 2009-2010
5. The Commercial Club - Cincinnati, Correspondence, (announcing new members, one in regards to Greater Cincinnati Foundation), 1997-2012
6. Materials related to Armstrong's involvement with the Cincinnati Commonwealth Club, 1997-2002 (folder 1 of 2)
7. Materials related to Armstrong's involvement with the Cincinnati Commercial Club, 1983-1995 (folder 2 of 2)

## **Series 8. Speeches, Writings, Manuscripts for Review, and Notebooks, 1958 – 2012**

(14.4 cubic feet)

**Series Description:** This series contains all of the speech materials kept by Neil Armstrong throughout his career. The series also includes materials related to speech preparation and writing. The speeches have been retained in and the order in which they were found. Earlier speeches were kept according to the place in which the speech was given or the organization to which he gave the speech.

Also housed here is Armstrong's published writings, which include academic articles, pieces for news and other media outlets, and books to which Armstrong contributed. These writings are organized chronologically by date of publication. Following Armstrong's written work is a collection of manuscripts which were sent to Armstrong for review. For several of these, Armstrong contributed a foreword or introduction. In other instances, Armstrong was simply asked to review the manuscript for publication. The series ends with early notebooks where Armstrong jotted miscellaneous notes for various occasions. The notebooks are exceptional for the insight they provide into his thought process.

### **Sub-series 1. Speeches, 1968-2012**

#### **Working Files**

(9.8 cubic ft.)

**Sub-series Description:** This sub-series contains manuscripts, drafts, and handwritten editorial notes for speeches delivered by Armstrong throughout his life. Over time, Armstrong used several different filing systems for his speech materials. These various arrangements have been preserved with the label applied by Armstrong himself indicated by enclosure in [brackets]. The subseries begins with early speeches arranged in binders labeled [A]-[Z] in which speeches are arranged alphabetically according to Armstrong's stated audience. Typical of this arrangement is a business/institute/university, followed by the city or country and a date. Following these alphabetically organized binders are speeches arranged thematically, such as commencement speeches, or presentations delivered to the Royal Academy of Morocco. More recently, Armstrong had organized his speeches by year, and the arrangement here reflects this shift by preserving Armstrong's arrangement by year in the final nine boxes of speech manuscripts. Following the speeches are three boxes of references which appear to be gathered for the purpose of drafting speeches. Reference materials are arranged in alphabetical order by Armstrong's own subject headings.

#### **Alphabetical by Business/Organization/Event**

**Box 162** *Speeches – [A] Binder, 1972-1997*

Folder Speeches – [A] Binder

1. [Adelphi College], undated
2. [Alexian Brothers, Elk Grove, IL 5/72]
3. [An American Idea, Cincinnati, Ohio (Radio) July 4, 1976]
4. [Amer. Animal Hosp. Assn. San Francisco, 3/24/90]
5. [Am/ Assn. of School Admin. Atlanta, GA. 2/13/82]
6. [American Bar Assn. Chicago, Ill. 10 May, 1977]
7. [American Bell, Hershey, PA. Jan. 18, 1983]
8. [Amer. Defense Prep. Middletown, Ohio. May 1, 1978]
9. [Amer. Gears Mfg. Assn. The Homestead 6-6-77]
10. [AIAA Student Conference, University of Cincinnati, 1978]
11. [AIAA Washington DC, 29 January 1976]
12. [AIAA Safety], undated
13. [Amoco, Baltimore, Chicago, Kansas City, Oct-Nov 1984, Tampa 2/85]
14. [Amer. Inst. Of CPAs, Cincinnati Oh. 10 Sept., 1977]
15. [A.I.E.E.], undated
16. [American Optical Co. Boston, Mass. 17 Aug 1977]
17. [Amer. Soc. Travel Agents, Acapulco], undated
18. [Amoco Tucson, AZ, May, 1984]
19. [Amoco Baltimore, Chicago, Kansas City, Oct.-Nov. 1984, Tampa 2/85]
20. [AMF, Ft. Lauderdale 12/9/81]
21. [AMP Jan. 18-20/89, Melbourne, Sydney]
22. [Amway, Chicago, Ill, Sept 9, 1972]
23. [Andritz, St. Paul, MN 6/3/91]
24. [Apollo 11 5<sup>th</sup> Anniv. Wash. D.C. July, 1974]
25. [Armstrong Cork], undated
26. [AST, Irvine, CA 8/4/89]
27. [ASTRA, Tenerife – 9/4/97]
28. [Atlas Van Lines, Chicago, Ill. 12 May 1976]
29. [AT&T 5/87, Maui]
30. [AT&T Cleveland 1/15/84]
31. [augustana college, Rock Island, Ill.], undated.
32. [Australia], undated

**Box 163** *Speeches – [B] and [C] Binders, 1972-1995*

Folder Speeches [B] Binder

1. [Banker Admin. Inst., Chicago], undated.
2. [Bishop Co.], undated
3. [Briggs & Stratton, July, 1988 Louisville.]
4. [BPL, Bombay 11/12/95]
5. [Bristol-Myers Products, Litchfield Park, Ariz. February 1, 1978]
6. [Bristol-Myers Products, Clearwater, Fla. January, 1978]

7. [Buckley School, Los Angeles, Cal. June 18, 1977]
- Folder Speeches [C] Binder
8. Unfiled speeches from the front of binder labeled [C]
9. [C & C, 10/15/86]
10. [Cal. College Arts & - , Oakland, Calif. Nov. 19, 1972]
11. [Certainteed, Valley Forge, PA. Dec. 4, 1978]
12. [Chamber of Commerce, Richlands, Va. Dec. 6, 1975]
13. [The Chicago Society, Chicago, IL 9/12/82]
14. [Cincinnati Airport], undated
15. [Cincinnati Gas & Electric, Cincinnati, OH 5/16/78]
16. [Cincinnati Milacron, Birmingham, England May 16, 1983]
17. [Cinn. Mus. of Nat. Hist, Planetarium Dedication], undated
18. [Clark Equipment Co., Buchanan, Mich. May 9, 1978]
19. [CLR, Dallas 4/24/86]
20. [Colgate, Wash. D.C., 10/10/88]
21. [Collins Radio, Cedar Rapids, Iowa], undated
22. [Comm. Hosp. of Cent. Calif., Fresno 10/19/89]
23. [Copernicus, Chicago], undated
24. [Cray, Maui, 2/2/81]

**Box 164** *Speeches – [D-E] and [F-H] Binders, 1972-1994*

Folder Speeches [D-E] Binder

1. [Deutsch Relays], undated
2. [DeKalb Co. Farm Bureau, Dekalb, IL 2/12/80]
3. [Diconis, Dayton, Ohio June, 1985]
4. [Dowling College], undated
5. [Drackett Products Co. Doral C. C., Fla. June 13, 1977]
6. [Dupont (2)], undated
7. [Eagle-Star, Bangkok, 3-24-88]
8. [Earth Day, Univ. of Cincinnati, April 12, 1972]
9. [Eaton, Atlanta 3/98]
10. [Elec. Cont. Assn, Ont. Windsor, Ont., Mar 3, 1973]
11. [Engineers Joint Council, Fredericksburg, VA 4/18/79]
12. [Ericsson, London 9/12]

Folder Speeches [F-H]

13. Unfiled speeches from the front of binder labeled [F-H], undated

Item

1. International Manufacturing; Breakthrough; Orlando, Florida; November 7, 1990
2. Financial Pacific Insurance; Monterrey, California; May 21, 1998
3. A WHOLE NEW WORLD; Orlando, Florida; October 27, 1994
4. GMC; Dallas, Texas; 1994
5. Frito-Lay? "In the early fifties;" Palm Springs, California; March 24, 1994

14. [5<sup>th</sup>/3<sup>rd</sup> Saurkraut Party, Fort Thomas, Ky.], undated.
15. [Flt. Test. Hist. FDN, LAX – 5/20/89]
16. [Gen. Foods, San Diego 2/87]
17. [Glasgow], undated
18. [Charlie Gates, Denver 1/12/87]
19. [Great Amer. Achmts. Wilmington, Del. Oct. 26, 1978]
20. [G. T. E. 5/16/85 W. Palm Beach (PGA)]
21. [Hamburg], undated
22. [Hammond Organ, Chicago, Ill], undated
23. [Harrodsburg Bicentennial, Harrodsburg, Ky. June 16, 1974]
24. [Hoffman la Roche, New Orleans/Nashville 1/80]
25. [Holiday Inns, Ottawa 10/84, Orlando 10/94]
26. [Humana Hospital, Beaumanot, Tex. Sept. 28, 1975]

**Box 165** *Speeches – [I-L] Binder, 1971-1997*

Folder Speeches [I-L] Binder

1. [INA, Puerto Rico 11/12/79]
2. [Industrial Design Soc. Lake Berkley, KY. Oct. 8, 1971]
3. [INROADS, Cincinnati, Ohio, Dec. 21, 1983]
4. [Intl. Plowing Match, Wingham, Ont. Sept. 26, 1977]
5. [International Computers, Manilla, Phillipines, Nov. 25, 1977]
6. [Iowa Bankers Assn. 410-7-74]
7. [JCI – Nagoya, Nov. 1986]
8. [Johannesburg Chamber, South Africa 19], undated
9. [Johnson County Airport, Johnson County, Kans. May 28, 1976]
10. [Johnson Wax, Kauai, Feb 89]
11. [Kerry Co. Mns. 97]
12. [Jugend Forscht, Manz, Germany, Nov. 11, 1972]
13. [Kill Devil Hill, Foreword], undated
14. [Kirchman Company, Buena Vista, Florida, 20 Feb., 1984]
15. [Labott, Toronto 6/9/81]
16. [Lockheed Mgmt. Club, Sunnyvale, Calif. 17 July, 1976]

**Box 166** *Speeches – [M-O] Binder, 1968-1990*

Folder Speeches [M-O] Binder

1. Unfiled speeches from the front of binder labeled [M-O], undated

Item

1. National Electrical Manufacturers Association; Arlington, Virginia; November 10, 1997
2. FAA; Clermont County, Cincinnati, Ohio; November 17, 1993
3. NBAA; Houston, Texas; October 31, 1991
4. BOILER draft; National Boiler and Pressure Vessel Inspectors; 1993

- or 1998?
5. Harry B. Combs Enshrined into the National Aviation Hall of Fame; Lakeland Linder Airport, Florida; July 20, 1987
  6. Boeing Award Ceremony, invited by Harry Stonecipher, undated
  2. [Major Market Radio, Buena Vista, FL 2/10/89]
  3. [Management Seminar, Univ. of Cincinnati], undated
  4. [Masonite, Costa Mesa, Calif. Nov. 16, 1976]
  5. [McMicken Society, Univ. of Cincinnati], undated
  6. [Merck. Finck, Dusseldorf 4/24/90]
  7. [M8OE Milwaukee, 9/14/90]
  8. [Missouri Teachers], undated
  9. [Motorola Service, Florida], undated
  10. [Motorola, June 15, 1972]
  11. [MSD Agvet, South Africa, Feb., 1983]
  12. [National Governor's Conf., Cincinnati 7/68]
  13. [National Veteran's Day, Birmingham, Ala. 10 Nov., 1976]
  14. [National War College, Wash. D.C., 4/71]
  15. [Nature Conservancy, Cincinnati, Sept. 22, 1979]
  16. [NCR, Mexico City 4/21/86]
  17. [Neb. Medical Assn], undated
  18. [NECA, Boston, Oct. 23, 1972]
  19. [Newcom 78, Las Vegas, Nev., 4 May 1978]
  20. [New York Telephone, New York City, Jan. 2, 1984]
  21. [Optimists Club, Cincinnati 2/16/79]

**Box 167** *Speeches – [P-Q] Binders 1 and 2, 1968-1999*

Folder Speeches [P-Q], Binder no. 1

1. Unsorted speeches stored in binder labeled [P-Q], 1970-1989.

Item

1. Onward and Upward, Research Airplanes—Act II (Article); The National Congress of Aerospace Education; March 21, 1986
2. Typed Manuscript; "Because the vast majority of the Earth's weight...." undated
3. Typed Manuscript; Speech on Luna Model Plumbing (9-29); Columbus, US; 1973
4. Various transcripts (typed and handwritten), Award Acceptance Speeches and Articles, "Home Movies," Texas?; Falk Award, March 1996; Dayton Town Talk, Dayton, OH; Bombay document, (November 12,) 1995
5. Astra 2; Tenerife, Spain; 1997
6. ECAO (Day 3-Day 18), Ontario?, undated
7. Junpend forself (Suspend Yourself?); Mainz, Germany; November 11, 197(4?)
8. International Brotherhood of Electrical Workers; Seattle,

- Washington; September 28, 1970
9. "Scientific Applications of Lunar Laser Ranging" (Gardner Lecture); Austin, Texas; 1976
  10. Typed Manuscript, "Ordered. Physicians were possibilities." (Description of flight through space and facts of space, as if you are on the mission), 1982? (Pages 10-12 are very similar to the Dayton Town Talk article in Item 4.), 1999?
  11. Gemini and Apollo Descriptions (the last two pages are very similar to the Dayton Town Talk article in Item 4.), 1992
  12. Quotes of Jokes; after 1990
  13. Omega, Switzerland, April 14, 1994
  14. Typed Manuscript, "And so it happened that manuscript was born (?);" Governance Institute w/ Palm Beach; February 28, 1992(?) OR "A Whole New World, Holiday Inns; October 27, 1994?"
  15. Typed Manuscript, "New Technology is not inevitably..." Palm Beach; February 28, 1992

- Folder Speeches [P-Q], Binder no. 2
2. [Telefonica, Jerez de la Fontera, 18 June, 2002], filed in the front of binder labeled [P-Q]
  3. [Pacific Science Center, Seattle WA 11/22/82]
  4. [Penn Bankers, 5/22/72]
  5. [Pharmacia, Houston 5/21/85]
  6. [Plumbers Assn., Columbus, Ohio], undated
  7. [Popular Bank, Cyprus 6/8/99]
  8. [Print, NJ, Secaucus, 3/30/88]
  9. [Project Excellence, Kings Island 5/3/89]
  10. [Purdue Univ. Doctoral/Grissom 5/68]
  11. [Quaker Oats of Canada, Toronto, Ont., 9/28/84]

**Box 168** *Speeches – [R-T] Binder, 1975-1988*

- Folder Speeches [R-T] Binder
1. Unfiled speeches from the front of binder [R-T], undated
 

Item

    1. Titanium Conference; San Diego, California, June 28, 1992
    2. Stalagluft 3 Reunion; Cincinnati, Ohio, May 13, 1995
    3. Neil Armstrong Signature at a Banquet at the Elangeni, South Africa, December 1972
    4. SW BELL YELLOW PAGES, 1995 © NA Armstrong (Document was written in December of 1994.)
  2. [RCP Group, Sun City, Bot. 6-18-88]
  3. [Scouting], various dates, most undated
  4. [SETP Wings of Man, Los Angeles, 5/21/75]
  5. [Space Shuttle, Readers Digest], undated
  6. [Stouffer Foods, FL 1/20/75]

7. [Sun City, Sun City Ariz.], undated
8. [Tandem Computers, Mauna Kea, Hawaii, March 7, 1985]
9. [Thermalite, London Feb. 15, 1985]
10. [Timex, W. Palm Beach 12/14/82]
11. [Toledo Airport, September, 1976]
12. [Traffic Club of Montreal, Montreal, Canada, Jan. 16, 1980]

**Box 169** *Speeches – [U-V] and [W-Z] Binders, 1970-1988*

Folder Speeches [U-V] Binder

1. [United Nations We Believe, New York, NY 9/22/82]
2. [United Way, Kings Island, 9/4/84]
3. [U.C. Alumni Assn. Cincinnati, Ohio April 20, 1979]
4. [Univ. of Cincinnati, Business School, 4-20-74]
5. [U.S. Savings Bonds, Dallas, Tex. 2/15/84]
6. [Vacaville Rotary Fly-In, Vacaville, CA 6/3/82]
7. [Visa – San Juan, May 14 – 1986]

Folder Speeches [W-Z] Binder

8. [Wang Customer Engineering, Nashua, NH 3/21/82]
9. [Warren co. Hist. Soc. Bicentennial Prayer Brkf.], undated
10. [Washington Award, Chicago, IL 2/19/80]
11. [Washington Bar Assn., Spokane, Wash. Sept. 16, 1976]
12. [Western Res. Hall of Fame, Cleveland 9/2/83]
13. [Western Star Anniv. Kings Island, OH 2/16/82]
14. [Westinghouse, Hilton Head, 4-21-75]
15. [White Farm Equipment, Phoenix, Arizona, January, 1985]
16. [Wichita Town Talk], undated
17. [Wings Club, N.Y.C., May 88]
18. [World Wildlife Fund, London, England, Nov. 18, 1970]
19. [X-30 Tech Mat, Monterrey, CA Feb. 88]
20. [Yorktown Bicentennial, Cincinnati, Ohio 10/17/82]
21. [Young Presidents Org. Vancouver, B.C. Sept. 19, 1978]

**Commencements, IBM**

**Box 170** *Speeches – [Commencements] Binder and “IBM” Binder, 1971-2005*

Folder Speeches [Commencements] Binder

1. Unfiled material from front pocket of binder labeled [Commencements], undated

Item

1. U.S. Customs and Border Protection (fill-out card), circa January 2004
2. Who Will Rebuild America in the 80s (Summer Commencement

- pamphlet); Miami University, Oxford, Ohio, August 22, 1980
3. The Stanford Observer (newspaper); Stanford University, Stanford, California? April 1984
  4. The Stanford Observer (newspaper); Stanford University, Stanford, California, June 1984
  5. Address by the Honorable Michael Collins, Assistant Secretary of State; St. Michael's College, Winooski, Vermont, Monday, June 8, 1970
  6. Congratulations, you are engineers; Tufts University, Medford Massachusetts, May 23, 2004
  7. Miami University Graduation of the Class of 1970; Miami University, Oxford, Ohio, June 1970
  8. Handwritten paper, untitled, undated
  9. Department of the State for the Press, Stonehill College, North Easton, Massachusetts, June 6/7, 1970
2. Unfiled speech from front of binder labeled [Commencements], USC, May 13, 2005
  3. [AIU 3/25/04]
  4. [Butler, 1972]
  5. [Univ. of Cincinnati, 6/13/82]
  6. [Cranfield '96]
  7. [Heidelberg, 1971]
  8. [Lafayette College, Easton, Pa. May 29, 1983]
  9. [Mt. st. Joseph, 5/13/00]
  10. [Ohio State Commencement, Columbus, OH 6/71]
  11. [Seven Hills School, Cincinnati 9/7/79]
  12. [U.C. Commencement, Cincinnati, OH 6/13/82]
  13. [Virginia Tech Commcmt., June 14 – 1986]
  14. [Weber State, 1988]
- Folder Speeches (IBM) Binder
15. Unfiled speech from the front of "IBM" binder, March 13, 1996 (water damage)
  16. [IBM, Huntsville, Alabama], undated
  17. [IBM – Australia/NZ, Bangkok, 3/1/89]
  18. [IBM Customers, MonteCarlo, June 18, q 1983]
  19. [IBM, Dorado Beach, Puerto Rico 4/12/72]
  20. [IBM – Field Engr. Hollywood, Fla. 3-23-77]
  21. [IBM – Mfg. Exec. Pheonix, Ariz. 6-10-77]
  22. [IBM-Intl. Gold Circle – Honolulu, 4-28-77]
  23. [IBM Internat. Barcelona], undated
  24. [IBM Op Engr. Port Saint Lucie], undated
  25. [IBM Administra. San Francisco, 7 June, 1972]

### **Introductions, Morocco, NASA**

**Box 171** *Speeches – [Intros Responses], [Morocco] and [NASA Speeches] Binders, 1971-2005*

Folder Speeches [Commencements] Binder

1. H. G. Wells quote from the front of binder labeled [Intros responses], on page labeled [CIA Media, Montreux 149 Jan. 2000]
2. [Index], table of contents for binder labeled [Intros Responses], undated
3. [1. A.C.E.C. – Distinguished Award of Merit. A.G.S. Globe Signing, AIL-EIN Presentation], 2004-2005
4. [2. Apollo 17 – 30<sup>th</sup> Anniv. Of Lunar Departure. AHA Hall of Fame – Pete Conrad]. December 14, 2002
5. [3. Combs, Harry – Sounds of Time Award; Edo – CMIS PDR; Disney – Space Mountain Relaunch], December 5, 1980 and July 15, 2005
6. [4. Lindberg AF Acad. Howard Hughes Mem. Award], January 19, 2004
7. [5. Milacron Retirement. Marathon Retirement], circa 2000-2002
8. [6. Ohio Quarter Dedication – AF Museum, NASM Lifetime Achievement Trophy], March 3, 2004
9. [RNASA National Space Trophy, Star Trek], March 11, 2004 and August 28, 2004
10. [Intro – Dick Underwood; Winters, Jonathan –Lone Sailor Award], April 11, 1997

Folder Speeches [Morocco] Binder

11. [The Ozone Layer Controversy], May 10, 1993
12. [Research Values in Contemporary Society], June 1989
13. [Welcome to Jacques-Yves Cousteau], June 5, 1989
14. [Observations on Genetic Engineering], November 1997

Folder [NASA Speeches] Binder

15. Speeches from binder labeled [NASA Speeches], 1971-2004

Item

1. Apollo 11 - 35<sup>th</sup> Anniversary, NASM, Washington D.C., July 20, 2004
2. Apollo 11 - Tenth Anniversary; Washington D.C., July 1979
3. Mr. President, Mr. Vice-President, July 20, 1994
4. Statement of Neil Armstrong at Press Conference, Washington D.C., June 11, 1979; (same document as Item 2)
5. Reflections after Returning From the Moon; From Address to Congress, September 16, 1969
6. USC Talk Seminar (notecard); University of Southern California, Los Angeles, California, 2005
7. Apollo 11 Lunar Landing Mission (USC Engineer pamphlet), University of Southern California, Los Angeles, California, January 22, 1970 (published March 1970)
8. NASA Dryden-50<sup>th</sup> Anniversary (Speech), Dryden Flight Research Center, Edwards, California, November 14, 1996
9. 50<sup>th</sup> Anniversary of American Society for Association Executives, Sheraton Park Hotel, Washington, D.C., August 25, 1970

10. Neil Armstrong Remarks, The National War College, Washington, D.C., April 1, 1971
11. Sylvanus Thayer Award Acceptance Remarks, United States Military Academy, West Point, New York, May 4, 1971
12. Astronaut Candidate Class Speech, November 1998
16. [NASA Anniv. Progs., etc.], 1979-1985

### **Speeches Arranged by Date**

#### **Box 172** *Speeches – Unlabeled Black Binder nos. 1 and 2, 1970-1972*

Folder Unlabeled Black Binder no. 1

1. [Lunar Decision, "+ Nearest Neighbor" "New Frontiers"], undated
2. [Ohio Hardware], undated
3. [Ohio School Boards] November 9, 1971
4. [Newspaper Editors] May 15, 1970
5. [Ft. Myers] December 2, 1971
6. [Test Effectiveness] undated, circa 1970s
7. [Scrap Iron] undated
8. [Alexian Bros.] May 3, 1972

Folder Unlabeled Black Binder no. 2

9. [ West Point, 5/4/71]
10. [IBEW/Seattle, 9/28/70]
11. [Calif. Dental] April 16, 1972
12. [IBM Administrators], undated
13. [Mountbatten] March 9, 1972
14. Notecards and pamphlet on "Lunar Surface Exploration," written by Armstrong, circa 1971

#### **Box 173** *Speeches – 1991-2000 (bulk)*

Folder

1. [Asteroids, Caledonian Star, 8/99]
2. [CIA-Media, Montreuz 1/00]
3. [CTIA/Global Star, New Orleans 2/00]
4. [Ericsson, Istanbul 11/00]
5. [ESAT – Digifone, Ireland 11/00]
6. [H.C.A., Kansas City 2/00]
7. [Mailcom, Las Vegas 8/00]
8. [Microsoft, Chile 3/00]
9. [Natl. Boiler, Anorage 5/95]
10. [Siemens, Geneva 4/00]
11. [Yorkshire, Leeds 6/99], also contains divider labeled [Vision Intl., Portugal 1/98] but without the indicated speech

- Folder Blue Folder with "Purdue Vision" sticker
12. "Address to the AIAA Joint Propulsion Conference, Sacramento California," June 25, 1991
  13. "NASA Space Shuttle Mission STS-48 Press Kit," September 1991
  14. Notes for speeches with humorous reference materials, jokes, etc., undated
  15. [Discovery Telescope Dedication, Flagstaff AZ, 7/21/12], final public appearance
  16. [UAL/IAM, Orlando, FL, September 21, 1993]

**Box 174** *Speeches – Two "Ohio National Financial Services" Binders, 1994-2005*

- Folder "Ohio National Financial Services" Binder no. 1
1. Unfiled speeches from front of black "Ohio National Financial Services" binder, 2002-2005

Item

1. HEC, Future Act, Paris, France, January 24, 2002
2. Apollo 17 - 30<sup>th</sup> Anniversary of Departure, December 14, 2002
3. Foothill Lecture Series, Cupertino, California, March 29, 2005
4. Coca Cola (speech), Bangkok, Thailand, January 17, 2005
2. [Roche], December 3, 2000
3. [MCA] February 21, 2001
4. [ON] Ohio National Retirement, February 8, 2001
5. [VER] March 13, 2001
6. [NSDJA] Reno, October 21, 2001
7. [Rothschild] London, January 26, 2001
8. [Expl. Club] New York City, March 24, 2001
9. [MIT-Gardner] April 3, 1994
10. [NY Life] October 5, 1999
11. [Compaq] New York City, February 2, 2001
12. [Snell] November 10, 2001
13. [Wright] December 14, 2001

- Folder "Ohio National Financial Services" Binder no. 2

14. Unfiled speeches from front of black "Ohio National Financial Services" binder, 2003-2004

Item

1. "Fortunately, each of you has been given...", circa 2004
2. AGS Globe Signing, Atlanta, Georgia, May 25, 2004
15. [Infoworld] Athens, May 23, 1998
16. [Lecture Series] San Francisco, February 13-15, 2001
17. [Moon] SS Caledonian Star, August 1999
18. [Moon 2] SS Sagafjord, March 1994
19. [SETP] National Aviators Hall of Fame, Dayton, OH, July 21, 2001.
20. [JLG] Las Vegas, March 22, 1999

**Box 175** *Speeches – Purdue Folder, 1998-2005*

Folder

1. Boy Scout Volunteer Recognition Dinner, May 22, 1978
2. [Vision Intl., Faro, Portugal, 1 October 1998]
3. [New York Life, Lanai, 5 Oct, 1999]
4. [National Press Club, Washington DC Jan 22, 2000]
5. [NAE, Washington, DC Jan. 22, 2000]
6. [Wright Memorial Dinner, Washington DC 5/14/01]
7. [Wright Memorial Dinner, Washington DC 12/14/01]
8. [Astra Zeneca, Dublin, Ireland 4/18/02]
9. [Lindbergh, Roundtable, St. Louis 22 Oct, 2002]
10. [FAA Wings Weekends, Hamilton OH, 6/29/03]
11. [AIAA Symposium, Dayton, OH 7/17/03]
12. [Centennial of Flight, Rockerfeller Center, 7/29/2003]
13. Foreward to “Flying is My Game,” with e-mail correspondence, August 2003
14. [EAA Airventure, Oskosh, WI 8/1/03]
15. [WTTTC, Vilamoura, Portugal, 8/5/03]
16. [NW Business Center, Tatton Park 9/26/03]
17. [Bakerfield Business Conference 10/11/03]
18. [Mason, OH Veterans Memorial Dedication 11/8/03]
19. [Presentation of Harry B. Combs, Kill Devil Hills, NC, 17 December, 2003]
20. Rationale for Human and Robotic Space Exploration, February 23, 2004
21. [Congressional Medal of Honor Society, New York City, 3/23/04]
22. [Purdue Alumni Assn. Nat.I Air & Space Museum, DC 4/24/04]
23. [Framatone ANP, West Palm Beach, 16 June, 2004]
24. [NAHF, Spirit of Flight Award, Dayton, 7/16/04]
25. [NAE Roundtable, Washington, D.C. 19 August, 2004]
26. [B-26 Squadron Reunion, Branson 6 Oct., 2004]
27. [FAA Lebanon, OH 12/2/04]
28. Biographic summary with edits, circa 2004.
29. [Pattison Group, Montgomery, AL 3/11/05]
30. [Liberty Life, Sun City S. Africa, 5/10/05]
31. [Renaissance Capital, Moscow 6/21/05]
32. [Campus TI 2005 7/26/05]
33. [Global Leadership Forum, Kuala Lumpur 9/6/05]
34. [Hays Cos. Minneapolis 9/12/05]
35. [Telekom Austria, Frankfort 9/22/05]
36. [The Goddard Lecture, Washington DC 3/2/08]
37. [RBS, Barcelona 4/11&14/08]
38. “For Dewitt and Selig, the Game of a Lifetime,” October 28, 2011
39. [Next Generation Suborbital Research, Palo Alto, 2/27/12]
40. Comments on Apollo 13, undated
41. Comments on Predictions of Flight capabilities, undated
42. Comments on naming of Armstrong Hall of Engineering at Purdue, with

- edits, undated
43. Comments on history of AIL and EPD, undated
  44. Foreward to "The Two Sides of the Moon," undated

**Box 176** *Speeches – ['05] and ['06] Binders, 2005-2006*

Folder Speeches ['05]

1. Letter to Walter congratulating him on the Outstanding Texan Award, and "Return to Moon (Schmitt) (emails?)," March 1-August 29, 2005
2. [Mediolanum Bank – Pesar – 2005]
3. [d], 49<sup>th</sup> Symposium of the Society of Experimental Test Pilots, September 30, 2005
4. [e] [Time], November, 2005
5. [Sanofi – Aventis, Dallas, TX], November 28, 2005

Folder Speeches ['06]

6. Table of Contents for binder ['06]
7. [1. 2/8/06 Kariera Athens]
8. [3. 3/23/06 R. Half Intl. LaQuinta]
9. [4. 4/18/06 CMNH Museum Ctr.]
10. [6. 6/18/06 NASM Washington]
11. [7. 7/27/06 Freescale Orlando]
12. [8. 9/26/06 Union League New York]
13. [9. 9/28/06 Piper Jaffray Keppler]
14. [10. 10/26/06 GAPAN London]
15. [11. 11/3/06 InfoKOL. Oslo]
16. [12. 12/3/06 Microsoft Dublin]

**Box 177** *Speeches – ['07] Binder, 2007*

Folder Speeches ['07]

1. Unfiled speeches from front of binder labeled ['07]; includes Armstrong Hall of Engineering Dedication Dinner speech, October 26, 2007

Item

1.
  1. Armstrong Hall Dedication Dinner (speech), Purdue University, West Lafayette, Indiana, October 26, 2007
  2. Armstrong Hall Dedication (speech), Purdue University, West Lafayette, Indiana, October 27, 2007
  3. Naturalization Ceremony (speech), Cincinnati, Ohio, December 14, 2007
  4. Copies of Armstrong Hall Dedication Dinner (Item 1 speech) and Armstrong Hall Dedication (Item 2 speech) Purdue University, West Lafayette, Indiana, October 26-27, 2007 (copies to be used by researchers)
2. Table of Contents listing speeches and dates filed in binder labeled ['07].

3. [Lotusphere, Orl 1/22/07]
4. [AIAA, DC. 3/7/07]
5. [Broin Cos. Sioux Falls 3/29/07]
6. [EAA, Dulles 4/11/07]
7. [Integrph, Nachville 5/22/07]
8. [Arcellor-Mittal, Cannes 5/29/07]
9. [Engineers Club of Dayton 6/6/07]
10. [Museum of Flt. – X-15 9/9/07]
11. [SKF – Gottenburg 6/29/07]
12. [DIH – Tel Aviv 7/10/07]
13. [Tax-Free Cannes 10/22/07]
14. [Black Rock, Istanbul 11/8/07]
15. [Shell, Dubai 11/14/07]

**Box 178** *Speeches – [‘08] and [‘09] Binders, 2009-2009*

Folder Speeches [‘08]

1. [Index] a “table of contents” for binder labeled [‘08]
2. [1) CoStar, Hazy Ctr. 1/4/08]
3. [Natl. Space Club, Goddard Lect. 3/7/08, APS, Philadelphia 4/26/08]
4. [RBS, Barcelona 4/11&14/08, IDC, Boston 6/6/08]
5. [4) Univ. Of Edinburg, Wash. DC 6/16/08]
6. [5) BT Las Vegas 6/25/08; Octo, Paris 7/03/08]
7. [6) Cin Fin. 7/18/08; Apollo 7 40<sup>th</sup> Anniv. Dallas Love Field 10/17/08]
8. [ZAIN, Dead Sea 10/24/08]
9. [8) London Drugs, Toronto, 11/3/08; YPO Tulsa, 11/5/08]
10. [9) Jay Barbree, KSC 11/24/08; Apollo 7 40<sup>th</sup> Dec. 11/08]

Folder Speeches [‘09]

11. Unlabeled, unfiled speech – references the retirement of an aircraft from service, undated
12. [Gen. Metcalf’s Distinguished Eagle Scout Award, Dayton 10/27/09]
13. [Linblad Antarctic Cruise 11-12/09]
14. [GNP, Mexico City, 11/2/09]
15. Friends and Alumni of Apollo, Canberra Deep Space Communications Center, undated
16. [ASME, President’s Award, video accptnce 11/15/09]
17. [NASA, Apollo 40<sup>th</sup> Anniversary 7/20/09]
18. [A Space Anniversary Year, Fulda University June 2009]
19. [MIT, Robert Seamans Memorial Service 6/10/09]
20. [Flying Midshipmen, Pensacola, 5/5/09]
21. [Apollo 10 40<sup>th</sup> Anniversary, Weatherford, 5/20/09]

**Box 179** *Speeches – 2008-2011*

Folder Speeches 2008-2011

1. Correspondence and speech on the occasion of NASA's 50<sup>th</sup> Anniversary celebration, circa 2008-2010
2. National Aviation Hall of Fame, July 2009
3. Tri-State War bird Museum, Batavia, Ohio [1/14/10]
4. Presentation of 2010 Howard Hughes Memorial Award, undated
5. [Volkswagen 2010], February, 2010
6. [C&C Clubs, Cincinnati, OH 3/16/10]
7. Material from Golden Eagles Reunion, including flight schedule, photo, and partial remarks by Armstrong, April, 2010
8. [EPNAA, Annapolis, MD, 5/1/10]
9. [Senate Commerce Comm. 5/15/10], with letter from Senator John D. Rockefeller, IV.
10. "Written Testimony of Neil A. Armstrong Before the Committee of Commerce, Science and transportation, United States senate, May 12, 2010," with notes
11. "Testimony of Neil A. Armstrong Before the Committee of Science and Technology," U.S. House of Representatives," May 26, 2010
12. [Testimony 12/3/81] NASA Aeronautical Program
13. Statements before Congress regarding the 2011 Budget Submittal, undated
14. [Naval Aviation Symposium, Pensacola, 13 May 2010]
15. [National Museum of Naval Aviation 5/14/10]
16. [National Museum of Naval Aviation 5/14/10]
17. [Jonathan Club, Los Angeles, Oct. 27, 2101], archival copies of speech. For original and other materials related to the Jonathan Club, see Series IX. Artifacts
18. [Purdue President's Council, Purdue 11/11/10]
19. [Purdue President's Council, Purdue 11/11/10]
20. [Dutch Science and Technology Summit, The Hague, 11/18/10]
21. [National Academy of Engineering, Joseph Gavin Tribute], circa January, 2011
22. [National Aviation Hall of Fame, Dayton, OH 7/16.11]
23. [Apollo 14 40th Anniversary, Kennedy Space Center, January 29, 2011]
24. [Apollo 15 40<sup>th</sup> Reunion, KSC 7/24/11]
25. [CPAA Students, Sydney, Australia 8/23-24/2011]
26. [CPA Australia, Sydney, August 23, 2011]
27. [CPA Australia, Sydney, 8/24/11]
28. "Hearing on NASA Human Spaceflight Past, Present, and Future: Where Do We Go from Here?" with correspondence, September 22, 2011
29. [Campfire, Jeff Bezos, 10/13/11]
30. [Congressional Gold Medal Ceremony, Washington, 11/16/11]
31. [Congressional Gold Medal Ceremony, Washington, 11/16/11]
32. [Standard Life, Paris, Dec. 1, 2011]
33. [X-15 Details], undated
34. Historical Overview of X-plane development, undated

35. Notes for speech, undated
36. [Apollo 16 40<sup>th</sup> Anniv. KSC, April 14, 2012]
37. [Wilbur Wright Memorial, Dayton, 6/1/12]
38. Speech celebrating John Glenn's achievements in flight, 50<sup>th</sup> Anniversary of the first American to orbit the Earth, circa 2012
39. [Armstrong Lecture Powerpoint, NASM], CD undated

**Box 180** *Speeches – Miscellaneous Speeches unfiled by Armstrong, 1969-2011*

Folder

1. Address to joint session of Congress to return American flags flown on Apollo 11. Includes 3 drafts (rough, edit, and final) showing work in progress, September, 1969
2. [Speeches], Apollo 11 related speeches and public remarks by Armstrong including commencement addresses, circa 1969-1971 (Folder 1 of 2)

Item

1. Purdue University Bulletin/Schools of Engineering (Volume 71; Careers in Engineering), Purdue University, West Lafayette, Indiana, June 28, 1971
2. The Blue Planet, World Wildlife Fund, London, England, November 18, 1970
3. News Conference, On First Anniversary of Manned Moon Landings, Washington, D.C., July 8, 1970
4. U.S. Manned Space Flight, between April 17, 1970 and January 31, 1971
5. Commencement Address to the University of Maryland, Heidelberg, Germany, April 30, 1971
6. Office of the White House Press Conference, Key Biscayne, Florida, March 7, 1970
7. Space Suit, NASA Textbook, (CSM21\_Spacesuits\_pp223-228), undated (photocopies)
8. Crew, NASA Textbook, (same as Item 7?), undated (photocopies)
9. NASA Biographical Data: Neil Armstrong, Houston, Texas, July 24, 1970
3. [Speeches], Apollo 11 related speeches and public remarks by Armstrong including commencement addresses, circa 1969-1971 (Folder 1 of 2)
  1. Apollo Historical Summary, between April 17, 1970 and January 31, 1971
  2. NASA Office of Legislature Affairs: Legislative Activities Report (Volume VIII), Washington, D.C., September 16, 1969
  3. The New York Times, "Transcript of Astronauts' Addresses to Congress," Washington, September 16/17, 1969
  4. "Why Explore the Moon?" Excerpt from statement to Congress by Dr. George E. Mueller, NASA Associate Administrator for Manned

5. Space Flight, March 11, 1969  
(Remarks); The National War College, National Defense University, Washington, D.C., April 1, 1971
6. Letter to Sister Mary Jucunda from Dr. Ernst Stuhlinger, Associate Director for Science at NASA's Marshall Space Flight Center, circa 1970
7. Speech, by Dr. James C. Fletcher, Los Angeles Area Chamber of Commerce, 14<sup>th</sup> Annual Aerospace Luncheon, Beverly Hilton Hotel, Los Angeles, California, October 1, 1971
8. Ohio State University Commencement Address, Ohio State University, Columbus, Ohio, June 11, 1971
9. Statement of Neil A. Armstrong, Deputy Associate Administrator (Aeronautics) Office of Advanced Research and Technology, statement before the Committee on Science and Astronautics, House of Representatives, Washington, D.C., March 11, 1971
10. International Brotherhood of Electrical Workers, Seattle, Washington, September 28, 1970
11. Lunar Surface Exploration, Manned Spacecraft Center, Houston, Texas, (COSPAR, Leningrad, USSR, May 1970)
4. [Excerpt from Lunar Surface Exploration by Neil A. Armstrong, Delivered at COSPAR, 1971]
5. [Excerpt from Lunar Surface Exploration by Neil A. Armstrong, Delivered at COSPAR, 1971]
6. [1972 Butler University/Commencement Speech]
7. [U.S. – Soviet Lunar Program], undated, circa 1997-1998
8. Correspondence, notes, and a bibliography with a copy of Mr. Armstrong's statements to Congress, circa 2011

**Box 181** *Speeches – Unlabeled Blue Binder, undated*

Folder

1. [Remarks], circa 1995 and various undated speeches
2. [Apollo A], undated
3. [Ascent], undated
4. [Capt. Cook], undated
5. [Computer], undated.
6. [Descent], undated
7. [Earth Death], undated
8. [Galileo], undated
9. [Gravity], undated
10. [Jacob's Ladder], undated
11. [Launch 1], undated
12. [LRR], undated
13. [The Sun], undated
14. [Opening], undated

15. [Telescope], undated
16. [Verne/Wells], undated

## Reference Materials

### Box 182 *Speeches – [Ref. Mat.], circa 2008*

#### Folder

1. List of contents in [Ref. Mat.] binder, undated
2. [Dayton 6, Deaths, Mil. 6, Dubai 6], circa 2008
3. [Grumman – 8], circa 2008
4. [Kilroy – 9], undated
5. [Morrill Act – 10], undated
6. [Polar Exped – 14, Reagan Quotes – 14, Safety 14, St. Exupery – 14 Sabine, Edward 14], undated

#### Folder Speeches, miscellaneous notes and reference material

7. Selected quotes, Dr. Robert H. Goddard, undated
8. Collection of quotes and segments of speech drafts, undated
9. Miscellaneous notes for speeches, undated
10. Reference material on Columbus voyage of 1492, undated

### Box 183 *Speeches – [Speech Stuff], 1966-2008*

#### Folder

1. Comments on congressional spending and Hurricane Katrina relief requests, circa 2008
2. “A Rendezvous with Infinity” from *Saturday Review World*, with note to “note the date →” February 9, 1974
3. Collection of witty sayings, from email correspondence, February 5, 2000
4. News-clippings on education and engineering, 1964-1997
5. Second and Third Annual R. P. Davis Lectures on the Practice of Engineering, 1969-1970; and, Sixth and Seventh Annual Edison Lectures, 1973-1974
6. Definitions of “engineer,” and “Faith of the Engineer,” both undated
7. [English/Quotes], various dates
8. [Environment], various dates
9. [Essays], circa 1984
10. [Excellence], undated
11. [Golf], 1975-1999
12. [History], 1983-1987
13. [Mathematics], 1985-1987
14. [Predictions], circa 1980s
15. [Press], circa 1980s
16. [Quips & Quotes], various dates

17. [Science Philosophy], 1971-1989
18. [Safety], circa 1987
19. [Sports], undated
20. [Business], 1971-1990
21. [Education], 1966-1987
22. [Engineering]1979-1981

**Box 184** *Speeches – [Today], 1990*

Folder

1. Unfiled materials from front of binder labeled [Today]
2. [1], Clippings from “Today” column, January, 1990
3. [2], Clippings from “Today” column, February, 1990
4. [3], Clippings from “Today” column, March, 1990
5. [4], Clippings from “Today” column, April, 1990
6. [5], Clippings from “Today” column, May, 1990
7. [6], Clippings from “Today” column, June, 1990
8. [7], Clippings from “Today” column, July, 1990
9. [8], Clippings from “Today” column, August, 1990
10. [9], Clippings from “Today” column, September, 1990
11. [10], Clippings from “Today” column, October, 1990
12. [11], Clippings from “Today” column, November, 1990
13. [12], Clippings from “Today” column, December, 1990

**Box 185** *Speeches – [Vol. A], undated*

Folder

1. Table of contents for binder labeled [Vol. A], note that some sections in the binder were empty when it was received, undated
2. Notes and newspaper clippings from the front pocket of binder labeled [Vol. A], circa August 2003
3. [A-1], “the Wright Memorial Dinner,” December 14, 2001
4. [A-2], “Lindbergh Award,” U.S. Air Force Academy, May 10, 1997
5. [A-3] Cranfield University, June 14, 1996
6. [A-4], Boiler Board (Alaska) 1<sup>st</sup> part, undated
7. [A-5] Stalagluft 3 Reunion, May13, 1995
8. [S-1], Apollo 17 30<sup>th</sup> Anniversary, undated
9. [S-2], Cospar, undated
10. [S-3], Joint session of Congress, undated
11. [S-4], table of contents says [WWF?], but no content is present, undated
12. [S-5], [Space Medicine], Cardiologists/Astrazeneca, animals, undated
13. [S-6], Mountblatten Lecture, undated, circa February 2003
14. Materials from back pocket of binder labeled [Vol. A] – [Intro] and [Savings Bonds ‘96]

**Box 186** *Speeches – Reference Materials Kept in “Property of the US Government Binder, 1966-1972*

Folder

1. Profiles of historical figures in science and brief biological sketches of great explorers, undated
2. [B], Report on a trip to the USSR in January 1970, with results of Apollo 11 EVA, medical tests, and documents on cooperation in space, 1968-1970
3. [D], Newsclippings regarding the US energy crisis and clippings about Arthur C. Clarke and Isaac Asimov together with speeches written by high school aged recipients of the “Citizenship Award,” 1966-1972
4. Collected essays, quotes, and biographies of historical figures, 1969-1972

**Sub-series 2. Writings, 1958-2009**

(1.2 cubic feet)

**Sub-series Description:** This sub-series includes materials authored or co-authored by Neil A. Armstrong. Included are academic and professional publications, essays, newspaper articles, printed interviews, commentary for television and film productions, and forewords written for monographs. These materials were kept by Armstrong as a group. They have been arranged in chronological order for ease of access.

**Box 187** *Writings, 1958-1972*

Folder

- 1 Armstrong, Neil A., “Future Range and Flight-Test Area Needs For Hypersonic and Orbital Vehicles”, For Presentation at The Society for Experimental Test Pilots, Professional Pilots’ Symposium on Air Space Safety, 1958
2. Matranga, Gene J. and Neil A. Armstrong, *Approach and Landing Investigation at Lift-Drag Ratios of 2 to 4 Utilizing a Straight-wing Fighter Airplane*, NASA Technical Memorandum X-31 National Aeronautics and Space Administration, Washington, August 1959
3. Holleman E.C., N.A. Armstrong, W.H. Andrews, *Utilization of the Pilot in the Launch and Injection of a Multistage Orbital Vehicle*, IAS Paper No. 60-16, Presented at the Institute of the Aeronautical Sciences 28<sup>th</sup> Annual Meeting, January 1960
4. Armstrong, Neil A., “X-15 Operations: Electronics and the Pilot” Article prepared for *Aeronautics* magazine. Circa 1960 (3 copies)
5. Armstrong, Neil A. and Joseph A. Walker. “The X-15 Program.” in *Proceedings of the Second National Conference on the Peaceful uses of Space*, Seattle: NASA, May 1962.
6. Armstrong, Neil A. and Euclid C. Holleman, A Review of In-Flight Simulation Pertinent to Piloted Space Vehicles, National Aeronautics and Space Administration, Presented to the 21<sup>st</sup> Flight Mechanics Panel of the Advisory

- Group for Aeronautical Research and Development, Paris, France. July 1962 (3 copies)
7. Armstrong, Neil A. and E.C. Holleman, "A Review of In-Flight Simulation Pertinent to Piloted Space Vehicles", Report 403, Advisory Group for Aeronautical Research and Development North Atlantic Treaty Organization, July 1962 (5 copies)
  8. Bangs, Scholer, (Interview with Neil A. Armstrong) "X-15 Pilot Evaluates Hydraulic System Performance", *Hydraulics and Pneumatics*, December 1962 (2 copies). Folder includes related correspondence.
  9. Armstrong, Neil A. "Flight Crew Selection, Training and Operations." Presentation at the *Pilot Space Science Symposium*, (February 1964), folder only contains the conference program
  10. Speeches, Writings, and Related Correspondence – Writings
    - Item
    - 1. Armstrong, Neil A., "Astronaut Training." Presentation at *Lunar Symposium, MSC* June 15, 1964
    - 2. Armstrong, Neil A., "Astronaut Training and Future Missions." Presented at Iowa State University and Drake University, July 10, 1964

Folder

11. [AIAA Paper], original copies of Apollo Program *News Reference* and data sheets on US and USSR launches, circa 1967.
12. Archive copies - [AIAA Paper], archival copies of Apollo Program *News Reference* and data sheets on US and USSR launches, circa 1967.
13. Nassiff, Samuel H. and Neil A. Armstrong, "Apollo Flightcrew Training in Lunar Landing Simulators." *AIAA Paper No. 68-254*, March 1968
14. Armstrong, Neil A., Testimony before a joint meeting of Congress to receive the Apollo 11 Astronauts, Sept. 16, 1969
15. Armstrong, Neil A., "The Blue Planet." *All Life on Earth: Second International Congress of the World Wildlife Fund*. London: 1970
16. Armstrong, Neil A., "Lunar Surface Exploration." paper presented at COSPAR, Leningrad, 1970; and, Akademif-Verlag, Berlin, 1971.
17. Armstrong, Neil A., "the Proper Role of Technology." Interview for "Today's America: Better or Worse?" in *U.S. News & World Report*, Jan. 11, 1971
18. Armstrong, Neil A., "Lunar Surface Exploration." *Space Research XI*, Berlin: Akademie-Verlag, 1971. (8 pub. Copies, 2 drafts)
19. Armstrong, Neil A., "Forward." *The Giant Leap: A Chronology of Ohio Aerospace Events and Personalities, 1815-1969*. Ohio Historical Society, 1971
20. Armstrong, Neil A., "Change in the Space Age." *The Mountbatten Lecture*. Edinburgh: University of Edinburgh Press, 1972. (5 copies)

**Box 188** *Writings, 1974-1983*

Folder

- 1 Armstrong, Neil A., "Out of This World." *Saturday Review World*. Aug. 24, 1974 (2 copies w/ drafts)

2. Armstrong, Neil A., "The First Timers." *The Sunday Express*, Jan. 6, 1974
3. Armstrong, Neil A., "Apollo Double Diaphragm Pump for Use in Artificial Heart-Lung Systems." Presented at AAMI National Meeting, March, 1975
4. Armstrong, Neil A., "A Day on Luna." *GENTE*, Argentina, 1975
5. Armstrong, Neil A., "Forward." *Scientific Application of Lunar Laser Ranging*. New York: Springer, 1977.
6. Armstrong, Neil A., "My Vacation." poem in *The Mini Page* a newspaper for young readers published by the *Columbus Dispatch*, July 15, 1978.
7. Armstrong, Neil A., "A citizen Looks at National Defense." *National Defense*, Sept.-Oct. 1978
8. Armstrong, Neil A. and Peter T. Reynolds, "The Lear-Jet 'Longhorn' Series: the First Jets with Winglets." *Society of Experimental Test pilots 22<sup>nd</sup> Annual Symposium*, Sept. 1978
9. Correspondence between Armstrong, legal counsel, and McGraw Hill publishers concerning a contributors agreement for *Mark's Standard Handbook for Mechanical Engineers*, circa 1978.
10. Armstrong, Neil A., "On the Launch Pad: A Space Truck." *TV Guide*, Vol. 29 No. 11, March 14, 1981
11. Armstrong, Neil A., "Foreword." Hallion manuscript *Dryden: The History of a NASA Research Center*, circa 1983 (folder 1 of 3)
12. Armstrong, Neil A., "Foreword." Hallion manuscript *Dryden: The History of a NASA Research Center*, circa 1983 (folder 2 of 3)
13. Armstrong, Neil A., "Foreword." Hallion manuscript *Dryden: The History of a NASA Research Center*, circa 1983 (folder 3 of 3)
14. Hironaka, Heisuke. "Neil A. Armstrong: The first man to walk on the moon." Interview with *UTAN Family Science*. Japan, July, 1983

**Box 189** *Writings, 1984-2009*

1. Lowman, Paul D. and Neil A. Armstrong., "New Knowledge of the Earth from Space Exploration." *The Academy of the Kingdom of Morocco*, First Session, March 1984
2. Armstrong, Neil A., "Wingless on Luna." 25<sup>th</sup> Wings Club General Harold R. Harris 'Sight' Lecture, May 1988
3. Armstrong, Neil A. and Robert C. Seamans, Jr. "Engineering Aspects of a Lunar landing." *The Twenty-fifth Lester D. Gardner Lecture*, May 3, 1994 (3 copies of program)
4. Young, Leonie, Avril Janks, and Neil Armstrong, *I Wish I'd Gone to the Moon with Neil Armstrong*. Willoughby: Weldon Kids, 1994.
5. List of Mr. Armstrong's publications circa 1995
6. Armstrong, Neil A., "The Engineered Century." *The Bridge*, Vol. 30 No. 1 (Spring 2000).
7. Correspondence with Paul Lowman regarding the foreword to *Exploring Space, Exploring Earth*, circa January, 1999.
8. Armstrong, Neil A., "Foreword." Lowman Manuscript *Exploring Space*,

- Exploring Earth: The Impact of Space Flight on Geology and Geophysics.*"  
New York: Cambridge University Press, 2000. w/ related correspondence  
(folder 1 of 3)
9. Armstrong, Neil A., "Foreword." Lowman Manuscript *Exploring Space, Exploring Earth: The Impact of Space Flight on Geology and Geophysics.*"  
New York: Cambridge University Press, 2000. w/ related correspondence  
(folder 2 of 3)
  10. Armstrong, Neil A., "Foreword." Lowman Manuscript *Exploring Space, Exploring Earth: The Impact of Space Flight on Geology and Geophysics.*"  
New York: Cambridge University Press, 2000. w/ related correspondence  
(folder 3 of 3)
  11. Correspondence with Dave Sorbel and other regarding Armstrong's foreword to *Longitude*, and information about Harrison clocks, circa 2004-2005.
  12. Correspondence with Bob White regarding a foreword to White's book, circa 2007-2008.
  13. Armstrong, Neil A., "A Superb National Enterprise." *Aviation Week & Space Technology*, (July 20, 2009), 50.
  14. Armstrong, Neil A., "Foreword." *Invitation to Space*.
  15. Speeches, Writings, and Related Correspondence – Writings  
Item
    1. Armstrong, Neil A., "Man in Motion No. 8: Bird-like Motion – The Development of the Aircraft."
    2. Armstrong, Neil A., "Man in Motion No. 9: Interplanetary Motion – Vehicles Move off the Earth."

Folder

16. Armstrong's answers to questions about the U.S. space program, its goals, and its future. Untitled, circa 1985

### **Sub-series 3. Manuscript Reviews, 1986-2012**

(3 cubic feet)

**Sub-series Description:** This sub-series includes book manuscripts that Armstrong received for review. In some cases, he contributed a foreword or preface to the book, and in others he was consulted as an expert on the book's subject matter. Armstrong's correspondence with the authors and his notes about the manuscripts are all retained as they were found.

#### **Box 190** *Manuscript Reviews, 1986*

Folder

1. Script edits for host narration, *The Voyages of Charles Darwin* for the British Broadcasting Corporation documentary, circa 1978
2. Manuscript of *The Space Program Quiz & Fact Book* by Timothy B. Benford and Brian Wilkes, circa 1985

3. *U.S. Space Program: An Historic View*, photo copy of manuscript, undated, 1986
4. Manuscript of *Test Pilot: Frontiers in Flight*, June 1986 (Folder 1 of 3)
5. Manuscript of *Test Pilot: Frontiers in Flight*, June 1986 (Folder 2 of 3)
6. Manuscript of *Test Pilot: Frontiers in Flight*, June 1986 (Folder 3 of 3)

**Box 191** *Manuscript Reviews, 1988*

Folder

1. Manuscript for the documentary, *For All Mankind*, circa 1988 (Folder 1 of 4)
2. Manuscript for the documentary, *For All Mankind*, circa 1988 (Folder 2 of 4)
3. Manuscript for the documentary, *For All Mankind*, circa 1988 (Folder 3 of 4)
4. Manuscript for the documentary, *For All Mankind*, circa 1988 (Folder 4 of 4)

**Box 192** *Manuscript Reviews, 1990-1995*

Folder

1. Manuscript draft of *America Grows Wings*, circa 1990 (Folder 1 of 4)
2. Manuscript draft of *America Grows Wings*, circa 1990 (Folder 2 of 4)
3. Manuscript draft of *America Grows Wings*, circa 1990 (Folder 3 of 4)
4. Manuscript draft for *America Grows Wings*, circa 1990 (Folder 4 of 4)
5. Manuscript of *Management by Intent*, circa 1991
6. Manuscript of *Behind the Wire: Stalag Luft III South Compound*, with correspondence from author Arnold A. Wright, circa 1995
7. Manuscript of *The Autobiography of Edward Keonjian*, circa 1995

**Box 193** *Manuscript Reviews, 2002-2005*

Folder

1. Manuscript draft of *X-15: Extending the Frontiers of Flight*, with correspondence. December 2002
2. Drafts of the final three chapters (16-18) of *Purdue in Flight*, circa 2002
3. Manuscript of *Two Sides of the Moon: the inside stories of an astronaut and a cosmonaut in the Cold War race to the Moon*, July 7, 2003
4. Manuscript draft of *Space Station Odyssey*, September 23, 2004
5. Manuscript of *Legacy of Honor: The Values and Influence of America's Eagle Scouts*, circa 2006

**Box 194** *Manuscript Reviews, 2007-2010*

Folder

1. Manuscript draft of *My Significant Other – 93 Hotel*, circa 2007
2. Manuscript for *Contrails Over the Mojaves: The Golden Age of Jet Flight*

- Testing at Edward Air Force Base, November 19, 2007*
3. Correspondence with Robert M. White regarding copies of White's book *Higher and Faster*, November 2007
  4. Manuscript of *Higher and Faster*, November 2007 (Folder 1 of 3)
  5. Manuscript of *Higher and Faster*, November 2007 (Folder 2 of 3)
  6. Manuscript of *Higher and Faster*, November 2007 (Folder 3 of 3)
  7. Manuscript of *Unstable at All Speeds – Flight Testing the 1903 Wright Flyer in 2003*, circa 2009
  8. Manuscript draft of *John F. Kennedy and the Race to the Moon*, with notes by Armstrong, circa 2010

**Box 195** *Manuscript Reviews, 2010-2012*

Folder

1. Manuscript draft *Luckiest Man in the Sky*, a biography of Col. Joe Kittinger ultimately published as *Come Up and Get Me* for which Armstrong wrote the foreword, with extensive photo layout; circa 2010 (Folder 1 of 2)
2. Manuscript draft *Luckiest Man in the Sky*, a biography of Col. Joe Kittinger ultimately published as *Come Up and Get Me* for which Armstrong wrote the foreword, with extensive photo layout; circa 2010 (Folder 2 of 2)
3. Manuscript draft of *Lessons Learned* with notes and foreword by Armstrong, undated, circa 2011
4. Manuscript of *Spacewalker* with correspondence from Purdue's Dauch Alumni Center, May 11, 2012
5. Manuscript draft of *Spacewalker: My Journey in Space and Faith as NASA's Record Setting Frequent Flyer*, by Jerry Ross, with a foreword by Gene Cernan; circa 2012
6. Manuscript of *QF 32* with correspondence from the publisher, May 15, 2012

**Box 196** *Manuscript Reviews, First Man biography, 2003-2005*

Folder

1. Correspondence with Hansen regarding Armstrong's biography *First Man*. Explains James Hansen's book deal and film rights option, circa 2003-2004
2. Manuscript draft of "Part Three: Wings of Gold," with correspondence, November 20, 2003
3. Manuscript draft of "Chapter 8: Fighter Squadron 51," December 2003
4. Manuscript of *The First Man*, circa 2005 (Folder 1 of 4)
5. Manuscript of *The First Man*, circa 2005 (Folder 2 of 4)
6. Manuscript of *The First Man*, circa 2005 (Folder 3 of 4)
7. Manuscript of *The First Man*, circa 2005 (Folder 4 of 4)

**Box 197** *Oversized Book Manuscripts, 2002-2008*

#### Folder

1. Manuscript draft of *Space: A History of Space Exploration in Photographs*, with correspondence from author Andrew Chaikin, circa 2002
2. Manuscript draft of *Images of Apollo 11: A Photo Scrapbook*, circa May 2008
3. French manuscript draft of a book on the Piccard family for which Armstrong wrote the foreword; includes draft of Armstrong's foreword, undated.

### **Sub-series 4. Notebooks, 1969-2007**

(0.4 cubic feet)

**Sub-series Description:** This subseries contains address and memoranda books from Armstrong's time as an Apollo astronaut. Also housed here are Purdue notebooks repurposed by Armstrong later in life as he prepared for speeches and undertook various kinds of research. Notes on the X-15 program, found together with a partially complete questionnaire, and a binder containing Armstrong's notations, graphs, figures, and writings on [Aero], [Boom], [Structures], [Fuel], [Propulsion], [Learjet], and [Appendix] are also items of note in this subseries.

#### **Box 198** *Notebooks, 1969-2007*

#### Folder

1. Address book, includes business and reference cards, and memoranda book including notes and quotations, circa 1969-1970
2. Two reused "Purdue" notebooks, one related to transonic flow theory and the other of partial notes related to manuscript reviews and speech preparation, circa 1971
3. Notes compiled by Armstrong related to various problems in flight mechanics, undated
4. Notebook containing notes on botany, plant, and tree identification, undated
5. Notebook of partial notes on the X-15 program with a partially completed questionnaire, presentation notes and other miscellany, circa 2000-2007
6. Partial notepad with handwritten notes, "\_\_\_ has recorded many firsts..." undated

#### **Box 198a** *Binder, circa 1961-1979*

#### Item

1. Binder containing articles and Armstrong's notations, graphs, figures, and writings on [Aero], [Boom], [Structures], [Fuel], [Propulsion], [Learjet], and [Appendix] circa 1961-1979 (appears to be compiled for a future publication)

### **Series 9. Subject Files**

(27.7 cubic feet)

**Series Description:** This series contains the majority of Neil Armstrong's subject reference files, as well as active subject files which includes some of Armstrong's ongoing correspondence. The reference files span the breadth of Armstrong's interests and speak to his personal and professional involvement as a life-long engineer. Much of the reference material preserved here concern space flight and exploration, as well as the aeronautical engineering projects that continued to interest Armstrong after his retirement from NASA. Also of interest are files on geology, including one dedicated to a caving expedition Armstrong took to the Los Tayos caves in Ecuador and another detailing his expedition to the North Pole.

The active subject files reflect research and correspondence Armstrong was conducting toward the end of his life. These files were stored by Armstrong in his office and are preserved here in the order in which they were found. Armstrong's own subject headings are indicated by enclosure in [brackets]. The active files include the files on astronauts [ASTRONAUTS]; which are comprised of correspondence related to Apollo 11 lunar surface photography, astronaut policy information, such as policies on the Personal Preference Kit (PPK), policies on appearances, assignments, standards of conduct and other related policies to which the astronauts were held.

Please note there are RESTRICTED materials in this series that require consultation with an archivist prior to use.

### **Sub-series 1. Reference Files, 1949-2009**

(14.5 cubic ft.)

**Sub-series Description:** This subseries contains material that was kept by Neil Armstrong for his own reference. Many of these subject file were stored in cardboard magazine holders and given subject headings by Armstrong. All original subject headings have been retained and are indicated by enclosure in [brackets]. As there was no clear order to the way in which these subject files were housed, we have placed them in alphabetical order according to subject heading. There are also headings here that were not generated by Armstrong himself, but were added during the archival process to describe the contents of unmarked boxes or folders that housed reference material collected by Armstrong over the years. Although these headings are not original to Armstrong, the contents are arranged exactly as Armstrong had kept them. A wide variety of miscellaneous material on space exploration and technology is found at the end of the subject files. Also presented here are books and publications belonging to Armstrong's personal library. Almost all of these texts are related to space exploration and aeronautics. Please note that NASA publications produced during Armstrong's astronaut career, or that are the result of his flown NASA missions are stored in Series I. NASA Career, Subseries 8. NASA Publications, Boxes 94-99.

**Box 199** *Subject Files – Magazine Holder for Aeronautics and Space Engineering Board, [A.S.E.B.], and [A.S.E.B. Rpts & Memos], 1978-1980*

Folder

1. Contents of magazine holder [A.S.E.B.]

Item

1. “Engineers and Public Affairs,” October, 1979
2. “Potential Future Initiative Directions in NASA Aeronautics Programs,” August, 1979
3. “60<sup>th</sup> Meeting, Aeronautics and Space Engineering Board,” May, 1980

Folder

2. Contents of magazine holder [A.S.E.B.]

Item

1. “Handbook of Near Earth (Sea Level to Geosynchronous Altitude) Environments,” April, 1979
2. “The Bridge,” vo. 8 Nos. 3-4, 1978; Vol. 9 No. 2 1979

Folder

3. Contents of magazine holder [A.S.E.B. Rpts. & Memos]

Item

1. “NASA’s Aeronautics Program: Systems Technology and Experimental Program,” 1980
2. “Issues in Engineering Education: A Framework for Analysis,” April, 1980

Folder

4. Reports and memos addressed to the members of the Aeronautics and Space Engineering Board (ASEB), circa 1979
5. Drafts of reports on NASA’s aircraft energy technology and national transonic facility, circa 1979
6. National Research Council reports, 1977-1980
7. National Research Council reports, 1978-1979.

**Box 200** *Subject Files – Magazine Holder [Aircraft – Sailplanes, GEM, Man-Powered], 1960-1974*

Folder

1. Contents of folder [Man-Powered Aircraft], with photographs, circa 1966
2. Contents of folder [GEM/Airship], 1975-1979
3. Contents of folder [Sailplanes], circa 1972
4. NASA Technical Reports, 1960-1974

Item

1. “R-65: Determination of Lateral Stability Characteristics from Free-Flight Model Tests, With Experimental Results on the Effects of Wing Vertical Position and Dihedral at Transonic Speeds,” 1960
2. “R-74: The Lateral Response of Airplanes to Random Turbulence,”

- 1960
3. "R-152: The Aerodynamic Design of Wings with Cambered Span Having Minimum Induced Drag," 1963
4. "R-198: Grounding Measurements of Sonic-Boom Pressures for the Altitude Range of 10,000 to 75,000 Feet," July, 1964
5. "The Power Profile, A New Type of Airfoil," January, 1974, with informational brochures on Beechcraft airplanes
6. "Those We Honor: The International Aerospace Hall of Fame," 1984

**Box 201** *Subject Files – Magazine Holder (Aircraft Maintenance), 1963-1988*

Folder

1. Cessna Models 310 and 340 owner's manuals, with documents filed in the front pocket of the binder, circa 1974-1986
2. "Federal Aviation Regulations, Vol. III," December 1969
3. "Business and Commercial Aviation – FBO Info Pak," circa 1989
4. "FBO Info Pak," circa 1987
5. Lists of manuals for various aircraft available on order, circa late 1980s
6. "The Instrument Flight Training Manual," circa 1986

**Box 202** *Subject Files – Magazine Holder (Aircraft Maintenance), 1963-2010*

Folder

1. Contents of fold [Flying] containing aircraft qualifications and portraits from the National Aviation Hall of Fame, circa 1963-1998
2. [IFR], "IFR Refresher," February 1990-November 1992; "Flying Magazine's Guide for Instrument Flying, 1973"
3. Material filed in the front pocket of a black binder containing information on air-craft maintenance, circa 1987
4. [Operations], undated
5. [AOPA], brochure on the Aircraft Owners and Pilots Association, undated
6. [Handheld XCVRs], information on handheld transceivers, circa 1986
7. [Paint], information about paints used on aircraft, circa 1987
8. [Loran], information on buying and installing used Loran-C receivers, circa 1988
9. [Insurance], information about insuring privately owned aircraft, circa 1988-1989
10. [Avionics Repair], undated
11. [Purchase ✓ List], advise on buying an aircraft, circa 1987-1988
12. [310 Parts], information on obtaining parts for a Cessna 310, undated
13. [310], general information for owners of Cessna 310s, circa 1988
14. [310 AD's], Airworthiness Directives for the Cessna 310 by which aircraft are kept flight-ready, circa 1988-1991
15. [Mode C], article entitles "Mode C Altitude Reporting: Altitude Encoding

- (Mode C) Transponders May Soon Become Mandatory for Virtually all Enroute and Terminal Area Operations,” February 1988.
16. [Videos], catalog of Airman Incorporated’s videos for pilots, undated
  17. [ELT], information about false alarms of the Emergency Locator Transmitter (ELT), circa June 1987
  18. Unfiled magazine clippings with information on various aircraft parts, circa 1989
  19. Spektum Dx5e 5-Channel Radio Systems, circa 2010

**Box 203** *Subject Files – Magazine Holder (Aircraft Maintenance), 1973-2010*

Folder

1. “Holds Made Easy,” article about holding patterns, circa 1988; and, U.S. Terminal Publication Volumes,” circa 1991
2. IFR Refreshers, October 1990-November 1991
3. “Aero: The Aircraft Owner’s Magazine,” February 1988; and, IFR Refreshers, December 1987-December 1988
4. IFR Refreshers, January 1989-December 1989
5. [Aircraft Performance], “Mission Analysis, circa 1970 (folder 1 of 3)
6. [Aircraft Performance], “SMU Aerospace Design Seminar, SM5369, Spring Semester 1970, Aerodynamics, February 3 and 5, 1970,” (folder 2 of 3)
7. [Aircraft Performance], “SMU Aerospace Design Seminar, SM5369, Spring Semester 1970, Aerodynamics, February 3 and 5, 1970,” (folder 3 of 3)

**Box 204** *Subject Files – Magazine Holder [Apollo], 1969-1978*

Folder

1. Subject Files – [Apollo]

Item

1. “First” 45rpm vinyl recording commemorating the Apollo 11 moon landing, circa 1969

Folder

2. Subject Files – [Apollo]

Item

1. “Origin of the Moon; New Data from Old Rocks” May 1972
2. “The Lunar Crosses: An original Hypothesis Concerning the Meaning of Certain High Crosses in Ireland” 1973
3. “Who—or What—Is That on the Moon” *The National Observer*, November 13, 1976
4. “The Earth’s Moon, Compiles and Drawn in the Cartographic Division of the National Geographic Society for the National geographic Magazine” circa 1969
5. “Fiery Spectacle on Moon in 1178, Described in Contemporary Report, Linked to Crater” copy of *NYT* story, October 20, 1976

6. "Apollo gets under the Moon's skin" highlighted story in *New Scientist*, November 9, 1978
7. "There is Evidence of Extra-Terrestrial Humanoids (Giants, Dwarfs, & Amorphous)" Spanish Newspaper clippings from Madrid's ABC with translation, October 3, 1976
8. "We've Been Asked, The Story Told by Moon Rocks" from *U.S. News & World Report*, September 13, 1976
9. "Geologic Setting of the Apollo 15 Samples" January 28, 1972
10. "The Apollo 15 Lunar Samples: A preliminary Description" January 28, 1972
11. "Scientists detail latest findings about moon" January 24, 1972
12. "MIT Reports on Research, Five Easy Pieces" December/January 1972
13. "Priestly Medal Address: Chemistry and Physics of the Moon" April 16, 1973
14. "What's New on the Moon?" circa 1973-74

Folder

3. Subject Files – [Apollo]

Item

1. "NASA shuts down Apollo lunar experiments," October 17, 1977
2. "Mystery Force on Moon May 'Run' Apollo Station" April 9, 1976
3. "Lunar Gravy," *NYT*, October 23, 1977
4. "MIT Reports on Research: Inside the Moon," July/August 1977
5. "Lunar Surface Chemistry: A New Imaging Technique," September 1977
6. "One Small Step – One Giant leap: The Voyage of Apollo 11," circa 1969
7. "Heat Flow and Convection Experiments aboard Apollo 17," January 17, 1975
8. "Lunar Gravity: The First Farside Map," June 27, 1975
9. "Lunar Science," (review), July-August 1975
10. "Chemistry of the Moon: a deepening puzzle," undated.
11. "Space-Age Immigrant," undated
12. "Post-Apollo Lunar Science – Report of a study by the Lunar Science Institute," July 1972

Folder

4. Subject Files – [Apollo]

Item

1. "Geotimes," June 1974
2. "Fruits of the Moon," June 1975
3. "The Moon: A Note on the Asymmetric Distribution of the Impacts which Created the Lunar Mare Basins," (reprint), 1975
4. "Dunite 72417: A Chemical study and Interpretation," 1975
5. "On the Moon with Apollo 15" contains memo "Meeting with Cosmonauts at Paris Air Show" and "On the Moon with Apollo 15," poster; June 1971

6. Photograph of Earth from space, undated
7. "Apollo 11 Lunar Science Conference: Lunar Glasses and Micro-Breccias: Properties and Origin," January 1970
8. "What's on the Moon?" July 27, 1969
9. "Ion microprobe analysis of lunar material from Apollo 11," February 1970
10. "Apollo 11 Voice Transcript Pertaining to the Geology of the Landing Site," circa, 1974

Folder

5. Subject Files – [Apollo]

Item

1. "One Small Step – One Giant leap: The Voyage of Apollo 11," circa 1969
2. "The Story of the Moon," circa 1969
3. "Apollo 15 At Hadley Base," circa 1971
4. RCA Apollo Program luggage tag with display of Apollo mission patches through Apollo 15, undated
5. "A giant step forward in gastronomics," (breakfast menu), undated
6. "Maanreis," circa 1969
7. "Bulletin de la Classes des Sciences: Extrait –The Rotation of the Moon," October 1974
8. "Man on the Moon: A Picture Chronology of Man in Space Exploration," circa 1969

**Box 205** *Subject Files – Magazine Holder [Apollo-Soyuz], 1977*

Folder

1. Subject Files – [Apollo-Soyuz]

Item

1. "Apollo-Soyuz Pamphlet No. 1: The Flight," October 1977
2. "Apollo-Soyuz Pamphlet No. 2: X-Rays, Gamma-Rays," October 1977
3. "Apollo-Soyuz Pamphlet No. 3: Sun, Stars, In Between," October 1977

Folder

2. Subject Files – [Apollo-Soyuz]

Item

1. "Apollo-Soyuz Pamphlet No. 4: Gravitational Field," October 1977
2. "Apollo-Soyuz Pamphlet No. 5: The Earth from Orbit," October 1977
3. "Apollo-Soyuz Pamphlet No. 6: Cosmic Ray Dosage," October 1977

Folder

3. Subject Files – [Apollo-Soyuz]

Item

1. "Apollo-Soyuz Pamphlet No. 7: Biology in Zero-G," October 1977
2. "Apollo-Soyuz Pamphlet No. 8: Zero-G Technology," October 1977
3. "Apollo-Soyuz Pamphlet No. 9: General Science," October 1977

**Box 206** *Subject Files – Magazine Holders [Astronomy], 1958-1984*

Folder

1. World Star Charts, one with Gemini VIII notes, and information on the Morehead Planetarium at the University of North Carolina at Chapel Hill, circa 1958
2. Correspondence on viewing an African solar eclipse with an eclipse viewer, circa 1984
3. Booklet on astronomical measurement tools and a book of planetary coordinates for the years 1980-1984
4. "The Finest Deep Sky Objects," 1978, with a buyer's guide to binoculars, circa 1979
5. "Verson Solar System Calculator," circa 1962
6. NASA publications on astronomy: "The Supernova," "Chemistry Between the Stars," "Atoms and Astronomy," "Extragalactic Astronomy," September 1976
7. World Star Charts (2), and Lunar Map, undated
8. "Our Neighbors in Space," (2 copies) circa 1962
9. "The Observer's Handbook," 1964-1971
10. Collection of small books of star maps and astronomy, 1962-1973
11. "Introduction to Space Age Astronomy," with answer key, circa 1960

**Box 207** *Subject Files – Magazine Holders (Aviation History), 1919-1996*

Folder

1. Magazines, newspaper clippings, and journal articles about aviation history, (folder 1 of 6)
2. Magazines, newspaper clippings, and journal articles about aviation history, (folder 2 of 6)
3. Magazines, newspaper clippings, and journal articles about aviation history, (folder 3 of 6)
4. Magazines, newspaper clippings, and journal articles about aviation history, (folder 4 of 6)
5. Magazines, newspaper clippings, and journal articles about aviation history, (folder 5 of 6)
6. Magazines, newspaper clippings, and journal articles about aviation history, (folder 6 of 6)
7. "Report of a Board of Officers convened to report upon the New (S-2693) and Curry (H.R. 1925) Bills which propose the creation of an Executive Department of Aeronautics," August 8, 1919

**Box 208** *Subject Files – Magazine Holders [Bios and Astronauts], 1970-1980*

Folder

1. [Bios – Aero bios], resumes and CVs of aerospace professionals, (folder 1 of 3)
2. [Bios – Test Pilots], resumes and recommendations for pilots to be inducted into the Society of Experimental Test Pilots, (folder 2 of 3)
3. [Bios – Test Pilots], resumes and recommendations for pilots to be inducted into the Society of Experimental Test Pilots, (folder 3 of 3)
4. Contents of folder [Astronauts] containing biographical information and newspaper/magazine clippings about NASA astronauts, (folder 1 of 3)
5. Contents of folder [Astronauts] containing biographical information and newspaper/magazine clippings about NASA astronauts, (folder 2 of 3)
6. Contents of folder [Astronauts] containing biographical information and newspaper/magazine clippings about NASA astronauts, (folder 3 of 3)

**Box 209** *Subject Files – Magazine Holders [Centrifuge, Zero 'G'], 1959-1964 and [Comets, Asteroids], 1970-1979*

Folder

1. "Experience with a Three-Axis Side-Located Controller During a Static and Centrifuge Simulation of the Launch of a Multistage Vehicle," with photographs and diagrams, undated
2. "Apollo Centrifuge Program Outline, Phase 1," October 4, 1963, and "The Ability of Pilot's to Perform a Control Task in Various Sustained Acceleration Fields," undated
3. "Gemini Centrifuge Program Outline," Phases I and II, 1962-1964
4. "Closed-Loop Centrifuge Simulation of Space Vehicle performance," June, 1959
5. "Apollo Manned Centrifuge Program, Phase 1 Final Report," July 31, 1964
6. Reports and technical memos on zero gravity and its effects on human performance, 1961-1963
7. Memos to Aeronautics and Space Engineering Board regarding solar powered satellites, April-November, 1979
8. Academic studies of asteroids, 1970-1972
9. "Asteroids and Comets, Strategy for Exploration," February, 1972
10. "NASA Technical Memorandum: Comets and Asteroids, a Strategy for Exploration," May, 1972
11. "Pioneer Asteroid and Comet Flyby Mission Preliminary Analysis," November 30, 1971

**Box 210** *Subject Files – Magazine Holders [Energy], 1971-1979*

Folder

1. Articles on the energy crisis, the future of energy, and alternatives to fossil fuels, circa 1971-1979
2. Articles on the technology of flywheel brakes, circa 1973-1974
3. "Nuclear Waste: A Problem with a Present Solution," undated; and, "Nuclear Energy Facts," circa 1971
4. Articles and newspaper clippings regarding the energy crisis, its solutions and alternative energy, circa 1975-1979
5. Articles and newspaper clippings regarding the energy crisis, its solutions and alternative energy, circa 1971-1976
6. "The Energy Plantation," circa 1973, with correspondence from John Yeager, COB of Cincinnati Gas and Electric Company, circa 1975
7. Articles and newspaper clippings regarding the energy crisis, its solutions and alternative energy, circa 1974-1975.
8. "Solar Energy Breakthrough Gets First Testing in Texas," undated, circa 1970s
9. Articles and newspaper clippings about the energy crisis, notably a series by the Battelle Memorial Institute, circa 1973-1975
10. Informational pamphlet about gas, coal, and the energy crisis, by various corporate publishers, 1970-1974

**Box 211** *Subject Files – Magazine Holders [Humor], 1948-1992*

Folder

1. Comics featuring moon landing and space flight gags, circa 1992
2. Contents of unlabeled red folder containing clippings of humor column from various magazines and some newspapers, circa 1948-1988
3. Magazine and newspaper clippings of various humor columns and comic strips, some related to the moon landing, circa 1967-1983
4. Contents of folder [Garden], contains comic strips about the moon landing, circa 1969-1970
5. Magazine, newspaper, and comic strips of a humorous nature, some about space flight, most of a professional nature, circa 1969-1975
6. Handwritten notes by Armstrong, undated
7. Magazine, newspaper, and comic strip clippings, some about space flight, professions, and taxes, circa 1968-1974

**Box 212** *Subject Files – Magazine Holder [Large Space Structures], 1978-1979*

Folder

1. NASA reports and studies concerning the development of large space structures, their fabrication, and design, 1978-1979
2. Contents of Magazine Holder [Large Space Structures]

Item

1. "Deployable Orbital Service Platform Conceptual Systems Study,"

- March 1979
2. "Technology for Large Space Systems: A Special Bibliography with Indexes," April 1979

Folder

3. "Erectable Space platform for Space Sciences and Applications, Final Report," June 14, 1979
4. Content of Magazine Holder [Large Space Structures]

Item

1. "Thermal Expansion Properties of Composite Materials," February 1979
2. "The Technology of Large Space Systems – A Review of NASA's Program," 197

Folder

5. Contents of folder [Space], newspaper and magazine clippings, undated
6. From folder [Space]; "Bell's engineer-pilots are bringing man closer to Personal Rocket Flight," December 1964.

**Box 213** *Subject Files – Magazine Holder [Lectures – NAA, Laser Ranging, Digital FBW], 1969-1978*

Folder

1. Contents of folder [Digital Fly-by-Wire] notes, overhead projector transparencies, reports, all undated
2. Contents of folder [Laser Ranging], notes, "Science," March 1978, "Apollo 11 Preliminary Science Report," 1969
3. Contents of folder [Science Seminars], undated
4. Envelop with slides, unopened, undated

**Box 214** *Subject Files – Magazine Holder [Los Tayos], 1972-1983*

Folder

1. Correspondence with Dr. Stanley Hall regarding the Los Tayos expedition, February 1977-March 1982
2. Photographs of the exploration of Los Tayos Caves, circa 1977
3. Clippings from the *New York Times*, "Speleologists at Work," August 21, 1976
4. Christmas cards from Major C. Browile to "Neil Armstrong and Family," undated
5. Notebook with notes on the Los Tayos cave expedition, circa 1977-1978
6. Banners from the Ecuador military marking their involvement in facilitating the Los Tayos expedition, circa 1976
7. Content of [Los Tayos] folder containing correspondence with Dr. Stanley Hall, July 1976-February 1977
8. German newspaper article about Armstrong's involvement in the Los Tayos

- cave exploration, circa 1976/1977
9. Correspondence regarding Armstrong's participation in and travel arrangements to the Los Tayos cave expedition, September 1975-June 1976
  10. Follow-up correspondence from Edward Armstrong regarding Neil Armstrong's continued involvement in Los Tayos related projects, August 1975-August 1976
  11. "Caving International, No. 1," October 1978; and, "The ROAC Gazette," December 1976
  12. Correspondence to Armstrong inquiring as to the results of the Los Tayos cave expedition, September 1976-September 1978
  13. Brazilian magazine *Manchete* with an article on Armstrong's involvement in the Los Tayos expedition, June 1977
  14. "Dating of Ancient Ceramics by Means of Thermoluminescence," circa 1972
  15. "Atlas Geografica del Ecuador," 1975-1976
  16. Clipping from *The National Observer* of a review of *The Longest Cave* entitled "Cave Exploring: A Deep Subject," August 28, 1976
  17. Brief correspondence between Armstrong and Erich von Däniken regarding further exploration of the caves at Los Tayos. Armstrong declines, February 1977
  18. Photographs of findings from the Los Tayos expedition, undated
  19. Correspondence with John C. Whalley regarding impending publication of material from the Los Tayos cave expedition, November 1976
  20. Geographic map of Ecuador and the region of Los Tayos caves, circa 1976

**Box 215** *Subject Files – Magazine Holder [Lowman] and [Paul Lowman], 1991-2007*

Folder

1. "Contents of folder [Lowman], containing academic articles by Paul D. Lowman, Jr., 1979-1985
2. Articles by Paul Lowman, with correspondence, 1987-1990
3. Correspondence with Paul Lowman; includes Lowman's academic work "Lansat and Apollo: The Forgotten Legacy," 2007
4. Correspondence with Paul Lowman; includes draft of the foreword to "Exploring Space, Exploring Earth," written by Neil Armstrong, March 1995
5. "NASA Technical Memo 4757: Lunar Limb Observatory: An Incremental Plan for the Utilization, Exploration, and Settlement of the Moon," October 1996
6. Technical and academic writings by Paul Lowman on the legacy of the Apollo program in the sciences, and on the development of geology in the 20<sup>th</sup> century, circa 1996
7. Technical and academic publications by Paul Lowman on the prospect of a lunar astronomical observatory, 1991-1994
8. Correspondence with Paul Lowman regarding the foreword being written by Neil Armstrong for "Exploring Space, Exploring Earth," 1994
9. Coursebook ASE 363L, Fall 1993, The History of Space Flight

10. Correspondence and photographs from Paul Lowman about samples of lunar meteorites he had discovered; includes publication in "Meteorite," vol. 11 no. 2, May 2005
11. First Draft – For review, "Exploring Space, Exploring Earth: The Impact of Space Flight on Geophysics and Geology," 1994

**Box 216** *Subject Files – Magazine Holder [North Pole] and [Ohio], 1978-1986*

Folder

1. Maps of the Arctic region, 1983-1984
2. "Andre-Polar Expedition," notes/outline by Neil Armstrong, undated, presumed 1985-1986
3. Correspondence and photocopies of news clippings on Arctic expeditions, 1986
4. Personal correspondence with photographs from companions on the North pole expedition, 1985-1986
5. "Chapin Chalmer Expeditions – Collector's Edition, 1984/85 offerings"
6. Contents of binder, articles on arctic exploration, unknown author, undated (2 copies)
7. "Canada's Northwest Territories," 1985; with patch and an obituary of Umberto Nobile, July 31, 1978
8. Contents of folder [Ohio], containing a variety of materials on the history of the state of Ohio, undated (folder 1 of 3)
9. Contents of folder [Ohio], containing a variety of materials on the history of the state of Ohio, undated (folder 2 of 3)
10. Contents of folder [Ohio], containing a variety of materials on the history of the state of Ohio, undated (folder 3 of 3)

**Box 217** *Subject Files – Magazine Holder [Pilot Handbooks], and [Propulsion – Tabakoff], 1949-1985*

Folder

1. "Pilots Manual: 24D, Gates Learjet Corporation," June 21, 1971
2. "Pilot's Handbook for Navy Models T4U-5, -5N, -5NL, -5P Aircraft," with inactive duty training orders, signed, February 1, 1954
3. "Flight Handbook USAF Series F-51D Aircraft," January 20, 1954
4. "Pilot's Handbook for Navy Models F8F-1, F8F-1B, F8F-1N, F8F-2, F8F-2N, F8F-2P Aircraft," December 1, 1949
5. Contents of folder [Propulsion – Tabakoff], containing academic articles by W. Tabakoff, 1967-1976
6. "Trip Report on Project Stargazer II: A Manned Balloon Astronomical Laboratory," April 18, 1963

**Box 218** *Subject Files – [Read & File] and [Ref.: Review & File], 1964-2010*

Folder

1. [Read & File], miscellaneous printed materials and photographs, circa 2008-2010
2. [Ref.: Review & File], unfiled reference materials saved by Armstrong. Includes handwritten notes, articles, and newspaper clippings, circa 1969-1990
3. [Ref.: Review & File], *Master Navigators Through Time and Space*, circa 1964
4. [Ref.: Review & File], Contents of folder [Talks] with documents related to Armstrong's speech at the Gold Medal Award Dinner of the International Radio and Television Society, March, 1970
5. [Ref.: Review & File], "Newsleaf," Vol. 21, No. 2, March/April, 1987; and, "Do We Need Heros?" undated

**Box 219** *Subject Files – [Shuttle], 1970-1989*

Folder

1. "Journal of Contemporary Business: Enterprise on the *Enterprise*, Industry, Government, and Space Industrialization," circa 1978
2. NASA documents and publications on the space shuttle program, its schedule, and a brochure on "Bioprocessing in Space," 1978-1982
3. "Interim Report, Space Shuttle Trajectory Management, Navigation, Guidance, and Control During Approach and Landing," May 1970, with correspondence, April 1974
4. "Aboard the Space Shuttle," and two copies of "The Space Shuttle at Work," circa 1980
5. Publications conceptualizing potential space ports, and new developments in the shuttle program, and aeronautics in the 1970s, 1971-1975
6. "Space Shuttle," June 1972
7. "Shuttle Imaging Radar (SIR-B) Investigation of the Canadian Shield, Final Report," March 15, 1989

**Box 220** *Subject Files – Magazine Holder [Skylab, Shuttle], 1973-1978*

Folder

1. Articles, reports, and news clippings about the NASA shuttle program and Skylab, 1973-1977
2. "Former Astronauts Briefings, August 21-22, 1978, Volume 1"
3. "Former Astronauts Briefings, August 21-22 1978, Volume 2," with related correspondence and travel documents, July, 1978
4. "Skylab Experiments," Vols. 1, 3, and 4, May 1973
5. "Skylab Experiments," Vols. 5-7, May 1973

6. "Space Shuttle Research," September 1978 with "Skylab 1/2 for the Press," undated

**Box 221** *Subject Files – Magazine Holder [Soaring], 1966-1971*

1. Contents of folder [Soaring], contains correspondence and photographs related to the Bay Area Soaring Club, 1966-1972
2. Contents of folder [Houston Soaring Club], contains correspondence and photographs, 1966-1972
3. "Proceedings of the First Annual Symposium on Competitive Soaring," with three patches, March 1969
4. Contents of folder [Wasserkuppe], correspondence, 1970-1971

**Box 222** *Subject Files – [Space Benefits], 1969-1984*

Folder

1. "Spinoff: An Annual Report," 1977, 1978, 1980, and 1984
2. "Utilizing Space for All Mankind," publications by General Electric, 1971
3. "The Family of Mann – Prospects for Progress," publication by General Electric, undated, circa late 1960s
4. "Bioengineering and rehabilitation: Windows of Opportunity Past, Present, and Future," circa 1985
5. Articles on industry in space, space factories, and products made possible by space flight, 1984
6. Studies on the benefits of the NASA space programs arguing for continued investment in space flight and related technologies, 1965-1980
7. News clipping on the discovery, from space, of an ancient Egyptian riverbed and on the monetizing of space science, 1972-1982
8. "...for the benefit of all mankind," publication by General Electric, 1972
9. "...for the benefit of all mankind," publication by General Electric, 1972

**Box 223** *Subject Files – (Space for Mankind's Benefit), 1971-1978*

Folder

1. "Space for Mankind's Benefit," with archive copies of newspaper clippings, November 1971
2. Original newspaper clippings found in front cover of "Space for Mankind's Benefit," circa 1972-1973
3. "...for the Benefit of All Mankind," GE publication, undated
4. "Space Program Benefits," January 1971; and, "The Apollo Program: Was it Worth It?" with magazine clippings about the benefits of space exploration, circa 1974
5. Books from box labeled [Lunar Ref.], includes *The Moon Book* (1977), NASA

6. 1978 *Photography Index* (1978), and *Moon Madness* (1976) (folder 1 of 2)  
Books from box labeled [Lunar Ref.], includes notes and NASA photograph descriptions with handwritten notes on [Nature of the Moon], undated (folder 2 of 2)

**Box 224** *Subject Files – Magazine Holder [Space Ref.], 1963-1990*

1. Contents of an unlabeled folder in [Space Ref.] box containing a variety of articles on space technology and private space ventures, circa 1974-1990
2. Articles and newspaper clippings about the development of the US space program and astronautics, circa 1963-1989
3. Contents of folder [Morocco Talk] containing material used by Armstrong to prepare a lecture at the Royal Academy of Morocco, circa 1983-1984
4. Articles on various space related topics including astronautical technology and manufacturing in space, circa 1978-1985

**Box 225** *Subject Files – Magazine Holder [Viking, Future Missions, Planets], 1972-1981*

Folder

1. "A Grand tour: A Traveler's Guide to the Solar System," 1981; with magazine and newspaper clippings about the planets of our solar system, 1974-1979
2. "Finance: Toward Corporate Continuity in Space," April 1972; with magazine and newspaper clippings on funding space exploration, 1976-1977
3. "NASA Technical Memorandum: Comets and Asteroids, a strategy for exploration," May 1972; with magazine and journal articles on interplanetary exploration, 1976-1979
4. "Uncorrected Proof – For All Mankind: America's Space Programs of the 1970s and Beyond," with correspondence with the editor, May 3, 1974
5. NASA newsletters, news clippings, and journal articles about the future of space exploration, 1973-1978
6. Contents of folder [Viking] regarding the unmanned Viking probe sent to Mars, various dates
7. "An International Gateway to Space," informational brochures about "Earthport," a hypothetical launch site for space travel and exploration, with news clippings, December 1977
8. Magazine and newspaper clippings, and NASA newsletters about unmanned probes sent to other planets in the solar system, 1973-1978

**Box 226** *Subject Files – Magazine Holder [UFO], 1970-1986*

Folder

1. Correspondence regarding UFOs, 1975-1979

2. New items and interviews (not with Neil Armstrong) about UFO phenomena, 1975-1979
3. Bulletin News material on UFOs, undated
4. "UFO Quarterly Review," July/September 1973
5. Note from Jim Olberg to Michael Collins with an article on supposed UFO sightings during the Apollo 11 mission; Olberg debunks these UFO claims, circa late 1970s
6. Newspaper clippings on UFO sightings, February 1978-July 1983
7. "The UFO Crash/Retrieval Syndrome, Status Report 11: New Sources, New Data," January, 1980; "California UFO: a forum on extraterrestrial theories and phenomena," September/October, 1986
8. Note from Ernie Clark with photographs, undated
9. "Mufon UFO Journal," No. 207, July, 1985

**Box 227** *Subject Files – Unlabeled Magazine Holder and unlabeled folder, 1953-2001*

Folder

1. Bariwck, Dee Danner ed. *Great Words of Our Time: Memorable Thoughts of Famous Men and Women of the 20<sup>th</sup> Century*. Kansas City, MO: Hallmark Cards, Inc., 1970
2. Padula, Cindi. *Fasten Your Seat Belts: Hilarious Happenings at 35,000 Feet*. Pacific Palisades, CA: Cindi Padula, 1987. Includes correspondence, circa 1987
3. Farmer's Almanac, 1985
4. Golden, Francis Leo. *For Doctors Only*. New York: Pocket Books, Inc., 1953
5. Ward, William Arthur ed. *For This One Hour*. Anderson, SC: Droke House, 1969
6. "McCall's You-Do-It Party Book," circa 1970
7. "Keys to Money Management: Quick Answers to Common Problems in Business and Personal Finance," 1979
8. "Songs We Love to Sing – Question Club Dinner," undated
9. Contents of green file folder with information on hurricanes; includes photographs and U.S. Department of Commerce report "Hurricane," circa 1956
10. "Special Research Series: New Recommendations for Investment Strategies," February 12, 1980
11. Articles on telecommunications and a photocopied newspaper article on fraudulent "moon rocks," circa 2001

**Box 228** *Subject Files – Miscellaneous Subject Files on Space Exploration, 1970-1981*

Folder

1. Research articles and clippings related to Apollo 11, 14-17 and funding of the U.S. Space Program, circa 1970-1973
2. Research files on the exploration of space, aviation, and corporate leadership, circa 1971-1976
3. Research files on the exploration of space, aviation, and corporate leadership, circa 1972-1976
4. Research files on the exploration of space, aviation, and corporate leadership, circa 1972-1977
5. Research files on the exploration of space, aviation, and corporate leadership, circa 1973-1978
6. George Rieveschl, Jr. Writings on aviation history, Literary Club, Cincinnati Ohio, circa 1975-1981

**Box 228a** *Subject Files – Miscellaneous Subject Files on Space Exploration, 1991-2009*

Folder

1. "National Aviation Hall of Fame Newsletter," Vol. 40, No. 3, Fall 2000
2. Print outs from talk by Carroll O. Alley titled, "Laser Ranging to Retro-Reflectors on the Moon as a Test of Theories of Gravity: Does Gravitational Binding Energy Gravitare?" Engineering Colloquium, Goddard Space Flight Center, May 14, 2001
3. "Some Recent Papers on the New Theory of Gravity," a bundle of academic papers on astrophysics to supplement the Carroll O. Alley lecture above, 1991-1999
4. Article, "The Quest for Zerkura," about Laszlo Almasz, subject of the film *The English Patient*, from *Aviation History*, March 2009
5. Commencement speech (not by Armstrong) from Piedmont College given by a World War II veteran and former POW, undated

**Box 229** *Subject Files – Miscellaneous Subject Files on Space Exploration, 1967-2000*

Folder

1. Rolex Oyster certificate of standardization with booklet on GMT-Mastr Rolex aviation timepiece, circa 1969
2. "The Venus Atmosphere from the Venera 5 and Venera 6 Measurements," by V.S. Arduevsky, M. Ia. Marov, and M.K. Rozhdestvensky, USSR Academy of Science, May 25, 1970
3. Space benefits articles, pamphlets and publications, circa 1970-1973
4. "Statement of Universe Astronautics Foundation, Inc. Presented to Subcommittee on Manned Space Flight, Committee on Science and Astronautics, U. S. House of Representatives and to Committee on Aeronautical and Space Sciences, U. S. Senate," March 1974

5. Newspaper clippings, magazine articles, and newsletters about experimental aircraft and flight technology, circa 1975-1995
6. "The Developing Artificial Geography of the Solar System," unpublished paper, June 1977
7. "Exploration of the Universe: Science in Space," November 7, 1985
8. "The \$457 Astronaut," article on "HAM," a chimpanzee launched into space as part of project Mercury, November 1986
9. "Space Policy: How Technology, Economics and Public Policy Intersect," MIT working paper with correspondence, September 27, 1989
10. "Engineering and Human Welfare." Supplement to *The Bridge*, Vol. 19, No. 4, winter 1989/Spring 1990
11. "Flight Safety Foundation: Accident Prevention," Vol. 48, No. 6, June 1991
12. "Nyet. How the Soviets Lost the Race to the Moon." *New York Times Magazine*, June 27, 1999
13. "Aviation Archeology – Subsequent Investigation of the Crash of the X-15-3 Aircraft on November 15, 1967," circa January 1995
14. "X-15: The NASA Mission Reports," circa 2000, with "Aerofax Datagraph 2 – North American X-15/X-15A-2," circa 1985

**Box 230** *Subject Files – Publications, 1956-1972*

Folder

1. "Australite (Meteoric) Glass," December 1956
2. Information on Alexander P. DeSeversky and the Electronatom Corporation. Research and patents information on the "Ionocraft" flight technology with correspondence between Seversky and the U.S. government, 1960-1964
3. "The Training of Astronauts," circa 1961, with NASA memo "Apollo 11 Prime Crew Participation in Spacecraft and Flight Crew Equipment Reviews," August 7, 1969
4. NASA technical reports and brochures on the history and accomplishments of NASA, labeled [Library Sort], 1961-1985
5. "NASA: 20<sup>th</sup> Century Explorer...into the sea of space – a guide to careers in Aerospace technology," July 1966
6. "Space 15," March 1967
7. Subject Files – Publications

Item

1. "Dudley Observatory Reports: Observations of Solar Eclipses Using Sr-71A Type Aircraft, An Informal Conference Held at The Dudley Observatory, July 25-26, 1968"
2. "Summary Data on SR-71A Type Aircraft Capabilities and Limitations as an Observing Platform for Solar Eclipses and Other Scientific Studies," November 8, 1968.
3. "Preliminary Proposal of Experiments for Long Duration, High Altitude Observations of the Corona and Chromosphere During Total Solar Eclipses in the 1970s with Emphasis on the March 7, 1970 Eclipse,"

November 8, 1968

4. "Ninety Minutes of Totality!" January, 1969

Folder

8. "Congressional Record, Vol. 115, No. 148," September 16, 1969
9. Press Release, "Westinghouse TV Cameras Bring Apollo Video from Liftoff to Lunar Landscape," undated, circa 1969
10. "Lunar Mission Events Sequence," informational poster with inserts, circa 1969
11. "TRW Spacelog 1970-71," with disassembled TRW Apollo 17 Flight Data Book, undated
12. Informational Brochures on the Skylab program, circa 1970
13. NASA informational brochures, circa 1970
14. "f.e.b. panorama," January 1970
15. "Opening of the Apollo 11 School," from the Hague, January 20, 1970
16. "Soviet Space Biology and Medicine" July, 1970
17. Swiss Federal Aircraft Documents with photographs, from folder "Eidenössisches Flugzeugwerk Emmen," September 1970
18. "Skylab Program: Technical Summary Handbook," February 1971
19. "Space Resources for Teachers: Chemistry," February 1971
20. "Civil Aviation Research and Development Policy Study Report," March 1971
21. "New Foundations of Science, Discovery of Non Existence of Attraction Forces, Mistakes of Sir Isaac Newton," sent by Alec P. Peterson, March 1971
22. "Exploring in Aeronautics: An Introduction to Aeronautical Science," (with 2 copies of "Aeronautics – Space in the Seventies") circa 1971
23. "Exploring in Aerospace Rocketry: An Introduction to the Fundamentals of Rocketry," circa 1971
24. "Technology Assessment of Advanced General Aviation Aircraft," June 1971
25. "Terrestrial and Lunar Analogues of Martian Topography," September 1971
26. "Symposium: Stall/Post-Stall/Spin – 15-17 December 1971"
27. Informational brochures on NASA and the development of the space program in the 1970s and 1980s, 1971-1988
28. "Pocket Guide to the Global Satellite System," July 1972
29. "Log of Apollo 11," (25 copies) circa 1972
30. "Aircraft Gas Turbine Guide," circa 1972
31. "Information for teachers (including classroom activities) SkyLab Student Project," November 1972

**Box 231** *Subject Files – Publications, 1973-1988*

Folder

1. "Symposium on Significant Results Obtained from the Earth Resources Technology Satellite-1, Vol. 1: Technical Presentations, Section B," March 1973
2. "Final Skylab SL-1/2 Flight Plan for the SL-1 Launch Date May 14, 1973,"

April 8, 1973

3. "Meteorites, the Poor Man's Space Probe," circa 1973
4. "Motorless Flight Research, 1972," November 1973
5. "Relativistic Spaceflight and the Catalytic Nuclear Ramjet," August 1974.
6. "Apollo Lunar Surface Experiments Package (ASLEP): Five Years of Lunar Science and Still Going Strong," circa 1974
7. Articles and booklets on unmanned probe missions Pioneer and Voyager, and the strategies of solar system exploration, 1974-1980
8. "NASA Report to Educators," Vol. 2, No. 3; and Vol. 3, No. 2; December 1974-June 1975
9. "Foundations of Space Biology and Medicine – Vol. II Book 1," circa 1975
10. "Foundations of Space Biology and Medicine – Vol. II Book 2," circa 1975
11. "Foundations of Space Biology and Medicine – Vol. III," circa 1975
12. Contents of envelop labeled [Geology, Tektites, Meteorites] containing scientific papers on these subject, circa 1975-1979
13. "What's New on the Moon?" circa 1976
14. "NASA Technology for Aviation and Space," July 1976-October 1978
15. "Mission to Jupiter/Saturn," circa 1977
16. "Destination Moon: A History of the Lunar Orbiter Program," April 1977
17. "NASA Activities," Vol. 9, Nos. 7-12, July-December 1978
18. "NASA Activities," Vol. 10, Nos. 1, 3, 4, 7 (3 copies), January-July 1979
19. "Solar Powered Satellites," and "Solar powered Satellites Design Considerations," April 1978
20. "This is NASA," August 1978
21. "Solar Powered Satellite," circa 1978, with "High Energy Astronomy Observatory," undated
22. "Space Law: Selected Basic Documents, Second Edition," December 1978 w/ copy of "Selected Government Publications," catalogue
23. "Astronautics and Space Report of the President," circa 1978
24. "The Writer's guide to Nasa," circa 1978
25. "About Space & Aeronautics," (ASA-9, ASA-78-3, ASA79-(1-7), circa 1978/79
26. "We Have a Sporting Chance: The Decision to Go to the Moon," circa 1979
27. "Log of Apollo 11," June 1979
28. "NASA New, Release No. 79-55: NASA Tests New Space Maneuvering Backpack," September 10, 1979
29. "This is NASA," circa 1979
30. NASA newsletters and "Mission Reports," 1979-1988

**Box 232** *Subject Files – Publications, 1980-1987*

1. "NASA Space Systems Technology Model, Vol. I: System/Program Descriptions and Technology Needs," May 1980
2. "NASA Space Systems Technology Model, Vol. II: Space Technology Trends and Forecasts," May 1980

3. "NASA Space Systems Technology Model, Vol. III: Opportunity Systems/Programs and Technologies," May 1980
4. "First Symposium on Aviation Psychology," April 1981
5. "McDonald Observatory," circa 1981
6. "Rotation of Asteroids and Planetary Axial Rotation Theory," August 1982
7. "Great Moments in Aviation History," circa 1982
8. "The Corsair Story," undated, with "Naval Fighters Number Nine, Chance Vaught F6U Pirate," circa 1983
9. "Colonist: a bi-monthly publication of the Piedmont Advocacy for Space, vol. 3 no. 12," September/October 1984
10. "NASA Technical Memorandum 87360: Human Capabilities in Space," October 1984
11. Informational brochures and newsletter on NASA's involvement in building the international space station, the shuttle program, and lunar science, 1984-1986
12. "A Logistics Scenario for an Early Lunar Base," circa 1984, with "comparison of Alternative Strategies of 'Return-to-the-moon' CASTOR, Executive Summary," circa 1985
13. Articles stamped "with the compliments of Carl Sagan," all by Carl Sagan, circa 1985
14. "NASA Conference Publication 2342 Part 1: Space Shuttle Technical Conference," circa 1985
15. "NASA Conference Publication 2342 Part 2: Space Shuttle Technical Conference," circa 1985
16. "Voyager 1986 – Press Kit," with note of thanks and photographs of Uranus, January 1986
17. "The Origin of Petroleum," February 1986
18. "American Institute of Aeronautics and Astronautics, Top Section Newsletter 1984-1985," October 1986
19. "Voyager 1986," circa 1986
20. "Spacewatch, vol. 5 no. 5," May 1988
21. "NASA Tech Briefs, vol. 12 no. 8," September 1988, with correspondence regarding the availability of NASA publications to Armstrong, October 20, 1988
22. "The Voyager Neptune Travel Guide," June 1, 1989
23. "Flight Operations Reunion for the 20<sup>th</sup> Anniversary of the First Manned Lunar Landing," circa 1989
24. "NASA Facts" series: "Earth Resources,"; "The planet Venus,"; "The Voyager Mission," 1977-1989
25. Excerpts prepared for delivery by various NASA representatives, February-June 1987 (folder 1 of 3)
26. Excerpts prepared for delivery by various NASA representatives, June 1987-March 1988 (folder 2 of 3)
27. Excerpts prepared for delivery by various NASA representatives March 1988-1989 (folder 3 of 3)
28. "Transcript of Apollo 11 and Apollo 17 Air-to-ground, Ground-to-air

- 29. Communications," corrected, with correspondence, March 12, 1990  
"Mercury: The Journal of the Astronomical Society of the Pacific, Vol. XIX, No. 5, Sept./Oct. 1990," with correspondence regarding USX Foundation grants and the Lowell Observatory, circa 1991
- 30. "A Concise History of the X-15 Research Airplane," December 1999
- 31. "Energy Management of Manned Boost-Glide Vehicles: A historical Perspective," May 2004
- 32. Materials related to the federal take-over of Chrysler following its bankruptcy, circa 2011

**Box 233** *Subject Files – Publications (Undated)*

Folder

- 1. "The Case for Adaptive Controls," undated
- 2. "Mercury: The Journal of the Astronomical Society of the Pacific, Vol. XIX, No. 5," September/October 1990, with correspondence regarding the USX Foundation grants and the Lowell Observatory, circa 1991
- 3. Printout of information on the Lunar Module control panels, undated
- 4. "The Promise of Astrophysical Observations Conducted from Space," undated.
- 5. "Spacestation, the Next logical Step," undated
- 6. Transcripts of Apollo 11 Air-to-ground, Ground-to-air communications, with corrections, undated
- 7. "Way Outer Space, with Dick Shaw," undated

**Sub-series 2. Active Subject Files, 1943-2012**

(13.2 cubic feet)

**Sub-series Description:** The active subject files were located in Neil Armstrong's office filing cabinets. The files were left in Armstrong's original arrangement of order which was roughly alphabetical by subject. Found within the files are reference material, and correspondence. This includes a range of topics including hobbies, his biography files, requests for forewords for books, museum information, error corrections, autograph requests, business pursuits, personal medical/physiology files, policies, and various other items of personal interest.

Also of note are the files on astronauts [ASTRONAUTS]; which include correspondence related to Apollo 11 lunar surface photography, astronaut policy information, such as policies on the Personal Preference Kit (PPK), policies on appearances, assignments, standards of conduct and other related policies to which the astronauts were held. Also among the astronaut files are scholarship information, reunion, launch information, budget analysis, International Space Station, Mars, Hubble, and Clementine Mission.

Located at the end of the series is correspondence to and from those who appeared to have a unique or ongoing relationship with Armstrong, including correspondence and miscellaneous items from Upper Sandusky and Wapakoneta, Ohio, including Armstrong's high school yearbook. There are also some e-mails from his later years among this correspondence.

Please note that some boxes are restricted, and one must consult with an archivist before use.

**Box 234** Some **[RESTRICTED MATERIAL]** Active Subject Files - 1952-2000s

Folder

1. [ASTRO SCHOL. FDN/AHF] (Astronaut Scholarship Foundation/Astronaut Hall of Fame, correspondence, e-mails, reading material, including "Astrograms") circa 2000s
2. [AUTOS] [CARS SOLD], receipts and bills of sale, 1952-2003 (folder 1 of 3)
3. [AUTOS] [Motorcycles/Boats, Trailers], information, registration, maintenance on Armstrong's vehicles, 1970-1971 (folder 2 of 3)
4. [AUTO STUFF] various materials about cars, OnStar, Ohio motor vehicle laws and news clippings, 1994-2002 (folder 3 of 3)
5. [BIO] information about Armstrong from various sources, includes one color photograph of him, circa 1960s-2000s (includes one manuscript; Susanjar, R.L. (1969, December). *A comparative study of the early lives of Christopher Columbus and Neil Alden Armstrong*, some correspondence attached)
6. [Books] information about various books of interest to Armstrong, correspondence and e-mails from others suggesting books of interest, circa 1980s-2000s
7. **[RESTRICTED MATERIAL]** [CAMARGO] receipts, brochures, member recommendations and miscellaneous material in regards to The Camargo Club (country club) for which Armstrong was a member, circa 1990s-2000s
8. [COLLECTIBLES] mainly consists of information (clippings) on collectible cars and "Collectors Corner" column from *portfolio*, Fifth Third Banks' newsletter, circa 1980s-1990s
9. **[RESTRICTED MATERIAL]** [EASTWOOD] Correspondence related to Clint Eastwood, 2003
10. Employment Applications and related materials, 1955-1967. Includes Personnel Security Questionnaire July 26, 1955; Application for Federal Employment June 27, 1962 and Security Investigation Data for Sensitive Position June 28, 1962; Security Investigation Data for Sensitive Position circa 1967
11. [ERRORS] correspondence and clippings in regards to "false information," circa 1970s-2000s
12. [Game Rules - Sports] various golf brochures (rules) and other games, circa 1980s-2000s

**Box 235** Some [RESTRICTED MATERIAL] Active Subject Files - circa 1980s-2005

Folder

1. [GOLF Tours] correspondence in regards to tournaments Armstrong participated in, includes some color photographs of participants, circa 1980s-2000s
2. [GOLF] correspondence, brochures and clippings (including technique), a few color photographs and miscellaneous golf related material (including 2 menus with autographs), circa 1990s-2000s (folder 1 of 2)
3. [GOLF] correspondence, brochures and clippings (including technique), a few color photographs and miscellaneous golf related material, circa 1980s-2000s (folder 2 of 2)
4. [RESTRICTED MATERIAL] [HANSEN] Contracts and publicity related to Armstrong's biography; *First Man: The Life of Neil A. Armstrong*, written by James R. Hansen and a possible motion picture based on the book, circa 2003-2005 (folder 1 of 3 includes 2 color photographs of James Hansen at Purdue University Libraries Distinguished Lecture Series in 2005)
5. [HANSEN] includes Hansen's Armstrong interview notes, a clipping; "AU prof pours 'everything' into Armstrong bio," and miscellaneous material, circa 2002-2005 (folder 2 of 3)
6. [RESTRICTED MATERIAL] [HANSEN] interview material, correspondence between Armstrong and Hansen, including second version of book agreement, circa 2001-2005 (folder 3 of 3)

**Box 236** Some [RESTRICTED MATERIAL] Active Subject Files - circa 1970s-2000s

Folder

1. [RESTRICTED MATERIAL] [HANSEN E-MAIL] correspondence between Hansen and Armstrong in regards to the book, 2002-2004
2. [HANSEN] "The Worst Loss," Chapter Draft, circa 2003
3. [HUB-IN-THE-AIR] clippings and notes related to airlines, circa 1980s-1990s
4. [HUNTING] brochures, correspondence and miscellaneous items in regards to Armstrong's hunting hobby, circa 2000s (folder 1 of 2)
5. [HUNTING] brochures, correspondence, a few color photographs, album titled, "The Cinci Honchos Visit Delta Wings 2001" and miscellaneous items in regards to Armstrong's hunting hobby, circa 1980s-2001 (folder 2 of 2)
6. [RESTRICTED MATERIAL] [LEBANON] items related to Lebanon, Ohio and Warren County; YWCA brochure, clippings about people and places, brochures and miscellaneous items, circa 1980s-2000s
7. [MUSEUM] correspondence, clippings and brochures related to Armstrong's involvement with various museums, includes lists/appraisal of donated items, circa 1970s-2000s

**Box 237** Some [RESTRICTED MATERIAL] *Active Subject Files - circa 1960s-2000s*

Folder

1. [VF-51] correspondence, clippings, photographs, related to Armstrong's former squadron, along with biography and photograph of "Captain Marshall U. Beebe, USN Commanding Officer, USS Bon Homme Richard (CVA-31)" circa 1990s-2000s
2. [SOARING] correspondence, clippings and brochures related to Armstrong's gliding hobby, many involving the Barron Hilton Cup, Flying M. Ranch, circa 1990s-2000s (folder 1 of 3)
3. [SOARING] soaring award certificates (gold/silver badge and applications, circa 1964), soaring license, correspondence, clippings, brochures, newsletters and photographs related to Armstrong's gliding hobby, circa 1960s-2000s (folder 2 of 3)
4. [SOARING] correspondence, clippings, brochures and photographs related to Armstrong's gliding hobby, circa 1960s-2000s (folder 3 of 3)
5. [RESTRICTED MATERIAL] [PMT] PMT LTD. (name of production company) documents related to making of *First Flights* television documentary series, including compensation information, circa 1990s-2000s
6. [RESTRICTED MATERIAL] [PHYSIOLOGY] health and medical clippings and reading material, includes some medical test results, circa 1990s-2000s
7. [WINGS CLUB] correspondence and a copy of Armstrong's speech for the 25<sup>th</sup> Wings Club General Harold R. Harris 'Sight' Lecture; Wingless On Luna, circa 1980s
8. [SSBJ] Supersonic Business Jet, printed material, circa 2000s

**Box 238** *Active Subject Files - circa 1970s-2000s*

Folder

1. [ASTRO REUNION] correspondence and information from August 23, 1996 reunion
2. [ASTRONOMY] related clippings, brochures, newsletters, circa 1980s-2000s
3. [CLEMENTINE] (joint mission between NASA and the Department of Defense, mainly to test the latest in space-based imaging components) A *Clementine Collection: Moonglow*. Washington, D.C.: Naval Research Laboratory (sampling of 1.8 million images acquired by the *Clementine* spacecraft); printed material, black and white and color images, circa 1990s
4. [COMPUTERS] clippings, printed material and some Armstrong notations, circa 1990s
5. [ENERGY] printed material, circa 1970s-2000s
6. [ENVIRONMENT] brochures and printed material, circa 1970s (folder 1 of 2)
7. [ENVIRONMENT] clippings and printed material, circa 1970s (folder 2 of 2)

**Box 239** *Active Subject Files - circa 1980s-2000s*

Folder

1. [FUSION] correspondence and clippings, circa 1990s
2. [GENETICS] Clippings and 2 publications; *Genetic Engineering and the Engineer. A symposium at the seventh annual meeting, November 5, 1981.* Washington, D.C.: National Academy Press; Parent Project Muscular Dystrophy. I. Basic Genetics For DMD, II. Muscle Structure/Function And DMD, circa 1990s-2000s
3. [GLOBAL WARMING] clippings and printed material, circa 1980s-2000s
4. [GRAVITY] clippings, 1980s-1990s
5. [HUBBLE] clippings, printed material and 2 publications; *Exploring the Universe with the Hubble Space Telescope.* National Aeronautics and Space Administration. Washington, D.C.: Government Printing Office. (2 copies) and *Hubble Space Telescope: Update: 18 Months in Orbit.* National Aeronautics and Space Administration. (no publication information available), circa 1990s-2000s
6. [IMPACT] (asteroid impact), clippings, circa 1990s
7. [LAUNCHES] one clipping and one magazine article, circa 1990s
8. [LUNAR BASE] printed material, one clipping and 2 publications; Roberts, B. B. (1987, March 5). *Lunar Bases In The 21<sup>st</sup> Century: The First Step Towards Human Presence Beyond Earth.* Johnson Space Center, Houston: National Aeronautics and Space Administration. and Duke, M. B.; Mendell, W. W.; Keaton, P.W. (1984). *Report of The Lunar Base Working Group.* Los Alamos, New Mexico: Los Alamos National Laboratory.
9. [MARS] clippings and printed material, circa 1980s-2000s (folder 1 of 2)
10. [MARS] NASA images and negatives, clippings, printed material, including three papers; Fletcher, J.C. (1987, July 20). *Excerpts from remarks prepared for delivery: Case for Mars III Conference,* Boulder, Colorado; Loftus, J.P.; Roberts, B.B.; Duke, M.B. *Technology for manned Mars flight;* and Keaton, P.W. (1985, September). *A moon base/Mars base transportation depot.* Los Alamos, New Mexico: Los Alamos National Laboratory, circa 1980s-1990s (folder 2 of 2)

**Box 240** *Active Subject Files - circa 1970s-2000s*

Folder

1. [METRIC] one article; Browne, M.W. (1996, June 4). Kinder, Gentler Push for Metric Inches Along. *The New York Times.* pp. B5, B8.
2. [MOON] clippings, newsletters, printed material and maps, circa 1970s-1990s
3. [MUSEUM, AVIA.] information related to various aviation museums, circa 1990s-2000s (folder 1 of 4)
4. [MUSEUM, AVIA.] information related to various aviation museums, circa 1990s-2000s (folder 2 of 4)

5. [MUSEUM, AVIA.] information related to various aviation museums, circa 1990s-2000s (folder 3 of 4)
6. [MUSEUM, AVIA.] information related to various aviation museums, circa 1990s-2000s (folder 4 of 4)

**Box 241** *Active Subject Files - circa 1970s-2000s*

Folder

1. [OZONE] correspondence, clippings and printed material, circa 1970s-1990s (folder 1 of 2)
2. [OZONE] printed material, circa 1970s-1990s (folder 2 of 2)
3. [PLANETARIUM] one article; Gelernter, D. (1995, March 5). The End Of Dignity. *The New York Times OP-ED*, p. E15.
4. [POPULATION] clippings, circa 1990s
5. [PROBES] clippings and printed material, circa 1980s-1990s (folder 1 of 2)
6. [PROBES] clippings, printed material and three publications; (1993). *Magellan: Revealing the face of Venus*. Pasadena: National Aeronautics and Space Administration, Jet Propulsion Laboratory, California Institute of Technology. (1980). *Voyager 1 encounters Saturn*. Pasadena: National Aeronautics and Space Administration, Jet Propulsion Laboratory, California Institute of Technology; *Planetary exploration through year 2000: a Core program: part one of a report*. NASA Advisory Council. Solar System Exploration Committee. United States National Aeronautics and Space Administration. (1983). Washington, D.C.: NASA. circa 1970s-1990s (folder 2 of 2)
7. NASA Technical Memorandum, "Role of Research Aircraft in Technology Development, by Kenneth J. Szalai, November 1984; Correspondence; NASA Advisory Council, Distinguished Public Service Medal received by Armstrong, 2008; Draft, "Report Outline and Draft, Taking Flight - NASA's Aeronautics Flight Research Program," 2011; "Straw Findings and Recommendations Taking Flight - NASA's Aeronautics Flight Research Program," undated
8. [PROPULSION] clipping and *NASA Briefs*, circa 2000s
9. [SAVINGS BONDS] various publications related to history of the United States Savings Bonds Program, a speech Armstrong wrote for "Savings Bond Kickoff," clippings and one letter, circa 1990s
10. [SCIENCE] clippings and printed material, circa 1970s-2000s

**Box 242** Some [RESTRICTED MATERIAL] *Active Subject Files - circa 1960s-2000s*

Folder

1. [SDI] Strategic Defense Initiative, circa 1990s
2. [SPACE HISTORY] clippings and printed material, circa 1960s-2000s

3. [STATION] International Space Station, various clippings, publications and printed material, circa 1980s-2000s
4. [Tell Me.] information and news articles on the developing integration of phone and internet services, circa 2000-2001
5. [TIME] clippings and printed material, circa 1990s-2000s
6. [RESTRICTED MATERIAL] [CANCELLED BUSINESS DEALS] correspondence, circa 1990s (folder 1 of 2)
7. [RESTRICTED MATERIAL] [CANCELLED BUSINESS DEALS] correspondence, circa 2000s (folder 2 of 2)
8. [RESTRICTED MATERIAL] [COPYRIGHTS] various documents concerning copyright information, including a few Armstrong contracts/certificates of registration agreements and correspondence, circa 1980s-2000s

**Box 243** Some [RESTRICTED MATERIAL] *Active Subject Files - circa 1970s-2000s*

Folder

1. [RESTRICTED MATERIAL] [PROJ. DIED] 2005
2. [RESTRICTED MATERIAL] [INFO REQUESTS] correspondence sent to Armstrong to verify facts about his life or obtain other information, circa 2000s
3. [ASEB] Committee to Assess NASA's Aeronautics Flight Research Capabilities; correspondence, meeting information, Armstrong's notes, 2 original folders and CD containing presentations, circa 2011
4. Apollo 11 lunar surface photography, includes a report, correspondence in regards to and miscellaneous material; correspondence in regards to a book honoring Walter Cronkite; USS Arlington reunion material, 1987-2010 (items were in the same original folder)
5. "General Atomics Aeronautical" folder containing company and product information, along with VF-51 reunion agenda and roster information, 2012
6. [Books, Prints, Appearances, Signatures] correspondence, clippings and miscellaneous material, circa 1970s-2000s
7. "Making A Difference: The conclusion of 23 years of explaining to future generations wonders and beauty of the universe and traveling through it," by Georg Von Tiesenhausen, February 3, 2011
8. Alumni Directory, prepared for NASA Alumni League Members, 1996
9. "NASA Human Spaceflight Budget Analysis, FY08-15," and related documents, February, 2010

**Box 244** *Active Subject Files - primarily correspondence, circa 1967-2012*

Folder

1. Goddard Memorial Dinner, correspondence related to it, 1976
2. American Association of Engineering Societies Chair's Award,

- correspondence related to award, 2000
- 3. Wright Brothers Memorial Trophy, correspondence related to award, including congratulatory letter from President George W. Bush, 1969-2002
- 4. Program, Rotary National Award For Space Achievement, Eighteenth Annual Awards Banquet, March 11, 2004 (features Armstrong)
- 5. Issue of *Engineering Inc.* features Armstrong on cover, "ACEC's Distinguished Award of Merit Honoree, Neil Armstrong," Volume 16, No. 3, May/June 2005
- 6. "Inside the Russian Space Program," October 1 – 11, 2008
- 7. "Von Braun" Heavy Lift Development Model, circa 2010
- 8. Issue of *On Patrol* (the magazine of the USO), includes the article, "The Tour of Legends," for which Armstrong was a part. Also includes an itinerary outline for "Armed Forces Entertainment - Legends of Aerospace II" tour, 2010
- 9. Miscellaneous printed material, some featuring Armstrong, circa 1990s-2000s
- 10. Correspondence, Purdue related, one from Ralph E. Bailey in regards to Bailey Hall and an issue of Purdue University *Aerogram*, from Armstrong dedication weekend, 2008-2011
- 11. Correspondence, Barron Hilton, 2010-2012
- 12. Correspondence, to the Honorable Jean Schmidt, M.C., signed thank-you from Armstrong in regards to package sent by Schmidt, upon Armstrong's receiving the Congressional Gold Medal, January 7, 2012
- 13. Correspondence, miscellaneous, includes card from Sully Sullenberger III, circa 1967-2005
- 14. Correspondence, miscellaneous, November 2007-September 2010
- 15. Correspondence, miscellaneous, October 2010 - June 2012

**Box 245** *[RESTRICTED MATERIAL]* Active Subject Files, Gemini 8 and Apollo 11 Correspondence, Schedules, and One Clipping, Astronaut Private Correspondence, Clippings, Memorial Programs, NASA Flight Crew Photographs, Photographs, circa 1970s-2000s

Folder

- 1. Gemini 8 and Apollo 11 correspondence, schedules, and one clipping; "Astronaut given a bit of Samoa," by Jane McKinney (includes six items Armstrong singled out for his active files) 1966-1969 (left in original folder)
- 2. [Dave Scott] 2003-2004
- 3. [ASTRONAUTS] circa 1970s-2000s (folder 1 of 3)
- 4. [ASTRONAUTS] circa 1970s-2000s (folder 2 of 3)
- 5. [ASTRONAUTS] circa 1970s-2000s (folder 3 of 3)
- 6. [BUZZ] circa 1990s-2000s
- 7. [ASTRO MAIL] circa 1980s-2000s (last items in folder are three reproduced Apollo 11 patches signed by Armstrong, Aldrin and Collins)
- 8. [STAFFORD] Omega Speedmaster watch information, 1998

**Box 246** *Active Subject Files - [POLICY], [ASTRO POLICY] and [SIGNATURES], circa 1960s-2000s*

Folder

1. [POLICY] includes policy on Personal Preference Kits (personal items taken into space, gifts, autographs, etc., circa 1960s-1990s (folder 1 of 2)
2. [ASTRO POLICY] includes policy on appearances, mail, assignments, launch invitations, personal preference kits (PPKs), NASA employees standards of conduct brochure, publications, etc., circa 1960s (folder 2 of 2)
3. [SIGNATURES] correspondence and miscellaneous material in regards to Armstrong's autograph, circa 1980s-2000s (folder 1 of 3)
4. [SIGNATURES] correspondence and miscellaneous material in regards to Armstrong's autograph and includes a copy of a photograph signed by Armstrong, Chaffee, Grissom and other astronauts, circa 2000s (folder 2 of 3)
5. [SIGNATURES] correspondence and miscellaneous material in regards to Armstrong's autograph, circa 1970s-2000s (folder 3 of 3)
6. "Program Next-Generation Suborbital Researcher Conference, February 27-29, 2012," "Neil, Meet us in lobby. ☺," penciled on inside back cover

**Box 247** *Active Subject Files - Correspondence, Organization Related and Miscellaneous, circa 2007-2012*

Folder

1. [Israel] correspondence and travel details in regards to Armstrong's trip to Israel, 2007
2. [To Purdue] (front) - [Signed JFK Letter] (back) - correspondence from Juli Steele regarding her gift of a signed letter from then Senator John F. Kennedy, letter circa 1958; gift and correspondence circa 2007
3. [Legends] correspondence and information on Armstrong's participation in the "Legends of Aerospace Tour," visiting U.S. troops in Southwest Asia, 2009-2010
4. [EPNAA - USNA] correspondence, information, travel plans and remarks made at Armstrong's induction into the Naval Aviation Hall of Honor at the National Museum of Naval Aviation, circa 2009-2010
5. [Armstrong Museum] newspaper clipping about new management at Armstrong Air and Space Museum, with booklet outlining fundraising goals, 2010
6. [Corresp.] Lunar Receiving Laboratory dedication, 2010
7. [Flying Midshipman, Pensacola, 5/5/09] and Armed Forces Entertainment Tour, 2010 (includes 2009 speech)
8. [NFA-PNS 5/10] correspondence and travel directions to the National Flight Academy, 2012
9. [CPA Australia] Notes, itinerary and news story about Armstrong's interview, Australia, June 2012

10. Correspondence, CBS News, to Scott Pelley, 60 Minutes, cc: Elon Musk, Mitch Weitzner, to address erroneous statements (Space X) made by CBS during 60 Minutes on March 25, 2012

**Box 248** *Active Subject Files* - [C-216] Minutes of the Meetings of the Board of Directors of Space Holding Corporation, [Eaton ?], [Airplanes], [Misc. Orgs.] and [AIAA] American Institute of Aeronautics and Astronautics, 1965-2007

Folder

1. [C-216] - Minutes of the Meetings of the Board of Directors of Space Holding Corporation, March 2002-2005
2. Correspondence regarding Space.com, December 1999-February 2000
3. [Eaton ?] Correspondence with Russell Meyer and William Butler, December 1992
4. Eaton, Aircraft analysis and other paperwork for the "Cessna Citation V aircraft and the Learjet 31A & 31A/ER," November 1992
5. [Airplanes] Information on various kinds of aircraft and on world record holders in flight, 1965-1990
6. [Misc. Orgs.] Correspondence with American Astronautical Society, 2001-2006
7. [AIAA] Correspondence and other information concerning Armstrong's involvement with the American Institute of Aeronautics and Astronautics, 1971-2007

**Box 249** *Active Subject Files* - [Amer. Philosophical Soc.] American Philosophical Society and [Assoc. Space Expl.] Association of Space Explorers, 1982-2003

Folder

1. [Amer. Philosophical Soc.] documents regarding Armstrong's membership in the American Philosophical Society, 2003-2008 (folder 1 of 4)
2. [Amer. Philosophical Soc.] documents regarding Armstrong's membership in the American Philosophical Society, 2003-2008 (folder 2 of 4)
3. [Amer. Philosophical Soc.] documents regarding Armstrong's membership in the American Philosophical Society, 2003-2008 (folder 3 of 4)
4. Information on the American Philosophical Society and the Philadelphia area, filed inside front cover of National Aviation Hall of Fame's, *Heroes & Legends Magazine*, 2003-2008 (folder 4 of 4)
5. [Assoc. Space Expl.] documents regarding Armstrong's involvement in the Association of Space Explorers, 1982-2008

**Box 250** *Active Subject Files* - [C&C] Commercial Club of Cincinnati and [Conquistadores] "Conquistadores del Cielo" Club, 1964-2010

Folder

1. [C&C] contains documents related to Armstrong's involvement in the Commercial Club of Cincinnati, 1977-2007 (folder 1 of 2)
2. [C&C] contains documents related to Armstrong's involvement in the Commercial Club of Cincinnati, circa 1964-2010 (folder 2 of 2)
3. [Conquistadores] rosters and pamphlets for the "Conquistadores del Cielo" Club, 1973-2006 (folder 1 of 4)
4. [Conquistadores] correspondence related to Armstrong's membership in the "Conquistadores del Cielo" Club, 1996-2007 (folder 2 of 4)
5. [Conquistadores] correspondence related to Armstrong's membership in the "Conquistadores del Cielo" Club, 1978-2001 (folder 3 of 4)
6. [Conquistadores] documents related to the initiation ceremony of the "Conquistadores del Cielo" Club, 1982-2002 (folder 4 of 4)

**Box 251** *Active Subject Files - [EPNAA] "Early and Pioneer Naval Aviators Association - Golden Eagles," [E.A.A.] Experimental Aircraft Association, [Explorers Club], [Flying Midshipmen Association], [N.A.E.] National Academy of Engineering and [Natl. Acad. Air & Space], 1969-2011*

Folder

1. [EPNAA] documents and correspondence related to Armstrong's membership in the "Early and Pioneer Naval Aviators Association - Golden Eagles," 1999-2011
2. [E.A.A.] documents and correspondence related to Armstrong's membership in the Experimental Aircraft Association, 1993-2003
3. [Explorers Club] documents and correspondence related to Armstrong's membership in the Explorer's Club, 1969-2004
4. [Flying Midshipmen Association] documents and correspondence related to Armstrong's membership in the FMA, 1985-2011
5. [N.A.E.] documents and correspondence regarding Armstrong's membership in the National Academy of Engineering," 2000-2008 (folder 1 of 2)
6. [N.A.E.] documents and correspondence regarding Armstrong's membership in the National Academy of Engineering," 1978-2003 (folder 2 of 2)
7. [Natl. Acad. Air & Space] brochure and membership certificate, 1983-2003

**Box 252** *Active Subject Files - [NAE Round Table], [NASA Alumni League] and [Phi Delta Theta], 1955-2009*

Folder

1. [NAE Round Table] information regarding funding for the National Academy of Engineering, circa 2001-2002 (folder 1 of 2)
2. [NAE Round Table] information regarding funding for the National Academy of Engineering, circa 2001-2002 (folder 2 of 2)
3. [NASA Alumni League] correspondence, newsletters and directories relating

- to the NASA Alumni League, 1988-2006
4. [Phi Delta Theta] correspondence, photograph and documents relating to Armstrong's membership in Phi Delta Theta, 1955-2009 (folder 1 of 3)
  5. [Phi Delta Theta] correspondence and documents relating to Armstrong's membership in Phi Delta Theta, 1967-2009 (folder 2 of 3)
  6. [Phi Delta Theta] "Songs of Phi Delta Theta," 1948; "Manual of Phi Delta Theta," 1951; member directory, 2009 (folder 3 of 3)

**Box 253** *Active Subject Files - [Purdue] material related to Armstrong's fund-raising efforts, 1995-2008*

Folder

1. [Purdue] material related to Armstrong's fund-raising efforts, "Campaign for Purdue," 2006-2008 (folder 1 of 4)
2. [Purdue] material related to Armstrong's fund-raising efforts for Purdue, 1995-2006 (folder 2 of 4)
3. [Purdue] material related to Armstrong's fund-raising efforts for Purdue, 2006-2008 (folder 3 of 4)
4. [Purdue] material related to Armstrong's fund-raising efforts for Purdue, "Campaign for Purdue," appreciation book, 2007 (folder 4 of 4)

**Box 254** *Active Subject Files - [Purdue ENGR], [Rookwood], [Spectrum], [SETP], [Union League], [Warbird Mus.], [Wings Club], 1966-2012*

Folder

1. [Purdue ENGR] materials related to developments in Purdue's engineering programs, 1966-2007 (folder 1 of 2)
2. [Purdue ENGR] materials related to developments in Purdue's engineering programs, 1995-2006 (folder 2 of 2)
3. [Rookwood] correspondence related to Armstrong's membership in the Rookwood Historical and Philosophical Society (a poker club), 2005-2012
4. [Spectrum] documents related to Spectrum 33 jet test flights, for which Armstrong was a consultant, 2004-2007
5. [SETP] materials related to Armstrong's membership in the Society for Experimental Test Pilots, 1996-2007
6. [Union League] material related to Armstrong's induction into the Union League Club and receipt of the American Experience Award, 2006
7. [Warbird Mus.] materials related to Armstrong's support of the Tri-State Warbird Museum in Batavia, Ohio, 2005-2008
8. [Wings Club] information regarding Armstrong's membership in the Wings Club, 2000-2002

**Box 255** *Active Subject Files - [Upper Sandusky], 1943-2009*

Folder

1. Upper Sandusky High, Indian Village Annual, (Armstrong in eighth grade) 1943
2. [Upper Sandusky] Correspondence, 1965-2009
3. [Upper Sandusky] Clippings (one includes front page feature on Armstrong's boyhood home) circa 1998-1999
4. [Upper Sandusky] photographs, classmates, circa 1997-2002
5. [Upper Sandusky] programs, 50<sup>th</sup> Anniversary of 1943 football team, Class of 1947 50<sup>th</sup> Anniversary, 1993-1997
6. Booklet and pin, "Upper Sandusky, Ohio, 1848-1998" 1998
7. "Remember Who...Remember Where? A Historical Perspective of The Businesses Located in Downtown Upper Sandusky, Ohio," as compiled by Mary Jane Constein, © 2006

**Box 256** *Active Subject Files - [Wapak], 1947-2009*

Folder

1. *The Retrospect*, Volume XXXX, published by the Class of 1947, Blume High School, Wapakoneta, Ohio, Auglaize County (Armstrong's senior year, senior picture caption, "He thinks, he acts, 'tis done."), 1947
2. [Wapak] Correspondence from acquaintances in Wapakoneta, Ohio to Armstrong, 1967-2009
3. [Wapak] Clippings, (includes 20<sup>th</sup> Anniversary of Apollo 11 Lunar Landing commemorative issue of *Wapakoneta Daily News*, some clippings are undated) 1973-2007
4. Pennants; Apollo 11, 25<sup>th</sup>, 1969-1994, "Wapakoneta, Ohio - Home of Astronaut Neil Armstrong," and one with picture of Armstrong on it, 1994
5. Blume High School, Class of 1947 reunion material and photographs, 1977-2007

**Box 257** *Active Subject Files - Correspondence, [A] - [L], 1946- 2012*

Folder

1. A - D, 2010-2012
2. [E] 1969-2011
3. [F] 1970-2009
4. G, 2008
5. [H] 1946-2011
6. [I] 1979-1994
7. [J] 1967-2011
8. [K] 1967-2012
9. [L] 1968-2010

**Box 258** *Active Subject Files - Correspondence, [M] - [R], 1965-2012*

Folder

1. [M] 1965-2012
2. [N] 1968-1999
3. [O] 1983-2008
4. [P] 1968-2011
5. [Q] 1987
6. [R] 1967-2000

**Box 259** *Active Subject Files - Correspondence, [S] - [Apollo 11 40<sup>th</sup> Anniversary Declinations] (e-mails), 1966-2012*

Folder

1. [S] 1969-2012
2. [Siegfried] 2001-2004
3. [T] 1966-2010
4. [U] 1968-1986
5. [V] 1975-2004
6. [W] 1969-2008
7. [X] 1981-2009
8. [Z] 1978-2012
9. [Apollo 11 40<sup>th</sup> Anniversary Declinations] (e-mails) 2009

**Series 10. Personal Correspondence, 1970-2012**

(32.4 cubic feet)

**Series Description:** The personal correspondence files consist of incoming letters, cards, requests and copies of replies dating from 1970-2012. Much of this correspondence could be considered fan mail and is global in scope. Please note that personal correspondence prior to 1970 that related directly to Neil Armstrong's Gemini and Apollo missions can be found in Series I, "NASA Career." Also please note that some of the correspondence from Armstrong's later years can be found among the active subject files in Series 9. Subject Files. The correspondence in Series 9 is primarily characterized by being with those Armstrong had an ongoing relationship.

In this finding aid the text in [ ] is exactly as Armstrong and his assistants had the files labeled. Much of the correspondence was arranged alphabetically by the sender's last name or organization name. Found within the series are binders; [NASA FORM LTRS] and [Form Letters] "and codes," which were used when a standard reply was indicated by Armstrong.

The correspondence is arranged into six sub-series: Completed Correspondence, 1970-1979; [OFF-Sort and P.R.], 1970-1980; Correspondence from Organizations and Schools, 1971-1974; Invitations, Requests and General Correspondence, 1977-1983; Miscellaneous Correspondence, 1970-1994 and Correspondence, Post-University of Cincinnati, 1970-2012. A detailed description of each sub-series precedes the listing for each.

Whenever possible, the personal correspondence has been maintained according to the designated categories established by the secretary who handled Armstrong's correspondence during their respective years of employment. Per notations on the correspondence, the following secretaries took care of Armstrong's correspondence that came through NASA, Office of Public Affairs; "S.B. Weber" took care of the replies from 1970-1971; "(Mrs.) Geneva Barnes, Secretary to Mr. Armstrong," 1971-1972; "(Mrs.) Fern Lee Pickens, Office of Public Affairs," 1972-1973. Letters needing translation were sent to "KSS/ Mr. Nagurney."

Secretaries at the University of Cincinnati who handled Professor Armstrong's correspondence were, Ruta Bankovskis, 1971-1973; (Miss) Luanna J. Fisher, 1974-1975, and 1976-1979 correspondence was handled by Elaine Moore. In 1974 Armstrong begins to refer requests for non-academic appearances to: Mr. Thomas Stix, Stix and Gude, 30 Rockefeller Plaza, New York, New York 10020. In 1980 Armstrong hired Vivian White as his administrative aide, and she managed the correspondence throughout Armstrong's later years.

### **Sub-series 1. Completed Correspondence, 1970-1979** (10.4 cubic feet)

**Sub-series Description:** The completed correspondence consists of letters from individuals for which some kind of reply was made or an autograph was sent. Most of the letters were written by youth, with correspondence from adults interspersed. The files are arranged in alphabetical order by sender. The letters within each file remain in original order. Also located within this sub-series is a binder labeled [NASA FORM LTRS].

Per notations on the correspondence, "S.B. Weber" took care of the replies from 1970-1971; "(Mrs.) Geneva Barnes, Secretary to Mr. Armstrong," 1971-1972; "(Mrs.) Fern Lee Pickens, Office of Public Affairs," 1972-1973. The 1976-1979 correspondence is mainly autograph requests, and the date of receipt is stamped on the letters, along with a date of reply noted in ink. Letters needing translation were sent to "KSS/ Mr. Nagurney."

Some replies are stamped, "Original signed by Neil A. Armstrong." The [CHRON FILE] correspondence contains pink copies of replies made to requests. It is likely the correspondence was received by Armstrong during the time between retiring from NASA and becoming a faculty member at the University of Cincinnati. The correspondence appears in reverse chronological order, just as it was originally.

This series also contains cards received by Armstrong from the public; 1<sup>st</sup> anniversary of moon landing congratulatory cards and notes, birthday, Christmas and miscellaneous correspondence for which “no reply necessary” was designated on the correspondence. Some of the correspondence had been processed by the secretary but was pending further action.

**Box 260** [*A - Ba Completed Correspondence*], 1970-1973

Folder

1. [A... Completed Correspondence], 1972-1973
2. [Aa - Am... Completed Correspondence], 1970-1972
3. [An - Az...Completed Correspondence], 1970-1973
4. [B...Completed Correspondence], 1970-1973
5. [Ba], 1970-1972

**Box 261** [*Be - Da Completed Correspondence*], 1970-1973

Folder

1. [Be], 1970-1972
2. [Bi], 1970-1972
3. [Bj-BI], 1970-1972
4. [Bo], 1970-1972
5. [Br], 1970-1972
6. [Bu-By], 1971-1972
7. [Completed Correspondence C...], 1972-1973
8. [Completed Correspondence D...], 1970-1973
9. [Da] 1970-1972 (includes a packet of correspondence from Colonel and Mrs. John G. Daiger in regards to the “Daiger Global Time Conversion Simplifier”)

**Box 262** [*De - Fy Completed Correspondence*], 1970-1973

Folder

1. [De], 1970-1972
2. [Di-Do], 1970-1972
3. [Dr-Dz], 1970-1972
4. [Completed Correspondence, E...], 1972-1973
5. [EA-EL], 1970-1972
6. [EM-EZ], 1970-1972
7. [Completed Correspondence, F...], 1972-1973
8. [FA-FL], 1970-1972
9. [Fo-Fy], 1970-1972

**Box 263** [*Completed Correspondence, G... - Completed Correspondence, H... (Oct. '71-)*] 1970-1973

Folder

1. [Completed Correspondence, G...], 1972-1973
2. [GA], 1970-1972
3. [GE], 1970-1972
4. [GH-GL], 1970-1972
5. [GN-GO], 1970-1972
6. [GR], 1970-1972
7. [GS-GU-GW], 1970-1972
8. [Completed Correspondence, H... (Oct. '71-)], 1970-1973

**Box 264** [*HA-HAP - Completed Correspondence, J... (Oct. '71-)*], (folder 1 of 2), 1970-1973

Folder

1. [HA-HAP], 1970-1972
2. [HAQ-HAZ], 1970-1972
3. [HE], 1970-1972
4. [HI], 1970-1971
5. [HO-HR], 1970-1972
6. [HU-HY], 1970-1972
7. [Completed Correspondence, I... (Oct. '71-)], 1971-1972
8. [Completed Correspondence, J... (Oct. '71-)], 1970-1973 (folder 1 of 2)

**Box 265** [*Completed Correspondence, J... (Oct. '71-)*], (folder 2 of 2), *Collection of Postcards from Nathaniel J. Jordan - [Completed Correspondence, L... (Oct. '71-)]*, 1970-1973

Folder

1. [Completed Correspondence, J... (Oct. '71-)], 1971-1973 (folder 2 of 2)
2. *Collection of Postcards from Nathaniel J. Jordan*, 1972-1973
3. [Completed Correspondence, K... (Oct. '71-)], 1971-1973 (folder 1 of 2)
4. [Completed Correspondence, K... (Oct. '71-)], 1970-1973 (folder 2 of 2)
5. [Completed Correspondence, L...], 1970-1973
6. [Completed Correspondence, L... (Oct. '71-)], 1971-1973

**Box 266** [*Completed Correspondence, M... - MY*], 1970-1973

Folder

1. [Completed Correspondence, M...], 1971-1973
2. [MA], 1970-1973

3. [MAR Only], 1970-1972
4. [ME], 1970-1972
5. [MI], 1970-1972
6. [MN-MO], 1970-1972
7. [MR], 1970-1971
8. [MU], 1970-1972
9. [MY], 1971

**Box 267** *[Completed Correspondence, N... - Completed Correspondence, R...Oct. '71], 1970-1973*

Folder

1. [Completed Correspondence, N...], 1970-1973
2. [Completed Correspondence, N...Oct. '71], 1971-1972
3. Completed Correspondence, O, 1973
4. [Completed Correspondence, R...], 1971-1973 (folder 1 of 2, includes a recording tape from Rissler Observatory, a photograph signed by Neil A. Armstrong to Robert Ray, and a letter from Inga Rost which includes an official copy of Armstrong's birth certificate)
5. [Completed Correspondence, R...], 1970-1972 (folder 2 of 2)
6. [Completed Correspondence, R...Oct. '71], 1971-1972

**Box 268** *[Completed Correspondence, S... - SP-SQ], 1970-1973*

Folder

1. [Completed Correspondence, S...], 1970-1973
2. [SA], 1970-1971
3. [Sc], 1970-1972
4. [SE], 1970-1972
5. [SH], 1970-1972
6. [SI-SK-SL], 1970-1972
7. [SM-SN], 1970-1972
8. [So], 1970-1972
9. [SP-SQ], 1969-1972

**Box 269** *Completed Correspondence, Binder, [NASA FORM LTRS], [Scouts], 1969-1972*

Folder

1. Binder, [NASA FORM LTRS], circa 1969-1970
2. [Scouts], International, 1971
3. [Alabama], Scouts, 1971
4. [Arkansas], Scouts, 1970

5. [California], Scouts, 1970-1972
6. [Connecticut], Scouts, 1971
7. [District of Columbia], Scouts, 1970
8. [Florida], Scouts, 1970-1972
9. [Idaho], Scouts, 1972
10. [Illinois], Scouts, 1971-1972
11. [Iowa], Scouts, 1971-1972
12. [Kansas], Scouts, 1971
13. [Louisiana], Scouts, 1972
14. [Maryland], Scouts, 1971
15. [Massachusetts], Scouts, 1970-1972
16. [Michigan], Scouts, 1970-1972
17. [Minnesota], Scouts, 1971
18. [Missouri], Scouts, 1971
19. [Nebraska], Scouts, 1970-1972
20. [New Jersey], Scouts, 1971-1972
21. [New York], Scouts, 1970-1972
22. [Ohio], Scouts, 1970-1972
23. [Oregon], Scouts, 1971
24. [Pennsylvania], Scouts, 1970-1972
25. [South Carolina], Scouts, 1971
26. [Tennessee], Scouts, 1970-1972
27. [Texas], Scouts, 1970-1972
28. [Virginia], Scouts, 1970
29. [Washington], Scouts, 1970-1971
30. [Wyoming], Scouts, 1972

**Box 270** *[ST - Completed Correspondence, W...], 1970-1973*

Folder

1. [ST], 1970-1972
2. [SU-SZ], 1970-1972
3. [Completed Correspondence, T...], 1970-1973
4. [Completed Correspondence, T...Oct. '71], 1971-1972
5. [Completed Correspondence, U...], 1970-1973
6. [Completed Correspondence, U...Oct. '71], 1971-1972
7. [Completed Correspondence, V...], 1970-1973
8. [Completed Correspondence, V...Oct. '71], 1971-1972
9. [Completed Correspondence, W...], 1971-1973

**Box 271** *[Wa - Completed Correspondence - Completed Correspondence, Z...], 1970-1973*

Folder

1. [Wa], 1970-1972
2. [We], 1970-1972
3. [Wh], 1971-1972
4. [Wi], 1970-1972
5. [Wo], 1970-1972
6. [Wr], 1971
7. [Wu-Wz], 1970-1971
8. [Completed Correspondence, X...], (folder is empty)
9. [Completed Correspondence, X...Oct. '71], (folder is empty)
10. [Completed Correspondence, Y...], 1970-1973
11. [Completed Correspondence, Y...Oct. '71], 1971-1972
12. [Completed Correspondence, Z...], 1970-1973

**Box 272** *[Completed Correspondence India and Pakistan - To go to N.A. (letters designated for Neil's signature)], 1970-1972*

Folder

1. [Completed Correspondence India and Pakistan], 1970-1972 (folder 1 of 2)
2. [Completed Correspondence India and Pakistan], 1970-1972 (folder 2 of 2)
3. [Completed Correspondence Africa and Ceylon], 1970-1972
4. [Class Projects (Letters from all members of class)], 1971-1972
5. (Unmarked folder containing international letters; letters from scouts; empty envelopes, some marked "to translation"), 1971-1972
6. [Classes], 1971-1972 (folder 1 of 2)
7. [Classes], 1972-1973 (folder 2 of 2)
8. [To go to N.A.], (letters designated for Neil's signature), 1972

**Box 273** *"No reply necessary" - Congratulatory (1<sup>st</sup> anniversary of moon landing), Birthday and Christmas Cards, Miscellaneous, 1970-1971*

Folder

1. "No reply necessary," noted on most of the correspondence, 1970
2. "No reply necessary," noted on most of the correspondence, many congratulatory notes and cards in recognition of 1<sup>st</sup> anniversary of the moon landing, along with birthday and Christmas cards, 1970 (folder 1 of 2)
3. "No reply necessary," primarily Christmas cards, 1970 (folder 2 of 2)

**Box 274** *"No reply necessary" - Birthday and Christmas Cards, Miscellaneous, 1970-1971*

Folder

1. "No reply necessary," primarily birthday cards, 1971
2. "No reply necessary," primarily Christmas cards, 1971
3. "No reply necessary," noted on most of the correspondence, 1970-1971

**Box 275** *Semi-Completed Correspondence, Miscellaneous, 1971-1972*

Folder

1. [Code C pictures for Members of Congress. Hold till further notice. GB], May 10, 1971
2. [Enter Space Prog.], 1972
3. [Ask N.A.], 1972
4. [Geneva], 1972
5. [Research], 1972

**Box 276** *RESTRICTED - signed photographs - [✓/Geneva - 3-line letters], 1971-1973*

Folder

1. [✓/Geneva], 1972
2. Photograph/Autograph requests and replies (folder was unmarked), 1971-1973
3. [No Letter], 1972
4. [Completed Work - File], 1971-1973
5. [FDC] (First Day Cover), 1972-1973
6. Official NASA Photographs, signed, undated
7. Miscellaneous International Letters, 1971-1973 (folder 1, original folder was unmarked)
8. Miscellaneous International Letters, 1972 (folder 2, original folder was unmarked)
9. Miscellaneous Letters, 1972 (original folder is unmarked)
10. [3-line letters], 1971-1972 (contains signed, official NASA photographs)

**Box 277** *[CHRON FILE -- April and May 1971] - Unmarked folders containing random replies, 1971-1973*

Folder

1. [CHRON FILE -- April and May 1971], May 1971 (folder 1 of 2, this correspondence has a RD-A designation and was signed by (Mrs.) Geneva Barnes)
2. [CHRON FILE -- April and May 1971], April-May 1971 (folder 2 of 2, this correspondence has a RD-A designation and was signed by (Mrs.) Geneva Barnes or Armstrong),
3. [CHRON FILE -- June & July 1971], (this correspondence has a RD-A designation and was signed by (Mrs.) Geneva Barnes or Armstrong), June-July 1971
4. [CHRON FILE -- AUG. & SEP. 1971], (this correspondence has a RD-A designation and was signed by (Mrs.) Geneva Barnes or Armstrong), August-September 1971

5. [OCTOBER 1971 CHRON FILE], (this correspondence has a RD-A designation and was signed by (Mrs.) Geneva Barnes or Armstrong), October 1971
6. Unmarked folder containing March and August 1973 completed correspondence which was in the same box as the above folders, 1973
7. Unmarked folder containing completed Eagle Scout replies and random replies, copies are yellow, May 1972-August 1973
8. Unmarked folder containing random completed international replies and one reply to a family in California, copies are yellow and are replies from (Mrs.) Fern Lee Pickens, NASA, Office of Public Affairs, February - March 1973
9. Unmarked folder containing random completed replies, copies are yellow and are replies from (Mrs.) Fern Lee Pickens, NASA, Office of Public Affairs, February - March 1973

**Box 278** [CHRON FILE -- November & December 1971 - FD/PICKENS Reading File Feb. 7-23, incl. (340 ltrs)], 1971-1973

Folder

1. [CHRON FILE -- November & December 1971], (most of this correspondence was for first day cover signatures and includes a standard reply declining the signatures and return of items, also includes a correspondence statistic sheet for April - October 1971), 1971-1972
2. [CHRON FILE -- January & February 1972], (most of these replies are for autograph requests, Eagle Scout congratulatory letters or career advice), 1972
3. [CHRON FILE -- March & April 1972], (most of these are copies of replies for autograph requests, replies to school children, Eagle Scouts or more detailed replies), 1972
4. [CHRON FILE -- May 1972] (these letters have a designation of [RD-T] on them - mixed correspondence) 1972
5. [CHRON FILE -- June 1972], (most of these letters have a designation of [RD-M] and most are replies to international letters), 1972
6. [CHRON FILE -- July 1972], (these letters have a [FD] designation and the majority are declining signature requests for first day covers/commemorative covers), 1972
7. [CHRON FILE -- August 1972], (these letters have a [FD] designation, and the subject matter is mixed; one letter contains statistics for the amount of correspondence received in the months following Apollo 11), 1972
8. [CHRON FILE -- September 1972], (these letters have a [FD] designation, with the majority declining signature requests for first day/commemorative covers), 1972
9. [CHRON FILE -- October 1972], (these letters have a [FD] designation, with the majority declining signature requests for commemorative covers), 1972
10. [CHRON FILE -- November 1972], (these letters have a [FD] designation, the majority being Eagle Scout congratulatory letters or letters declining

- cover signature requests), 1972
11. [FD/PICKENS Reading File for Week of March 19 - 23 (55 letters)], (most of the replies are for autograph requests, also included is a NASA automatic typing equipment usage record), 1973
  12. [FD/PICKENS Reading File for Week of March 12 thru 16 (77 letters)], (most are autographed photograph request replies or replies to letters from [young people]), 1973
  13. [FD/PICKENS Reading File for Week of 3/5-9 (56 letters)], (these letters have a [FD] designation and are mixed correspondence, many are from foreign countries), 1973
  14. [FD/PICKENS Reading File for Week of 2/26 - 3/2/73 (73 letters)] ,(these letters have a [FD] designation and most are autograph request replies or replies to correspondence from [young people]), 1973
  15. [FD/PICKENS Reading File Feb. 7-23, incl. (340 ltrs)], (mixed replies with a [FD] designation), 1973

**Box 279** *[Schools (folder 1) - POLISH], 1970-1973*

Folder

1. [Schools], 1971-1972 (folder 1 of 3)
2. [Schools], 1970-1972 (folder 2 of 3, many letters from schools named after Neil A. Armstrong, also packet of letters from Burtfield Elementary, 4<sup>th</sup> Grade Class, West Lafayette, IN),
3. [Schools], 1970-1972 (folder 3 of 3, many letters from schools named after Neil A. Armstrong),
4. [To Translation], 1971-1972 (includes original folder, along with instructions on how to handle letters needing translation)
5. [SPANISH], 1972-1973
6. [FRENCH], 1972-1973
7. [POLISH], 1972-1973

**Box 280** *[GERMAN - MISC - Send to Translation], 1972-1973*

Folder

1. [GERMAN], 1972-1973
2. [ITALIAN], (includes 3 photographs of a sculpture an artist made of Neil A. Armstrong), 1972-1973
3. [MISC - Send to Translation], 1972-1973

**Box 281** *[A - G], 1975-1978*

Folder

1. [A], 1976-1977

2. [B], 1977 (folder 1 of 2)
3. [B], 1976-1977 (folder 2 of 2)
4. [C], 1976-1977
5. [D], 1975-1978
6. [E], 1976-1977
7. [F], 1976-1977
8. [G], 1975-1977

**Box 282** [H - M], 1975-1977

Folder

1. [H], 1977 (folder 1 of 2)
2. [H], 1975-1977 (folder 2 of 2)
3. [I], 1976-1977
4. [J], 1976-1977
5. [K], 1976-1977 (folder 1 of 2)
6. [K], 1975-1976 (folder 2 of 2)
7. [L], 1975-1977
8. [Mc], 1976-1977
9. [M], 1976-1977 (folder 1 of 2, note on one letter in regards to signing "with his own hand")
10. [M], 1975-1976 (folder 2 of 2)

**Box 283** [N - S], 1976-1977

Folder

1. [N], 1976-1977
2. [O], 1976-1977
3. [P], 1975-1977
4. [Q], 1976-1977
5. [R], 1976-1977 (folder 1 of 2)
6. [R], 1976-1977 (folder 2 of 2)
7. [S], 1977 (folder 1 of 3)
8. [S], 1976-1977 (folder 2 of 3)
9. [S], 1976 (folder 3 of 3)

**Box 284** [T - Z], 1975-1977

Folder

1. [T], 1976-1977
2. [U], 1976-1977
3. [V], 1975-1977
4. [W], 1976-1977

5. [X-Y], 1975-1977
6. [Z], 1976-1977

**Box 285** [A - PR-UC], 1976-1979

Folder

1. [A], 1978-1979
2. [B], 1977-1979
3. [C], 1978-1979
4. [D], 1977-1979
5. [E], 1979
6. [F], 1978-1979
7. [G], 1977-1979
8. [H], 1978-1979
9. [I], 1979
10. [J], 1978-1979
11. [K], 1978-1979
12. [L], 1977-1979
13. [Mc], 1978-1979
14. [M], 1977-1979
15. [N], 1978-1979
16. [O], 1978-1979
17. [P], 1978-1979
18. [Q], (folder was empty)
19. [R], 1978-1979
20. [S], 1978-1979
21. [T], 1978-1979
22. [U], 1979
23. [V], 1978-1979
24. [W], 1978-1979
25. [X Y], 1978-1979
26. [Z], 1977-1978
27. [PR - UC], 1976-1979 (autograph requests from people associated with the University of Cincinnati)

**Sub-series 2. [Off-Sort and P.R.] Correspondence, 1970-1980**  
(10.8 cubic feet)

**Sub-series Description:** The “Off-Sort” and “P.R.” correspondence includes miscellaneous requests for fund raising items, appearance requests, and personal information (for which the policy was no reply). Numerous letters are for Armstrong’s educational, career, and engineering advice. The correspondence also includes

thank-you letters from Armstrong for gifts, poems, kind words, etc. The correspondence usually entailed Armstrong's involvement versus a form letter.

There are some notations written by Armstrong to his secretaries on how to respond to various inquiries. Most of the correspondence in this series is from adults. The 1971-1973 replies were signed by Ruta Bankovskis, 1974-1975 letters were signed by (Miss) Luanna J. Fisher, and 1976-1979 correspondence was handled by Elaine Moore, secretaries to Professor Neil A. Armstrong. Some of the [Off-Sort and P.R.] correspondence indicated a signature by Armstrong himself. The copies of the replies do not contain Armstrong's actual signatures, just the typed name.

The V.I.P. correspondence was given personal replies by Armstrong, and most of the correspondence indicates "Original signed by Neil A. Armstrong."

A majority of the 1975-1980 correspondence received was for appearance requests (P.R.) and often includes Armstrong's reply. Some of the correspondence in this sub-series has moisture damage.

#### **Box 286 [A - G], 1971-1973**

##### Folder

1. [A], 1972-1973
2. [B], 1972-1974 (folder 1 of 2)
3. [B], 1972-1973 (folder 2 of 2)
4. [C], 1972-1973 (folder 1 of 2, includes a letter Neil wrote to his first grade teacher, Mrs. Faye Crow, upon her retirement)
5. [C], 1971-1972 (folder 2 of 2)
6. [D], 1972-1973
7. [E], 1972-1973
8. [F], 1972-1973
9. [G], 1972-1973

#### **Box 287 [H - R], 1971-1973**

##### Folder

1. [H], 1971-1973
2. [I], 1973
3. [J], 1972-1973
4. [K], 1972-1973
5. [L], 1971-1974
6. [M], 1972-1973
7. [N], 1971-1973
8. [O], 1972-1973
9. [P], 1971-1973
10. [Q], 1973

11. [R], 1972-1973 (contains letter verifying quote, "One small step...")

**Box 288** [S - X,Y,Z], 1970-1973

Folder

1. [S], 1972 (folder 1 of 3)
2. [S], 1970-1972 (folder 2 of 3)
3. [S], 1971-1973 (folder 3 of 3, contains letter about Armstrong's boot size)
4. [T], 1971-1972 (folder 1 of 2)
5. [T], 1971-1973 (folder 2 of 2, includes a letter from a Purdue University Aeronautical Engineering student and Armstrong's reply)
6. [U], 1972-1973
7. [V], 1972-1973
8. [W], 1971-1973
9. [X, Y, Z], 1972-1973

**Box 289** [PR 1971-1973, Press/Media 1973-1974], (some moisture damage to this box), 1971-1974

Folder

1. [Boy Scouts], 1972 (folder 1 of 2, includes congratulatory Eagle Scout letters from Armstrong and thank-yous from recipients)
2. [Boy Scouts], 1971-1972 (folder 2 of 2, includes congratulatory Eagle Scout letters from Armstrong and thank-yous from recipients)
3. [FDC], 1971-1974 (first day cover signature requests)
4. [A], 1971-1973
5. [B], 1972 (folder 1 of 2)
6. [B], 1971-1972 (folder 2 of 2)
7. [C], 1972-1973 (folder 1 of 2)
8. [C], 1971-1972 (folder 2 of 2)

**Box 290** [PR 1971-1973, Press/Media 1973-1974], [D] - [L], 1971-1973

Folder

1. [D], 1972-1973
2. [E], 1972-1973
3. [F], 1971-1972
4. [G], 1971-1973
5. [H], 1972-1973 (folder 1 of 2)
6. [H], 1972-1973 (folder 2 of 2)
7. [I], 1972-1973
8. [J], 1971-1973
9. [K], 1971-1973

10. [L], 1972-1973

**Box 291** *[PR 1971-1973, Press/Media 1973-1974], [M] - [S], 1971-1974*

Folder

1. [M], 1972-1973 (folder 1 of 2)
2. [M], 1971-1972 (folder 2 of 2)
3. [N], 1972-1974
4. [O], 1972-1973
5. [P], 1971-1973
6. [Q], 1971-1972
7. [R], 1972-1974 (folder 1 of 2)
8. [R], 1971-1972 (folder 2 of 2)
9. [S], 1972-1974 (folder 1 of 2)
10. [S], 1971-1972 (folder 2 of 2)

**Box 292** *[PR 1971-1973, Press/Media 1973-1974], [T] - [Articles, Blogs, Publications – Reqs], 1971-1974*

Folder

1. [T], 1971-1973
2. [U], 1972-1973
3. [V], 1972-1974
4. [W], 1971-1973
5. [X,Y,Z], 1971-1973
6. [P & M], 1974 (Press and Media, folder 1 of 2)
7. [P & M], 1973-1974 (Press and Media, folder 2 of 2)
8. [Articles, Blogs, Publications – Reqs], 1972 (requests)

**Box 293** *[A - C], (some moisture damage to this box), 1973-1975*

Folder

1. [A], 1974-1975 (folder 1 of 2)
2. [A], 1973-1974 (folder 2 of 2, includes letter from United States Department of the Interior in regards to naming of minerals Armstrongite and Armalcolite)
3. [B], 1974-1975 (folder 1 of 2, includes letter and clipping in regards to Armstrong's involvement in research for heart-lung device)
4. [B], 1973-1974 (folder 2 of 2)
5. [C], 1974-1975 (folder 1 of 2)
6. [C], 1973-1974 (folder 2 of 2)

**Box 294** *[D - H], (some moisture damage to this box), 1973-1975*

Folder

1. [D], 1974-1975 (folder 1 of 2, includes Armstrong's reply of favorite Bible passage, Proverbs 16:16)
2. [D], 1973-1974 (folder 2 of 2)
3. [E], 1972-1975
4. [F], 1974-1975
5. [G], 1973-1975 (includes a letter Armstrong wrote to Congressman Barry M. Goldwater, Jr.)
6. [H], 1974-1975 (folder 1 of 2, includes an autographed photograph of Armstrong)
7. [H], 1973-1975 (folder 2 of 2, includes correspondence from Congressman Seymour Halpern asking for Armstrong's views on world peace and Armstrong's reply)

**Box 295** [I - N], 1973-1975

Folder

1. [I], 1973-1975
2. [J], 1973-1975 (includes letter written by Armstrong giving his views on "public acclaim")
3. [K], 1973-1975
4. [L], 1973-1975
5. [M], 1974-1975 (folder 1 of 2)
6. [M], 1973-1974 (folder 2 of 2)
7. [N], 1974-1975 (folder 1 of 2, includes letter Armstrong wrote in regards to the use of his name in public places and a letter stating when he selected the words he spoke upon his first step on the moon)
8. [N], 1973-1974 (folder 2 of 2)

**Box 296** [O - S], 1973-1975

Folder

1. [O], 1973-1975
2. [P], 1973-1975
3. [Q], (folder is empty)
4. [R], 1974-1975 (folder 1 of 2)
5. [R], 1973-1974 (folder 2 of 2)
6. [S], 1974-1975 (folder 1 of 2)
7. [S], 1973-1974 (folder 2 of 2)

**Box 297** **RESTRICTED, Student Information in Folder W** - [T - XYZ], 1972-1975

Folder

1. [T], 1973-1975
2. [U], 1972-1974
3. [V], 1973-1975
4. [W], 1973-1975 (student information in this folder, a telegram sent by Senator John Glenn, and a copy of a telegram from Richard Nixon to Armstrong)
5. [X,Y,Z], 1973-1975

**Box 298** [A - D], 1975-1977

Folder

1. [A], 1976-1977 (folder 1 of 2)
2. [A], 1976, (folder 2 of 2, contains one letter written by Armstrong for the Allen County, Ohio time capsule)
3. [B], 1976-1977 (folder 1 of 2)
4. [B], 1976 (folder 2 of 2)
5. [C], 1976-1977 (folder 1 of 2)
6. [C], 1976 (folder 2 of 2)
7. [D], 1976-1977

**Box 299** [E - I], 1976-1977

Folder

1. [E], 1975-1977
2. [F], 1976-1977 (folder 1 of 2)
3. [F], 1976 (**Restricted** - folder 2 of 2, includes a signed photograph)
4. [G], 1977 (folder 1 of 2, includes a book prospectus by John C. Whitcomb and Donald B. DeYoung)
5. [G], 1976-1977 (folder 2 of 2)
6. [H], 1976-1977 (folder 1 of 2)
7. [H], 1976-1977 (folder 2 of 2)
8. [I], 1976-1977

**Box 300** [J - P], 1975-1977

Folder

1. [J], 1976-1977
2. [K], 1975-1977
3. [L], 1976-1977
4. [Mc], 1976-1977
5. [M], 1976-1977 (folder 1 of 2, one letter contains burn times for stages 1, 2 and 3 of Apollo 11)

6. [M], 1976 (folder 2 of 2)
7. [N], 1976-1977
8. [O], 1976-1977
9. [P], 1976-1977 (folder 1 of 2)
10. [P], 1976 (folder 2 of 2)

**Box 301** [Q - XYZ], 1976-1977

Folder

1. [Q], (folder is empty)
2. [R], 1976-1977 (folder 1 of 2)
3. [R], 1976 (folder 2 of 2)
4. [S], 1976-1977 (folder 1 of 2)
5. [S], 1976 (folder 2 of 2, includes 2 photographs of Armstrong)
6. [T], 1976-1977
7. [U], 1976-1977
8. [V], 1976-1977
9. [W], 1976-1977 (folder 1 of 2)
10. [W], 1976 (folder 2 of 2)
11. [XYZ], 1976-1977

**Box 302** [A - D], 1977-1980

Folder

1. [A], 1978-1979
2. [B], 1979-1980 (folder 1 of 2)
3. [B], 1977-1979 (folder 2 of 2)
4. [C], 1979 (folder 1 of 2)
5. [C], 1978-1979 (folder 2 of 2)
6. [D], 1978-1979

**Box 303** [E - Mc], 1976-1979

Folder

1. [E], 1979 (folder 1 of 2)
2. [E], 1978-1979 (folder 2 of 2)
3. [F], 1978-1979
4. [G], 1978-1979
5. [H], 1979 (folder 1 of 2)
6. [H], 1979 (folder 2 of 2)
7. [I], 1978-1979
8. [J], 1978-1979
9. [K], 1976-1979

10. [L], 1978-1979
11. [Mc], 1978-1979

**Box 304** *[M - R], 1977-1979*

Folder

1. [M], 1979 (folder 1 of 2)
2. [M], 1978 -1979 (folder 2 of 2)
3. [N], 1978-1979
4. [O], 1977-1979
5. [P], 1979 (folder 1 of 2)
6. [P], 1977-1979 (folder 2 of 2)
7. [Q], (empty folder)
8. [R], 1978-1979

**Box 305** *[S - Z], 1977-1979*

Folder

1. [S], 1978-1979 (folder 1 of 2)
2. [S], 1978 (folder 2 of 2)
3. [T], 1979 (folder 1 of 2)
4. [T], 1977-1979 (folder 2 of 2)
5. [U], 1978-1979
6. [V], 1978-1979
7. [W], 1979 (folder 1 of 2)
8. [W], 1978-1979 (folder 2 of 2)
9. [X], 1978
10. [Y], (empty folder)
11. [Z], 1978-1979

**Box 306** *[A - C], 1974-1984*

Folder

1. [A], 1976-1980 (folder 1 of 2)
2. [A], 1974-1976 (folder 2 of 2)
3. [B], 1977-1980 (folder 1 of 2)
4. [B], 1975-1977 (folder 2 of 2)
5. [C], 1978-1984 (folder 1 of 3, includes correspondence from Carl Sagan and Eugene Cernan)
6. [C], 1976-1978 (folder 2 of 3)
7. [C], 1975-1976 (folder 3 of 3)

**Box 307** *[D, E - K], Apollo 11, 10<sup>th</sup> anniversary fan mail and Miscellaneous correspondence thanking Armstrong for making public appearance or public appearance requests, 1974-1990*

Folder

1. [D, E], 1975-1980 (folder 1 of 2)
2. [D, E], 1974-1980 (folder 2 of 2)
3. [F, G], 1975-1980 (folder 1 of 2)
4. [F, G], 1975 (**RESTRICTED** - folder 2 of 2)
5. [H], 1977-1980 (folder 1 of 2)
6. [H], 1975-1977 (folder 2 of 2)
7. [I, J], 1975-1980
8. [K], 1976-1980
9. Apollo 11, 10<sup>th</sup> anniversary fan mail, 1979
10. Miscellaneous correspondence thanking Armstrong for making public appearance or public appearance requests, 1979-1990

**Box 308** *[L - Screwballs], 1971-1980*

Folder

1. [L], 1974-1980
2. [M], 1980
3. [Listing Screwballs] undated
4. [Screwballs], 1978-1979 (folder 1 of 3)
5. [Screwballs], 1975-1976 (folder 2 of 3)
6. [Screwballs], 1971-1975 (folder 3 of 3)

**Box 309** *V.I.P. Correspondence, George H.W. Bush, Gerald Ford, Barry Goldwater, among others, circa 1969-1976 and [Personal/V.I.P. Correspondence Thru June 1971], May 1970-June 1971*

Folder

1. VIP Correspondence, George H.W. Bush, Gerald Ford, Barry Goldwater, among others, circa 1969-1976
2. [Personal/V.I.P. Correspondence Thru June 1971], April 1971-June 1971 (folder 1 of 3)
3. [Personal/V.I.P. Correspondence Thru June 1971], January 1971-April 1971 (folder 2 of 3)
4. [Personal/V.I.P. Correspondence Thru June 1971], May 1970-January 1971 (folder 3 of 3)
5. [Personal/V.I.P. Correspondence (July 1971--)], August 24, 1971-February 10, 1972 (folder 1 of 2, includes Armstrong's NASA time and attendance report for June 1970-November 1971)
6. [Personal/V.I.P. Correspondence (July 1971--)], January 21, 1971-September

3, 1971 (folder 2 of 2)

**Box 310** [*Speaking Declinations thru Apr. '71*], *December 1970-April 1971*

Folder

1. [Speaking Declinations thru Apr. '71], January - April 1971 (folder 1 of 5)
2. [Speaking Declinations thru Apr. '71], March - April 1971 (folder 2 of 5)
3. [Speaking Declinations thru Apr. '71], January - March 1971 (folder 3 of 5)
4. [Speaking Declinations thru Apr. '71], October - December, 1970 (folder 4 of 5)
5. [Speaking Declinations thru Apr. '71], July - October 1970 (folder 5 of 5)

**Box 311** [*Speaking Declinations May - September '71*] - [*Appearances Accepted - Scotland - England*], 1971-1972

Folder

1. [Speaking Declinations May - September '71], May - August 1971 (folder 1 of 3)
2. [Speaking Declinations May - September '71], ], May - July 1971 (folder 2 of 3)
3. [Speaking Declinations May - September '71], July - September 1971 (folder 3 of 3)
4. [Speaking Declinations October 1971 --], October 1971 - January 1972
5. [Speaking Requests Referred To N. Armstrong & Mr. Stix (NYC)], September 1971 - February 1972
6. [Appearances Accepted], October 1970 - September 1971 (includes telegram from Richard Nixon)
7. [Appearances Accepted - Scotland - England], January 1971 - February 1972

**Box 312** [*Declined*] - *Declinations of Professional Offers, 1975-2011*

Folder

1. [Declined] - Declinations of Professional Offers, 1975-1983 (folder 1 of 3)
2. [Declined] - Declinations of Professional Offers, 1983-1989 (folder 2 of 3)
3. [Declined] - Declinations of Professional Offers, 1989-2011 (folder 3 of 3)

**Sub-series 3. Correspondence from Organizations and Schools, 1971-1974**

(1.2 cubic feet)

**Sub-series Description:** This correspondence covers letters from organizations and schools inviting Armstrong to attend or speak at events, membership requests, and other miscellaneous requests, along with Armstrong's replies. One folder contains replies given by Armstrong to requests from the press and media, with some replies occurring after Apollo 17, the last Apollo flight. In 1974 Armstrong begins to refer requests for non-academic appearances to: Mr. Thomas Stix, Stix and Gude, 30 Rockefeller Plaza, New York, New York 10020. Also included in the correspondence are thank-you letters to and from Armstrong.

**Box 313** [A - G ], 1971-1974

Folder

1. [A], 1971-1972
2. [B], 1971-1972
3. [C], 1971-1972
4. [D], 1971-1972
5. [E], 1971-1972
6. [F], 1971-1974
7. [G], 1971-1972

**Box 314** [H - O], 1971-1974

Folder

1. [H], 1971-1972
2. [I], 1973-1974 (folder 1 of 2)
3. [I], 1971-1972 (folder 2 of 2, includes proposal and Armstrong's permission to have new mineral, "Armstrongite" named for him)
4. [J], 1971-1972
5. [K], 1971-1972 (includes Armstrong's reply to a fellow [A.E./H.E.], Boilermaker couple)
6. [L], 1971-1972
7. [Mc], 1971-1972 (includes a letter from Armstrong's boyhood friend, Charles McClain)
8. [M], 1971-1972
9. [N], 1971-1972
10. [O], 1971-1972

**Box 315** [Press and Media - XYZ], 1971-1972

Folder

1. [Press and Media], 1971-1972
2. [P], 1971-1972
3. [Q], 1971-1972
4. [R], 1971-1972

5. [U], 1971-1972
6. [V], 1971-1972
7. [W], 1971-1972
8. [XYZ], 1971-1972

**Sub-series 4. Invitations, Requests and General Correspondence, 1977-1983**

(1.6 cubic feet)

**Sub-series Description:** The correspondence in this series was handled by Elaine Moore, Secretary to Professor Neil A. Armstrong, and most of it involved standard [std.] replies. The first folder in the series contains the codes for the replies and sample letters. The sample letters are typed on Cardwell International LTD and University of Cincinnati stationery. The majority of the correspondence appears to be correspondence received during Armstrong's transition from university professor to business owner.

**Box 316** *[Form Letters] and Codes - [A - E], circa 1977-1983*

Folder

1. [Form Letters] and Codes, circa 1977-1983
2. [A], 1977-1979
3. [B], 1979 (folder 1 of 2)
4. [B], 1977-1979 (folder 2 of 2)
5. [C], 1978-1980 (folder 1 of 2)
6. [C], 1977-1978 (folder 2 of 2)
7. [D], 1977-1979
8. [E], 1977-1979

**Box 317** *[F - N], 1977-1980*

Folder

1. [F], 1977-1979
2. [G], 1977-1979
3. [H], 1977-1979
4. [I], 1977-1979
5. [J], 1977-1979
6. [K], 1977-1979
7. [L], 1977-1979
8. [Mc], 1977-1979
9. [M], 1978-1980 (folder 1 of 2)
10. [M], 1977-1978 (folder 2 of 2)
11. [N], 1977-1979

**Box 318** [O - U], 1977-1979

Folder

1. [O], 1977-1979
2. [P], 1977-1979
3. [Q,] (folder is empty)
4. [R], 1977-1979
5. [S], 1979 (folder 1 of 2)
6. [S,] 1977-1979 (folder 2 of 2)
7. [T], 1977-1979
8. [U], 1977-1979

**Box 319** [V - FDC -78-79], 1977-1979

Folder

1. [V], 1977-1979
2. [W,X,Y,Z], 1977-1979
3. [FDC -78-79], 1979 (folder 1 of 3, first day cover requests for signatures, along with copy of replies)
4. [FDC -78-79], 1978-1979 (folder 2 of 3, first day cover requests for signatures, along with copy of replies)
5. [FDC -78-79], 1977-1978 (folder 3 of 3, first day cover requests for signatures, along with copy of replies)

**Sub-series 5. Miscellaneous Correspondence, 1969-1994**  
(3.9 cubic feet)

**Sub-series Description:** This series consists of files that needed additional attention and follow-up, such as [Suspense], [To N.A. for sig or comment] and [Translation]. Much of the correspondence is general and does not fall under the designated categories that had been established. There are sample letters, including standard replies used for common requests and their respective codes, along with teletype tapes.

Also included among the miscellaneous correspondence are various cards, nonsensical correspondence, unusual requests, and other miscellaneous correspondence for which a reply was deemed unnecessary.

Some of the unique correspondence includes [Poems/Songs] and Armstrong's thank-you replies. Copies of many of the replies indicate that the original was signed by Armstrong. Also of note are [Memorials/"Namesakes" -- Groups, Foundations, Organizations, Godparents], [Awards/Recognitions], [Armstrong "Heritage"], [U.S.S.R. (NAArmstrong)], and various thank you notes Armstrong wrote after visit to Russia, [Second Anniversary Invitations], and [AGARD] (Advisory Group for

Aerospace Research and Development), includes Armstrong's publication, "Lunar Surface Exploration, Space Research XI" - Akademie-Verlag, Berlin.

The last group of miscellaneous correspondence is [Wapakoneta Friend's Sister] and included items collected by Fred Schneider, which was sent by his sister. Items include publications from Wapakoneta that featured Armstrong; *Wapakoneta Daily News*, headlines, "Neil Steps On The Moon") Monday, July 21, 1969 (11 issues); *Wapakoneta Daily News*, front page article, "Neil's training plane arrives home," Friday, November 21, 1969 (10 issues); Wapakoneta telephone directory featuring Armstrong on the cover and Apollo 11, first day cover and 25<sup>th</sup> anniversary postage stamps and related information.

The correspondence remains in the folders as found to preserve original order.

**Box 320** [*Suspense - School Groups*], 1970-1973

Folder

1. [Suspense], 1971-1972
2. [To N.A. for sig or comment], 1972
3. [Hold for Gifts], 1971
4. [Correspondence Pending (Publishers)], 1971-1972
5. [Sample Letters], circa 1971-1973 (includes standard replies to some of the most common correspondence requests and their codes)
6. ["Interested" Tape], 1971-1972 (includes 2 sample letters and a teletype tape)
7. [School - Class Projects/School Class Projects Tape,], 1971-1972 (includes 5 sample letters and a teletype tape)
8. Unmarked folder, contains miscellaneous correspondence, 1973
9. [Completed Work - File - General Correspondence], 1970-1973
10. Unmarked folder, contains a few cards, general correspondence, an Apollo 8 brochure and 8 NASA lunar photographs, 1971-1973
11. [School Groups], 1972-1973 (folder 1 of 3)

**Box 321** [*School Groups*] - *Unmarked folder containing random correspondence, and printed materials, 1972-1973*

Folder

1. [School Groups], 1972 (folder 2 of 3)
2. [School Groups], 1972 (folder 3 of 3)
3. [FDC's - file], 1973 (folder 1 of 2, standard replies to first day cover signatures)
4. [FDC's - file], 1973 (folder 2 of 2, standard replies to first day cover signatures)
5. Unmarked folder containing random correspondence, 1972-1973
6. Unmarked folder containing random correspondence, includes a packet of X-

15 information, copies from a Purdue University, School of Engineering bulletin, copy of "The Blue Planet," by Neil A. Armstrong, transcript of news conference "On First Anniversary Of Manned Moon Landing," and NASA memorandum titled, "Some Thoughts On The Next Decade Of Space Exploration, November 21, 1958," 1973

**Box 322** *[Christmas 1972] - Correspondence - Periodicals/Pepperdine University President's Report, 1972-1973*

Folder

1. [Christmas 1972], 1972 (cards received by Armstrong from the public)
2. Birthday cards, 1972 (cards received by Armstrong from the public)
3. Random correspondence, 1972-1973
4. Correspondence - *World Union Periodical*, Article from *Lockheed Southern Star*, Pepperdine University President's Report, 1972-1973

**Box 323** *[Scout] and Unmarked manila envelope (nonsensical letters), 1972-1973*

Folder

1. [Scout], random scout correspondence, no replies attached, 1972-1973
2. [Speaking Req.], a few random speaking requests, no reply attached, 1972-1973
3. [Auctions], random requests for fund-raising items, 1972-1973
4. [Invitations], miscellaneous correspondence and invitations, 1972-1973
5. [Suspense], 1972-1973
6. Unmarked manila envelope, 1972-1973 (folder 1 of 3, appear to be nonsensical letters)
7. Unmarked manila envelope, 1972-1972 (folder 2 of 3, appear to be nonsensical letters)
8. Unmarked manila envelope, 1972-1973 (folder 3 of 3, appear to be nonsensical letters)

**Box 324** *[Memorials/"Namesakes" -- Groups, Foundations, Organizations, Godparents] - [Poems/Songs], 1970-1972*

Folder

1. [Memorials/"Namesakes" -- Groups, Foundations, Organizations, Godparents], February - July 1971
2. [Awards/Recognitions], September 1970 - December 1971 (significant water damage to this folder)
3. [World Wildlife Fund], September 1971 - March 1972 (some water damage)
4. [Armstrong "Heritage"], December 1970 - December 1971

5. [Poems/Songs,], 1970-1972 (folder 1 of 3, many of the thank-you replies indicate that the original was signed by Armstrong)
6. [Poems/Songs], 1970-1971 (folder 2 of 3, many of the thank-you replies indicate that the original was signed by Armstrong)
7. [Poems/Songs], 1970-1971 (folder 3 of 3, many of the thank-you replies indicate that the original was signed by Armstrong)

**Box 325** *[Causes] - [Recording & Publication Statement Requests, Endorsements, and Interviews], 1970-1972*

Folder

1. [Causes], (most are monetary requests or requests for help to get to the United States from overseas), 1971
2. [Fund Drives/Charity/Auctions, Etc.], 1971-1972 (folder 1 of 2)
3. [Fund Drives/Charity/Auctions, Etc.], 1970-1971 (folder 2 of 2)
4. [Recording & Publication Statement Requests, Endorsements, Interviews], 1971-1972 (folder 1 of 3)
5. [Recording & Publication Statement Requests, Endorsements, Interviews], 1970-1971 (folder 2 of 3)
6. [Recording & Publication Statement Requests, Endorsements, Interviews], circa 1970 (folder 3 of 3, includes a book manuscript; *The Giant Leap: a chronology of Ohio aerospace events and personalities*, 1815-1970)

**Box 326** *[Honorary Memberships] - [Second Anniversary Invitations], 1970-1971*

Folder

1. [Honorary Memberships], 1971 (folder 1 of 2)
2. [Honorary Memberships], 1970-1971 (folder 2 of 2)
3. [Requests To Do Portraits, Busts, Etc.], 1970-1971
4. [Business Projects], 1971
5. [U.S.S.R. (NAArmstrong)], 1970-1971 (various thank you notes Armstrong wrote after visit to Russia),
6. [AGARD] (Advisory Group for Aerospace Research and Development, includes Armstrong's publication, "Lunar Surface Exploration, Space Research XI" - Akademie-Verlag, Berlin), 1971
7. [Flag Day Appearances Declined], 1971
8. [Second Anniversary Invitations], 1970-1971

**Box 327** *Unanswered Mail and Mail Needing Translation, 1974-1979*

Folder

1. [Unanswered Mail - Spanish Translation], 1974-1975
2. [Translation], 1974-1975 (letters from various countries)

3. [Unanswered Mail], 1974-1975 (**Restricted** - contains 2 signed photographs)
4. [To Be Translated Aug. - Dec. 1979 - Translation], 1979

**Box 328** *Correspondence - Nonsensical and Unusual Requests, 1973-1984*

Folder

1. Correspondence - Nonsensical and Unusual Requests, 1973-1984 (folder 1 of 3)
2. Correspondence - Nonsensical and Unusual Requests, 1973-1984 (folder 2 of 3)
3. Correspondence - Nonsensical and Unusual Requests, 1973-1984 (folder 3 of 3)

**Box 329** *[Wapakoneta Friend's Sister], 1969-1994*

Folder

1. Newspaper, *Wapakoneta Daily News*, headlines, "Neil Steps On The Moon"), Monday, July 21, 1969 (11 issues)
2. Newspaper, *Wapakoneta Daily News*, front page article, "Neil's training plane arrives home," Friday, November 21, 1969 (10 issues)
3. Wapakoneta telephone directory, Armstrong on cover, June 1970 (5 copies)
4. Wapakoneta telephone directory, Armstrong on cover, June 1970 (5 copies)
5. Photographs, color, Wapakoneta related, circa 1969-1970
6. Postage stamps and information, First Day Cover and 25<sup>th</sup> anniversary, Apollo 11, *First Manned Lunar Landing*, 1969, 1994
7. Clipping; Borjas, R. (1989, July 20). Local Apollo collection grows and grows: 'Anything with Armstrong's name on it'. *The Wapakoneta Daily News*, p. D5. (features Fred Schneider, collector from where these items originated)

**Sub-series 6. Correspondence, Post-University of Cincinnati, 1970-2012**

(3.8 cubic feet)

**Sub-series Description:** This sub-series is comprised of correspondence received by Armstrong after he left the University of Cincinnati. In 1980 he hired Vivian White as his administrative aide. Per White, as stated in Armstrong's Biography, *First Man: The Life of Neil A. Armstrong*, by James Hansen, Armstrong often composed form letters himself, and he often signed anything he was asked to sign, except first-day covers. White began to check the files for repeat requesters, hence the reason some files from the 1970s were carried forward during her tenure. Hansen also notes that in 1993 Armstrong realized his autographs were being sold over the Internet, and he

found many of his signatures to be forgeries. It was at this time he stopped signing letters.

This correspondence was found grouped into the following categories; an autograph or autographed picture, congratulatory letter on becoming an Eagle Scout, individual requests from youth for information about piloting or space exploration, similar requests from entire classes, students asking about astronaut qualifications, donations or contributions for a charitable auction, invitations for specific events, requests for speaking engagements, queries from authors for forewords to their book and media interview requests. Most of the media requests were declined by standardized letters, unless Armstrong accepted, in which case he composed and signed a personal letter.

The correspondence is grouped as it was found in Armstrong's files. One letter was received by Carol Armstrong, from David Scott, upon Armstrong's passing, and this was added to the papers in 2017. Much of the correspondence from the 1980s was interspersed among the papers and can be found in the box of miscellaneous correspondence.

**Box 330** *[Letters From Children], [Eagle Court of Honor] and [Troop...], 1990*

Folder

1. [Letters From Children], 1990 (folder 1 of 2)
2. [Letters From Children], 1990 (folder 2 of 2)
3. [Eagle Court of Honor], 1990
4. [Troop # 1-50] 1990
5. [Troop # 51-100], 1990
6. [Troop # 101-150], 1990
7. [Troop # 151-200], 1990
8. [Troop # 251-300], 1990
9. [Troop # 301-350], 1990
10. [Troop # 351-400], 1990
11. [Troop # 401-450], 1990
12. [Troop # 451-500], 1990
13. [Troop # 500], 1990
14. [Troop # 600], 1990
15. [Troop # 700], 1990
16. [Troop # 800], 1990
17. [Troop # 900], 1990
18. [Troop # 1000], 1990
19. School Groups and Children, 1990

**Box 331** *[Suspected Repeaters], [Repeaters] and Correspondence from Scotland, 1970-2008*

Folder

1. [Suspected Repeaters], 1970-1978
2. [Repeaters], 1975-2008
3. Correspondence from Scotland, 1970-1994

**Box 332** *[Auctions/Fund Drives/Charity], [Contribute to Book, etc.] and [Miscellaneous], 1990*

Folder

1. Auctions/Fund Drives/Charity, 1990
2. [Contribute to Book, etc.], 1990
3. [Miscellaneous], 1990 (folder 1 of 2)
- 4, [Miscellaneous], 1990 (folder 2 of 2)

**Box 333** *[Eagle Scouts], [Invitations Declined], [Sale or Auction] and [Schools, Classes], 1998*

Folder

1. [Eagle Scouts], 1998
2. [Invitations Declined], 1998
3. [Sale or Auction], 1998 (folder 1 of 4)
4. [Sale or Auction], 1998 (folder 2 of 4)
5. [Sale or Auction], 1998 (folder 3 of 4)
6. [Sale or Auction], 1998 (folder 4 of 4)
7. [Schools, Classes], 1998

**Box 334** *[Requests For Information], [Contribution To Book - Favorite Recipe] and [Miscellaneous], 1993-1999*

Folder

1. [Requests For Information], 1998
2. [Contribution To Book - Favorite Recipe], 1998
3. [Miscellaneous], 1993-1998 (folder 1 of 2)
4. [Miscellaneous], 1998-1999 (folder 2 of 2)

**Box 335** *[Eagle Scouts], [Invitations Declined], [Sale or Auction], [Schools, Classes], [Requests For Information], [Contribution To Book - Favorite Recipe] and [Miscellaneous], 2007*

Folder

1. [Eagle Scouts], 2007
2. [Invitations Declined], 2007

3. [Sale or Auction], 2007 (folder 1 of 2)
4. [Sale or Auction], 2007 (folder 2 of 2)
5. [Schools, Classes], 2007
6. [Requests For Information], 2007
7. [Contribution To Book - Favorite Recipe], 2007
8. [Miscellaneous], 2007 (folder 1 of 2)
9. [Miscellaneous], 2007 (folder 2 of 2)

**Box 336** *[Sale or Auction], [Eagle Scouts], [Invitations Declined], [Schools, Classes], [Requests For Information], [Contribution To Book - Favorite Recipe] and [Miscellaneous], 2008*

Folder

1. [Sale or Auction], 2008 (folder 1 of 2)
2. [Sale or Auction], 2008 (folder 2 of 2)
3. [Eagle Scouts], 2008
4. [Invitations Declined], 2008
5. [Sale or Auction], 2008
6. [Schools, Classes], 2008
7. [Requests For Information], 2008
8. [Contribution To Book - Favorite Recipe], 2008
9. [Miscellaneous], 2008

**Box 337** **RESTRICTED**, *[Program Participation Correspondence], [Associations] [LTRS To Be Filed], and contracts, 1963-2012*

Folder

1. [Program Participation Correspondence], 1979-1997 (folder 1 of 3)
2. [Program Participation Correspondence], 1975-1978 (folder 2 of 3)
3. [Program Participation Correspondence], 1963-1974 (folder 3 of 3)
4. [Associations], 1979-2011 (folder 1 of 2)
5. [Associations], 1978-1958 (folder 2 of 2)
6. [LTRS To Be Filed], 2003-2012 (some undated)

**Box 338** **RESTRICTED** - *[Recommendations], circa 1970s-2000s*

Folder

1. [Recommendations], circa 1970s-2000s (folder 1 of 2)
2. [Recommendations], circa 1970s-2000s (folder 2 of 2)

**Box 339** *[Awards], circa 1970s-2000s*

#### Folder

1. [Awards], Correspondence regarding various awards intended for Armstrong, some which he declined, circa 1970s-2000s
2. [Awards], Italian "Peace Ambassador Award," January - March, 1975
3. [Awards] Tuskegee Airmen Distinguished Achievement Gold Medallion Award, June 1981-August 1982
4. [Awards], American Astronautical Society Space Flight Award, 1999
5. [Awards], National Press Club, February 22, 2000
6. [Awards], Heinlein Award, April-May, 2000
7. [Awards], American Association of Engineering Societies, Norm Augustine Award, May 8, 2000 (2 programs)
8. [Awards], Aerospace Historical Society, August - October, 2001
9. [Awards], Rotary National Award for Space Achievement, includes letter of congratulations from Martin Jischke, 2004
10. [Awards], National Air and Space Museum Lifetime Achievement Award, 2004
11. [Awards], Guild of Air Pilots and Air Navigators (2 programs), 2006
12. [Awards], National Aeronautics and Space Administration, Group Achievement Award to "America in Space: NASA's First Fifty Years Team," (certificate), 2008
13. [Awards], Naval Aviation Hall of Honor (1 program), 2010
14. [Awards], Der Steiger Award, 2012

#### **Box 340** *Miscellaneous, 1974-1989*

#### Folder

1. Correspondence and related newspaper clippings, 1974-1989
2. Correspondence, 1976-2000
3. Purdue Alumni Association, 1976
4. Correspondence with Professor Alex Nickon regarding his naming a molecule, "Apollan-11-ol," 1979
5. Correspondence with photograph (Auburn-Cord-Dusenbergl Club) from Dottie Geheen, December 29, 1979
6. Correspondence from Anthony P. Cima, March 1980-August 1984
7. Correspondence, thank-you notes from Armstrong to those facilitating travel arrangements, 1981-1987
8. Correspondence, travel arrangements, 1982-2005
9. Correspondence and notations in regards to fuel optimization from Armstrong, addressed to C.E. Cook, Jr. and Fred Powell, February 4, 1983
10. Autograph requests for various projects, May 1984-July 1987
11. Correspondence, Hoover Institution, October 31, 1978 and June 25, 1984
12. Poem, "A Modern Version of Wynken, Blynken and Nod," by Leta Burgess Brandemihl, November 19, 1984
13. Correspondence in regards to Dell Mae Bowling's death, April 6, 1987
14. Correspondence, travel expenses, October 15, 1987

15. Correspondence from Yves Candal and summary of Armstrong's X-15 Test Pilot experience, written by Candal, May 18, 1987
16. Correspondence, H.J.P. Arnold, in regards to Armstrong and lunar surface photographs, March 1987
17. Correspondence, New York Athletic Club, 1987-2001
18. Correspondence, associates, 1988-1989
19. Correspondence, Rex Stewart Visual Promotions, October 13, 1988
20. Invitation, 20 year ceremonies of the human centrifuge, Harry G. Armstrong Aerospace Medical Research Laboratory, Wright-Patterson Air Force Base, Ohio, November 21, 1989
21. Correspondence, Mr. Peter R. de Vries, Editor-in-Chief, Uitgeverij De Vrijbouter, 1989

**Box 341** *Miscellaneous, 1991-2012*

Folder

1. Correspondence, High Flight Foundation, Mary Irwin, 1991
2. Correspondence, Howard Benedict, Mercury Seven Foundation, 1993
3. Correspondence and article, "The Moon Watch: A history of the Omega Speedmaster Professional, by Alan Nelson, 1991-1993
4. Correspondence, J.T. Ames, in regards to the Ames-Melz In Space Cyclotron Accelerator/Satellite-Projectile Payload, November 23, 1993
5. Correspondence, Lawrence Suid, in regards to "Kennedy, Apollo and the Columbus Factor," February 16, 1994
6. Correspondence, American Institute of Aeronautics and Astronautics, Fellows Dinner, confirmation, April 26, 1994
7. Correspondence, Meccano/ERECTOR™, May 12, 1994 (letter signed by Armstrong)
8. Correspondence, Frederick Seitz, in regards to climate change, circa 1998
9. Correspondence, Edith Haines Sampson and clippings about Armstrong's first grade teacher and class at Champion Elementary School, Warren, Ohio, 1998
10. Correspondence, Bob Hoge, includes Mobile Optical Tracking Systems (MOTS) film frames from first Saturn V launch (S-501), related UCS map of Cape, tracking photographs from a Gemini launch and an Apollo 7 launch, 1966-1999
11. Correspondence, NASA Johnson Space Center, Oral History Project, (Ms. Rebecca Wright, Project Manager, Oral History Project, SIGNAL Corporation), 2001-2002
12. Correspondence, in regards to "Brown Shoes History Project," 2000-2003
13. Project binder and correspondence, related to artwork by Drew Struzan, commissioned by Joseph A. Corvi, Jr. in relation to the "First Flight Centennial Campaign," 2000-2005
14. Correspondence, "NAHF print signing correspondence," National Aviation Hall of Fame, "Spirit of Flight," 2003

15. Correspondence, in regards to NASA renaming the Dryden Flight Research Center, 2005
16. Correspondence and notes, "D-558-2 launch and flight," circa 2005-2006
17. Correspondence, 2004-2006
18. Correspondence, Timothy Alan, Neil Gagnon, Project Gemini and Apollo commemorative patches, July 24, 2009
19. Correspondence, Telluride Foundation, 2010
20. Correspondence, "Honeysuckle console log page," and photograph, John Saxon, August 21, 2011
21. Correspondence, Eagle Scout, Court of Honor request, 2011
22. Correspondence, Letter from David R. Scott to Carol Armstrong, September 26, 2012 with enclosed copy of letter Jimmie Mattern sent to David Scott and Neil Armstrong, March 17, 1966
23. [Standard Atmosphere], tables of atmospheric statistics at various altitudes, includes post-it, [Purdue], attached to back, undated
24. Correspondence, Virgil C. Hab, Armstrong's former scout leader, undated

**Box 342** *[Quack], circa 1999-2000s*

Folder

1. [Quack] ,includes International UFO Congress Convention And Film Festival brochures, clippings and miscellaneous pamphlets, circa 1999-2000s

**OS Box 343** *Correspondence and Commemorative Scrapbook, 2009*

Item

1. Correspondence and commemorative scrapbook, "Fly Me To The Moon," by the Kona Brass, a musical journey honoring the Apollo 11 moon landing," 40<sup>th</sup> anniversary, 2009

**Series 11. Artifacts, 1920-2011**

(27.2 cubic feet)

**Series Description:** The artifacts series houses items of various sizes and in a variety of media, and includes artwork, awards, memorabilia, and some collected items most likely from Neil Armstrong's youth. Much of the artwork came as gifts to Armstrong from colleagues, friends, and admirers. Also included in the series are plaques and awards granted to Armstrong for his service in the NASA manned space program, as well as his professional career at the University of Cincinnati and as a member of several professional boards and commissions. In addition to official award plaques and certificates, Armstrong also collected an array of commemorative coins and medallions related to space flight and exploration, which we have preserved in arrangements according to how Armstrong himself stored them. The series also

contains a variety of commemorative memorabilia, including a 1967 Rose Bowl football signed by the winning Boilermakers, and models of different space crafts. Items of note, which are likely from Armstrong's childhood, include his geology collection, wooden model planes, and a small collection of stamps.

## **Sub-series 1. Artwork, 1964-1996**

### **Working Files**

(2.4 cubic feet)

**Sub-series Description:** This subseries contains artwork that was gifted to Armstrong at various points in his life. Of note are original cartoon strips, various depictions of the Apollo 11 lunar landing, and a wide variety of paintings, sketches, and lithographs pertaining to Armstrong's legacy as a pioneer in flight and space exploration.

#### **Box 344** *Artifacts – Artwork, 1968-1994*

##### Folder

1. "The Eagle," print produced by The House of Harley, New York, print no. "Neil Armstrong," circa December 1969
2. Painting "One Small Mistake," depicts lunar surface with dropped set of keys next to footprint, art by Chris Butler with small note, undated
3. Painting by Jay B. McVey with moon in foreground and view of "Earth rise," undated
4. Photographs and artwork gifted to Armstrong, circa 1968-1984
5. Original comic strip art gifted to Armstrong by various artists, circa 1968-1995
6. Lithographs from G & H Technology, art by René Villiger, circa 1996
7. Print of an "Old English Engraving," depicting geographical features of the moon, undated

#### **Box 345** *Artifacts – Artwork, 1964-1970*

##### Folder

1. Poster advertisement for Vern Hammerlund photography, undated
2. Pencil drawing of the Apollo 11 launch entitled "To the Moon," signed and numbered (46/50), undated
3. Oversized binder containing four enlarged photographs taken during the Apollo 11 EVA, with correspondence from the company that produced the enlargements, June 15, 1970
4. Matted mock-up of magazine page, enlarged with photograph of the Lunar Landing Module, undated.
5. Matted mock-up of magazine page, enlarged with photograph of unidentified astronaut exiting a CSM during an EVA, undated

6. Matted mock-up of magazine page, enlarged with photograph of astronaut during an EVA with comparative photo of human baby attached to umbilical, undated
7. Matted mock-up of magazine page, enlarged with photograph taken during the Apollo 11 EVA, July 1969
8. Matted mock-up of magazine page, enlarged with photograph of distant mountains with rocky terrain in the foreground, undated
9. Matted mock-up of magazine page, enlarged with photograph of Edwin "Buzz" Aldrin during Apollo 11 EVA with Armstrong visible reflected in Aldrin's visor, July 1969
10. Drawing, Boeing Company, Saturn V Apollo Flight Configuration, drawn by Don Sprague, December 1970
11. Diagram and image, "Hindenburg"...transatlantic challenge, drawings by Willis L. Nye, circa 1964

## **Sub-series 2. Awards and Plaques, 1969-2011**

### **Working Files**

(4 cubic feet)

**Sub-series Description:** The subseries contains a selection of awards and plaques received by Armstrong throughout his career. Of note are several awards from Purdue University, including distinguished alumni awards from the School of Engineering, the University Band, as well as Armstrong's Order of the Griffin certificate commemorating his reception of Purdue's highest honor. Also housed here are items from Armstrong's NASA career, including his NACA experimental test pilot materials, along with awards associated with his work on corporate boards. Lastly, there are items related to his receipt of the Congressional Medal of Honor in 2011.

#### **Box 346** *Artifacts – Awards and Plaques, 1969-2010*

##### Item

1. Honorary citizen certificate from the City of West Monroe, Louisiana, July 11, 1969
2. Massachusetts Association of Land Surveyors and Civil Engineers, Inc. honorary membership certificate, October 10, 1969
3. Boy Scouts of Korea Honorable Citation for the Lunar Mission, circa November 1969
4. City of West Lafayette, IN declaration of Armstrong as "Man of the Century," January 9, 1970
5. Certificate, Friendship Veterans Fire Engine Company 1774, Alexandria, Virginia, February 22, 1970 (honorary life member)
6. American Institute of Aeronautics and Astronautics, Kent State University, Honorary membership certificate, May 11, 1973
7. American Institute of Aeronautics and Astronautics, certificate of

- appreciation for 25 years of service, circa 1974
8. Purdue Alumni Association Lifetime Membership Certificate, February 13, 1975
  9. "National Research Council, Aeronautics and Space Engineering Board Certificate of Appreciation," circa 1981
  10. The American Astronautical Society electing Armstrong as a Fellow, undated
  11. Golden Legion of Phi Delta Theta, celebrating 50 years of Armstrong's membership in the fraternity, circa 2003
  12. 2010 Reagan Distinguished American Award, Jonathan Club, Los Angeles, CA. Includes program, correspondence related to a signed lunar aircraft model (not in this collection) and contribution to the Purdue Research Foundation, and speech, October 27, 2010

**Box 347** *Artifacts – Awards and Plaques, 1996*

Item

1. Dryden Flight Research Center glass plaque, undated
2. Milton O. Thompson Lifetime Achievement Award, crystal plaque, November 6, 1996

**Box 348** *Artifacts – Awards and Plaques, 1967-2004*

Item

1. Purdue University School of Engineering Distinguished Alumni Award, May 1967
2. Certificate, Purdue University, Silver Anniversary of Armstrong's graduation, April 27, 1980
3. Purdue University Band Distinguished Alumni Award, circa 1991
4. "Purdue" cloth from a Purdue Band uniform, mounted on a board, "Neil Armstrong, In recognition of your ongoing support of and interest in the Purdue University Band Program. In your legendary role as our most "Well-Travelled" member, you reached for the moon, and shared a piece of it with each of us. Your contributions are treasured by us all. Presented this 18<sup>th</sup> day of October, 1997."
5. "Neil Armstrong Hall of Engineering, Purdue University," development plans, September 2004
6. Purdue Foundation commendation, recognizing Armstrong's participation on the Board of Governors of the Purdue Foundation and, on behalf of the institution, commend this service for its lasting benefits to Purdue University, signed by Purdue President Steven C. Beering and Win Hentchel, Secretary, undated

**Box 349** *Artifacts – Awards and Plaques, 1961-2011*

Item

1. Square of green marble engraved by Eaton printer products, undated
2. Small crystal commemorative plaque reproducing the FAA aircraft type certificate for the Gates Learjet A10CE, circa 1981
3. No. 26 framed shield of Los Scout de la Patria, the highest achievement in the Argentine Boy Scouts, with original box, circa 1969
4. NASA Plaque for X-15 research from Edward's Flight Research Center, with insignia made with silver used in X-15 systems, circa 1961
5. Joe Tiller Chapter of Northwest Indiana National Football Foundation Outstanding American and Representative of Northwest Indiana award and award dinner program, June 16, 2011
6. An official Fisher Space Pen, with case, undated
7. Commemorative medal for the 50<sup>th</sup> anniversary of the Beech Aircraft Corporation, circa 1982
8. Certificate from the American Society of Mechanical Engineers acknowledging Armstrong's receipt of the Spirit of St. Louis Medal with correspondence from Otto Fedor who accepted the award on Armstrong's behalf, circa 1972-1973
9. Nomination for the Ancient Golden Cross of Honor and Merit, from the Sovereign order of the Hospitallers of St. John of Jerusalem Knights of Malta, circa June 1969

**Box 350** *Artifacts – Awards and Plaques, 1981-1989*

Item

1. Artifacts – Awards and Plaques – Tuskegee Airmen Honorary Lifetime Membership plaque classifying Armstrong as "Expedition Commander," November 12, 1981
2. Artifacts – Awards and Plaques – Jimmy Doolittle Fellow, Aerospace Education Foundation of the Air Force Association, Apollo XI Crew, Neil A. Armstrong, 1989, Central Florida Chapter, AFA

**Box 351** *Artifacts – Awards and Plaques, 1994-2011*

Item

1. Artifacts – Awards and Plaques – Purdue University Order of the Griffin framed certificate with gold Griffin pin and Purdue Band pin, circa October 1994
2. Artifacts – Awards and Plaques – Distinguished Alumni Award from Purdue University Alumni Association, October 23, 1999
3. Artifacts – Awards and Plaques – American Institute of Aeronautics and Astronautics Appreciation Certificate commemorating the 100<sup>th</sup> Anniversary of Powered Flight, circa December 2003
4. Artifacts – Awards and Plaques – The Guild of Pilots and Navigators Guild

- Award of Honour, October 26, 2006
5. Artifacts – Awards and Plaques – Poetic tribute and commemoration read into the record of the U.S. House of Representatives, signed by poets Albert Casey Caswell, circa 2009
  6. Artifacts – Wooden paddle, “Presented to Mr. Neil Armstrong – Legends of Aerospace Tour, From the Captain and Crew of USS Harry S. Truman (CVN 75), October 9-10, 2010
  7. Artifacts – Congress of the United States, official decree congratulating Armstrong upon receiving the Congressional Gold Medal, includes a small booklet, “The Congressional Gold Medal, honoring John Glenn, Neil Armstrong, Michael Collins, and Buzz Aldrin,” November 16, 2011
  8. Artifacts – Awards and Plaques – Certificate of Honor for Distinguished Service from Airmen’s Squadron of Disabled American Veterans, undated

### **Sub-series 3. Coins, 1969**

(0.2 cubic feet)

**Sub-series Description:** This series contains one set of proofs for U.S. currency minted in 1969.

**Box 352** *Artifacts – Coins, 1969*

#### Folder

1. United States Proof Set of coins in circulation circa 1969

### **Sub-series 4. Commemorative Coins and Medallions, 1966-2011**

(2.5 cubic feet)

**Sub-series Description:** This subseries contains a collection of commemorative coins and various medallions given to Armstrong at various occasions. The subseries is dominated by an assortment of Apollo era coins, which Armstrong kept in a box labeled [Commemorative Medallions]. Also from this time are coins related to astronautics in general, including coins minted in recognition of achievements by Russian cosmonauts like Yuri Gagarin. Lastly, numerous tie tacks, cuff links, pins and a few other commemorative items can be found here.

**Box 353** *Artifacts – Commemorative Coins and Medallions, 1969-2005*

#### Tray

1. Artifacts – Commemorative Coins and Medallions
  - Item
  1. Gift Box and letter from elderly fan, August 5, 2005
  2. Cuff-links “presented to Neil Armstrong, Boy Scouts of Korea,

- 1971”
3. CSM tie-tack, undated
  4. B-70 Aircraft pin, undated
  5. National Space Club medallion minted from Apollo VIII, Apollo XI, Skylab, Apollo-Soyuz, and early Goddard rocket materials; in white envelope w/ info card, undated
  6. “Ohio space pioneers” medallion encased in plastic, undated
  7. USA Space Program commemorative coin by C. D. Peacock of Chicago in white box and turquoise clamshell box, undated
  8. Vostok 1, Yuri Gagarin medallion in burgundy clamshell box, undated
  9. Medallion with congratulatory letter from The Lunar Order granting Armstrong honorary membership, undated
  10. “Paired for Space” Gemini/Agna keychain set by Bell Aerosystems, undated
  11. Gemini 8 coin with Shell logo on one side in rectangular black clamshell box with gold “P,” undated
  12. Small black clamshell box with notecard sized photos from German aircraft manufacturer Erno-Raumfahrttechnik GMBH, undated
  13. Blue clamshell box with 3 commemorative medallions from Ohio, undated
  14. Sergei P. Korolev commemorative medallion, undated
  15. “The Engineers Club, Dayton” medallion, undated
  16. “25<sup>th</sup> Anniversary m Liberation of Guam” commemorative coin, undated
  17. Dayton, Ohio Bicentennial Commemorative Medallion, undated
  18. Medallion commemorative international cooperation in space exploration minted from Space Shuttle Atlantis and Space Station Mir materials, undated
  19. Wright-Patterson AFB commemorative medallion, undated

Tray

2. Artifacts – Commemorative Coins and Medallions

Item

1. 20<sup>th</sup> Anniversary of Apollo 11 CD in clear jewel case, undated
2. Manila envelope with 6 gold Apollo XI/XVII gold medallions on chains, each in individual envelope, undated
3. Brown enveloped numbered “2000/3000” – signed 45” vinyl record of Apollo 11 mission, undated
4. Brown rectangular box [11 – Viola Armstrong] containing nine numbered (#12 - #20) Apollo 11 Robbins Medallion, each originally in plastic case, plastic cases have been replaced with archival coin sleeves, July 16, 1969
5. Small mounted sample of rocket fuel w/ certification signed by technician working on Apollo 11 in box marked “Fragile”
6. Gold plated honorary membership card for The American Federation of Musicians of the United States and Canada, A.F.L.

- C.I.O. , undated
- 7. Plastic RCA Apollo 16 coin, undated
- 8. Two-piece bronze and silver First Moon Landing medallion, German, in Navy-blue "United States of America" clamshell, undated
- 9. Commemorative Medallion featuring mathematical equations in baby-blue felt sleeve and white box, undated
- 10. Bronze Apollo 11 commemorative medallion in black Omega clamshell box with info sheet in white box, undated
- 11. Gold keychain with note from friends of Armstrong's parents, in dark brown rectangular box, undated
- 12. NASA lapel pin, undated
- 13. "Expedition Nine" lapel pin, undated

Tray

3. Artifacts – Commemorative Coins and Medallions – [Commemorative Medallions]

Item

- 1. Apollo 11 10<sup>th</sup> Anniversary commemorative medallion, undated
- 2. Bronze Apollo 11 commemorative medallion in white box, undated
- 3. Silver Apollo 11 key chain, undated
- 4. Silver Apollo 11 lunar landing medallion, imbedded in plastic with "Neil Armstrong" scratched on the side, undated
- 5. Silver Apollo 11 medallion in small manila envelope whose die was flown to moon, undated
- 6. Apollo 11 commemorative coin in plastic, undated
- 7. Sunoco millennium coin commemorating the Apollo 11 lunar landing, undated
- 8. "Altair" patch for the uncompleted lunar landing module in development circa 2007
- 9. Package matchbooks depicting Armstrong as an Apollo 11 astronaut without matches, undated
- 10. Three Apollo 11 matchbooks with matches, undated
- 11. Ryan Apollo Lunar Landings Radar playing cards, undated
- 12. Blue and red commemorative Apollo playing cards, undated
- 13. RCA Apollo commemorative matchbook series No. 16395, undated
- 14. Small color Apollo 11 medallion in North American Rockwell Corporation box, undated
- 15. Small silver Apollo 11 commemorative coin in clear clamshell, undated
- 16. Apollo 11 pin depicting the Command and Service Module in a trailer truck, undated
- 17. Spalding, undated
- 18. Small piece of Apollo spacecraft encased in plastic in small white box, undated
- 19. The Historical Society of Australia and New Zealand Apollo 11 commemorative medallion in white plastic clamshell box, undated

20. Project Apollo/Apollo 11 commemorative gold medallion in black plastic clamshell and cardboard sleeve, undated
21. Gold Apollo XI/XVII medallion in plastic sleeve, undated
22. "First Man on the Moon" commemorative medallion in red clamshell and white box marked with number "2" , undated
23. Square wooden box with silver Apollo 11 commemorative medallion, undated

**Box 353a** *Artifacts – Commemorative Coins, Medallions, Pins, Tie-Tacks, Cufflinks, and Watches, circa 1940s-2000s*

Item

1. Artifacts - Small blue case with pins & medals; 4 Purdue Intramural Sports, 5 wings, 5 miscellaneous, circa 1940s-1950s
2. Artifacts - Medal in blue velvet case, USS Kitty Hawk CV-63, First in Flight, on back, "Presented by the Commanding Officer, Commissioned April 29, 1961"
3. Artifacts - Musical jewelry box; contains 100<sup>th</sup> Anniversary of Coney Island, 1886-1986 watch, gold ring, belt buckle, White House Situation Room medal type item, 2 YC-15 tie tacks, and 75 other assorted tie tacks/cuff links
4. Artifacts - Small blue case holding 2 gold medals with red, white and blue ribbon; USO Wright Flyer...Continuing the Legacy, and "EAA MSOE, Neil A. Armstrong, September 14, 1990"
5. Artifacts - American flag box with 55 commemorative coins/medallions, 2 cloth patches, and one Army adhesive patch, circa 2000s
6. Artifacts - "Count Down 2000" watch, silver watch, unmarked, and gold wristband, undated
7. Artifacts - Small black & gold case, marked United States of America, 2 pins and 2 medals, "Distinguished Public Service," engraved on back," undated

**Box 353b** *Artifacts – Ink Pen, Small Compass, Medallions, Pins, Tie-Tacks, and Cufflinks, circa 1960s-2011*

Item

1. Artifacts – 10 small boxes with tie tacks, cufflinks, pins, etc., circa 1960s-2000s  
Artifacts – Gold Coin – "I Primi Uomini Sulla Luna," July 20, 1969, in blue case
2. Artifacts – ink pen in black case, "La Penna Expo '70"
3. Artifacts – Greater Cincinnati Chapter American Defense Preparedness Distinguished Service Medal, May 1, 1978  
Artifacts – Coin – Euro Eire 2006, in blue velvet case

4. Artifacts – The Reagan Distinguished American Award, Jonathan Club, 2010
4. Artifacts – Flying Midshipmen Association, medallion, 100<sup>th</sup> anniversary, 1911-2011
5. Artifacts – small compass in black case, undated

## **Sub-series 5. Commemorative Memorabilia, 1955-2010**

### **Working Files**

(1.4 cubic feet)

**Sub-series Description:** This subseries includes commemorative memorabilia gifted to Armstrong on occasions of celebration throughout his career. Of particular interest is a 1967 Rose Bowl football signed by the Purdue football team and given to Armstrong after he had completed the Gemini VIII mission. Roger Chaffee, Gus Grissom, and Eugene Cernan were also in attendance. Also found in this subseries are items from Purdue University's Astronaut Reunion in 1999, as well as materials Armstrong received as part of the Legends of Aerospace Tour in 2010. Armstrong's selective service card can is also housed here, stored by him with a plaque commemorating the move of the offices of U.S. Steel from New York to Pittsburgh.

**Box 354** *Artifacts – Commemorative Memorabilia – Gemini Heat Shield Fragment, 1966*

#### Box

1. Mounted acrylic mold of CSM containing a piece of the heat shield from the Gemini VIII CSM, 1966

**Box 355** *Artifacts – Commemorative Memorabilia – Signed Rose Bowl Football, 1967*

#### Folder

1. Rose Bowl Football, signed by the varsity football team, from 1967 Rose Bowl, Purdue v. USC, January 2, 1967

**Box 356** *Artifacts – Commemorative Memorabilia, 1990-1994*

#### Folder

1. Purdue box with Griffin emblem containing gold pins from the Vision 21 fundraising campaign, circa 1990-1994

**Box 357** *Artifacts – Commemorative Memorabilia, 1999*

Folder

1. Purdue Astronaut Reunion commemorative event binder with correspondence and photos, circa 1999

**Box 358** *Artifacts – Commemorative Memorabilia, 1999-2010*

Folder

1. STS-126 Press Packet, patches, and photographs, circa 1999
1. USS Dwight D. Eisenhower (CVN 69) visitor's information folder from the Armed Forces Entertainment, Legends of Aerospace II Tour, circa 2010
2. USS Dwight D. Eisenhower (CVN 69) photobook documenting Armstrong's visit, circa March 2010
3. USS Harry S. Truman (CVN 75) visitor's information folder from the Armed Forced Entertainment, Legends of Aerospace II Tour, circa 2010

**Box 359** *Artifacts – Commemorative Memorabilia, 1955-1988*

Folder

1. Small plaque "End of an Era," commemorating the 87 years of Board of Directors of US Steel in New York City before moving to Pittsburgh, includes Armstrong's selective service card and Indiana State Registration of Land Surveyors card (these items were kept in a small box with the plaque by Armstrong), plaque circa 1988; cards circa 1955-1956

**Sub-series 6. Commemorative Models, 1968-1969**

**Working Files**

(1.2 cubic feet)

**Sub-series Description:** The subseries houses models of spacecraft and satellites which were given to Armstrong by various institutions, such as the North American, Corporation and the Armstrong Museum in Wapakoneta, Ohio. Several Apollo era items are of note, including models of the Command and Service Module, the Lunar Lander, and an early communications satellite.

**Box 360** *Artifacts – Commemorative Models, 1969*

Item

1. Model of the Command and Service Module of the Apollo program made by North American Aviation, circa 1969
2. Model of the communications satellite ESRO 1B (Boreas) launched WTR

October 1<sup>st</sup>, 1968, inscribed “To Mr Neil A. Armstrong as a reminder of his visit to Holland – 9<sup>th</sup> October, 1969”

**Box 361** *Artifacts – Commemorative Models, undated*

Item

1. Model of the Lunar Landing Module with mounted plaque inscribed “Neil A. Armstrong,” undated

**Sub-series 7. Geology Collection, undated**

**Working Files**

(1.6 cubic feet)

**Sub-series Description:** Included here is a labeled collection of Armstrong’s geological samples, mainly rocks and minerals. The boxes in which it was originally housed have been retained.

**Box 362** *Artifacts – Geology Collection, undated*

Item

1. Original boxes in which Armstrong stored his rock collection, includes original lists identifying rocks and minerals in the collection, undated

**Box 363** *Artifacts – Geology Collections, undated*

Item

1. Armstrong’s geology collection, undated (Box 1 of 3)

**Box 364** *Artifacts – Geology Collection, undated*

Item

1. Armstrong’s geology collection, undated (Box 2 of 3)

**Box 365** *Artifacts – Geology Collection, undated*

Item

1. Armstrong’s geology collection, undated (Box 3 of 3)

**Sub-series 8. Honorary Degrees and Appointments, 1970-2004**

**Working Files**

(0.8 cubic feet)

**Sub-series Description:** The subseries contains all of Armstrong's honorary degrees, including PhDs from Purdue and Tufts Universities. Also located here are honorary appointments to various scholarly and scientific organizations to which Armstrong was admitted on the basis of his achievements in space flight and aeronautics.

**Box 366** *Artifacts – Honorary Degrees and Appointments, 1970-2004*

Folder

1. Artifacts – Honorary Degrees – Purdue University Honorary PhD, circa January 1970
2. Artifacts – Honorary Degrees – Lafayette College, Easton, Pennsylvania maroon mortar board, and commencement program, May 29, 1983
3. Artifacts – Honorary Degrees – Tufts University Honorary PhD, circa May 2004

**Box 366a** *Artifacts – Honorary Degrees and Appointments, 1970-2004*

Folder

1. Artifacts – Honorary Degrees – Drake honorary degree and other honorary appointments by foreign nations, rolled and awaiting preservation treatment

**Sub-series 9. Models, undated**

**Working Files**

(1.6 cubic feet)

**Sub-series Description:** This subseries contains model airplanes made by Armstrong. It is unclear when they were made, however, their appearance would suggest early in Armstrong's life. They are relatively small, hand-painted wooden aircraft with signs of light wear and use.

**Box 367** *Artifacts – Handmade Aircraft Models, undated*

Item

1. One small wooden airplane, hand-painted, undated

**Box 368** *Artifacts – Handmade Aircraft Models, undated*

Item

1. Two small wooden airplanes, both hand-painted, both undated

**Box 368a** *Artifacts – Handmade Aircraft Models, undated*

Item

1. Two small wooden airplanes and instruction sheet, both undated

**Sub-series 10. Stamps, 1920-2000s**

**Working Files**

(0.4 cubic feet)

**Sub-series Description:** This subseries contains stamps collected by Armstrong throughout his life. Of particular note is an international stamp book kept by Armstrong as a boy and containing stamps from the 1920s through the 1940s. Other stamps in this subseries are items related to space flight and achievements in astronautics. The subseries includes stamps related to Apollo missions.

**Box 369** *Artifacts – Stamps, 1920s-1994*

Folder

1. International Stamp Book, with stamps circa 1920s-1940s
2. [Neil's Stamps], First man on the moon blocks, Apollo 8, and project Mercury, circa 1962-1969
3. Lithograph of "Neil Armstrong's First Flight, Age 6 Years Old, July 25, 1936 – Warren, Ohio," with stamps commemorating the 13<sup>th</sup> anniversary of the Apollo 11 launch, lunar landing, and recovery, circa 1982
4. Crown Agents Stamp set, circa July 1999
5. Photographs with first day stamps, one crew photo signed by Aldrin and Collins, circa 1969-1972
6. Apollo 8 stamp on small envelop, with July 16 and July 20, 1969 postmarks, circa 1968-1969
7. Australian stamps, "Blast Off! 50 Years in Space," circa 2007
8. Undated 25 cent Frederick Douglass stamp and Spacecraft stamp circa 1994

**Box 370** *Artifacts – Stamps, 1978-1989*

Folder

1. Moon Landing Priority Stamps and Wright Brothers Airmail stamps, both sets issued by the USPS, circa 1978-1989

**Box 370a** *Artifacts – Stamps, circa 1969-2000s*

Folder

1. Original shoe box containing first day covers/postcards/unique stamps on envelopes/unique envelopes, some signed, one by Cosmonauts, (majority addressed to Mr. and Mrs. Stephen K. Armstrong), circa 1969-2000s
2. Original shoe box containing first day covers/postcards/unique stamps on envelopes/unique envelopes, some signed, (majority addressed to Neil Armstrong and some to Mrs. Armstrong, Mark and Ricky, circa 1969-2000s
3. Leather binder with sheets of Apollo 11 – 1969 stamps from Czechoslovakia
4. Framed, First Moon Landing, 1969 stamp (marked #48 of 154 issued), signed by Armstrong and Jim McDivitt
5. First Day Cover on 11"x14" sheet, signed by Richard Nixon and Winton M. Blount, Postmaster General (\*Note: "This stamp made from the die carried to and from the moon.")

**Sub-series 11. Textiles, 1955-1999**

**Working Files**

(2.4 cubic feet)

**Sub-series Description:** This subseries includes graduation gowns worn by Armstrong for commencement ceremonies. Also of interest is a commemorative jacket from Purdue University's 1999 Astronaut Reunion.

**Box 371** *Artifacts – Textiles – Black Cap and Gown, undated*

Item

1. Artifacts – Textiles – Black gown and cap by Fifth Avenue, undated

**Box 372** *Artifacts – Textiles – Black Cap and Gown, undated*

Item

1. Artifacts – Textiles – Black gown tailored by C. E. Ward Company, undated

**Box 373** *Artifacts – Textiles- Purdue Astronaut Reunion Jacket, 1999*

Item

1. Artifacts – Textiles – Purdue University Astronaut Reunion commemorative jacket, circa 1999
2. Artifacts – Textiles – Green canvas bag, well worn, holes in it, undated
3. Artifacts – Textiles – Cap and unidentified green material, marked in black marker, "N.A. Armstrong," undated

## **Sub-series 12. Miscellaneous Memorabilia, 1948-2011**

### **Working Files**

(8.5 cubic feet)

**Sub-series Description:** This subseries brings together a variety of objects collected by Neil Armstrong throughout his life. There is a wide range of different artifacts here, including a piece of the Berlin Wall, items from Armstrong's military career, Boy Scout memorabilia, two magic kits and a model train set from his youth, a segment of the Graf Zeppelin, a signed drawing of professional baseball player Bob Feller, as well as many business cards, decals, and patches from a variety of events and organizations.

#### **Box 374** *Artifacts – Miscellaneous Memorabilia, 1991*

##### Item

1. Piece of the Berlin Wall, circa 1991
2. Three Photographs of the piece of the Berlin Wall being removed, circa 1991
3. The original box for the piece of the Berlin Wall, circa 1991

#### **Box 375** *Artifacts – Miscellaneous Memorabilia, 1940s-1950s*

##### Item

1. Contents of small jewelry box which includes Armstrong's 1<sup>st</sup> Lieutenant bars, a Boy Scout Gold Star, and small metal Purdue memorabilia, circa 1940s-1950s

#### **Box 375a** *Artifacts – Armstrong Family Scout Items, circa 1940s-1970s*

##### Item

1. Field Book for Boys and Men, Boy Scouts of America, signed by Mark Armstrong inside, © 1967
2. Canteen
3. Emergency kit in navy blue canvas bag (11 items inside)
4. Binoculars
5. Small rope
6. Drinking horn
7. Pocket knife
8. Archery glove and bow holder

#### **Box 375b** *Artifacts – Survival Kit, circa 1950s*

##### Item

1. Survival kit, Fraass Surgical Manufacturing Company on card listing items,

circa 1950s (Korean War era)

**Box 376** *Artifacts – Miscellaneous Memorabilia, undated*

Item

1. Clipboard with arm-mount used piloting jets with original flight check-list and photos of original plastic check-list sleeves, undated, circa 1960s

**Box 377** *Artifacts – Miscellaneous Memorabilia, undated*

Item

1. Contents of cigar box labeled [Pins & Funny Medals] consisting of an assortment of humorous pins as well as pins representative of institutions at which Armstrong gave a speech or lecture. Includes honorary medals worn by Armstrong in various parades, but are not awards or distinctions of a professional nature, undated

**Box 378** *Artifacts – Miscellaneous Memorabilia, 1969-2000*

Item

1. Original cigar box labeled [Badges] which housed the items in this box, undated
2. [Badges], Membership cards and discount cards, undated
3. [Badges], Various business cards, undated
4. [Badges], Miscellaneous foreign currency, paper money, undated
5. [Badges], Voyager/Uranus Encounter visitor's badge; Sheriff's special deputy paperwork from State of New Jersey, circa 1969-1986
6. [Badges], Brochure "Executive Currency," Fall/Winter 2000
7. [Badges], Two "Altair," pins, undated

**Box 379** *Artifacts – Miscellaneous Memorabilia, 1972 and undated*

Item

1. Original cigar box labeled [Decals] which housed the items in this box, undated
2. [Decals], Purdue related stickers, undated
3. [Decals], Fabric patches and A.M.I.S. stickers with patches, undated.
4. [Decals], Miscellaneous stickers, undated
5. [Decals], Apollo 16 "Right On!" pin, circa 1972
6. [Decals], Apollo 17 "...Only a Beginning!" pin, circa 1972
7. [Decals], Stickers, window decals, undated
8. [Decals], Aircraft Owners and Pilots Association decals and stickers,

- undated
- 9. [Decals], Correspondence from Angelika Leptien with pressed flowers from her garden, February 1975
- 10. [Decals], Bumper stickers, "Loves You!" "Red Baron," and "Fighter Pilots Do It Better," undated
- 11. Small box with playing cards, a green golf tee, "Cabin Bluff" pin with turkey on it, and an Arthur C. Clarke business card, undated

**Box 379a** *Artifacts – Miscellaneous Memorabilia, circa 1959-1979*

Item

- 11. Little wooden box, "handmade in Havana, Cuba," carved on side, contains; pin – "Neil Armstrong, Moon Deputy, Essex County Sheriff's Department, N.J.;" metal nametag, "Life Member American Fighter Pilots Association, Honorary;" small envelope of business cards, "Neil A. Armstrong, United States of America;" various adhesive and cloth patches; 2 small gold stars on military bars; F-105 Pilot's card, December 17, 1959; Membership card, The Soaring Society of America, Inc., June 30, 1979; Mach Buster's Club – USAF F-100 Super Sabre, undated; Badge, Apollo 11 Fifth Anniversary, July 16, 1974; Badge, First Launch of the Space Shuttle (items left as received)

**Box 380** *Artifacts – Miscellaneous Memorabilia, 1928-2011*

Item

- 1. Contents of folder [Memorabilia] containing a piece of fabric from the Graf Zeppelin (1928), a signed Bob Feller baseball print, and an undated "B-2" special visitor tag, circa 1988
- 2. National League of Professional Baseball Clubs "Astronaut" courtesy card, circa 1965
- 3. Day planners/calendars; 2008-2009, 2010, 2011

**Box 380a** *Artifacts – Magic Kits and Model Train Set, undated*

Item

- 1. Magic kit, "120 Magic tricks and puzzles," price sticker on side - 10¢ - Morris 5¢ to \$1.00 Stores, undated
- 2. Vintage cigar box containing magic tricks, magic catalog, and magic info, undated
- 3. Small model train set, undated

**OS Items** *Artifacts – Leather Briefcase, and Samsonite Suitcase, undated*

Item

1. Briefcase (Property of U.S. Government stamped on the bottom, top grain cowhide)
2. Samsonite Suitcase, undated

## **Series 12. Audio Visual, circa 1960s-2011** (11.8 cubic feet)

**Series Description:** This series contains a variety of recordings, films, and images on a variety of media. The highlights of this series are; numerous magnetic tapes (audio recordings) which include songs written by those inspired by Apollo 11, “wake-up” greetings to the astronauts, various interviews related to Apollo 11, the crew and their families. One box of recordings is dedicated to the entire Apollo 11 mission, from the day before lift-off, lift-off, the descent to the lunar surface, recordings from the events on the moon, ascent, splashdown, quarantine, and an interview with President Nixon.

There are four 45 RPM records containing Apollo 11 related songs, a LP, and 50 full color, 35 mm slides, titled, “One Giant Leap For Mankind: a history of Apollo 8-11,” along with six, 33 1/3 RPM phonograph records and one book which cover the first message from the moon, the Mercury Project, the Gemini Project and the Apollo Project.; “To the moon: Section 1: The story in sound. Section II: The story in pictures and text,” New York: Time-Life Records, 1969.

Also featured are 35mm slides which include NACA and NASA related aircraft and events, slides from the travels of the Apollo 11 crew, post-mission, including some family related slides. There are slide sets featuring “Project Viking,” the USA’s trip to Mars and “Jupiter/Voyager-2, XA-36.”

There is a mixture of other audio visual materials, including, 16 mm films titled, “Korea Welcomes Astronauts,” miscellaneous VHS tapes, including a Bob Hope Special, X-14 tape, and Apollo astronaut reunion dinner tape. Other items include, CDs containing interviews with townspeople, “the people that knew Armstrong best,” leading up to Tranquility Base, an episode of “I’ve Got A Secret,” which Armstrong’s parents took part in, House Hearing pictures on CD and X-15, Astronaut Wings Ceremony on DVD. Cassette tapes range from an X-15 interview with Armstrong, “Future Apollo Missions” and “Advanced Projects,” and cassettes related to travels.

The audio visual material also includes VHS tapes containing the 1992 Documentary Series, *First Flights*, for which Neil Armstrong was host, along with corresponding documents, transcripts, and photographs. Armstrong explores the history of Aviation in this Arts and Entertainment Network Series.

The last box found in the series contains unmarked, undated and unused, magnetic tapes and cassettes.

The audio visual material has been grouped by type of media and in most cases is in chronological order.

**Box 381** *Audio Recordings, Magnetic Tape, 1964-1973 and undated*

Item

1. Magnetic tape, 5", "Wake Up Greetings To The Current Astronauts - Assorted," June 1964
2. Magnetic tape, 7", "Record Music By Kado Cadel, Title: Home on the Moon (Way Out Of This World) and Man Is On The Way," 1969
3. Magnetic tape, 5", "Apollo 11 thru 15 (beyond) Metromedia Special, For: Neil Armstrong, From: Tony Janak, hour, speed 3 ¾", August 21, 1971
4. Magnetic tape, 7", "Buzz Aldrin - Side 1: TV Spots; Side 2: Mike Douglas/Merv Shows, For: Neil Armstrong, From: Tony Janak," September 17, 1973
5. Magnetic tape, 5", "Charlie Boone - Rog Erickson report on Moon landing from viewpoint of lunar citizen, 7 ½" speed," undated
6. Magnetic tape, 5", [Title: Singing Tribute, To United States Astronauts and NASA Team, 7 ½, I.P.S. – Full Track], undated
7. Magnetic tape, 5", "Spirit of '76" "Neil Armstrong, 7 ½ IPS, Heads Out," undated
8. Magnetic tape, 5", [AP11] unmarked and undated

**Box 382** *Audio Recordings, Apollo 11 related (magnetic tapes), 1969 and undated*

Item

1. Magnetic tape, 7 ½, IPS, Mono [Space Song: Up, Up in a Space Craft, written @ 1 a.m., July 20, 1969, by Jean Riley, sung by folk singer, Charlie Marshal of Sacto. ?]
2. [15 I.P.S. Mono, "The Astronaut Song," Danny Constantino; 1. As Played on Mutual Broadcasting System, July 24, 1969 2. As Recorded for Demo (Song Only)]
3. Magnetic tape, [For: Neil Armstrong, "Apollo 11" Capsule, Speed 3 ¾"], July 27, 1969
4. Magnetic tape, 5" [Moon Sounds, by Brock McElheren, State University College Potsdam, New York 13676; copied from 4 to 2 tracks, 7 ½ ips, quarter track stereo, "N.B. The left speaker should be in front of the listener; the right behind,"], July 30, 1969
5. Magnetic tape, 3 ¼", ["Apollo 11" by music classes, July 1969, Tualitin Rec. Dept., Beaverton, Ore.]
6. [For: Neil Armstrong, "Apollo 11" Astronauts... Press Conference, Houston, August 12, 1969, Play Both Sides 3 ¾"]
7. [New York, Chicago Parades, August 13, 1969, Play 2 Sides, Speed 3 ¾", For: Neil Armstrong, Compliments, Tony Janak]
8. [Chicago Parade, August 13, 1969; For: Neil Armstrong's Wife's Folks in Chicago, Speed 3 ¾, 2 Sides]
9. Magnetic tape, 3", song by James Noblet; "Astronauts Carry On," includes lyrics and correspondence, August 14, 1969

10. ["Face the Nation," CBS TV, August 17, Side Two" 1. Houston Press Conference, July 6, 1969 2. Houston Parade, For: Neil Armstrong...From: Tony Janak]
11. [For: Neil Armstrong, "Hometown Parades," September 6, 1969] 7" magnetic tape
12. [For: Neil Armstrong From: Tony Janak; Side 1 Apollo 11 Astronauts Visit Congress, September 16, 1969, 7 ½" Side 2: TV News Coverage, 7 ½"]
13. [Mr. and Mrs. Stephen Armstrong on Merv Griffin Show, September 24, 1969]
14. WRAS Radio; Apollo 11 Salute, Written by Arnold Starr, Directed by Barbara Greacen and Robert Marino, Engineer, Robert Marino, A WFAS Radio Production, White Plains, New York, October 23, 1969
15. [For: The Neil Armstrongs, From: Tony Janak; Bob Hope at the Waldorf Astoria Eisenhower Medical Center Dinner, NBC TV, February 16, 1970, 3 ¾"]
16. Christmas tape made for Armstrong by son and family, personal note in box, undated
17. [For: Neil Armstrong, Temporary Composite on Apollo 11, 2 Sides, 3 ¾"], undated
18. [For: Neil Armstrong, Side 1: "The President's Dinner" for Apollo 11 Astronauts Side 2: Parade Resumes... Astronauts, Speed 3 ¾", Compliments Tony Janak], undated
19. [The President's Dinner for the Apollo 11 Men, New Version], undated
20. [Apollo 11 Crew – Informal Narration (For Interpreters) of Film Clip for International Tour] (7 ½ IPS) magnetic tape, undated
21. [WOMP-PARTY LINE, 3 ¾ IPS, Full Track], undated
22. Magnetic tape with note stuck on box; [Ken Bierly...] 7", undated
23. Magnetic tape, 7", unmarked and undated
24. Magnetic tape, 5", [WCCO Radio Recording, Minneapolis - St. Paul, Minnesota, Charlie Boone - Rog Erickson, Report on Lunar Landing from viewpoint of Lunar citizen, 3 ¾" speed], undated
25. Magnetic tape, 5", [Apollo 11 Tape, Kenneth James King, Program Director, WCHN-AM & FM], undated
26. Magnetic tape, 5", [Apollo 11, #2], includes clipping photograph relating to "moon meal preview," undated
27. Magnetic tape, 5", [Apollo 11, #3], undated
28. Magnetic tape, [ABNAK ?], 5", unmarked and undated
29. Magnetic tape, 5", unmarked and undated
30. Magnetic tape, 5", unmarked and undated
31. Magnetic tape, 2 ¾", unmarked and undated

**Box 383** *Audio Recordings (magnetic tapes), 1969 & undated*

Item

1. Magnetic tape, 7", "Liaison for 14 instruments by 11 players; SNU Music

- Department Ensemble at National Theatre, conducted by Jae Ok Lee, composed by Sung Jae Lee, November 29, 1969”
2. Magnetic tape, 4”, “Space Cantata for Apollo 11,” CBS TV, Christmas Eve, 1969 (from Tony Janak)”
  3. Magnetic tape, 7”, “Side: 1 - Borman, 1/25/71 (Cavett) von Braun (Douglas); Side 2: - Schirra, 1/26/Week 1/28; Collins - 2/3/Swigert 2/3 Russian Space/Politics & Space,” 1971
  4. Magnetic tape, 7 ½”, “Dr. Zhivago, Boston Pops/Movies,” undated
  5. Magnetic tape, 7 ½”, “Christmas,” undated
  6. Magnetic tape, 7”, “Apollo 15, 2 sides (composite), speed 3 ¼ “ from Tony Janak,” undated
  7. Magnetic tape, 5”, “Vojislav Kostic: “A Hymn To Man,” Sung by Olivera Vuco, text by Bozidar Timotijevic, recording speed: 19 cm,” included 2 sheets, translation of tape recording of, “A Hymn To Man,” undated (tape is in poor condition)

**Box 384** *Audio Recordings (magnetic tapes), 1969 & undated*

Item

1. Magnetic tape, 3”, “Neil Armstrong, Bob Hope, Terence Cooke,” 12/25/1969
2. Magnetic tape, 3”, “NASA, 1/2/71 (Neil)”
3. Magnetic tape, 3”, “ 1 - Neil - USSR; 2 - Space Walks, CBS TV, 8/5/1971”
4. Magnetic tape, 7”, Herb Alpert, Chet Atkins, Baja Marimba Band, undated
5. Magnetic tape, 7”, “Ferrante & Teicher, Nat King Cole,” undated
6. Magnetic tape, 7”, unmarked and undated

**Box 385** *Audio Recordings (8 magnetic tapes/2 recording per tape), “Tapes - two track at 1 7/8 - copied at double speed, listening time about 24 hours,” Apollo 11 Mission, 1969*

Item

1. Side 1: “Day before and “Lift Off” and orbital insertion;” Side 2: “Earth discussion - trans lunar injection. Live with pictures from Apollo 11 and video tape rerun - Live, 110 miles above Moon describing craters and ½ hour tele test,” 1969
2. Side 1: “Day before - 3 hours before separation - 4 hours before landing ends before undocking of lunar module;” Side 2: “Before undocking - 3 hours before landing on Moon, undocking near end of tape - up to 1 hour and 51 minutes to landing,” 1969
3. Side 1: “Last of #5 acquisition signal from live about ½ hour before touchdown - 12 minutes before power descent - ends about 600’ feet above Moon;” Side 2: “Starts at 1600’ above Moon with live broadcast from lunar module - The Eagle has landed, 4:17:42 seconds. Live description of rocks by Buzz Aldrin, etc. - ½ way on tape, replay 2 ½ minutes before touchdown.

- Official time 4:17:40 seconds," 1969
4. Side 1: "Mrs. Neil Armstrong, 2/3 of tape Mrs. Aldrin and Mrs. Collins. Last of tape simulation while on surface of Moon, etc.;" Side 2: "Comments while waiting on opening of hatch, interview with Vice President Agnew, opening of hatch (live) near end of tape," 1969
  5. Side 1: "Comments and live broadcast 10:28 p.m. Armstrong starts using space suit, ¼ of tape - opening of hatch, about ½ tape "On the Porch," middle of tape, "Foot on the Moon," Last ½ "Live" with 1<sup>st</sup> 50 minutes on Moon;" Side 2: "Continued from "Live" on the Moon, President of United States at first of tape. Most of tape "Live" on the Moon, Closing of hatch near end of 2 hour and 31 minutes on the surface," 1969
  6. Side 1: "Conversation with Armstrong's parents; inside lunar module after walk (Live); discussion with scientists and astronauts while men rest. Very last of tape, take off from Moon and explanation before;" Side 2: "Repeat of take-off from Moon and in orbit over Moon. Interviews, etc. before acquisition and docking rendezvous and docking (Live)," 1969
  7. Side 1: "On the way back, "Live" showing boxes of rocks, etc., "Live" showing eating and food, speech or statement from men, appreciation from men, etc., Apollo 11 about 10,000 miles, separation of service module from command module, 27 minutes from splashdown, black-out into earth's atmosphere;" Side 2: "7 minutes before splashdown, splashdown, 1<sup>st</sup> of tape, before ½ - approaching and sighting of space craft, after ½ - 1<sup>st</sup> astronaut emerges, ¾ - picking up in basket by helicopter, near end of tape - on ship and into isolation, end - report on quarantine procedure," 1969
  8. Side 1: "Continuation of discussion on isolation, ¼ tape - President Nixon and astronauts, broadcast ends about ¾ tape;" Side 2: "1/2 hour news rerun, 1 hour news rerun and 11:00 news," 1969

**Box 386** *Audio Recordings, Magnetic Tape, 1969-1971*

Item

1. Magnetic tape, 3", "Apollo 11," by Billy Ashley and Billy Kelly, July 19, 1969 (includes correspondence and lyrics)
2. Magnetic tape, 3", "Apollo 11," 2 tracks (Turn) 3 ¾", "newer version, per Tony Janak," circa 1969
3. Magnetic tape, 3", "One Small Step," song by Terrence D. Woodruff, 2<sup>nd</sup> Lieutenant, United States Air Force, July 20, 1969 (includes correspondence)
4. Magnetic tape, 3", "Interview With Miss Helen Hall, Grade School Teachers of Neil Armstrong," WLEC News, Sandusky, Ohio, September 5, 1969
5. Magnetic tape, 3", "For Surr Grurman" (print questionable), September 17, 1969
6. Magnetic tape, 5", "Presence in H. of C. Galleries of Apollo 11 Astronauts," 3 ¾ IPS, December 2, 1969
7. Magnetic tape, 3", "Mr. and Mrs. Armstrong, Wapakoneta, Ohio," 3 ¾ IPS,

October 1971

**Box 387** *Audio Recordings, Magnetic Tape, 1969-1972*

Item

1. Magnetic tape, 3", "Apollo 11" "For Mrs. Armstrong - Flight and Return, Play 2 Sides, 3 ¾", circa 1969
2. Magnetic tape, 3", "Apollo 11, a Meditation - Side 1: Composers - Explanation; Side 2: Remarks Music," circa 1969 (print difficult to read)
3. Magnetic tape, 3", "Neil Armstrong, TV, 3 ¾", September 25, 1969
4. Magnetic tape, 3", "Tranquility in "C" by, Wally Hayman - Dedicated to: Apollo 11 Mission and Neil A. Armstrong, Edwin E. Aldrin and Michael Collins, 7 ½," circa 1969
5. Magnetic tape, 5", "One Small Step," "Susan Barbara Wayne, 7.5 ips, Stereo" per label on box, circa 1969
6. Magnetic tape, 3", no title, from Lewis Durling, includes a note, circa 1969
7. Magnetic tape, 3", "Sky Lab, TV, (Neil) 3 ¾," July 19, 1972
8. Magnetic tape, 3", "Apollo 11" "Capsule, 2 sides - (Turn) For Folks of Janet," (print difficult to read), undated
9. Magnetic tape, 3", "69er's Space Song, #3, Dedicated to Space Flights and The Astros," undated
10. Magnetic tape, 3", sent by Melvin Campbell, no title or markings, undated
11. Magnetic tape, 7", "Astronauts Theme Song," by Rose Morais, undated
12. Correspondence and lyrics, (4) related to recordings, circa 1969

**Box 388** *Records (45 RPMs), circa 1969*

Item

1. 45 RPM, "Rocketship to the Moon," and "Heartbroken," Tex Roe and the Ramblers, Cortland, New York: Sterling-Star Enterprises, undated
2. 45 RPM, "Hot Sand" and "Venus," Rob Van Leeuwen, Penny Farthing, © 1969
3. 45 RPM, "Theme for Apollo 11," (John Anthony-Joan Martin) John Anthony & The Saturn Expedition, and "TEL-STAR," (Joe Meek) John Anthony & The Saturn Expedition, Solar Sonic, "Dedicated to the Crew of Apollo 11," undated (2 copies)
4. 45 RPM, "Christmas On The Moon," (B. Hess) Troy Hess and "I Dreamed About Christmas Last Night," (B. Hess) Troy Hess, Janalyn Records, Produced by T.C.T.A. Record Enterprises, includes correspondence in regards to gift to Armstrong, 2 black and white photographs of Troy Hess, inscribed and initialed to Armstrong by Hess and biography of Troy Hess, age 4, "America's Singing Souvenir," undated
5. Recording; "Double Face 33 T," 1. "Apollo 11..." and 2. "...En Direct De La Lune," includes descriptive jacket holder, 1969

6. Booklet containing sheet music; songs include, "Apollo 11," "Apollo 12," "Lunar Orbiter," "Ranger," "Zond," "Vostok," "Surveyor," "Lunik," "Gemini," and "Sputnik," Musik in Der Kreisbahn, inscription to Armstrong on 1 cover by, Luciano Wurzberger, © 1969 (2 copies)

**Box 389** *LP Record Albums and Corresponding Publication, 1969*

Item

1. One LP record and 50 full color 35 mm slides, "One Giant Leap For Mankind: a history of Apollo 8 - 11," narrated by Lt. Colonel John "Shorty" Powers, Cocoa, Florida: Imagineering Company, Incorporated, 1969
2. Six, 33 1/3 RPM phonograph records and one book; "To the moon: Section I: The story in sound. Section II: The story in pictures and text," New York : Time-Life Records, 1969

**Box 390** *Slides, 35 mm, circa 1960s-1980s*

Item

1. Binder containing slides, 32 pages, with letter to Armstrong stating, "Enclosed are images of the X-1A, X-15 and F-104 you requested from Mr. Bill Dana," from Tony R. Landis, dated April 7, 1995 and brochure; NASA Films brochure, dated 1979, pages labeled by Armstrong as follows, circa 1960s-1980s

Page

1. [NACA Aircraft], 20, 35 mm slides
2. [Edwards], 13, 35 mm slides
3. [Edwards], 16, 35 mm slides
4. [Edwards], 18, 35 mm slides
5. [Edwards], 16, 35 mm slides
6. [Lunar Flying], 20, 35 mm slides
7. [Space History], 2, 35 mm slides
8. [Mercury], 9, 35 mm slides
9. [Apollo 11 Surface], 13, 35 mm slides
10. [Apollo 11 Surface], 11, 35 mm slides
11. [LRRR], 19, 35 mm slides
12. [LRRR], 16, 35 mm slides
13. [Apollo 11], 3, 35 mm slides
14. Unmarked page, 1, 35 mm slide
15. Unmarked page, 6, 35 mm slides
16. Unmarked page, 2, 35 mm slides
17. Unmarked page, 2, 35 mm slides
18. Unmarked page, 6, 35 mm slides
19. [LATS? Apollo], 3, 35 mm slides
20. Unmarked page, 15, 35 mm slides

21. Unmarked page, 8, 35 mm slides
22. Unmarked page, 18, 35 mm slides
23. Unmarked page, 2, 35 mm slides
24. Unmarked page, 10, 35 mm slides
25. Unmarked page, 14, 35 mm slides
26. [Awards], 11, 35 mm slides
27. [Astronomy], 20, 35 mm slides
28. [Space Geology], 17, 35 mm slides
29. [Space Geology], 14, 35 mm slides
30. [Mythology], 15, 35 mm slides
31. [N. Pole], 6, 35 mm slides
32. Unmarked page, 14, 35 mm slides
2. Metal case containing 150 slides; NASA/Apollo related, circa 1965-1980s
3. "The Story Of Our Universe," 40 color slides (35 mm) and sound cassette with narration. Whittier, CA: Holiday Film Corporation, 1900-1981?
4. [Space Frontier], small box with 70, 35 mm slides, 1986
5. [Mars], NASA Johnson Space Center, 8, 35 mm slides, undated
6. [Family], 1, (possibly homestead) 35 mm slide, and [Air Planes], 12, 35 mm slides (originally residing in same container and labeled), circa 1964
7. [World Views,] 22, 35 mm slides, reside in single container, undated
8. [SW Ohio, Dick Underwood], 1, 35mm slide, undated
9. Apollo related, 8, 35 mm slides, undated
10. [Airplanes], 36, 35 mm slides, undated
11. [Aero Space], 19, 35 mm slides, circa 1981
12. "Metz Cathedrale Saint-Etienne, interior", package of 6, 35 mm slides, undated
13. "Metz Cathedrale Saint-Etienne, exterieur", package of 6, 35 mm slides, undated
14. "Metz Cathedrale Saint-Etienne, Vitraux anciens (XIII et XIV siècle)," package of 6, 35 mm slides, undated
15. "Project Viking, the USA's Trip to Mars, Slide Set #1, Smithsonian Institution" Palo Alto, CA: Jones Photocolor, Incorporated, package of 5, 35 mm slides, undated
16. "Project Viking, the USA's Trip to Mars, Slide Set #2, Smithsonian Institution" Palo Alto, CA: Jones Photocolor, Incorporated, package of 5, 35 mm slides, undated
17. "Project Viking, the USA's Trip to Mars, Slide Set #3, Smithsonian Institution" Palo Alto, CA: Jones Photocolor, Incorporated, package of 5, 35 mm slides, undated
18. "Jupiter/Voyager-2, XA-36," Holiday Film Corporation, package of 5, 35 mm slides, 1979
19. "Jupiter/Voyager-2, XA-43," Holiday Film Corporation, package of 5, 35 mm slides, 1979
20. "Jupiter/Voyager-2, XA-48," Holiday Film Corporation, package of 5, 35 mm slides, 1979

**Box 391** *Slides and Magnetic Tape from Various Travels, 1967-1985 (some undated)*

Item

1. Soviet painting slides, 35 mm, 12 slides, in booklet, Russian text, undated
2. Soviet cosmos slides, 35 mm, 24 slides, "...Soviet Painting..." Russian text, undated
3. Slides, 35 mm [Rose Bowl Parade], parade, 16 slides, 1967
4. Slides, 35 mm [Bunnell Bridge], 5 slides, December 1985 (stamped on slides)
5. Slides, 35 mm [Los Tayos], 56 slides, September 1976 (stamped on slides)
6. Slides, 35 mm [Switzerland], 40 slides, July 1972 and March 1973 (stamped on slides)
7. Slides, 35 mm, Russian Space Related, 24 slides, unmarked and undated
8. 3" magnetic tapes, 16, unmarked, undated
9. 3" magnetic tapes, 1, unmarked, undated
10. One box labeled, [This Roll Exposed Probably No Good!], undated
11. One unidentified item; 3" x 3 ½" black stand with small green ball on top, undated

**Box 392** *Films, 1969-1972*

Item

1. Film, 16 mm, "Korea Welcomes Astronauts," 1 of 2 (English version), circa 1969
2. Film, 16 mm, "Korea Welcomes Astronauts," 2 of 2 (English version), circa 1969
3. Film, 8 mm, unmarked and undated
4. Film, 5 ¼ mm, "Apollo 11...A Journey Recalled," A Special Report, NASA Aeronautics and Space Report No. 65, sound/color, 6:30, circa 1969
5. Film, 7 mm, [South Africa], 1972
6. Film, 7 mm, [Switzerland], 1972

**Box 393** *VHS Tapes, circa 1983-2002*

Item

1. [Bob Hope Special], 1983
2. [X-14 Story, Rough Assembly] PMT, LTD., December 31, 1992
3. [Curtis Management Group Marketing Video, Contemporary Celebrities] 6:40, October 26, 1993
4. [Apollo Astronaut Reunion Dinner: Questions & Answer Segment], 32 minutes, September 14, 2002

**Box 394** *VHS Tapes, undated*

Item

1. [Armstrong 8 MM] Afterimage Video Productions, undated
2. [Fusion NAA – Bad Copy], undated
3. [The Infinite Voyage Sail On, Voyager!] time 60:00, WQED, 4802 Fifth Avenue, Pittsburgh, PA 15213, undated
4. [Wings Over The World, Ep #2 – Igor Skorsky; Ep #3 – Boeing: The Red Barn, 50 minutes each], PMT, LTD. Harleysville, PA 19438, undated

**Box 395** *CDs, CD-R Audio, DVDs, 1962-2011*

Item

1. [I've Got A Secret], DVD-R, September 17, 1962 (2 copies)
2. [Neil Armstrong: a man, his hometown and his townspeople], CD and 2 letters, dated 2008 and 2009 concerning CD; interviews, recorded at WOUB, Ohio University, Athens, OH, November 17, 1969
3. [Ed von Renouard's Super 8 movies taken at Honeysuckle Creek of the Apollo 11 EVA], DVD, Colin Mackellar, July 14, 2005
4. [Astronaut Wings Ceremony, Dryden X-15 Pilots – Slideshow; X-15 Research Program – Documentary], DVD-R, Bill Dana, Jack McKay, Joe Walker, August 23, 2005
5. "Due for the Moon," Craig A. Lozanovski, Purdue University Digital Learning Collaboratory (educational film about Armstrong and Purdue University), 2007
6. [Riding Rockets: Armstrong and X-15] DVD, TZ Productions, Clay Lacy, NAHOF Presentation, February 23, 2011
7. [House Hearing pics], CD-R, 2011
8. [Lincoln Portrait, Begin at 7:30+], CD-R Audio, undated

**Box 396** *Cassette Tapes, 1969-1992*

Item

1. ["Future Apollo Missions"...By Jim McDivitt], September 22, 1969
2. ["Advanced Projects" ...Briefing By Bill Davidson], September 23, 1969
3. ["Lunar Surface Material" ...Briefing By Dr. Robin Brett], September 23, 1969
4. [Business Assembly Luncheon], August 10, 1977
5. [Eng: Electronic Dialogue USIS Cairo/ Neil Armstrong, SRC 45, 9:30A, For: R. Petzing], May 23, 1983
6. [The X-15 Project; Interview: Neil Armstrong, Part 1 (copy)], May 1984
7. Cassette tapes, 11 tapes; "Pilot's Audio Update," Richard L. Taylor, Greenwich, CT: Belvoir Publications, Incorporated, 1992

**Box 397** *Cassette Tapes, Marked - Countries; Includes Miscellaneous Music and Audio Visual Notations, undated*

Item

1. [Side 1: Belgrade, Ankara Kinshasa; Side 2: Teheran, Bombay], undated
2. [Side 1: Mexico, Columbia, Brazilia, B.A.; Side 2: Rio, Madrid, Paris, Amsterdam], undated
3. [Side 1: Amsterdam, Brussels, Oslo, Bonn, Cologne, Berlin; Side 2: London, Rome, Belgrade], undated
4. [Side 1: Perth, Sydney; Side 2: Tokyo], (part of print can't be read), undated
5. [Side 1: 2 songs-one-"Blast-off-Moon;" two- a celebration song], undated (side 2 not marked)
6. [Down Caledonia Road; It's Love; Out of this World; Everywhere I Go; Down Caledonia Road; I'm Your Man], undated
7. [Nadya Milostnoja - Apollo 11], undated
8. Cassette, unmarked; [this side], undated
9. Cassette, unmarked, undated
10. Miscellaneous audio visual related notations, undated

**Box 398** *Documentary, "First Flights," 1992*

Tape

1. [New First Flights Show Opener], PMT, LTD. Harleysville, PA 19438, circa 1992
2. Armstrong, Neil (1992). *First Flights: Air Battles At Sea*. New York: New York: A & E Home Video. (video recording: VHS tape, ½ in)
3. Armstrong, Neil (1992). *First Flights: Turboprops*. New York: New York: A & E Home Video. (video recording: VHS tape, ½ in)
4. Armstrong, Neil (1992). *First Flights: New Generation Of Flyers*. New York: New York: A & E Home Video. (video recording: VHS tape, ½ in)
5. Armstrong, Neil (1992). *First Flights: Fighters Between The Wars*. New York: New York: A & E Home Video. (video recording: VHS tape, ½ in)
6. Armstrong, Neil (1992). *First Flights: First To Fly*. New York: New York: A & E Home Video. (video recording: VHS tape, ½ in)
7. Armstrong, Neil (1992). *First Flights: Flying Aces, War In The Air*. New York: New York: A & E Home Video. (video recording: VHS tape, ½ in)
8. Armstrong, Neil (1992). *First Flights: Every Day A Better Design*. New York: New York: A & E Home Video. (video recording: VHS tape, ½ in)
9. Armstrong, Neil (1992). *First Flights: Bigger Is Better*. New York: New York: A & E Home Video. (video recording: VHS tape, ½ in)
10. Armstrong, Neil (1992). *First Flights: Flying Entrepreneurs*. New York: New York: A & E Home Video. (video recording: VHS tape, ½ in)
11. Armstrong, Neil (1992). *First Flights: Air Forts Of The War*. New York: New York: A & E Home Video. (video recording: VHS tape, ½ in)
12. Armstrong, Neil (1992). *First Flights: First Jets*. New York: New York: A & E

- Home Video. (video recording: VHS tape, ½ in)
13. Armstrong, Neil (1992). *First Flights: By The Seat Of Their Pants*. New York: New York: A & E Home Video. (video recording: VHS tape, ½ in)
  14. "First Flights: General Aviation; Flying Lite: Gliders and Ultralights," Columbia House Video Library, Terre Haute, IN, 45 minutes, 1992
  15. *First Flights*, "Episode 1, By The Seat Of Their Pants, (Private Use Only)" undated
  16. *First Flights*, "Episode 1, By The Seat Of Their Pants, Episodes 3, Flying Aces: War In The Air," undated
  17. *First Flights*, "Episode 2, Every Day a Better Design, (Private Use Only)," undated
  18. *First Flights*, "Episode 4, Flying Entrepreneurs, (Private Use Only)," undated
  19. *First Flights*, "Episode 5, Bigger Is Better, (Private Use Only)," undated
  20. *First Flights*, "Episodes 6, Fighters Between the War, (Private Use Only)," undated
  21. *First Flights*, "Episodes 7, Testing Under Fire, August 21, 1981"
  22. *First Flights*, "Episodes 7, Testing Under Fire, (Private Use Only)," undated
  23. *First Flights*, "Episodes 8, New Generation of Flyers, (Private Use Only)," undated
  24. *First Flights*, "Episode 9, Air Battles at Sea, (Private Use Only)," undated
  25. *First Flights*, "Episode 10, For Viewing," undated
  26. *First Flights*, "Episodes 11, First Jets, (Private Use Only)," undated

**Box 399** Documentary, "*First Flights*," circa 1992-1993

Tape

1. *First Flights*, "Episode 14, The Helicopter: From Dreams to Reality," undated
2. *First Flights*, "Episode 15, Airlines: Passengers Join the Jet Age, (Private Use Only)," undated
3. *First Flights*, "Episode 16, The Big Bombers, Private Viewing Use Only," undated
4. *First Flights*, "Episode 17, Jet Fighters: Wings of Lightning, Private Viewing Use Only," undated
5. *First Flights*, "Episode 18, General Aviation: Barnstormers to Businessmen, Private Viewing Use Only," undated
6. *First Flights*, "Episode 19, Supersonic Bombers: The Elusive Search, Private Viewing Use Only," undated
7. *First Flights*, "Episode 20, Locusts of War, Private Viewing Use Only," undated
8. *First Flights*, "Episode 21, Mass Transit in the Skies, Private Viewing Use Only," undated
9. *First Flights*, "Episode 22, Flying Lite: Gliders and Ultralights, Private Viewing Use Only," undated
10. *First Flights*, "Episode 23, Attack Aircraft, Private Viewing Use Only," undated

11. *First Flights*, "Episode 24, Faster Than The Eye and Higher Than The Sky, Private Viewing Use Only," undated
12. *First Flights*, "Episode 25, Experiments In Flight, Private Viewing Use Only," undated
13. *First Flights*, "Episode 26, Rocket Aircraft, Private Viewing Use Only," undated
14. *First Flights*, "Episode 27, Whirling Wings, with commercial breaks," undated
15. *First Flights*, "Episode 28, Water Birds, with commercial breaks," undated
16. *First Flights*, "Episode 29, Jet VTOL: Jump To The Sky, Private Viewing Use Only, Not For Re-Sale/Do Not Copy," undated
17. *First Flights*, "Episode 30, Tail First Flying: The Canard (with black commercial breaks), Private Viewing Use Only, Not For Re-Sale/Do Not Copy," undated
18. *First Flights*, "Episode 31, Around The World, PMT Productions, LTD.: Harleysville, PA, 30 min. 09 Mar 93, CH 1-FULL Mix CH 2-Full Mix"
19. *First Flights*, "Episode 32, Final Show, Flying Blind, PMT Productions, LTD.: Harleysville, PA, 32 min. 27 Mar 93"
20. *First Flights*, "Episode 33, Flying Wings, (with black commercial breaks), PMT Productions, LTD.: Harleysville, PA , Private Viewing Use Only, Not For Re-Sale/Do Not Copy," circa 1993
21. *First Flights*, "Episode 34, Flight Control: Wing Warping, to Fly-By-Wire," PMT Productions, LTD.: Harleysville, PA, "Private Viewing Use Only, Not For Re-Sale/Do Not Copy," circa 1993
22. *First Flights*, "Episode 35, Flash of Glory: Aerial Combat Enters the Jet Age", PMT Productions, LTD.: Harleysville, PA, "Private Viewing Use Only, Not For Re-Sale/Do Not Copy," circa 1993
23. *First Flights*, "Episode 38, First in Speed: Air Racing, (with black commercial breaks) Private Viewing Use Only," PMT Productions, LTD.: Harleysville, PA, circa 1993
24. *First Flights*, "Episode 39, Propellers: Wings With a Twist, (with black commercial breaks," PMT Productions, LTD.: Harleysville, PA , "Private Viewing Use Only," circa 1993
25. "*First Flights*, with Host Neil Armstrong, 6 minute sample, NTSC ½" VHS," circa 1993
26. "*First Flights: General Aviation; Flying Lite: Gliders and Ultralights*," Columbia House Video Library, Terre Haute, IN, 45 minutes, 1992

**Box 400** *Documentary, "First Flights," duplicate copies, circa 1992-1993*

Tape

1. *First Flights*, "Episode 14, The Helicopter: From Dreams to Reality," undated
2. *First Flights*, "Episode 15, Airlines: Passengers Join the Jet Age, (Private Use Only)," undated
3. *First Flights*, "Episode 16, The Big Bombers, Private Viewing Use Only," undated

4. *First Flights*, "Episode 17, Jet Fighters: Wings of Lightening, Private Viewing Use Only," undated
5. *First Flights*, "Episode 18, General Aviation: Barnstormers to Businessmen, Private Viewing Use Only," undated
6. *First Flights*, "Episode 19, Supersonic Bombers: The Elusive Search, Private Viewing Use Only," undated
7. *First Flights*, "Episode 20, Locusts of War, Private Viewing Use Only," undated
8. *First Flights*, "Episode 21, Mass Transit in the Skies, Private Viewing Use Only," undated
9. *First Flights*, "Episode 22, Flying Lite: Gliders and Ultralights, Private Viewing Use Only," undated
10. *First Flights*, "Episode 23, Attack Aircraft, Private Viewing Use Only," undated
11. *First Flights*, "Episode 24, Faster Than The Eye and Higher Than The Sky, Private Viewing Use Only," undated
12. *First Flights*, "Episode 25, Experiments In Flight, Private Viewing Use Only," undated
13. *First Flights*, "Episode 26, Rocket Aircraft, Private Viewing Use Only," undated
14. *First Flights*, "Episode 39, Propellers: Wings With a Twist, (with black commercial breaks, PMT Productions, LTD.: Harleysville, PA , Private Viewing Use Only, circa 1993

**Box 401** *Documentary, "First Flights" Documents, Transcripts, Photographs and Poster, 1992-1993*

Item

1. Reproduction of Western Union telegram, "Orville Wright," original dated 1903 (found among *First Flights* material)
2. Document, *First Flights* concept, "A concept for a 26 half-hour documentary TV series about the history of aviation through the eyes of aircraft pilots. An adventure through time where technical intellect and human daring become the essential ingredients for the development of the modern aircraft," produced by PMT, Ltd. in association with Arts & Entertainment Network, executive producers: Peter Maris and Mark H. Tuttle, Directed by Neil Hollander, © PMT, Ltd., 1989
3. Folder containing information on Dyess Air Force Base, Texas and flight itinerary, from Armstrong's visit during filming of *First Flights* documentary, December 1991
4. Binder containing information on Beale Air Force Base, California and flight itinerary from Armstrong's visit during filming of *First Flights* documentary, March 1992
5. Document, *VIDEOSMITH Incorporated*, Steven and Martha Smith, Freelance Video Crew, includes biographical information on Jeffrey L. Ethell,

- circa 1992
6. Transcripts for episodes, "Show Opening/Main Titles," #3, #5, #9, #10, #14, #16, #17, #20, #23, #24, #25, #26, #27 and "Seaplanes," 1993
  7. Spiral bound document, "*First Flights*," Tentative Episode Topics, 26 half-hours, Episodes #27-52, © 1992
  8. Transcript for episode 29, "JET VTOL," circa 1993
  9. Transcript for episode 30, "CANARDS," circa 1993
  10. Transcript for episode 31, "First Around the World," circa 1993
  11. Transcript for episode 32, "Flying Blind," circa 1993
  12. Transcript for episode 33, "Flying Wings," circa 1993
  13. Transcript for episode 34, "Flight Control & Fly-By-Wire," circa 1993
  14. Transcript for episode 36, "First to Fly the Mail," circa 1993
  15. Transcript for episode 37, "Backyard Fliers: An Airplane In Every Garage," circa 1993
  16. Transcript for episode 38, "First In Speed," circa 1993
  17. Transcript for episode 39, "Propellers," circa 1993
  18. Facsimile transmission of schedule; "mix of old and new episodes," March 30, 1993
  19. Article, "A&E's fall schedule includes eclectic mix of programming," by Wayne Walley, no publication information is available, undated
  20. *First Flights*, cover featuring picture of Armstrong, circa 1993 (2 copies)
  21. Spiral bound *First Flights* transcripts for episodes 14-26, "Time Indication of Program Elements," Produced by PMT, Ltd. in association with Arts & Entertainment Network, executive producers: Peter Maris and Mark H. Tuttle, Directed by Neil Hollander, © PMT, Ltd., 1989
  22. *First Flights*, pamphlet, "KM Productions, P.O. Box 3433 Abu Dhabi, UAE," undated
  23. Original envelope that some documents were in, labeled [PMT - 1<sup>st</sup> FLTS - SCRIPTS ADVERT.], undated
  24. Poster, color, 14"x11", "First Flight, December 17, 1903, 120 feet, The Wright Experience, First Flight, November 20, 2003, 97 feet"
  25. Photograph, color, 14" x 11", "U.S. Air Force Jet, 01839," undated

**Box 402** *Unmarked, Magnetic Tapes and Cassettes, Undated*

Item

1. 3" magnetic tapes (11)
2. 3 ½" magnetic tapes (2)
3. 5" magnetic tapes (2)
4. "Magnetoband" tape (1)
5. Cassettes (6, some possibly unused)

**Series 13. Books and Magazines, 1671-2012**

(13.65 cubic feet)

**Series Description:** This series contains selected books and magazines from Neil Armstrong's personal library. The magazines are grouped as Armstrong had stored them, except for the second box which contains the older magazines and those from 1969. Many of the older magazines feature various astronauts on the cover or Neil Armstrong himself, with related stories inside. The issues from 1969 and early 1970s feature Apollo 11 or Armstrong on the cover and inside.

There are 144 books, arranged in chronological order, and cited in APA (American Psychological Association) format. The finding aid indicates if the books have been signed and/or inscribed by the author. Some of the books have water damage. The books and magazines are stored in archival boxes.

**Box 403** *Wonders Of World Aviation (Serial Publication), circa 1930s*

Item

1. *Wonders Of World Aviation*, The conquest of the air in story and picture (serial publication), parts 1-17, 19-40, concluding part with complete index, Clarence Winchester, editor. London: Amalgamated Press, circa 1930s

**Box 404** *Various Aviation and Aerospace Magazines, 1943-1990*

Item

1. *Air Trails*, February, 1943; "Model Annual," 1943; November, 1951
2. *The Bee-Hive* (United Aircraft Corporation), January, 1953
3. *Air Progress*, includes History of Aviation issue, circa 1950s and June/July, 1963
4. *Business Week*, May 30, 1964 (Armstrong on cover, with caption, "One of the astronauts who will be going into space gets training on a moon NASA is creating.")
5. *Model Aviation*, September, 1964
6. *Space Aeronautics*, "The Future For Manned Aircraft," A Special Report, November, 1964
7. *rendezvous* (Bell Aerosystems Company) Vol. IV, No. 2, 1965; Vol. V, No. 2, 1966, Vol. VI, No. 2, 1967
8. *kosmonautika*, 1966
9. *Time*, June 11, 1965 ("The McDivitt - White Flight" featured); March 25, 1966 (Gemini 8 featured inside); Special Anniversary Issue, "The Most Amazing 60 Years In History," October 5, 1983
10. *Venture: The Traveler's World*, June/July, 1967 (lunar module, an astronaut and star over Houston, Texas on cover)
11. *Flying Annual & pilot's guide*, 1967
12. *Radar*, circa 1967
13. *Private Pilot*, November - December, 1968 (November issue; "Exclusive!")

- U.S. Astronauts: NASA's Weekend Pilots!")
14. *Ryan Reporter* (Ryan Aeronautical Company) March, 1969 ("to conquer the moon" inside); May, 1969 ("Seven Minutes To Touchdown" inside); October, 1969 Apollo 11 featured inside)
  15. *Investor's Reader*, June 18, 1969 ("Dress Rehearsal For The Moon," cover and inside)
  16. *Atlantica & Iceland Review*, No. 4, Vol. 7, 1969 ("Neil Armstrong Comes To Iceland," cover and inside)
  17. *Life*, July 4, 1969; August 8, 1969; Special Edition - "To The Moon And Back;" November 14, 1969 (Armstrong and astronauts featured on cover and/or inside stories)
  18. *Soviet Life*, Special Issue: "Man And Outer Space," "American And Soviet Spacemen's Poll," August, 1969
  19. *Gaceta Ilustrada*, "Los Astronautas Vienen A Espana," October, 1969
  20. *SDC Magazine*, August, 1969 ("Live From The Moon," cover and inside)
  21. *The Scroll Of Phi Delta Theta*, September, 1969 ("Neil Armstrong (Purdue '55) First Man On The Moon" and caricature of Armstrong on cover); November, 1969
  22. *USC Engineer*, October, 1969 (Aldrin and flag lunar photograph on cover and "Some pictures of Armstrong, Aldrin, and Collins' Summer Trip," inside)
  23. *Sport Aviation*, October, 1969
  24. Marquette vs. N. Michigan basketball program, December 2, 1969 (Armstrong, Aldrin and Collins on cover; includes letter from Reverend Leonard Piotrowski, Chaplain, Marquette University basketball team)
  25. Annual Report, Methuen Massachusetts, 1969 (Apollo 11 crew on cover)
  26. Annual Report of the Houston Chamber of Commerce, 1969 ("One Step In History" and lunar footprint on cover)
  27. *L'Astronomie: Revue Mensuelle Fondée Par Camille Flammarion*, July-August, 1970 (Apollo 11 crew featured on cover)
  28. *Skyline: North American Rockwell Corporation*, Volume 25, Numbers 3-4, 1967; Volume 26, Numbers 1, 4, 1968; Volume 27, Numbers 1, 4, 1969
  29. *Skyline: North American Rockwell Corporation*, Volume 26, Number 2, 1970 (inside, "Stones With A Story: Tiny Fragments of the Moon Yield Clues to the Origin of the Solar System")
  30. *UCT*, December 1972 (cover; astronaut on moon, inside "Man And The Moon," article and poem by Professor L.H. Ahrens)
  31. *Sports Planes*, April/May, 1973
  32. *Ohio History*, Volume 95, Winter-Spring, 1986
  33. *Timeline*, A Publication of the Ohio Historical Society, February - May, 1985
  34. *Timeline*, A Publication of the Ohio Historical Society, October - November, 1986
  35. *Timeline*, A Publication of the Ohio Historical Society, April - July, 1987
  36. *Timeline*, A Publication of the Ohio Historical Society, February - May, 1988
  37. *Timeline*, A Publication of the Ohio Historical Society, October - November, 1989
  38. *Timeline*, A Publication of the Ohio Historical Society, February - July, 1990

39. *Newsweek*, June 21, 1965 (Gemini 4 featured on cover and inside issue)
40. *Newsweek*, February 6, 1967 (Astronauts Grissom, White and Chafee on cover, "The Apollo Tragedy" featured inside.)
41. *Newsweek*, December 30, 1968 (Apollo 8 astronauts Lovell, Anders and Borman on cover, "To The Moon" featured inside,
42. *Newsweek*, August 11, 1969 (Astronaut Edwin Aldrin with Armstrong reflected in visor featured on cover, "Moonwalk in Color" featured inside.)
43. *Homebuilt Aircraft*, August, October, December, 1978
44. *Homebuilt Aircraft*, April - December, 1979
45. *Homebuilt Aircraft*, January - March, 1980
46. *Aviation Week & Space Technology*, May 5, 1969; July - August, 1969 (8 issues feature Apollo 11 activities on the cover and inside)
47. *The Eagles Magazine*, September 14, 1969 (features Apollo 11 crew on cover, with caption, "Congratulations On The First "Eagle" Touchdown of 1969 - Men On The Moon - July 20, 1969 - Lunar Landing)
48. Purdue Football Program, September 27, 1969 (cover caricature of moon landing with title, "The greatest touchdown ever - First Man On The Moon, Neil Armstrong, Purdue '55)
49. *The Purdue Alumnus*, September-October, 1969 (Armstrong on cover); February, May, 1970 (articles featuring Armstrong)
50. *Soaring: The Journal of the Soaring Society of America*; March, September - December, 1968
51. *Soaring: The Journal of the Soaring Society of America*; March - August (3 issues), October, December, 1969
52. *Soaring: The Journal of the Soaring Society of America*; June (2 issues) - December, 1970

**Box 405** *Various Aerospace, Aircraft and Airline Company Publications, 1965-1983*

Item

1. Lockheed *Horizons*. Lockheed Aircraft Corporation, Burbank, California: Lockheed-California Company; spring, summer, autumn, 1965
2. Lockheed *Horizons*. Lockheed Aircraft Corporation, Burbank, California: Lockheed-California Company; first and second quarters, 1966
3. Lockheed *Horizons*. Lockheed Aircraft Corporation, Burbank, California: Lockheed-California Company; winter, 1979/80; fall, 1980; winter, 1980/81
4. Lockheed *Horizons*. Lockheed Aircraft Corporation, Burbank, California: Lockheed-California Company; spring, 1982
5. Lockheed *Horizons*. Lockheed Aircraft Corporation, Burbank, California: Lockheed-California Company; June 1983
6. Grumman *Horizons*. Bethpage, New York: Grumman Aerospace Corporation, spring 1963; volume 5, number 1, 1965; volume 8, number 1, 1966
7. *The Rolls-Royce Magazine*. London: Rolls-Royce Limited, December 1979-February 1980; December 1980-February 1981

8. *LTV Looking Ahead*. Dallas, Texas: LTV Corporation, 1980
9. *Dateline*, Washington: LTV Washington seminar. Dallas, Texas: LTV Corporation, 1981, 1982
10. *Dornier-Post*. (English edition). München, Dornier, 1/2, 1970
11. *Dornier Post*. Friedrichshafen (German Serial) 2 issues, circa 1970s
12. *Dornier Do 231*, circa 1970

**Box 406** *Various Aerospace, Aeronautical, Aircraft and Airline Company Publications, 1969-1983*

Item

1. *Stratoflex to the Moon*. Fort Worth, Texas: Stratoflex, Incorporated, Volume 12, Number 2, 1969
2. *VertiFlite*. New York: American Helicopter Society. Volume 15, Number 10, 1969
3. *Skyline*. El Segundo, California: North American Rockwell Corporation. Volume 27, Number 2, 1969; Volume 28, Number 1, 1970
4. *Ryan reporter*. San Diego, California: Ryan Aeronautical Company. Volume 30, Number 3, October 1969
5. *Marathon World*. Findlay, Ohio: Marathon Oil Company. Volume 6, Number 4, Winter, 1969-70 (2 copies)
6. *Informations Aeronautiques*. Paris : Groupement des industries françaises aéronautiques et spatiales. Supplement No. 278, No. 962, September 2, 1971
7. *Nimbus: The growth satellite*. Philadelphia, Pennsylvania: General Electric Company, Space Division. 1972
8. "1972 Activities," Paris: Office National d'Etudes et de Recherches Aérospatiales, June 1973
9. *Shell Aviation News*. New York, New York: Aviation Department, Shell Oil Company. Number 423, 1974
10. Zentralgesellschaft VFW-Fokker mbH, annual report and 2 additional publications, 1976
11. *Link\* Training Systems*. Binghamton, New York: Link, Division of the Singer Company. 1977
12. *DFVLR Guide* (German Aerospace Research Establishment). Köln-Porz, March 1977
13. "ERNO '77," a VFW-Fokker Company. ERNO Raumfahrttechnik GmbH, Bremen, May 1977
14. *Aviation Research Journal*. Daytona Beach, Florida: George R. Wallace Center, Embry-Riddle Aeronautical University. Volume III, August 1978
15. *From Travel Air to Tristar: The first fifty years of Delta Air Lines, 1929-1979*. Miami, Florida: Halsey Publishing Company. 1979
16. *NASDA '80 → '81: National Space Development Agency of Japan*, September 1980
17. *Vectors: Hughes Aircraft Company*. Culver City, California: Hughes Aircraft

- Company. Volume XXIII, Number 3, 1981
18. *aerospace: Official Publication of the Aerospace Industries Association*. Washington, D.C.: Aerospace Industries Association. Volume 19, Number 3, Fall 1981
  19. *Horizons: Grumman Aerospace*. Bethpage, New York: Grumman Aerospace Corporation. Volume 18, Number 1, 1982; Volume 19, Numbers 2 and 3, 1983 and *Grumman - 50 Years* (brochure) 1980
  20. Brochure, San Diego Aerospace Museum, San Diego, California, 1983
  21. *Quarterly: British Aerospace, Inc.* (Bicentennial Edition). Kingston-upon-Thames: British Aerospace. June 1, 1983
  22. Brochure, AG Anderson-Greenwood Aviation Corporation, Houston: Texas, no date
  23. General Electric, *Aircraft Gas Turbine Guide*. Cincinnati, Ohio: Aircraft Engine Group, no date
  24. *Ariane: The European Satellite Launcher*. Paris: European Space Agency, no date

**Box 407** *Soaring: The Journal of the Soaring Society of America, 1971-1987*

Item

1. *Soaring: The Journal of the Soaring Society of America*; January - December, 1971 and *Technical Soaring*, July, 1971
2. *Soaring: The Journal of the Soaring Society of America*; January - December, 1973
3. *Soaring: The Journal of the Soaring Society of America*; January - December, 1974
4. *Soaring: The Journal of the Soaring Society of America*; January - October, 1975
5. *Soaring: The Journal of the Soaring Society of America*; January - December, 1976
6. *Soaring: The Journal of the Soaring Society of America*; January - December, 1977
7. *Soaring: The Journal of the Soaring Society of America*; January - December, 1978
8. *Soaring: The Journal of the Soaring Society of America*; January - December, 1979
9. *Soaring: The Journal of the Soaring Society of America*; January, 1987

**Box 408** *The AOPA PILOT (Aircraft Owners and Pilots Association), 1969-1979*

Item

1. The AOPA *PILOT* (Aircraft Owners and Pilots Association), August 1969
2. The AOPA *PILOT* (Aircraft Owners and Pilots Association), March, April, July - December, 1970

3. The AOPA *PILOT* (Aircraft Owners and Pilots Association), January - July, September - December, 1971
4. The AOPA *PILOT* (Aircraft Owners and Pilots Association), January, March - August, November, December, 1972
5. The AOPA *PILOT* (Aircraft Owners and Pilots Association), January, March - December, 1973
6. The AOPA *PILOT* (Aircraft Owners and Pilots Association), January - December, 1974
7. The AOPA *PILOT* (Aircraft Owners and Pilots Association), January - December, 1975
8. The AOPA *PILOT* (Aircraft Owners and Pilots Association), January - December, 1976
9. The AOPA *PILOT* (Aircraft Owners and Pilots Association), January - February, March - May, July - December, 1977
10. The AOPA *PILOT* (Aircraft Owners and Pilots Association), January - February, April, September, 1978
11. The AOPA *PILOT* (Aircraft Owners and Pilots Association), January, 1979

**Box 409** *Various Aviation and Aerospace Magazines and Miscellaneous Magazines, 1973-2011*

Item

1. *Astronautics & Aeronautics*, July 1973
2. *The Goddard Biblio Log*, Volume III, No. 2, Summer 1973
3. *Popular Science*, March, 1984
4. *American Heritage of Invention & Technology*, Summer, 1986; Winter, 1988
5. *The Explorers Journal* (Official Quarterly of the Explorers Club), March, June, 1988; Winter 1993; Spring - Winter, 1994; Spring - Winter, 1995; Spring - Winter, 1996; Spring, 1997
6. *Space World*, January 1988
7. *Final Frontier*, May/June, 1991
8. *Business & Commercial Aviation*, January - February, 1991
9. *Business & Commercial Aviation International*, July, 1996; April - June, 1997
10. *Golf Magazine*; June, October - November, 1992; March - May, 1993; July - August, 1996; July - December, 1997
11. *Golf Magazine Presents Luxury Golf Homes*, Fall 1997
12. *NASA Magazine*, Summer 1993
13. *The Space Studies Bulletin*, September, 1995
14. *Boeing Airliner* (Customer Service Division), July - September, 1995
15. *Forbes*, December 2, 1996
16. *Forbes ASAP* (Forbes Supplement on the Information Age), December 2, 1996
17. *United Airlines Hemispheres*, 1996
18. *Aerospace America*, April - July, 1996; April - June, October, 1997
19. *Sport Aviation*, July, September - December, 1994; July, 1996; April - June,

- 1997
20. *Space Governance: The Journal of United Societies in Space*, June, December, 1994; June, December, 1995
  21. *Lunar News*, February, 1995
  22. *Golf Journal*, June - August, 1996
  23. *Ohio Aviation News*, Winter, 1996
  24. *AOPA Pilot*, November 1996; May - June, 1997
  25. *Timeline* (A Publication of the Ohio Historical Society), May/June, November/December, 1996; January/February, 1997
  26. *Aerospace*, August, 1996; April - May, 1997
  27. *Fidelity Focus*, Winter 1996
  28. *The Corporate Board: The Journal of the Corporate Governance*, November/December, 1996
  29. *Congressional Record*, Volume 157, No. 175, November 16, 2011 (on the occasion of Armstrong being awarded the Congressional Medal of Honor)

**Box 410** *Aviation Week & Space Technology, Skiing, National Geographic, The Cincinnati Historical Society Bulletin and Ohio History, 1966-1997*

Item

1. *Aviation Week & Space Technology*, June 20, 1966; April 24, 1967; May 29, 1967; September 18, 1967
2. *Skiing*, December, 1969
3. *National Geographic*, August - October, December, 1995; January - July, September - October, 1996; April, July - November (2), 1997
4. *The Cincinnati Historical Society Bulletin*, 1973-1977
5. *Ohio History*, Spring/Summer, 1976; Spring/Autumn, 1977; Spring/Summer, 1979; 1980-1984; Winter/Spring, 1985; Winter/Spring, 1987

**Box 411** *Books, 1671-1954*

Book

1. (1671). *L'homme dans la lune*. Paris: Chez Jban Cochart.
2. Lockyer, J.N. (1877). *Astronomy*. New York: D. Appleton and Company.
3. Tietjens, O.G. (1934). *Applied and hydro- and aeromechanics: Based on lectures of L. Prandtl, Ph.D.* New York: Dover Publications.
4. First National Bank of Boston, Buenos Aires Branch. (1940). *List of useful phrases: English - Spanish*. Buenos Aires: First National Bank of Boston.
5. Page, V.W. (1941). *ABC of aviation: A simplified guide to modern aircraft* (2<sup>nd</sup> edition). New York: The Norman W. Henley Publishing Company.
6. Andrews, P. (ed.). (1944). *Air News Yearbook: Volume 2*. New York: Duell, Sloan and Pearce.
7. Moulton, W.G. (1944). *Spoken German: Basic course: Units 13-30*. Madison, Wisconsin: Armed Forces Institute.

8. Morgan, H.T. (1944). *The story of jade*. Los Angeles: Quon-Quon Company.
9. Morgan, H.T. (1944). *Chinese porcelain and pottery*. Los Angeles: Quon-Quon Company.
10. Morgan, H.T. (1944). *Chinese carvings*. Los Angeles: Quon-Quon Company.
11. Morgan, H.T. (1944). *Chinese dogs*. Los Angeles: Quon-Quon Company.
12. Morgan, H.T. (1945). *Chinese symbolism: And its associated beliefs*. Los Angeles: Quon-Quon Company.
13. Von Mises, R. (1945). *Theory of flight*. New York: McGraw-Hill Book Company, Inc.
14. (1945). *Aviation Fuels and Their Effects on Engine Performance*, prepared for United States Army Air Forces and Bureau of Aeronautics, United States Navy.
15. Mallory, V.S. (1947). *New trigonometry: Including the elements of spherical trigonometry*. Chicago: Sanborn. ("Property of Neil A. Armstrong" written inside)
16. Liepmann, H.W. & Puckett, A.E. (1947). *Introduction to aerodynamics of a compressible fluid*. New York: John Wiley & Sons, Inc. ("Neil Armstrong" written inside front cover)
17. Perkins, C.D. & Hage, R.E. (1949). *Airplane performance stability and control*. New York: John Wiley & Sons, Inc. ("Neil Armstrong" written inside front cover)
18. Savage, W. (1950). *English-french helps to conversation: With pronunciation in the script of the association phonétique internationals*. Paris: Editions Garnier Frères.
19. (circa 1950s) *Revue of the Polish aircraft industry*. Warsaw, Poland: Foreign Trade Enterprise Of The Automotive Industry.
20. Kiekhofers, W.H. (1951). *Economic principles, problems, and policies*. New York: Appleton-Century-Crofts. (water damage and torn pages)
21. Boole, G. (1954). *An investigation of the laws of thought, on which are founded the mathematical theories of logic and probabilities*. New York: Dover Publications. (water damage)

**Box 412 Books, 1952-1959**

Book

- 22-26. *Debris*, (1952-1955). West Lafayette, IN: Purdue University (Jane Heath written inside 1952 volume, and includes 1948, Purdue basketball schedule; 1955 volume has Ruth Neely written inside, along with article, "Purdue: Alma Mater Of The Astronauts")
27. Corning, G. (1953). *Airplane design*. College Park, Maryland: University of Maryland. ("Neil Armstrong" printed inside cover)
28. Cross, M. & Ewen, D. (1953). *Encyclopedia of the great composers and their music*. Garden City, New York: Doubleday. (inscribed inside, "1954, Merry Christmas, To Neil, From Mother")
29. Herge. (1954). *On a marche sur la lune*. Paris: Casterman.

30. Bodsworth, F. (1955). *Last of the curlews*. New York: Dodd, Mead & Company. (includes letter from the author)
31. Mason, P.; Stenberg, G.B. & Niven, W. (1956). *Elementary accounting* (2<sup>nd</sup> edition). Brooklyn, NY: The Foundation Press. (water damage)
32. Rajadhon, P.A. (1956). *Thailand Culture Series*, (3<sup>rd</sup> edition, #s 1-15, 17). Bangkok, Thailand: The National Culture Institute.
33. Prochnow, H.V. (1957). *A treasury of stories, illustrations, epigrams, and quotations*. Grand Rapids, Michigan: Baker Book House.
34. Stahnke, H.L. (1958). *The treatment of venomous bites and stings*. Tempe, AZ: Arizona State University.
35. Gilluly, J.; Waters, A.C. & Woodford, A.O. (1959). *Principles of geology* (2<sup>nd</sup> edition). San Francisco, CA: W.H. Freeman and Company.

**Box 413 Books, 1959-1972**

Book

36. Golenpaul, D. Associates, ed. (1959). *Information please almanac, 1960*. New York: McGraw-Hill. (New York Journal American edition)
37. Stone, Irving. (1961). *The agony and the ecstasy: A biographical novel of Michelangelo*. New York: New American Library. (A Signet book; cover torn off)
38. Higdon, A. & Stiles, W.B. (1962). *Engineering Mechanics* (Vector edition). Englewood Cliffs, New Jersey: Prentice-Hall.
39. Stearns, E.V.B. (1963). *Navigation and guidance in space*. Englewood Cliffs, New Jersey: Prentice-Hall.
40. Confucius (1963). *The wisdom of Confucius*. Mount Vernon, New York: Peter Pauper Press. (inscribed, "1963, Merry Christmas to Neil from mother," water damage)
41. London, Jack. (1963). *The sea wolf*. New York: Bantam Books. (Bantam Pathfinder edition).
42. Roth, Dennis. (1963). *Tranquilizing gems*. Archbold, Ohio: I.B. Rogers Company. (inscribed inside, "Merry Christmas 1981 to Neil, Janet, Ric and Mark, from Grandpa and Gramma")
43. Gruber, E.C. (1963). *2300 steps to word power: Programmed learning without a machine*. New York: ARC Books.
44. British Airways (1963). *British Airways German phrasebook: For visitors of Germany, Austria and Switzerland*. London: Harper of Holloway.
45. Bronowski, J. (1965). *Science and human values* (2<sup>nd</sup> edition). New York: Harper & Row.
46. Greenwood, D.T. (1965). *Principles of dynamics*. Englewood Cliffs, New Jersey: Prentice-Hall.
47. Francis, D. (1966). *Flying finish*. New York: Harper & Row.
48. Marsh, T.R. (1967). *Lest we forget: A brief sketch of Wyandot County's history*. Upper Sandusky, Ohio: Marsh. (signed by author, also includes letter and clipping from author)

49. Mayborn, Mitch, (1967). *Stearman Guidebook: including the PT-13D/N2S-5 pilot handbook*. Flying Enterprises: Dallas Texas.
50. Keinz, V. (1967). *Poems in memory of President John F. Kennedy* (signed by author, water damage)
51. National Aeronautics and Space Administration. (1967). *Fifty years of aeronautical research: National Advisory Committee for Aeronautics, 1917 to 1958. National Aeronautics and Space Administration, 1958 to 1967*. Washington: U.S. Government Printing Office.
52. Ward, W. (1968). *Thoughts of a Christian optimist*. Anderson, South Carolina: Droke House. (signed by author)
53. Hope, B. (1969). *Five women I love: Bob Hope's Vietnam story*. New York: Avon.
54. Prochnow, H.V. (1969). *The speaker's source book*. Grand Rapids, Michigan: Baker Book House.
55. Durrell, Gerald. (1969). *Birds, beasts, and relatives*. New York: The Viking Press. (Viking Compass edition)

**Box 414 Books, 1969-1972**

Book

56. Wells, R.A. (1969). *French-English aerospace dictionary, including selected data processing, electronics, and nuclear terms*. Washington, D.C.: America House.
57. Corning, G. (1970). *Supersonic and subsonic airplane design* (3<sup>rd</sup> edition). College Park, Maryland: University of Maryland.
58. Ogata, K. (1970). *Modern Control Engineering*. Englewood Cliffs, New Jersey: Prentice-Hall.
59. Weinwurm, G.F. (ed.). (1970). *On the management of computer programming*. Princeton: Auerbach Publishers.
60. Luening, O. (1970). *Otto Luening*. New York: Broadcast Music, Inc. (letter from Armstrong part of the book, inscription and signature of author above letter)
61. Duncan, E.R. (1970). *Modern school mathematics: structure and use*. New York: Houghton Mifflin.
62. Ahyoseph, Y.; Abir, D. (1970). *Adam `al ha-yareah : Sefer `idan ha-halal*. [Tel-Aviv]: Misrad ha-bitahon.
63. Schiff, Barry. (1971). *Flying*. New York: Golden Press.
64. Hartog, J.P. D. (1971). *Mechanical vibration: An interdisciplinary specialty*. Morgantown, West Virginia: College of Engineering.
65. Dubois, M. (1971). *Larousse's French-English, English-French dictionary*. New York: Pocket Books.
66. Kintner, W.R. & Pfaltzgraff, R.L., Jr. (1971). *Soviet military trends: implications for U.S. security*. Washington, D.C.: American Enterprise Institute.
67. Eckert, E.R.G., & Drake, R.M., Jr. (1972). *Analysis of heat and mass*

- transfer*. New York: McGraw Hill.
68. Etkin, B. (1972). *Dynamics of atmospheric flight*. New York: John Wiley & Sons, Inc.
69. Smith, A. (1972). *Super Money*. New York: Random House. (water damage)
70. Warner, W.E. (1972). *1,000 stories and quotations of famous people*. Grand Rapids, MI: Baker Book House.

**Box 415 Books, 1972-1976**

Book

71. Patrick, E.A. (1972). *Fundamentals of pattern recognition*. Englewood Cliffs, New Jersey. (includes signature, inscription and letter from author)
72. McPhee, J. (1973). *The deltoid pumpkin seed*. New York: Ballantine Books.
73. Tack, A. (1973). *How to speak well in public*. Grand Rapids, Michigan: Baker Book House.
74. National Flag Foundation (1973). *Flags of America: A salute to America's bicentennial*. Pittsburgh: The Foundation.
75. Rickey, J. (1973). *The free enterprise patriot* (2<sup>nd</sup> edition). St. Louis, MO: The Book Tree.
76. Hines, P.R. (1973). *The wines and wineries of Ohio*. Franklin, Ohio: The Chronicle. (includes a letter from the author; an article: Heimlich, J. (1973). Family wine making. *The Cincinnati Post*, Saturday, July 21, 1973, p. 3. and a "Colonial Vineyards" brochure)
77. Michener, M.A. (1973). *The bridges at Toko-ri*. Greenwich, CT: Fawcett.
78. Caidin, M. (1974). *The last dogfight*. Boston: Houghton Mifflin Company.
79. Langsam, W. (1974). *The common market: Problems and prospects*. Cincinnati, Ohio: University of Cincinnati. (signed by author)
80. Mahoney, T. & Sloane, L. (1974). *The great merchants: America's foremost retail institutions and the people who made them great*. New York: Harper & Row. (inscribed and signed by author)
81. Cortright, E. M. (ed.). (1975). *Apollo expeditions to the moon*. Washington, DC: Scientific and Technical Information Office, National Aeronautics and Space Administration. (signed and inscribed by Armstrong)
82. Perdelwitz, G. (1975). *Kuriosa der Dulkener Narrenakademie*. Stadtarchiv Viersen. (includes a postcard to Armstrong from Perdelwitz)
83. Whitfield, J.S. (1975). *Webster's new world crossword puzzle dictionary*. New York: Collins World.
84. von Kármán, T. (1975). *Collected works of Theodore von Kármán: 1952-1963*. London : Butterworths Scientific Publications.
85. Beer, F.P. & Johnston, E.R., Jr. (1976). *Mechanics for engineers* (3<sup>rd</sup> edition). New York: McGraw-Hill.
86. Kaplan, M.H. (1976). *Modern spacecraft dynamics & control*. New York: John Wiley & Sons.
87. Gottfried, R.D. (1976). *Pictorial memories: Upper Sandusky, Wyandot County*. Upper Sandusky, Ohio: Gottfried. (includes 3 maps)

88. Bennis, W. (1976). *The unconscious conspiracy: why leaders can't lead*. New York: AMACOM. (signature and inscription to "Jan and Neal" by author; water damage)

**Box 416 Books, 1977-1989**

Book

89. Budynas, R.G. (1977). *Advanced strength and applied stress analysis*. New York: McGraw Hill.
90. Wise, K. (1977). *Still points*. Danbury, New Hampshire: Addison House Publishers. (signed by author)
91. Kuehner, C.D. (1978). *Capital and job formation: Our nation's 3<sup>rd</sup>-century challenge*. Homewood, IL: Dow Jones-Irwin. (water damage)
92. Nizer, L. (1978). *Reflections without mirrors*. Garden City, New York: Doubleday. (water damage)
93. Fromme, J. (editor). (1979). *The Eagle Has Landed...1979 Eyrie*. Frankenmuth High School, Frankenmuth, MI (high school yearbook with letter and picture from Armstrong on pages 4 and 5)
94. Wise, K. (1979). *A church, a people*. Andover, MA: Adam Press. (inscription from author inside)
95. Reynolds, J.H. (1980). *The Trojan Gallery: A pictorial history of the University of Southern California*. Los Angeles, California: University of Southern California. (Armstrong featured on page 214)
96. Peters, T.J. & Waterman, R.H., Jr. (1982). *In search of excellence: lessons from America's best-run companies*. New York: Harper & Row.
97. Lattimer, D. (1983). *"All we did was fly to the moon."* Gainesville, FL: The Whispering Eagle Press. (signed by author)
98. Ragaway, M. A. (1984). *The golfer's dictionary: Funny funny definitions!! (a perfect lie)*. Los Angeles: Price/Stern/Sloan Publishers.
99. Rand McNally (1984, 1988, n.d.). *Rand McNally pocket road atlas*. Chicago: Rand McNally. (3 copies, "Neil Armstrong" written on one cover, 1984 and 1988 have water damage)
100. Bell (1984). *Inuit nunanganniittunut*. Tele-Direct (Publications).
101. Shaffer, G.W. (1985). *"In the words of..." Inspirational messages from America's heroes*. Tulsa, OK: George W. Shaffer Enterprises.
102. Moll, N. (1985). *EAA Oshkosh: The world's biggest aviation event*. London: Osprey Publishing Limited.
103. Helmstetter, S. (1986). *What to say when you talk to yourself: The major new breakthrough to managing people, yourself, and success*. Scottsdale, AZ : Grindle Press (water damage)
104. Siepmann, H.R. & Shayler, D.J. (1987). *From the flightdeck: NASA space shuttle*. London: Ian Allan Ltd. (inscribed and signed by author)
105. Cawley, C.C. (1987). *A platform to the stars*. Huntington, West Virginia: University Editions. (includes letter from the author; water damage)
106. Saint-John, A. (1988). *Breathings*. California: [s.n.]. (inscribed by author)

107. Donachie, M.J., Jr. (1988). *Titanium: A technical guide*. Metals Park, Ohio: ASM International. (inscribed by "USA organizing committee")
108. Morgan, S.F. (1989). *Classic aviation humor: Book II*. Ft. Mill, SC: Pendragon Publishing Company. (signed and inscribed by author; water damage, book is in poor condition)
109. Forbes magazine. (1989). *The Forbes scrapbook of thoughts on the business of life*. New York: Forbes. (water damage)

**Box 417 Books, 1991-2002**

Book

110. Scott, M.L. (1991). *San Diego: Air capital of the west*. Virginia Beach, Virginia: The Donning Company. (signed by author)
111. Dumovich, E. (1991). *The Boeing logbook: 1916-1991*. Seattle, Washington: Boeing Historical Archives.
112. Montignac, M. (1991). *Eat yourself slim* (5<sup>th</sup> edition). Artulen UK.
113. Neville-Sington, P. & Sington, D. (1993). *Paradise dreamed: how utopian thinkers have changed the modern world*. London: Bloomsbury.
114. Shepard, A. & Slayton, D. (1994). *Moon shot: The inside story of America's race to the moon*. Atlanta: Turner Publishing. (introduction by Armstrong, 2 copies)
115. Kraus, J. (1995). *Big ear two: listening for other-worlds*. Powell, Ohio: Cygnus-Quasar Books. (signed and inscribed by author; water damage)
116. (1995). *Organization and members: National Academy of Sciences, National Academy of Engineering, Institute of Medicine, National Research Council*. Washington, D.C.: National Research Council.
117. Aldrin, B. & Barnes, J. (1996). *Encounter with Tiber*. New York: Warner Books. (water damage)
118. Moorcroft, C.; Magnusson, M. & Armstrong, N. (1998). *Neil Armstrong 1930-* London: Channel Four Learning. (signed and inscribed by authors, includes letter from author to Armstrong's Administrative Aide, Vivian White)
119. Franklin, B; Holms, J.P. & Baji, K. (1999). *Bite-size Franklin: Wit & wisdom from a founding father*. New York: Thomas Dunn Books.
120. Rosenkranz, K. (1999). *Vipers in the storm*. New York: McGraw-Hill. (signed and inscribed by author, includes letter from author)
121. Bryan, L. (1999). *Race for the world: strategies to build a great global firm*. Boston, MA: Harvard Business School Press.
122. Godwin, R. (Ed.). (2000). *X-15: The NASA mission reports*. Burlington, Ontario: Apogee Books. (signed by Joe Engle)
123. Buck, J. (2001). *Jack Buck: A collection of poems and stories: From the life and times of legendary broadcaster Jack Buck*. St. Louis, Missouri: Cystic Fibrosis Foundation. (signed by author with inscription to Armstrong)
124. Meisner, R. & Dech, S. (2001). *Kunstwerk Erde: Satellitenbilder aus dem All: 20 Kunstpostkarten*. Germany: München Frederking & Thaler.

125. (2002). *Museum of flight, Seattle, Washington: 100 years of aviation history*. Seattle, Washington: Elton-Wolf Publishing.
- 126 Lane, S. (2002). *First world flight: The odyssey of Billy Mitchell*. Daytona Beach, FL: U.S. Press.

**Box 418** *Books, 2002-2012*

Book

127. Lowman, P. (2002). *Exploring space, exploring earth: New understanding of the Earth from space research*. Cambridge, New York: Cambridge University Press. (foreword by Armstrong)
128. Lamb, S. & Sington, D. (2003). *Earth story: The forces that have shaped our planet*. Princeton, N.J.: Princeton University Press.
129. Scott, D.; Leonow, Alexej & Toomey, C. (2004). *Zwei Mann Im Mond*. Berlin: Econ.
130. Boeing Company (2005). *The Boeing Company Presents: The wings of heros gala, the 35<sup>th</sup> anniversary celebration of the mission of Apollo 13*. Seattle, Washington: The Museum of Flight. (includes photograph of honorees)
131. Chiang, J. (2005). *Four essays on the importance of discernment and the meaning of life*. Seattle Pacific University. (inscribed and signed by author)
132. Hansen, J.R. (2005). *First Man: The life of Neil A. Armstrong*. New York: Simon & Schuster.
133. Jones, T. (2006). *Sky walking: an astronaut's memoir*. New York: Smithsonian Books. (includes letter from the editor)
134. Heiken, G. & Jones, E. (2007). *On the moon: The Apollo journals*. New York: Springer
135. Czaia, W. (2007). *Project 262 the test pilot's journal*. Moosburg, Germany: NeunundzwanzigSechs. (signed and inscribed by author, includes letter from author)
136. Explorers Club, Library & Archives Committee (2008). *The Explorer's Club yearbook, 2008*. New York: Explorers Club.
137. Rahman, T. (2008). *We came in peace for all mankind: The untold story of the Apollo 11 silicon disc*. Overland Park, Kansas: Leathers Publishing. (includes correspondence from author)
138. Fish, B. (2009). *Hornet plus three: The story of the Apollo 11 recovery*. Reno, Nevada: Creative Minds Press. (signed and inscribed by author)
139. Lovell, J.; Fu, M. & Lennard-Goehner, A. (2012). *Neil Armstrong, 1930-2012*. New York: Life Books. (2 copies; one hardcover, one softcover)
140. Tyson, N.D. (2012). *Space chronicles: Facing the ultimate frontier*. (1<sup>st</sup> edition) New York: W.W. Norton. (signed by author and includes letter from author)
141. Lindberg, A. & Lindberg, R. (2012). *Against wind & tide: Letters and journals, 1947-1986*. New York: Pantheon Books. (signed and inscribed by author)

142. (n.d.). *Guide to German menu terms*. Bonn, Germany: American Embassy.
143. (n.d.). *Air traveler's English-Spanish dictionary*. Panagra.
144. (n.d.). *Flying Tigers: The World War II American Volunteer Group*. (no publication information available)

## Series 14. News Clippings, 1959-2006

(5 cubic feet)

**Series Description:** This series consists of Neil Armstrong's collection of newspaper clippings. The clippings have been retained as much as possible in the groups in which they were found but arranged chronologically within each group.

The first two boxes contain oversized newspapers covering the Apollo 11 Moon Landing and its anniversaries. This includes a signed copy by Neil Armstrong of the July 15, 1969 *Wapakoneta Daily News*. The remaining boxes contain clippings from Armstrong's time at NASA, his life after the Apollo 11 Moon Landing, and his teaching and research career at the University of Cincinnati. This series also contains clippings that appear to be loosely organized by topics or subjects that were of interest to Armstrong. Lastly, the series includes what appears to be the personal clipping collection of Neil Armstrong's mother, Mrs. Viola Armstrong.

### Box 419 *Apollo 11 Moon Landing Newspapers, 1969*

#### Item

1. Signed *Wapakoneta Daily News*, July 15, 1969
2. *Bild*, July 21, 1969
3. *Dagbladet*, July 21, 1969
4. *Fort Lauderdale News*, July 21, 1969
5. *Los Angeles Times*, July 21, 1969
6. *New York Times*, "Men Walk on Moon," July 21, 1969
7. *Wisconsin State Journal*, July 21, 1969
8. *Amarillo Daily News*, July 22, 1969
9. Booklet; "America-First On The Moon: Historic front pages from all over the world commemorating this great day in the history of mankind," presented as a public service of the *Fort Worth Star-Telegram*, 1969

### Box 420 *Special Anniversary Edition Newspapers, and 1858 Moon Article, 1858-1984*

#### Item

1. *The Washington Post*, July 20, 1979
2. Special Anniversary Edition, *The Western Star*, February 10, 1982

3. *Minneapolis Star and Tribune*, July 15, 1984
4. Reproduction of front page of *The Cincinnati Enquirer*, July 20, 1989
5. *Harper's Weekly*, "The Moon as Seen Through a Powerful Telescope," July 31, 1858, pp. 488-489

**Box 421** *Clippings - Teaching at University of Cincinnati, 1971-1972*

Box

1. Miscellaneous clippings regarding Armstrong's teaching and research career at the University of Cincinnati, 1971-1972

**Box 422** *Clippings about Neil Armstrong, 1969-1994*

Folder

1. Apollo Program and Moon Landings, 1969-1994
2. Protecting Earth and Possible Mars Landing, 1970-1972
3. Miscellaneous clippings regarding Armstrong's teaching and research career at the University of Cincinnati, 1971-1972

**Box 423** *Clippings about Neil Armstrong, 1959-2006*

Folder

1. Boy/Eagle Scouts, 1971-1973
2. Life After Moon Landing, 1971-2000
3. Purdue University, 1971-2008
4. Speeches, Functions, and Awards, 1970-2006
5. Miscellaneous Clippings About Armstrong, 1959-1995

**Box 424** *Subject Clippings, [Astro Personal - Neil's Words], 1966-2002*

Folder

1. [Clippings – Astro Personal], 1972-2000
2. The Commercial Club of Cincinnati, 1990-2002
3. The Commonwealth Club, 1989-1995
4. [Earth], 2000-2001
5. Greater Cincinnati Chamber of Commerce, 1991-1996
6. [Neil's Words] note [See in "Viola"], 1966-1987

**Box 425** *Subject Clippings - Business, Management, and Leadership Related, 1989-1995*

Folder

1. The Procter & Gamble Company Annual Report, 1990
2. Persons of Interest, N/A
3. *The Cincinnati Enquirer* Business Monday, 1989-1995

**Box 426** *Subject Clippings – Science Related, 1985-2001*

Folder

1. Computer Science, 2000
2. Flight and Space, 1985-2001
3. Human Expansion and Languages, 2000
4. The Human Genome, 2000
5. Physics, 2000

**Box 427** *Mrs. Viola Armstrong's Clippings Collection, 1962-1964*

Folder

1. X-15, N/A
2. Mr. Stephen Armstrong, 1963
3. Gemini Space Suit, 1964
4. Gemini Test Flights, 1964
5. Armstrong House Fire, 1964
6. Quest For Moon Landing, 1962-1964

**Series 15. Oversized Materials, 1967-2000**

(1 cubic foot)

**Series Description:** This series contains a collection of oversized posters, prints, and maps that Neil Armstrong maintained as part of his interest in space flight, aeronautic and astronautic technology, and geology. Most of these materials were bundled together under the label [Posters] by Armstrong himself. Other items in this series were kept by Armstrong as miscellany, variously stored by him in his office and other work spaces. The bulk of items found here are related to NASA and space flight, the remainder reflect Armstrong's interests in travel and geology.

**Box 427a** *[Posters], 1967-2000*

Folder

1. Oversized – [Posters]

Item

1. "Purdue University: Our Place in Space," circa 1999-2000

Folder

2. Oversized – [Posters]

Item

1. "Materials in Space Technology," March 29, 1967
2. "U. S. Aerospace Program: Mission and Projects as of June 1, 1967."
3. "NASA Facts: Saturn V," (2 copies), circa 1969
4. Diagram, Saturn V Apollo Flight Configuration, undated
5. "Teammates in Mankind's Greatest Adventure," circa September 1973
6. "The Space Construction Site," circa 1980

Folder

3. Oversized – [Posters]

Item

1. "NASA Facts: Space Shuttle," (2 copies), circa 1972
2. "NASA Facts: SkyLab," circa 1972
3. "NASA Facts: NASA Aeronautics," circa 1974
4. "NASA Facts: The Jupiter Pioneers," circa 1974
5. "NASA Facts: The Spectrum: There's More than Meets the Eye," circa 1975
6. "NASA Facts: Landsat," circa 1978

Folder

4. Oversized – [Posters] (Materials still to be processed)

Item

1. "NASA Facts: Comparing the Planets," circa 1978
2. "SpaceLab," circa 1983

Folder

5. Oversized – Miscellaneous Oversized Items

Item

1. Print memorializing John F. Kennedy, depicting him in profile overlooking a lunar landing mission, presumably Apollo 11, by artist Norman Fletcher Jackson, circa 1969
2. Poster advertisement for Kauai Surf resort, undated
3. "Geological Map of the Bright Angel Quadrangle, Grand Canyon National Park, Arizona," circa 1961

**Series 16. Photographs, circa 1900s-2000s**  
(12.55 cubic feet)

**Series Description:** This series is comprised of six sub-series: NACA/NASA Experimental Test Pilot; Gemini; Apollo and Apollo 11; Military [Navy]; Photograph Subject Files; and Oversized. The text in [ ]s indicate the original folder titles for which Neil Armstrong or his assistant had arranged the photographs. A description of each precedes the sub-series listings.

The NASA photo series begins with Armstrong's time as an experimental test pilot for the X-15 project and extends through both Gemini and Apollo programs. When

official NASA photographs are present, they are arranged by designated NASA photograph number.

These are followed by the Military [Navy] series. Armstrong's military service photographs include images of training, formation (flying and marching), various aircraft, Armstrong in his flight suit, Navy friends and Navy reunion photographs. The Photograph Subject Files series are labeled as Armstrong had originally labeled them and have been left as he had arranged them within the folders.

The photographs in the Oversized (OS) Series were separated out from the other series for preservation purposes. Found within this series are Gemini, Apollo 11, Navy, Awards/Honorary Degrees, Trips and Purdue Alumni Astronaut Reunion photographs, along with miscellaneous photographs.

### **Sub-series 1. NACA/NASA Experimental Test Pilot, 1955-2007** (0.5 cubic feet)

**Series Description:** This sub-series consists of technical photographs of the various X-aircraft and the support vehicles used in the launch and flight of super-sonic jets. Included among the X-15 photos are portraits of Armstrong in his flight suit and posed with the X-15 that he piloted, as well as group shots of the X-15 personnel.

**Box 428** *Photographs, Edwards Air Force Base and X-1A, X-1E, X-3, X-15 Vehicle and Crews, circa 1955-2007*

#### Folder

1. [NASA - EDW], Edwards Air Force Base, Aeronautical Research Pilot, Photographs of Armstrong, circa 1955
2. [NASA - EDW], Edwards Air Force Base, Aeronautical Research Pilot, Photographs of Equipment and Planes, circa 1955
3. [NASA - EDW], Edwards Air Force Base, Aeronautical Research Pilot, Photographs of Crew and Staff, circa 1955 (folder 1 of 2)
4. [NASA - EDW], Edwards Air Force Base, Aeronautical Research Pilot, Photographs of Crew and Staff, circa 1955 (folder 2 of 2, one pilot reunion photograph from The Museum of Flight, *The Wings of Heroes Gala: Celebrating the Birth of Spaceflight - A Tribute to the X-15*, June 9, 2007)
5. Various photographs of X-1A, X-1E, X-3, X-15 vehicle and crews, circa 1960-1962

### **Sub-series 2. Gemini, 1963-1968** (0.9 cubic feet)

**Sub-series description:** The Gemini sub-series includes an extensive collection of photographs from the Gemini VIII mission; training, crew, team meeting shots, family

photographs, pre-mission preparations and post-mission activities. The Gemini equipment photos contain official NASA technical photographs of equipment used on Gemini VIII. Also included are NASA photo identification sheets and a few photographs from Gemini V and XI, for which Armstrong was a back-up crew member.

Located in Box 449 of the Oversized photographs are five Gemini VIII crew and mission photographs. There are also four color photographs matted in a frame; "World's First Docking in Space" "Gemini VIII March 16, 1966."

**Box 429** *Pre and Post Gemini VIII Photographs, 1963-1968*

Folder

1. June 1963-1966 (includes NASA photograph numbers, S-63-23098 - S-66-17041)
2. January - March, 1966 (includes NASA photograph numbers, S-66-17132 - S-66-26046)
3. March 1966 (includes NASA photograph numbers, S-66-26062 - S-66-26315 and a "Gemini VIII (March 16, 1966) 70MM Photography Identification" sheet)
4. March 1966 - 1968 (includes NASA photograph numbers, S-66-26332 - S-68-55810)
5. Postcard, "Wapakoneta Salutes Neil Armstrong, Command Pilot, Gemini 8," April 13, 1966
6. Booklet of Gemini photographs; *The Gemini Program: Weber Aerospace Division*. Burbank, California: Weber Aircraft Corporation. 1966
7. Brochure and images; *Gemini VIII: Rendezvous and Docking Mission*. Houston, Texas: Manned Spacecraft Center, 1966 (images are highlights of the mission)

**Box 430** *Gemini VIII Equipment and Laser Mirror Array Photographs, circa 1966*

Folder

1. Gemini VIII Equipment Photographs (5450-5494), 45 black and white photographs, circa 1966 (folder 1 of 3)
2. Gemini VIII Equipment Photographs (5495-5539), 45 black and white photographs, circa 1966 (folder 2 of 3)
3. Gemini VIII Equipment Photographs (7440-74510), 12 color photographs and (104P-KSC-366-36) 1 black and white photograph, signed by Dan T. McCarthy (folder 3 of 3)
4. Series of NASA Photographs depicting results of Test EP641-036, "Evaluation of thruster exhaust impinging on GT-8 and 9 EVA tether lines and umbilical cord," 16 color photographs, 1966 (NASA photograph numbers, S-66-20429 - S-66-20559)

5. Laser Mirror Array photographs, 7 color photographs, circa 1966

### **Sub-series 3. Apollo and Apollo 11, 1963-1993**

(2.5 cubic feet)

**Sub-series description:** This series contains Apollo photographs leading up to Apollo 11; various training photographs, lunar lander and lunar lander ejection/crash, pre-flight preparations and NASA public relations photographs. There are numerous lunar surface photographs and Apollo 11 flight photographs. The post-flight photographs include but are not limited to splashdown rescue, quarantine, family, and goodwill tour photographs. There are also Apollo 11, 5<sup>th</sup> anniversary photographs and Apollo 14 launch photographs.

Among the photographs are Apollo 11 picture postcards and publications pertaining to the Apollo 11 photographs. Many Apollo 11 photographs can also be found in the oversized photograph boxes at the end of the Photograph Series.

Most of the photographs are NASA photographs and are arranged by number within each folder. The photographs are grouped as Armstrong had them.

#### **Box 431** *Apollo and [Apollo 11 Flight] 1963-1969*

##### Folder

1. Apollo, 1963-1965 (includes many training photographs)
2. [Apollo 11 Pre-Flight], 1967-1969 (folder 1 of 2)
3. [Apollo 11 Pre-Flight], 1967-1969 (includes one photograph signed by Armstrong, folder 2 of 2)
4. *Life* Magazine, Apollo 11, crew doing moon walk simulations, Ralph Morse, photographer, 9, 9" x 13", black and white photographs, April 24, 1969
5. [Lunar Lander] and [Lunar Lander Ejection], Photographs, 1968-1969
6. [Apollo 11 Flight], (all lunar surface), 1969
7. [Apollo 11 Flight], 1969

#### **Box 432** *[Apollo 11 Flight], 1969*

##### Folder

1. Apollo 11 Flight, 1969
2. Apollo 11 Flight, 1969 (includes 3 signed photos by Armstrong, Aldrin and Collins)
3. Apollo 11 Flight, 1969 (all lunar surface)
4. Apollo 11 Flight, 1969 (most of lunar surface)
5. Apollo 11 Flight, 1969

**Box 433** *Apollo 11, 1969*

Folder

1. [A-11 POST-FLT.], Apollo 11 Post-Flight, circa 1969 (one photograph inscribed to Jan Armstrong from Carl Seiberlich and one photograph has a dedication from K.R. Siegfried on the back, also includes a few negatives)
2. U.S.S. Hornet, 28, 6" x 4" color photographs, 1969 (most have notations on the back, some feature President Nixon, also includes 18, 6" x 4" Hornet reunion color photos taken in July 1996)
3. Postcards, Apollo 11 Moon Landing, 1969
4. [Giant Step], 1969 (includes photographs from the post-flight Goodwill Tour designated as "Project Giantstep" and referred to as the "Giant Leap" tour)

**Box 434** [NASA-MISC], *circa 1960s-1993*

Folder

1. [NASA-MISC], circa 1960s-1970s (folder 1 of 3, includes various post-Apollo 11; Apollo 11, 5<sup>th</sup> anniversary and Apollo 14 launch photographs)
2. [NASA-MISC], 1969 (folder 2 of 3, includes a series of First Day Cover presentation photographs) (photos curled)
3. [NASA-MISC], circa 1963-1993 (folder 3 of 3; various photographs, including Apollo 10, Lunar Landing Training Vehicle and photographs of Armstrong with President Ronald Reagan, includes some signed photographs and one photograph signed by numerous astronauts) (photos curled and one torn)
4. NASA-MISC, framed photograph, Armstrong with NASA Administrator and 2 unidentified men, undated

**Box 435** *Apollo 11, circa 1969-1980s*

Folder

1. NASA Public Relations Photographs (NASA card stock); booklet, *Log of Apollo 11 (2 copies)* and *'Man on the Moon' A Picture Chronology Of Man In Space Exploration*, collector's edition, circa 1969 (2 copies)
2. *Apollo 11 70-mm Photographic Catalog*. Greenbelt, Maryland: National Aeronautics and Space Administration, National Space Science Data Center. 1970
3. *Space Photography 1971 Index*. Washington, D.C: National Aeronautics and Space Administration.
4. *Space Photography 1974 Index*. Washington, D.C: National Aeronautics and Space Administration, Audio Visual Branch, Public Information Division.
5. [General Package], various NASA brochures filed with the photographs, circa 1980s

## **Sub-series 4. Military [Navy], circa 1949-2000s**

(0.25 cubic feet)

**Sub-series description:** This sub-series consists of photographs from the time Armstrong served in the United States Navy. Most of the photographs are not marked, but several indicate by markings on the back that they were taken at “Ellyson Field (HT8),” Pensacola, Florida and on “USS Essex (CV9)” and “USS Valley Forge (CV-45).” The photographs include but are not limited to training, formation (flying and marching), aircraft, Armstrong in his flight suit, Navy friends and Navy reunion photographs.

There is one oversized Navy photograph in Box 446; Armstrong is photographed with several unidentified Navy colleagues.

### **Box 436** *[Navy] Photographs, circa 1949-2000s*

#### Folder

1. [Navy], Photographs, circa 1949-1950
2. [Navy], Photographs, circa 1949-2000s

## **Sub-series 5. Photograph Subject Files, circa 1900s-2000s**

(3.75 cubic feet)

**Sub-series description:** The photograph subject files are labeled as Armstrong had them and were left as he had arranged them within the folders. Found within the files are a few photographs from his youth and photos of Armstrong [Portraits] from the 1960s through his later years.

There is a collection of photographs of various aircraft from the early 1900s-2000s, and a folder of photographs from the “First Flights” documentary. Also included are photographs from award ceremonies, public appearances, trips and Purdue related photographs. Two folders contain photographs related to Armstrong’s Board of Director [Director] activities.

Also of note are folders marked [Clubs], [Golf] and [Friends], miscellaneous photographs from NASA historical photo file and other photographs related to aviation/aeronautical history, including President Kennedy in historic message to a joint session of Congress, in regards to landing a man on the moon. There are two folders that are marked [Captions] and [Photo Captions]. The last box in the sub-series [Celebs] is a box of photographs of Armstrong and celebrities.

### **Box 437** *Youth, [Portraits], [Dan Patterson], [Aircraft], and [Astronomy], circa 1900s-2000s*

Folder

1. Youth, circa 1930s-1950s
2. [Portraits], circa 1960s-2000s (one is signed by Armstrong)
3. [Portraits], 1980s-1990s
4. [Portraits], 1990s
5. [Portraits], undated
6. [Dan Patterson], correspondence between Mr. Patterson and Armstrong in regards to his "Aviation Century" project and images of various aviators, 2002-2003
7. [Aircraft], circa 1900s-2000s (folder 1 of 3, includes photographs, images on calendars, brochures and various other images from unknown sources)
8. [Aircraft], circa 1930s-2000s (folder 2 of 3, includes photographs, a packet of images of United States Air Force historical aircraft and various other images from unknown sources)
9. [Aircraft], circa 1940s-2000s (folder 3 of 3, includes photographs and other images related to aircraft and aeronautics)
10. [Astronomy], various photographs, circa 1970s

**Box 438** *[Awards] and [First Flts.], circa 1960s-2000s*

Folder

1. [Awards], circa 1960s-1990s (folder 1 of 3)
2. [Awards], circa 1960s-1990s (folder 2 of 3)
3. [Awards], circa 1960s-2000s (folder 3 of 3)
4. Langley Medal Presentation, Apollo 11 Astronauts and Al Gore at Smithsonian Air and Space Museum, 19, 8" x 10", color photographs, 1999
5. [First Flts.], First Flights (photographs from the documentary, includes 3 signed black and white photographs with model airplane), 1991-1993

**Box 439** *[Club Photos], [Golf], and [Friends], circa 1960s-2000s*

Folder

1. [Club Photos], circa 1960s-2000s
2. [Golf], circa 1970s-2000s (folder 1 of 2)
3. [Golf], circa 1970s-2000s (folder 2 of 2)
4. [Friends], circa 1960s-2000s

**Box 440** *[Learjet], Early [Purdue], [Purdue], circa 1950s-2000s*

Folder

1. [Learjet] and Gates Learjet Corporation folder with photographs, circa 1970s and 1980s

2. Early [Purdue], circa 1950s
3. [Purdue], circa 1960s-2000s (folder 1 of 2)
4. [Purdue], circa 1960s-2000s (folder 2 of 2)
5. Purdue - "Counting Our Blessings," Photobook from Steve and Jane Beering, June 6, 2001

**Box 441** *[Russia], [Director], and [Shuttle], circa 1960s-2000s*

Folder

1. [Russia], circa 1960s-1990s
2. [Director], (includes photographs of involvement with various boards), circa 1970s-2000s (folder 1 of 2)
3. [Director], (includes photographs of involvement with various boards,) circa 1970s-2000s (folder 2 of 2)
4. [Shuttle], circa 1990s-2000s

**Box 442** *[Misc.] and [Captions], circa 1960s-2000s*

Folder

1. [Misc.], (includes school opening photographs, photographs from a publicity event and National Aviation Hall of Fame reunion) circa 1960s-2000s
2. Miscellaneous photographs from NASA historical photo file and other photographs related to aviation/aeronautical history, including President Kennedy in historic message to a joint session of Congress, in regards to landing a man on the moon, circa 1960s-1970s (some undated)
3. [Captions], circa 1960s-1980s
4. Binder, [Photo Captions], 1993-1998

**Box 443** *[Trips], [AGARD], and Miscellaneous Negatives, circa 1960s-2000s*

Folder

1. [Trips], circa 1960s-1990s (folder 1 of 2)
2. [Trips], circa 1960s-1990s (folder 2 of 2)
3. [Trips], (Moscow, Baikonur, Star City, 46, 4"x6" color photographs, many with notations on the back), 2008
4. [AGARD], Advisory Group for Aerospace Research and Development, circa 1962
5. Miscellaneous Negatives, (1 flag on moon, family), circa 1960s

**Box 444** *[Public Appearance], [Speeches/Awards], 1960s-2000s*

Folder

1. [Public Appearance], (includes 10<sup>th</sup>, 20<sup>th</sup> and 30<sup>th</sup> Apollo 11 reunion/anniversary photographs and Apollo 11 crew with Presidents Carter and Bush, one photo signed by George W. Bush, circa 1960s-2000s
2. [Speeches/Awards], circa 1960s-1990s (folder 1 of 4)
3. [Speeches/Awards], circa 1960s-1990s (folder 2 of 4)
4. [Speeches/Awards], circa 1960s-1990s (folder 3 of 4)
5. [Speeches/Awards], circa 1970s-2000s (folder 4 of 4)

**Box 445** [Celebs], 1970s-2000s

Folder

1. [Celebs], circa 1970s-2000s (folder 1 of 2, many include celebrity autographs and inscriptions to Armstrong; Colin Powell, Jimmy Carter, various actors, among others)
2. [Celebs], circa 1970s-2000s (folder 2 of 2, this folder includes many of the Apollo 14 launch for which the Prince and Princess of Spain were guests and were seated next to Armstrong, many include celebrity autographs and inscriptions to Armstrong)

**Sub-series 6. Oversized Photographs, 1962-2010**

(4.65 cubic feet)

**Sub-series description:** For preservation purposes, the following oversized photographs have been separated and grouped together in order to be stored flat in archival boxes. Included are several Gemini VIII photographs, Apollo 11 photographs; crew, Armstrong in space suit, launch, module, first step on the moon, lunar surface, among others. Also featured are photographs from a trip to Russia, USO tours, awards and honorary degrees, Purdue alumni astronauts' reunion (matting signed by many), and several miscellaneous photographs.

Many of the photographs are matted and cannot be removed from the matting without damaging the photographs.

**OS Box 446** - Navy, "MACH Club" Award, Apollo 11 and NASA Deputy Associate Administrator for Aeronautics – Matted Photographs, circa 1950-1971

Item

1. Armstrong in Navy group photograph, 1 black and white photograph, circa 1950
2. Armstrong being presented "MACH Club" Award, 2 black and white photographs, circa 1962
3. "MACH Club" Award presentation group shot, 2 black and white photographs
4. Crew, 15 color photographs, circa 1962

5. Armstrong in flight suit, 5 color photographs, 1969
6. Apollo 11 launch, 3 color photographs, 1969
7. Apollo 11 module, approaching moon, 5 color photographs, 1969
8. Earth from space, 1 color photograph, 1969
9. Lunar surface, 1 color photograph, 1969
10. Aldrin descending ladder of lunar module, "Eagle," 3 color photographs, 1969
11. First step on moon, shot of boot and footprint, 3 black and white photographs, 1969
12. Aldrin on lunar surface, with Armstrong reflected in helmet, 1 color photograph, 1969
13. Aldrin on lunar surface by lunar module, 1 color photograph, 1969
14. Aldrin on lunar surface by United States flag, 2 color photographs, 1969
15. Armstrong, NASA Deputy Associate Administrator for Aeronautics for the Office of Advanced Research and Technology, Advanced Research Projects Agency, 2 color photographs, 1971

**OS Box 447** - *Apollo 11 Crew in Space Suits and Armstrong in Space Suit, Matted Photographs, 1969*

Item

1. Aldrin on lunar surface, 1 color photograph, 1969 (housed here due to size)
2. Apollo 11 crew in space suits, matted photographs, 20" x 16", color, 4, 1969 (one signed by Aldrin)
3. Armstrong in space suit, matted photographs, 16" x 20", color, 15 copies, 1969

**OS Box 448** - *Apollo 11 and USO Show, Vietnam - Matted Photographs, 16" x 20", 1969*

Item

1. Apollo 11 launch, 2, matted photographs, 16" x 20", color, 1969
2. Earth from space, 4, matted photographs, 16" x 20", color, 1969
3. Lunar module approaching moon, earth in background, 2, matted photographs, 16" x 20", color, 1969
4. Aldrin descending ladder of lunar module, "Eagle," 1 color photograph, 1969
5. Aldrin walking on lunar surface, 2, matted photographs, 16" x 20", color, 1969
6. United States flag on lunar surface, 1, matted photograph, 16" x 20", color, 1969
7. Footprint on lunar surface, 2 color, 1 black and white, matted photographs, 16" x 20", 1969
8. Armstrong space boot on lunar surface, 3 black and white, matted photographs, 16" x 20", 1969

9. Armstrong at USO Show, Vietnam, 1 color, matted photograph, 16" x 20", Department of Defense Certificate of Appreciation and signed photograph from General Creighton Abrams, 1969

**OS Box 449** - *Gemini VIII Crew/Mission, Pope Paul VI reading document during Apollo 11 lunar landing, and Apollo 11 crew in front of two Houses of Congress, Awards and Honorary Degrees, Russia Trip, and Miscellaneous photographs, circa 1960s-2010*

Folder

1. Gemini VIII Crew and Mission, 5, 14" x 11", black and white photographs, 1966
2. Pope Paul VI reading document during Apollo 11, lunar landing, 10 ¾" x 14 ¾", black and white photograph and Apollo 11 crew in front of two Houses of Congress, 14" x 11", black and white photograph, 1969
3. Awards and Honorary Degrees, 5 color photographs and 2 black and white, circa 1970s-1990s
4. Russia Trip, 6 black and white and 1 color photograph, includes letter from Sergei Springer, friend of Rudolph Kucherov, the photographer during trip, 1970
5. Matted photograph of Armstrong, Phillips Pro-Celebrity Charity Classic, Bella Vista Village, Arkansas, June 24-25, 1989
6. Miscellaneous photographs; Armstrong with son; with unidentified man, standing next to bicycle; photo of Armstrong, with notation "Peace Corps"; glider; rendering of a lunar rover, black and white photographs, circa 1960s-1990s
7. Various b&w photographs (6) of Yuri Gagarin and other Cosmonauts, undated
8. Collage of images, "Felix Baumgartner meets Neil Armstrong, Location: the Hangar 7, Date: 28<sup>th</sup> of July 2010"

**OS Box 450** - *Trips - Possibly from Bob Hope USO Christmas Tour (Thailand), and Photograph of Armstrong, Aldrin, and Collins, Apollo 11<sup>th</sup> Anniversary, 1969-1974*

Item

1. Buddha, 1 color, 18" x 22", matted photograph, 1969
2. Thai children, 1 color, 24" x 20", matted photographs, 1969
3. Parade in street, 1 color, 20" x 24", matted photograph, 1969
4. Opera scene, color, 18" x 22", matted photograph, 1969
5. Photograph, color, 20" x 24", Armstrong, Aldrin, Collins, Launch Complex 39, John F. Kennedy Space Center, Apollo 11 Anniversary Ceremony, press site, 1974 (had to house in this box due to size)

**OS - Framed Items, 1966-1999 (on shelf)**

Item

1. 4 Color Photographs matted in frame. "World's First Docking in Space" "Gemini VIII March 16, 1966"
2. Framed photo of Armstrong, B-1B #40, April 12, 1990. (Armstrong seated in cockpit)
3. Purdue alumni astronauts in front of Memorial Union, reunion photograph, October 22, 1999 (matting signed by many of them)
4. Framed photograph, "First and Last Apollo Moonwalkers – Neil Armstrong (Apollo 11) and Gene Cernan (Apollo 17), Apollo 12 40<sup>th</sup> Anniversary Dinner, November 7, 2009."
5. "AERO FLIGHT, XP 841, HP 115" written on aircraft. Photograph of an aircraft in flight. On verso, "Flights Area Photographic Services R.A.E. Redford, Crown Copyright Reserved, Negative No. B 3170/F, undated
6. Photograph of lunar landing vehicle, astronaut, and American flag. Photograph is backed by canvas and stretched over stretcher. On verso is a stamp, "McDonald Photo Products, Inc., Dallas, TX," (photograph is separating from canvas), undated
7. Framed photograph of Armstrong in paraglider plane, (photo was hanging in Armstrong's office) undated
8. Framed photograph of NACA/Air Force X plane, (photo was hanging in Armstrong's office) undated

**Series 17. Restricted Materials, 1969-2010**

(.25 cubic feet)

**Series Description:** Materials in this series are restricted per donor request to respect third party privacy. Various lengths of restrictions are indicated in the folder listing.

**Box 451 *RESTRICTED***

Folder

1. Materials from Series 10, Closed until December 1, 2039
2. Materials from Series 10, Closed until December 1, 2039
3. Materials from Series 10, Closed until December 1, 2024
4. Materials from Series 10, Closed until December 1, 2039
5. Materials from Series 10, Closed until December 1, 2039
6. Materials from Series 10, Closed until December 1, 2039
7. Materials from Series 10, Closed until December 1, 2039

**Series 18. Original Subject File Containers, circa 1943-2012**

(7.0 cubic feet)

**Series Description:** This series includes selected cardboard containers originally used by Armstrong in his home office to house a portion of his subject files. These containers were separated from the documents housed in them because the containers are highly acidic. This series also includes original drop file labels also retained during the processing. These materials were retained to represent Armstrong's original records storage system and for exhibit use.

**Box 452** *Home Office Subject Files Containers with Original Hand-Written Labels, circa 1943-2012*

Item

1. [AIRCRAFT SAILPLANES GEM MON-POWERED]
2. [APOLLO]
3. [APOLLO—SUYUZ]
4. [A.S.E.B.]

**Box 453** *Home Office Subject Files Containers with Original Hand-Written Labels, circa 1943-2012*

Item

1. [A.S.E.B. RPTs. & Memos]
2. [ASTRONOMY]
3. [CARDWELL INTL.]
4. [CENTRIFUGE ZERO `G']

**Box 454** *Home Office Subject Files Containers with Original Hand-Written Labels, circa 1943-2012*

Item

1. [COMETS, ASTEROIDS]
2. [LARGE SPACE STRUCTURES]
3. [LECTURES—NAA LASER RANGING]
4. [DIGITAL F13W]
5. [LUNAR DESCENT]

**Box 455** *Home Office Subject Files Containers with Original Hand-Written Labels, circa 1943-2012*

Item

1. [PAUL LOWMAN]
2. [PILOT HANDBOOKS]

3. [PHOTOGRAPHS APOLLO—FLIGHT]
4. [PHYSIOLOGY]

**Box 456** *Home Office Subject Files Containers with Original Hand-Written Labels, circa 1943-2012*

Item

1. [NORTH POLE]
2. [SOARING]
3. [SKYLAB SHUTTLE]
4. [TANKNOLOGY]

**Box 457** *Home Office Subject Files Containers with Original Hand-Written Labels, circa 1943-2012*

Item

1. [UFO]
2. [VIKING FUTURE MISSIONS PLANETS]
3. [X-15 A/C SAFETY PARAGLIDER]

**Box 458** *Envelope, Original Drop File Tabs from Home Office File Cabinet, Various Cardboard Boxes (shirt box, shoe box) Recycled and Labeled as Subject File Containers, circa 1943-2012*

Item

1. Empty envelope written to "Neil" (from mother?)
2. File tabs
3. Box Labeled, [BOY SCOUT]
4. Box Labeled, [HUMOR]
5. Box Labeled, [LUNAR]
6. Box Labeled, [SPACE REF.]