

**Finding Aid for the
Charles Stark Draper Laboratory Historical Collection
at the MIT Museum**

Compiled by Alexander Brown, October – December 2001.

Preamble: The Charles Stark Draper Laboratory Historical Collection (hereinafter CSDL-HC) at the MIT Museum comprises 8 sets of boxed documents plus a number of box files. This material comprises Doc Draper's personal papers, plus a variety of other materials. Deborah Douglas, science and technology curator at the MIT museum, recalls that in 1978 or 1979, an arrangement was reached between MIT museum and the Draper Lab that MIT museum would catalog Draper's historical collection. This was partially done but the collection is a mixture of materials with no obvious logic to it. Furthermore, in the process of these materials being moved from Draper to the museum, they were merged with the existing MIT Institute archives, rendering limited the use of the index. There exists both contract lists and accession lists, but these have not been updated since the 1970s, since when many objects have been relabeled or transferred to other institutions.

This finding aid was compiled under the auspices of the Apollo Guidance Computer project, part of a larger project in the History of Recent Science and Technology. Thus, it focuses on the material relevant to that topic. The AGC project has permission from Draper Lab to catalog these items – specific permission must then be granted for further use or reproduction of any items.

Thanks to Deborah G Douglas of the MIT Museum for ongoing help and support in this project.

CSDL-HC (P) Charles Stark Draper personal. 20 boxes.

1. A – Apollo reports, January 1972,
2. Apollo reports, June 1972 to correspondence general M
3. Correspondence general N to Draper lab correspondence
4. Draper Lab general to Draper Lab correspondence
5. Education reports 1951 – 54 to FAA correspondence reports
6. FBM Polaris steering task group to gunsight technical reports
7. Gyroscope reports 1939 to Instrument Society of America
8. Gunsight Mark 1 to Gyroscopes reports 1961 – 75
9. Instrument reports 1959 – 1965 to International Academy of Astronautics correspondence
10. International Academy of Astronautics correspondence 1968 to International Academy of Astronautics reprints and speeches
11. International Academy of Astronautics Warsaw trip 1964 to MIT linear vibration photographs
12. National Research Council meetings to patents general numbers 3,000,000
13. National Academy of Engineering meetings 1965 to National Inventors Council correspondence 1969
14. National Inventors Council correspondence 1971 to National Research Council meetings
15. MIT Linear vibration graphs and charts to National academy of Engineerings meetings 1968
16. Patents Draper to Russian

17. Sabre to Scientific Advisory Board
18. Seamans, Robert C to United Nations
19. US Armed Forces – Air Force to US Armed Forces – Army
20. US Armed Forces – Navy to X-1 Fire Control System.

CSDL – HC. 10 Boxes

1. A to Activism reports
2. Apollo to Apollo Missions
3. Apollo general to Cryogenic hydrogen experiment graphs
4. Cryogenic hydrogen experiment graphs to FBM general
5. FBM general to Gunsight mark 15
6. Gyro scoop to Pace technical reports
7. Pace Technical reports to Skylab
8. Special Test Facility to Traverse gravimeter experiment design
9. Traverse gravimeter experiment design to Traverse gravimeter experiment lunar
10. Traverse gravimeter mission control to X-1 gunfire control

CSDL – HC Wrigley, Walter. Class notes. 2 boxes.

1. CSDL – HC Wrigley, Walter. Class notes 1 of 2.
2. CSDL – HC Wrigley, Walter. Class notes 2 of 2.

CSDL – HC SAMSO (Space and Missile Sys. Org.) 6 Boxes

1. Project file outline to contracts
2. Contracts to equipment and software
3. Equipment and software to group documents
4. Equipment to Industrial
5. Group documents to project memos
6. Reliability to TWX file

CSDL – HC Edelbaum, Theodore N. 13 boxes

Note: These boxes have cards attached as well as writing on the boxes themselves. The legend in this guide is taken from the card, and where there was no card , from the box.

1. A – Brea.
2. Blay – Can. No card
3. Bres – Dev.
4. Dey – Gaza.
5. Geiss – Hor.
6. Haz – Jay. No card
7. Horsewood, Jerry L – Kelley, Henry J.
8. Ken – McColl
9. McCue – Newbold, P. M.

10. Mol - PE. No card.
11. Newe – Ross.
12. Ross, Stanley – Ti
13. Toms, R. S. H. – Z

CSDL – HC DSS Program (Deep Submergence System.) 7 Boxes

1. Photographs – Written material
2. Technical reports
3. Technical reports
4. Technical reports
5. History
6. History
7. History

CSDL – HC Loose gray file boxes

1. Personnel and facilities 1955 – 1957, annual reports 1954 – 1961
2. Education 1961 – 1974
3. D - notes vol 1 – vol 7 complete
4. D - Notes vol 9
5. Annual reports 1962 – 1964
6. Annual reports 1965 – 1966
7. Annual reports 1968 – 1971
8. Annual reports GP20, 1973
9. Annual reports GP21 – GP24, 1974 - 1977
10. Annual reports GP25,
11. Annual reports GP26, 1979
12. MIT Department of Aeronautics and Astronautics
13. GP 02 – various annual reports
14. Activism, MIT newspapers 1969 –
15. Activism, News clippings 1959 – 1973
16. Activism, The Tech 4/25/68 – 12/15/72
17. Activism, Newspapers, The Catalyst 5/69 – 2/71, ERGO 5/8/69 – 4/14/71, SACC 9/17/69 – 2/71
18. Activism, SACC 9/17/69 – 6/70, various papers 5/69 – 5/70
19. Telephone directories, Jan 52 – March 68.
20. Telephone directories, Nov 68 – Jan 75.
21. Telephone directories, Jul 75 – Oct 79.

CSDL – HC Apollo program Computer Programs. 1 Box

CSDL – HC Technical Reports General. 7 Boxes

1. Technical Reports General
2. Apollo Technical Reports general

3. Apollo Technical Reports, Apollo Mission 7 – 9, Mission E to Mission 9.
4. Apollo Technical Reports, Apollo Mission 10 – 13.
5. Apollo Technical Reports, Mission 12 – 15
6. Apollo Technical Reports, Mission 15 – Colossus data
7. Apollo Program, Colossus data.

CSDL – HC Apollo program Computer Programs. 1 Box

Contains two large volumes of fanfold paper printouts, approx 6 inches thick and unseparated.

Volume 1. Colossus IIA Comanche rev 55, 1 August 1969.

This is a listing of the Command Module software that was used on Apollo 11. The listing notes that “This program is intended for use in the Cm as specified in report R-577.”

Volume 2. Luminary IA, 14 July, 1969.

This is a listing of the computer program which flew in the Lunar Module on Apollo 11. Header reads “Assemble revision 001 of AGC program LMY99 by NASA 2021112 – 061.” The listing notes. “This LGC program is intended for use in the LM during the Manned Lunar Landing Mission or any subset thereof. The details of implementation are specified in report R-567 as amended.

CSDL – HC Technical Reports General. 7 Boxes

Box 1: Technical Reports General

1. Apollo Guidance program symbolic listing information for block 2. 10 January 1967.

The abstract notes that “the material which is included is oriented towards permitting a user to understand the computations being performed by the program, and to follow the logic associated with the control of a complete guidance program assembly. The document includes a detailed comparison of block 1 and block 2.

2. Apollo Guidance program symbolic listing information for block 2. 27 June 1968.

Revision of the first edition, number 1 in this finding aid.

3. MSC internal note no. 69 – FM – 64, 13 March 1969. “Briefing charts for lunar orbit navigation problem, for LM descent, and for hybrid mission.”

The abstract notes “the briefing on the lunar orbit navigation problem summarized what was learned from the Apollo 8 flight, and how this information applies to a lunar landing.” This presentation was made by Jim McPherson, chief of the Mathematical Physics branch.

4. CSM/LM Spacecraft operational data book, vol II. LM data book, part 1, revision 2, 1 September 1969, LED 540-54. Prepared by Grumman for Systems Engineering Division, Apollo Spacecraft Program Office, MSC.

Part of a 6 volume, 8 part series. The introduction notes that “this document presents performance information regarding the mission capabilities and limitations of the LM. The information is intended for use in nominal mission planning and also to provide specialized data relation to pre-mission studies and real time flight operations.”

5. CSM/LM Spacecraft operational data book, vol II. LM data book, part 2, revision 2, 1 September 1969, LED 540-54. Prepared by Grumman for Systems Engineering Division, Apollo Spacecraft Program Office, MSC.

Part of a 6 volume, 8 part series. The introduction notes that “this document presents performance information regarding the mission capabilities and limitations of the LM. The information is intended for use in nominal mission planning and also to provide specialized data relation to pre-mission studies and real time flight operations.”

6. Bound amendments to above, amendments 90 through 172, 12/21/1970 – 12/10/1972.
7. User’s guide to the General Assembly Program, March 1970.

“The Gap system is a system which assembles assembler language for the AGC. In addition to doing assemblies, the GAP (AGC) system has a large section which performs tasks needed to send necessary information to the manufacturers of the AGC and to ensure the accuracy of the information sent. The historical forerunner of the GAP (AGC) system was the YUL system. The YUL system ran on the Honeywell – 1800 computer.”

8. CSM/LM Spacecraft operational data book. Vol. 1, CSM data book, part 1, constraints on performance SD 68-447-1B, revision 3, 15 April 1970.

“This document presents operational information on the capabilities and limitations of the spacecraft. The information presented is intended for use in nominal mission planning and for providing specialized data relating to pre-mission studies.”

Box 2: Apollo Technical Reports general.

9. Amendments 112 – 154 of CSM data book, vol 1, part 1.
10. CSM/LM Spacecraft operational data book. Vol. 3, mass properties, part 1, revision 3, 1 April 1971. SNA-8-D-027 (III) rev. 3. Plus Amendments 102 – 137.

“The purpose of this document is to provide spacecraft mass properties data for use in the mission planning activities, trajectory documentation, mission simulations, and to provide all necessary information and documentation for consumable loading.”

11. Programmed guidance equations for Colossus 3, Command Module Earth orbital and lunar landing program NAS 9-8166, 20 April 1971. Based on Artemis 72 program.

“The information presented in the document on the Colossus 3 (manned Apollo Command Module Earth orbital and lunar) guidance program was produced with the intention that it be used together with a symbolic tabulation of the program. The information is divided into a series of separate segments called “writeups,” each of which describes a basic area of guidance computations within the program.”

This document covers the J missions starting with Apollo 15.

12. MSC Internal note no. 71-FS-2. Programmed guidance equations for Luminary 1E Manned LM Earth Orbital and Lunar Program, June 1971. Prepared by Simulation and Flight Software Branch, MSC.

Under the egis (sic) of the Program Support Group, Guidance Program Section, Simulations and Flight Support Branch of MSC, in order to facilitate the reading of the detailed symbolic listing, a “Programmed Guidance equations Document” has been prepared for the “LUMINARY” program. A major purpose of this document has been to provide more effective identification and analysis of various program performance features and to permit more effective review of published computer program documentation.”

13. 4900.5-244 NASA – 12330 Programmed Guidance Equations for Skylark Command Module Earth orbital program, 14 February 1972. Prepared for Mission Planning and Analysis division, MSC. Based on Skylark 48 program, based on Colossus.

“A review of certain portions of the AGC program identified as “Skylark” has been conducted. This program is a considerably modified version of the “Colossus 3” program used on J-series Apollo flights, and is intended for use with the Command Module Computer on Skylab missions.”

14. User's guide to the Apollo Digital Simulator. Sidney S. David, Lance W. Drane, Stephen R. Femino, F. Keith Glick, Steven J. Savatsky, Leonard W. Silver. Sidney S. David, editor. Charles Stark Draper Laboratory, April 1972.

"The MIT Apollo Digital Simulator is a basic tool developed and employed primarily to support the development and qualification of AGC programs. The simulator is entirely digital, and consists of a number of programs implemented on a general purpose digital computer. It simulates instruction-by-instruction the operation of the AGC, together with the details of the environment within which it operates. [...] This document presents an extensive introduction to the simulator, and discusses in considerable detail its design, structure, components, features and models, and provides a comprehensive manual for its utilization."

15. Visual Sensing of Spacecraft Guidance Information: Earth Orbit Rendezvous Maneuvers, by S. Seidenstein, W. K. Kincaid, Jr., G. L. Kreezer, and D. H. Utter. NASA CR-1214. Prepared under contract no. NAS 1-6801 by Lockheed Missiles and Space Co. for Langley Research Center.

"An analysis of earth orbit rendezvous in terms of maneuver geometry served as a basis for establishing the requirements for visually sensed rendezvous guidance information"

Box 3: Apollo Technical Reports, Apollo Mission 7 – 9, Mission E to Mission 9.

16. MSC Internal note no. 68-FM-181, 31 July 1968. Apollo Mission E (AS504/CSM104/LM4) Spacecraft Reference Trajectory, Revision 2. Volume 1 – Mission Profile, by David D. DeAtkine and Alexander Woronow, Orbital Mission Analysis Branch.

"This report represents the 2nd update to the E mission reference trajectory. The mission is designed to simulate in earth orbit as much as is possible of the timeline and flight operations of the lunar mission and to satisfy the spacecraft mission objectives and the launch vehicle and spacecraft constraints."

17. E-16-II part 1 MSC Internal note no. 68-FM13-438, 1 August 1968. Revision II to mission E (AS504/CSM104/LM4) Spacecraft Reference Trajectory, volume II – Trajectory listing part 1, CSM parameters.
18. E-16-II part 2 MSC Internal note no. 68-FM13-438, 1 August 1968. Revision II to mission E (AS504/CSM104/LM4) Spacecraft Reference Trajectory, volume II – Trajectory listing part 2, LM and separation parameters.
19. Mission requirements for Apollo 7 CSM development mission 05952-H169-R0-00, NAS 9-4810, 1 May 1967. Prepared by TRW for NASA, MSC.

“The Apollo 7 mission as scheduled as an earth orbital block II CSM development mission. The objectives presented in this document have been developed to provide a comprehensive demonstration of the performance of the CSM subsystems and of the interface between the spacecraft and MSFN.”

20. C-1 Revision 1, SPD 8-R-001. Mission requirements “C” type mission, CSM operations revision 1, 14 February 1968. Prepared by TRW for NASA, MSC.

“This document defines the spacecraft detailed test objectives for mission AS205/101. [...] The mission requirements document provides mission planning support to insure the implementation and accomplishment of the primary mission intent (CSM operations). This document will be the control document for all spacecraft mission requirements used in mission planning.”

21. C-35 I, MSC Internal note no. 68-FM13-422. Revision I to volume I of the Apollo 7 (“C” mission) spacecraft operational trajectory, mission profile, 31 July 1968.
22. C-35 II, MSC Internal note no. 68-FM13-419. Revision I to volume II of the Apollo 7 (“C” mission) trajectory listing.
23. C-41, MSC Internal note no. 68-FM13-579. Revision II to volume I of the Apollo 7 (“C” mission) Spacecraft operational trajectory, mission profile, 4 October 1968.
24. C’-22 II, MSC Internal note no. 68-FM13-620. Apollo mission “C” prime alternative 1 (AS503/CSM 103/LTA-B). Spacecraft operational trajectory volume 3. Summary of missions for December 1968 launch window, 16 October 1968.
25. C’-22 IV, MSC Internal note no. 68-FM13-619. Apollo mission “C” prime alternative 1 (AS503/CSM 103/LTA-B). Spacecraft operational trajectory volume 4. Summary of missions for January 1969 launch window, 15 October 1968.
26. C’-22, MSC Internal note no. 68-FM13-623. Apollo mission “C” prime alternative 1 (AS503/CSM 103/LTA-B). Spacecraft operational trajectory volume 1. Mission profile for a mission launched December 21, 1969. 22 October 1968.
27. C’-99, MSC Internal note no. 68-FM-307. The earth and the moon as viewed from the spacecraft, Apollo VIII mission, by Charles T. Hale and Alfred N. Lunde, 16 December 1968.

“The purpose of this document is to depict the geometry of the Apollo 8 trajectory as it might appear from the spacecraft commander’s window. In addition to depicting attitude orientations at TLI and LOI, TEI and entry, detailed views of the earth and moon during the translunar and transearth coast phases are shown. The earth-centered inertial geometry of the trajectory is also depicted.”

28. MSFN Navigation Error Analyses for the Apollo 8 mission by navigation analysis section, mathematical physics branch. 19 December 1968.

“This document summarizes the expected RTCC navigation capabilities during cislunar operations of the Apollo 8 mission. These capabilities were analyzed both with and without spacecraft re-entry.”

29. C’-22_{II} MSC Internal note no. 68-FM13-605. Apollo mission “C” prime alternative 1 (AS503/CSM 103/LTA-B). Spacecraft operational trajectory volume II. Trajectory parameters for a mission launched 21 December 1968. 8 October 1968.

30. D-21 AS503 “D mission” launch vehicle operational trajectory 7 June 1968.

“The preliminary guidance presettings and launch vehicle operational trajectory for the AS503 ‘D’ mission are presented in this coordination sheet. The data included in this report represents the launch vehicle trajectory characteristics for the AS503 ‘D’ mission based upon the current mission planning status.”

31. D-22_I MSC Internal note no.68-FM284 Apollo mission D (AS504/CSM104/LM3) Spacecraft operational trajectory volume I, mission profile by Harold L. Conway, Robert S. Merriam, Harold O. Sperlin, orbital mission analysis branch, and William E. Lee, TRW Systems group.

“The Apollo Mission D spacecraft operational trajectory completely revises all previously published spacecraft trajectory data. This volume, volume I, describes the mission profile and delta v maneuvers that include five docked SPS burns, one docked long duration DPS burn, an LM active rendezvous, an APS burn to depletion, and three CSM solo SPS burns.”

32. D-1_{LMIA} SPD8-R-005, revision 1, change A. Mission requirements “D”-type mission. LM evaluation and combined operations revision one, change A, 21 January 1969, prepared by TRW systems for systems engineering division.

“This document defines the detailed test objectives for the D type mission.”

33. Final Apollo 9 flight plan (AS504/CSM104/LM3) 3 February 1969 prepared by flight planning branch, flight crew support division.

“This document schedules the AS504/CSM104/LM3 operations and crew activities to fulfill, when possible, the test objectives defined in the mission requirements, D type.”

34. Apollo 9 flight plan (Final) change A, 20 February 1969.

35. MSC Internal note no. 68-FM-264, 25 October 1968. Apollo mission F spacecraft reference trajectory volume II. Reference mission profile trajectory parameters (launched 14 August 1969) by lunar mission analysis branch and orbital mission analysis branch.
36. F-8_{vol I} MSC Internal note no.68-FM-269 28 October 1968. Apollo mission F spacecraft reference trajectory volume I. Reference trajectory profile (launched 14 August 1969).

Box 4: Apollo Technical Reports, Apollo Mission 10 – 13.

37. Final Apollo 10 flight plan (AS505/CSM106/LM4) 17 April 1969.

“This document schedules the AS505/CSM106/LM4 operations and crew activities to fulfill, when possible, the test objectives defined in the mission requirements, F type mission, change A, dated 9 April 1969.
38. F-1 no. SPD9-R-037 mission requirements SA505/CSM106/LM4. F type mission lunar orbit 11 February 1969.

“This document defines the spacecraft test objectives for Apollo mission F. The detailed test objectives comply with the Apollo flight mission assignments directive (reference 1).”
39. F-49 MSC Internal note no. 69-FM13-218 Apollo 10 (F) mission operation trajectory simulated data package for 18 May 1969 launch.

Entirely tables of navigation data.
40. G-22_I MSC Internal note no.69-FM13-253 Apollo 11 (G) mission operational trajectory volume I, operational mission profile launched 16 July 1969. Dated 16 May 1969.

The mission G operational trajectory documentation updates and replaces the reference trajectory documents. This volume and volume II present a detailed operational mission profile for a typical lunar landing mission with free return trajectory that would occur within a three-month launch period of July, August, and September 1969.
41. G-22_{II} MSC Internal note no.69-FM13-254 Apollo 11 (G) mission operational trajectory volume II, operational mission profile trajectory parameters launched 16 July 1969. Dated 8 May 1969.

Entirely tables of navigation data.

42. G-31* MSC Internal note no.69-FM-160 revision one to the error source data for dispersion analyses by Joe W. Nolley, guidance and performance branch, 9 June 1969.
43. G-35_I MSC Internal note no.69-FM13-361 Apollo 11 (G) mission revised operational trajectory volume I. Operational mission profile launched 16 July 1969. Dated 27 June 1969.
44. G-35_{II} MSC Internal note no.69-FM13-361 Apollo 11 (G) mission revised operational trajectory volume II. Operational mission profile trajectory parameters launched 16 July 1969. Dated 30 June 1969. First volume of two.
45. G-35_{II} MSC Internal note no.69-FM13-361 Apollo 11 (G) mission revised operational trajectory volume II. Operational mission profile trajectory parameters launched 16 July 1969. Dated 30 June 1969. Second volume of two.
46. MSC Internal note no. 69-FM-210 Operational mission profile parameters launched 18 July 1969.

A CSM mission summary for the opening of the 18 July 1969 launch window is provided in this document.

47. SPD9-R-051 mission requirements (SA507/CSM108/LM6) H-1 type mission, lunar landing 18 July 1969.

“This document defines the mission objectives and experiments for Apollo mission H-1. The primary purposes of this mission are to investigate the lunar surface environment, to emplace ALSEP 1, to obtain lunar material samples, and to enhance the capability for manned lunar exploration.”

48. MSC Internal note o. 69-FM55-212 31 July 1969 by Gene W. Ricks, lunar mission analysis branch.

“This memorandum presents the data to be used in mission planning for missions H and J.”

49. MSC Internal note o. 69-FM13-476 17 September 1969 R.E. Simms, mission planning support office, data management group.

“Apollo 12 (H1) mission mid-course correction simulator data package.”

50. Final Apollo 12 flight plan (AS507/CSM108/LM6) 15 October 1969.

“This document schedules the AS507/CSM108/LM6 operations and crew activities to fulfill, where possible, the test objectives defined in the mission requirements, H type mission lunar landing, change B, dated 14 October 1969.”

51. MSC Internal note no. 69-FM-274 Revision one to the spacecraft operational trajectory for Apollo 12. (Mission H1) vol. II, trajectory parameters, launched 14 November 1969, dated 20 October 1969.

Tables of navigational data.

52. MSC Internal note no. 69-FM264 Views from the CM and LM during the flight of Apollo 12 (Mission H1) 17 October 1969.

Mostly line drawings with some lunar surface maps.

Box 5: Apollo Technical Reports, Mission 12 – 15

53. H-1 MSC Internal note no. 69-FM-266 Revision one to the spacecraft’s operational trajectory for Apollo 12 (Mission H1) volume I, hybrid mission profile launched 14 November 1969. Dated 28 October 1969.

“In volumes one and two of the revision to the spacecraft operational trajectory, a detailed description of the hybrid mission profile is presented. This revision documents the changes in the mission profile since the generation of the operational trajectory.”

54. MSC Internal note no. 69-FM-277 Spacecraft operational trajectory for Apollo 12 mission H1 volume III, mission summaries: November 1969 launch window. Dated 28 October 1969.

Entirely tables of navigational data.

55. MSC Internal note no. 69-FM49-393 Apollo 12 lunar navigation select support data and preliminary results by Wilbur R. Wollenhaupt, mathematical physics branch, 3 December 1969.

56. SPD9-R-053 Mission requirements SA508/CSM109/LM7 H2 type mission lunar landing 10 November 1969. Prepared by TRW systems, for systems engineering division.

“The primary purposes of this mission are to investigate the lunar surface environment, to emplace ALSEP2, to obtain lunar material samples, and to enhance the capability for manned lunar exploration.”

57. MSC Internal note no. 69-FM13-611 Apollo 13 (H2) mission operational trajectory simulator data package. R.E. Simms, mission planning support office, data management group, 12 December 1969.

“The purpose of this memorandum is to provide a simulated data package to be used in Apollo 13 flight crew training.”

58. MSC Internal note no. 69-FM-322 The spacecraft operational trajectory for Apollo 13 (mission H2) volume I. Hybrid mission profile for a 12 March 1970 launch, dated 23 January 1970.

“In volumes one and two of the spacecraft operational trajectory, a detailed description of the hybrid mission profile for Apollo 13 is presented. The nominal launch date of 12 March 1970 was used for the trajectory simulation.”

59. FM4/Mathematical physics branch. Expected orbit parameter rate for Apollo 13, pre PDI, J. N. Engel, 10 April 1970.
60. Mission requirements SA508/CSM109/LM7 H2 type mission, lunar landing 10 November 1969. Prepared by TRW systems for systems engineering division.
61. Apollo 13 flight plan AS508/CSM109/LM7 6 February 1970 by flight planning branch, flight crew support division.

Box 6: Apollo Technical Reports, Mission 15 – Colossus data

62. Apollo 15 (26 July 1971), (24 August 1970), (22 September 1971), (23 September 1971). AS510/CSM112/LM10 Final flight plan 21 June 1971.

This is a minute-by-minute flight plan.

63. MSC Internal note no. 72-FM-39 Spacecraft operational trajectory for Apollo 16 (mission J2) launched 16 April 1972. Volume I, mission profile. Dated 14 March 1972.

This is details of trajectory for all stages of the mission and detailed timings for all stages of the mission.

64. MSC Internal note no. 72-FM-39 Spacecraft operational trajectory for Apollo 16 (mission J2) launched 16 April 1972. Volume II, trajectory parameters. Dated 10 February 1972.
65. Apollo 16, 16 April 1972 launch. Change A flight plan dated 27 March 1972.

- Written on this is “Do not discard. This copy baseline for 15 May and 14 June launch.” Detailed minute-by-minute flight plan for LM, CSM, and main mission.
66. MSC Internal note no. 72-FM-187, Spacecraft operational trajectory Apollo 17 launched 6 December 1972, CST (7 December 1972 GMT) volume I, mission profile. Dated 18 August 1972.
- Detailed verbal and tabular description of mission profile.
67. Trajectory documentation change notification. Mission planning and analysis division 30 October 1972.
- Revises MSC Internal note no. 72-FM-187 with twenty-plus pages.
68. MSC Internal note o. 72-FM-187, Spacecraft operational trajectory Apollo 17 launched 6 December 1972, CST (7 December 1972 GMT) volume II, trajectory parameters. Dated 18 August 1972.
69. Apollo 17 Final flight plan 23 October 1972.
- A detailed description of CSM, LM, and main mission.
70. Apollo 17, 6 December 1972 launch, change A flight plan. Dated 20 November 1972.
71. Folder of PROGRAM CHANGE REQUESTS for SUNDISK-R-547.
- Detailed outline of revisions and internal memos, some quite humorous. Most dated September to December 1967.
72. Folder of PROGRAM CHANGE REQUESTS for COLOSSUS 3.
- COLOSSUS anomaly status report 18 October 1968.
 - Hand-written anomaly disposition list.
 - Anomaly status report, COLOSSUS 2, COMANCHE revision 44, dated 26 March 1969.
 - Software anomaly reports and change routing slips.
 - ARTEMIS (COLOSSUS 2E) discrepancy reports dated 1970.
 - COLOSSUS 3 ADR March 1971.
 - SKYLARK 1 ADR, March 1971 to October 1971.

Box 7: Apollo Program, Colossus data.

73. Folder labeled COM (2C) (2D) anomalies.

- COLOSSUS anomaly status lists September 1969.
 - Anomaly reports COLOSSUS 2C 2D and 2E, July 1969 to March 1970.
 - Assembly control board requests, COLOSSUS 2D and 2E.
74. Folder labeled COL 3 PCR's.
- Memos dealing with testing of COLOSSUS 2E (ARTEMIS).
 - Program change requests for COLOSSUS 3, March to November 1970.
Some astronaut-initiated requests
75. Folder labeled COLOSSUS anomalies.
- Fax x2 to Fred Martin, September 1968, commenting on review of COLOSSUS revision 237.
 - Memo of COLOSSUS program and operational notes, 10 February 1969, COLOSSUS 1A version 249 mission D.
 - COLOSSUS memo #77 revision 3, 23 December 1968.
 - COLOSSUS memo #140 revision 2, 5 March 1969. Contains final content of COLOSSUS 2, COMANCHE revision 45, and documents three types of new code. These are PCRs, anomalies requiring no specification change, and ACBs which are improvements with no PCBs or anomalies.
 - COLOSSUS 239 and 247 anomaly reports.
76. MIT/IL Apollo 16 LUMINARY 1E Erasable memory programs. By Philip Rye, 6 April 1972.
- EMPs for guidance computers, COLOSSUS 3 in CSM LUMINARY 1E in LM.
77. Memory locations for ARTEMIS 72 and SKYLARK 48.
78. Folder, no label.
- Register diagrams for SKYLARK 48.
 - LUMINARY downlink list maps.
 - ARTEMIS 67 register maps.
 - Memo listing erasable locations for LUMINARY and COMANCHE flight ropes to be avoided by MIT/IL.
 - Register maps for SKYLARK 21.
 - Register maps for DIGFLY 39.
 - Register maps for SKYLARK 10.
 - PCRs 44 to 46 for SUNDISK GSOP chip #4.
 - Memo AG#478-67, 29 December 1967. Proposed changes in uplink format.
 - No. 3420.5-67 TRW-A-90, 28 January 1968. Notes changes to SUNDISK command module program between SUNDISK 267 and SUNDISK 281.

- Set of viewgraph slides labeled “System test laboratory SUNDISK program verification.”
- Set of viewgraph slides labeled “CSM Block 2 Program SUNDISK First article configuration inspection (FACI).”
- Comments from FACI meeting 4 October 1967.
- SUNDISK program notes.
- TRW/A/90 17 January 1968. SUNDISK programmed guidance equation updating information for SUNDISK 273 program.
- Polynomial coefficients for AS205/101 boost monitor.
- SUNDISK CMC program discrepancy status summary.
- Unlabeled folder contains flight discrepancy reports for SUNDISK, July and August 1967.
- Questionable items for Apollo 7 SUNDISK 158, 193, 214, 234, 242.
- MIT/IL Apollo 16 COLOSSUS 3 EM programs 5 April 1972.

CSDL – HC Charles Stark Draper Personal Papers. 2 Boxes

Box 1: A – Apollo reports, January 1972

Folder labeled “Apollo correspondence.”

- Proposed collaboration with MIT Department of Nutrition 14 November 1971.
- From Jean Claude Porée to C.S.D. regarding visit of French ambassador to CSDL. 15 October 1971.
- From Ernest Brackett, Chairman Inventions and Contributions Board, NASA, to C.S.D. Letter of commendation to Allan Clumpp and George Cherry for “development of LM descent guidance equations.” 8 October 1971.
- Activities report 22 July 1971. Details of Apollo 15 lightning strike linked with Apollo 12. Details of CSD travel to Eastern Europe and USSR.
- From CSD to Dale Meyers regarding Don Eyles’ part in Apollo 14 LM abort switch fail.
- From Dale Meyers to CSD regarding NASA retrenching, building on success of Apollo, NASA’s optimism. 21 August 1970.
- From Ralph Ragan to Charles W. Mathews regarding manned spacecraft experiments. 5 August 1970.
- Memo from Hal Laning regarding introduction of OS360. 22 May 1970.
- From Howard Johnson to CSD. Isaac Newton story about Apollo 11. 6 August 1969.
- From Shikao Ikehara to CSD, President of the MIT Club of Japan, congratulating him on success of Apollo 11. 25 July 1969.
- From George Mueller to CSD. Congratulating on successful Apollo 11 mission. 24 July 1969.
- Four telegrams congratulating CSD on Apollo 11. Two from Moscow signed Letov and Sedov.

- Apollo Project memo #30-69 from David Hoag entitled “How did we do on Apollo 9?” 10 April 1969.
- From CSD to Bob Gardiner concerning problems with Apollo 11 gyro and appointing Ragan as project manager to address this. 28 March 1969.
- From John Miller to E.J. Hall. “A Response to Cline, Frazier, Frazier’s Question regarding Spin Axis Bearing Screening Procedures.” 27 February 1969.
- From John Miller to CSD discussing arrangements for attendance at pre-launch of Apollo 9. 4 February 1969.
- From Howard Johnson to CSD, congratulations on Apollo 8. 27 January 1969. Second letter congratulations from George Mueller to Howard Johnson, 21 January 1969.
- Apollo Project memorandum #3-69 from David Hoag, “Report on Apollo 8,” 10 January 1969.
- From CSD to George Lowe at MSC requesting seat for MIT at spacecraft analysis systems support room. 9 January 1969.
- Set of letters from Ragan to CSD, Sam Philips to CSD, George Mueller to CSD regarding Apollo Executives group meeting on 10 November 1968 to discuss Apollo 7 anomalies and Apollo 8 mission objectives.
- From George Mueller to Howard Johnson asking for suggestions on various points raised at previous Apollo executives group meeting, specifically, cost reductions, public relations if another Apollo accident, forecasting benefits of manned space flight. 11 October 1968.
- From C. Robert Weiser to CSD, letter of resignation, noting that tensions still exist between MIT/IL and NASA but relations getting better. 15 July 1968.
- From J.S. Miller to Jack Ruina, recommending purchase of 360/91 for MIT/IL. 27 June 1968.
- Memo from CSD to Ralph Ragan noting changed relationship with Chris Kraft regarding reliability of delivery schedules. 27 June 1968.
- From Ralph Ragan to J.B. Feldman regarding expansion of Apollo effort from FY1967 to FY1968 and need for extra space at MIT/IL. 4 June 1968.
- Apollo Project Memo #1893 from David Hoag regarding summary of Apollo 5 and 6 guidance and navigation performance. 22 April 1968.
- Draft of previous item dated 15 April 1968.
- Memo from George Mueller to Bob Gilruth, suggesting the establishment of a guidance software taskforce to improve software development and verification. 18 December 1967.
- From David Hoag to Howard Johnson, reporting on the success of Apollo 4 guidance and navigation on the 4 December 1967 mission.
- From Howard Johnson to CSD with enclosure from George Mueller to Howard Johnson congratulating on the successes of Apollo 4, 27 November 1969.
- From Ralph Ragan to CSD on Apollo software, noting changing management practices, scheduling conflicts with NASA and overcrowding. 1 November 1967.
- From A.M. Letov to J.L. Nevins concerning Russian visit to Huntsville and MIT. 18 November 1967.

- Memo from David Hoag to CSD regarding slipping software schedules and funding problems. 9 September 1967.
- Memo from Richard Battin discussing upgrades in software management since Apollo 1. Notes that throwing people at the problem will not solve it. 5 October 1967.
- Memo from David Hoag to CSD. Material in support of a \$31 million 30-month proposal to NASA to continue work from 1 January 1968 to 30 June 1970. Includes a brief history of development efforts. 4 October 1967.
- From Ralph Ragan to CSD regarding mission programming and Black Friday (cutting back of mission programs). 30 August 1967.
- From Bob Gilruth to Howard Johnson requesting cost savings at MIT/IL. 25 August 1967.
- From E. J. Hall to CSD, comments on recent gyro failure analysis teardown.
- Memo from George Mueller to Howard Johnson suggesting production of set of books setting out Apollo management structure in order to restore confidence in management structure. 23 June 1967.
- From Ralph Ragan to CSD regarding meeting with Howard Johnson, James Killian, and Jack Ruina. Notes that there is still a problem with software management. Bill Tindall to fix. Also that after meeting with Eldon Hall and John Miller at MSC, "Now we are making the grade in the hardware area." 19 May 1967.
- Memo from Joe Shea to Howard Johnson complaining about slippage in software scheduling. 9 November 1966.
- Memo from Ralph Ragan to CSD noting funding drop from \$16.5 million to \$9 million in 1967 budget. Asks MIT/IL to reassess product and manpower on this basis. 2 November 1966.
- From Ralph Ragan to CSD regarding pay increase for field staff. 2 November 1966.
- From Robert Duncan to CSD congratulations on success of AS202. 31 October 1966.
- From David Hoag and Ralph Ragan to A.C. Delco, congratulations on efforts of resident engineers. 11 October 1966.
- From CSD to Jack Ruina regarding pay and conditions for field site engineers. 6 October 1966.
- From Aaron Cohen to David Hoag accelerometer scale factor correction in AS202 erasable load. 13 September 1966.
- From Lewis Larson to Howard Johnson scheduling design review for AS204. 8 September 1966.
- Memo from I. S. Johnson. AS205 training schedule for prime and backup crew at MIT (22-26 August 1966).
- Memo from Ralph Ragan to CSD regarding manpower problems at MIT/IL. 7 July 1966.
- From Charles Collins to Hanscom Field requesting weather forecasts for Apollo tests for optically viewing stars. 30 June 1966.
- From J. L. Nevins to Paul Cusick requesting MIT Club memberships for AS204 prime and backup crews (Grissom, White, Chaffee / McDivitt, Scott, Schweikart) 27 June 1966.

- Memo from David Hoag “Comments on NASA / HQ quarterly reliability report.” Notes concerns over reliability of guidance and navigation system, and rebuts NASA concerns about design, manufacturing, and management problems. 16 June 1966.
- From Bob Gilruth to CSD inviting him to symposium on lunar landing mission. 10 June 1966.
- From Joe Shea to CSD confirming MIT / IL in new role as operational support contractor, rather than R&D. 9 May 1966.
- From John Miller to CSD noting Apollo 2 gyro vibration problem is false. 6 May 1966.
- From David Hoag to CSD. Basic statistics on size, weight, and power consumption of Block 1, Block 2, LGC, plus reliability chart for presentation to George Mueller. 18 March 1966.
- Memo from Milt Trageser establishing Felleman as simulation coordinator. 26 January 1966.
- Memo from J.L. Nevins discussing “space navigator” – roof-mounted Apollo guidance and navigation system at Building 7, MIT / IL.
- From CSD to Joe Shea, regarding scheduling concerns for delivery of guidance and navigation system. 2 July 1965.
- From Joe Shea to CSD in reply to letter of 2 July 1965. 23 July 1965.
- From Robert Seamans to CSD regarding CSD’s status as crew member for Apollo.

Folder labeled “Apollo Reports 1960-1963.”

- Apollo guidance and navigation system, participating contractor quarterly progress report. AC spark plug. June 1963.

“The purpose of this report is to present a detailed resume of program status and progress, considering each of the major program elements. These elements are: 1. Management; 2. Airborne equipment including IMU, navigation base, display and control panel, coupling display unit, power and servo assembly and system assembly and test; 3. Ground support equipment; 4. Manufacturing including equipment fabrication, production engineering, tooling and test equipment, and facilities.”

Contains good line drawings of IMU, navigation base, and DSKY.

- MIT / IL Project Apollo guidance and navigation: a proposal for a research, development, and space flight program. 6 August 1961.

Sets out basis of G&N system, costs, and IMU and digital computer concepts.

- Facts on the AVCO ablative heat shield for Apollo.
- Shooting script for movie entitled “Guidance for Apollo.”

19-minute movie made by MIT / IL.

Folder labeled "Apollo Reports 1964-1969."

- The post-Apollo space program: directions for the future. Space task group report to the U.S. President, September 1969.
- Summary of President's Space Advisory Committee report to the President's Space task group. "The Next Decade in Space." September 1969.
- Apollo GN&C flight experience October 1968. Contains slides for presentation outlining history to 1969 of GN&C efforts, significant GN&C events on Apollo 7. Plus copy of memo from David Hoag concerning GN&C performance on Apollo 7.
- Report "Engineering and Reliability Techniques for Apollo GN&C at MIT / IL" by CSD, Eldon Hall, G. W. Mayo, J. E. Miller, and E. J. Schwamm. 28 July 1965.

Non-technical discussion.

- Report R-443 entitled "Reprints of Presentation to North East executive's visit to MIT/IL 13 March 1964." Includes CSD's "Introduction to the MIT Apollo G&N Program."

Full of pictures, notes, and diagrams, but a poor photocopy.

- Report R-495, "Apollo Spacecraft Guidance System" by Milt Trageser and David Hoag, June 1965.

Folder labeled "Apollo Reports 1970."

- Report R-675, "SKYLOTS: SKYLAB B Observation Telescope System (A Conceptual Design Definition) Final Report." By G. Ogletree, L. Johnson, L. Young, W. Tanner, M. Smith. October 1970.

Folder labeled "Apollo Reports January 1972."

- Report E-2630, "Interim Technical Report no. 2, Candidate Configuration Trade Study, Stellar Inertial Measurement System (SIMS) for an Earth Observation Satellite." By G. Ogletree, J. Coccoli, R. McKern, M. Smith, R. White. 31 January 1972.

Box 2: Apollo reports, June 1972 to correspondence general M

Folder labeled "Apollo Reports June 1972."

- Report E-2630, “Interim Technical Report no. 3, Candidate Configuration Trade Study, Stellar Inertial Measurement System (SIMS) for an Earth Observation Satellite.” By G. Ogletree, J. Coccoli, R. McKern, M. Smith, R. White. 15 June 1972.

Folder labeled “Astronauts.”

- Envelope labeled “Biographical” containing biography of William B. Lenoir, plus the “Song of the Astronauts.” By Janice E. Irvin, January 1969.
- Folder “Correspondence” containing
 - CSD to Aldrin, congratulating him on selection for Gemini XII. 8 November 1966
 - Aldrin to CSD inviting him to launch of Gemini XII, 28 October 1966.
 - Walter Wrigley to CSD noting that Aldrin’s DSC dissertation was accepted after debate and on condition that revisions be undertaken. Notes that this was done to permit Aldrin to accept military assignment. No revisions undertaken and thesis accepted with reservations. Committee very unhappy about this. June 1964.
 - McDivitt to CSD, thanking him for gift of “Inertial Guidance” 7 March 1963.
 - Al Shepard Jr. to CSD, thanking him for sending MINIVAC 6010 from SDC.
 - Handwritten note “with all good wishes for success to the builders of the system from the users of the hardware.” Signed Al Shepard Jr., Scott Carpenter, John Glenn, Deke Slayton.

CSDL – HC. 10 Boxes

Box 2: Apollo to Apollo Missions

Folder labeled “Block I Photos”

- Envelope “AGC rope modules.” Five photos.
- Envelope “Computer mockups.” Six photos, modules plus DSKY. Plus two modular mock-ups from Raytheon.
- Envelope “Sub-assembly mock-ups.”
 - 2x Optical base mock-up from Kollsman
 - 6x Eye pieces
 - 3x Interior of IMU 3.
 - 2x Kollsman “Space eye” telescope and sextant.
 - Transparency of back of telescope and sextant.
 - Kollsman optical components of outer telescope tube.
 - Control panel with noun and verb list.

- GN&C panel.
- Eye pieces.
- 3x Front panel
- Optical sub-systems and navigation base
- 4x Block I IMU
- IMU Integrity model.
- Envelope “Working Assemblies”
 - 3x Block I on test stand
 - 1x Block I plus DSKY on stand

Folder labeled “Apollo Block II Photos: 2 of 2”

- Envelope “Wiring Details.”
 - 18x wiring details
 - 45x Block I assembly mock-ups
- Envelope “Apollo Block II Photos.”
 - 1x Computer plus keyboard
 - Block II computer mockup
 - 1x flat pack mockup
 - 1x mockup assembly
 - 1x Eldon Hall holding DSKY and computer
 - 4x unlabeled mockups
 - 5x Block II mockups
 - 4x IMU vibration testing
 - 7x working assembly
 - 1x Block I in ACM simulator
 - 1x Block II mockup
 - 1x Margaret Hamilton plus CM mockup plus MIT flag
 - 5x working assembly
 - 2x Block II NACM simulator
- Envelope: “Apollo Block II: 1 of 2”
 - 4x System II wiring harness
 - 6x external lenses after splashdown showing ablated heat shield
 - 8x wiring harnesses
 - 2x IMU optics harness
 - 50x Block II sub-assembly mockups

- 65x Block II wiring harness
- Envelope: “Apollo general technology”
 - Picture of CSD labeled “Splash-down party (first flight)”
- Envelope: “Apollo LEM photos”
 - LEM “A” and “B” wiring harness mockups
 - LEM subassembly mockups

Viewgraph Sets

- Activities mission C (2 slides)
- Mission 7 – significant GN&C events (5 slides)
- Mission 8 – significant GN&C events (5 slides)
- Block I computer (3 slides)
- Block I G&N system (2 slides)
- Block I mockup photos (5 slides)
- Block II mockup photos (7 slides)
- Block II changes (7 slides)
- Block II computer (16 slides)
- Block II subassembly diagrams (13 slides)
- Block II subassembly mockups (4 slides)
- Artists’ conception of translunar flights (22 slides)
- Draper Labs’ technical developments (1 slide)
- Mission control (2 slides)
- Flight histories (2 slides)
- Block I and Block II in comparison (3 slides)
- General technology, functional design (20 slides)
- General technology, hardware and software verification procedures (2 slide)
- Rooftop simulator (2 slides)
- General technology, lunar landing (8 slides)
- General technology, space navigation (15 slides)
- General technology, orbital navigation (3 slides)
- General technology, G&N spacecraft locations (3 slides)
- LEM computer (2 slides)
- LEM configuration diagrams (7 slides)
- LEM mockups (3 slides)
- LEM optics system (7 slides)

- Apollo project administration funding and expenditures (8 slides)
- Personnel and infrastructure (9 slides)

Box 3: Apollo general to Cryogenic hydrogen experiment graphs

Folder labeled “History.”

- Report, Apollo Guidance and Navigation System, 6 pages plus diagrams of IMU and gyro system
- Apollo 8 COLOSSUS foreword, “Quad oculus non videt, cor non dolet,” “What the eyes do not see, the heart does not regret.” “There is a lot that happens that we are not telling you about.”
- List of instrumentation lab senior staff plus astronauts containing degrees, and date of degree.
- List of all Mercury, Gemini, and Apollo flights.
- List of all Apollo flights with handwritten names of software builds.
- Apollo addition of CSDL notes, interviews with Ragan, Hall, Sears, Battin, and Hoag.
- List of subcontractors for MIT / IL Apollo program.
- Report R-495.
- Report E-2411. Apollo GN&C Systems: A Progress Report by David Hoag, 14 April 1969.
- Report P-357. The History of Apollo Onboard GN&C by David Hoag, September 1976.
- Report “Background on the G&N System for the Project Apollo Spacecraft.”
- MIT / IL Apollo Program Acronym Glossary
- Report E-2397, “Apollo Guidance and Control System Flight Experience.” By John E. Miller and Ain Laats.
- Shooting script for “Guidance for Apollo.”
- Jill Todd article on MIT / IL in Apollo program.

Folder labeled “General Written Material.”

- List of films held at MIT Museum

Many of these no longer exist; those that do exist are in poor condition.

- List of artifacts held by MIT Museum.

List is out of date and incomplete.

Folder labeled "Apollo Correspondence."

- President Nixon to Jerome Wiesner congratulating on success of Apollo, 9 January 1973.
- Request for proposals for lunar experiments, 11 September 1969. Includes candidate landing sites for Apollo.
- Memo CSD to all MIT / IL inviting IL personnel to convocation for Apollo 8 astronauts, 6 February 1969.
- Press release on Apollo 8 mission, 24 December 1968. Release stresses CSD's role in Apollo mission.
- From Arthur C. Hardy to John R. Lawson. Recalls Hardy's role in visibility studies and his observation on the effects of light on optical systems. 2 June 1967.
- Memo from CSD to all MIT / IL discussing NASA cost reduction programs. 4 November 1965.

This folder also contains duplicates of Hoag memos about Apollo 5 through 9.

Folder labeled "Apollo Press Releases, 1961-1963."

- NASA Release, "New Public Information Officers Assigned," 6 December 1963
- NASA Release, "NASA to Test Apollo Spacecraft Escape System" 5 November 1963
- NASA Release, "NASA Announces Changes in Saturn Mission" 30 October 1963
- NASA Release, "NASA Negotiates for Development of LEM G&N" 18 October 1963
- NASA Release, "IBM Selected for Saturn Instrumentation and Guidance Equipment" 10 October 1963
- NASA Release, "Joe Shea to Lead Apollo Spacecraft Development at MSC" 8 October 1963
- NASA Release, "Technical Fact Sheet on Apollo G&N" 24 September 1963
- NASA Release, "MIT / IL's G&N Will be Autonomous" 24 September 1963
- Sperry Release, "Sperry Builds Accelerometers in Apollo G&N" 24 September 1963
- AC Sparkplug Release, "AC Sparkplug Building Prototype G&N" 24 September 1963
- Kollsman Release, "Kollsman Builds Optics in Apollo G&N" 24 September 1963
- NASA Release, "Two Thousand Hours of Spaceflight to Precede Lunar Trip" 15 September 1963

- NASA Release, "Apollo-Little Joe Flight Qualification Test #1" 26 August 1963
- NASA Release, "George Mueller to Head MSC" 23 July 1963
- MASSA Division, Cohn Electronics Release, "Cohn Electronics to Supply Multi-Channel Oscillographic Recording Systems for Apollo" 15 July 1963
- NASA Release, "RCA to be Subcontractor to Grumman for LEM" 28 June 1963
- NASA Release, "Contract Signed with AC Sparkplug for G&N" 14 June 1963
- NASA Release, "Third Saturn to be Launched" 13 November 1962
- NASA Release, "Grumman to Build LEM" 7 November 1962
- NASA Release, "North American Contract for Second Stage of Advanced Saturn" 30 October 1962
- NASA Release, "Mercury MA7 Press Kit" 13 May 1962
- NASA Release, "Three Companies Selected for Negotiation of Production Contracts for G&N" 8 May 1962
- NASA Release, "MIT Selected to Develop G&N" 9 August 1961
- AC Sparkplug Release, "History of AC Sparkplug's Involvement in Aerospace" n.d.
- NASA Release, "MSC Purpose and Philosophy" n.d.
- MSC Release, "Information Procedures for Contractors, Suppliers, and Vendors," n.d.
- AC Sparkplug Release, "AC Sparkplug's Role in Apollo 5" n.d.
- AC Sparkplug Release, "AC Sparkplug's Role in Aerospace" [1968?]
- AC Sparkplug Release, "Apollo 8" n.d.
- AC Sparkplug Release, "Saturn V Second Launch" n.d.
- Richard Battin manuscript on History of Navigation
- DOD Release, "Apollo Saturn (AS202) for the Press" n.d.

Folder labeled "Apollo News Releases 1964-1967."

- NASA Release, "Apollo 5 Scheduled" 26 December 1967
- NASA Release, "Apollo contract with North American for CSM" 7 December 1967
- MIT / IL Release, "Performance of Guidance and Navigation in Apollo 4," 18 December 1967
- NASA Release, "Apollo 4 Spacecraft Performance," 3 December 1967.
- NASA Release, "Apollo / Saturn Schedule – 6 in 1968, 5 in 1969" 3 November 1967
- NASA Release, "Apollo 4 launch scheduled" 26 October 1967
- NASA Release, "Lunar Module Delivery Changed – Unmanned Rather than manned Required" 13 October 1967
- NASA Release, "First Apollo / Saturn rollout set for August 19" 11 August 1967
- NASA Release, "Chrysler Corporation contract converted for Saturn" 10 August 1967

- NASA Release, “General Bolender Lunar Module Head at Houston” 25 July 1967
- NASA Release, “NASA plans inspection of Saturn V stage” 2 May 1967
- NASA Release, “Biographies of Cernan, Cunningham, Eisele, Schirra, Young” 9 May 1967
- NASA Release, “AS204 will launch lunar module” 20 March 1967
- NASA Release, “Seamans Report to Webb on Apollo 1, part 2” 15 February 1967
- NASA Release, “Seamans Report to Webb on Apollo 1, part 1” 3 February 1967
- NASA Release, “NASA will Proceed with Unmanned Flights,” 3 February 1967
- NASA Release, “Appointment of Panel to Investigate Apollo 1” 28 January 1967
- NASA Release, “First Manned Apollo Flight on 21 February” 23 January 1967
- NASA Release, “Crews of Second and Third Manned Flights Named,” 22 December 1966
- NASA Release, “NASA Orders Third Apollo Link Trainer” 6 December 1966
- NASA Release, “NASA Changes Manned Space Flights,” 17 November 1966
- NASA Release, “Second Crew Named for Apollo Flight,” 29 September 1966
- NASA Release, “Flight Plan for AS202” 21 August 1966
- Release by MIT / IL, Raytheon, Kollsman, and AC Sparkplug, “First Flight Test of Guidance and Navigation” 21 August 1966
- MIT / IL Release, “Instrumentation Laboratory and Aero/Astro Department Role in Apollo” 21 August 1966
- MIT Release, “MIT Gets New Contract for Apollo Guidance and Navigation” 9 April 1965
- NASA Release, “AC Sparkplug gets contract for Manufacture of Guidance and Navigation,” 3 March 1965
- NASA Fact Sheet #285, “Simulation Facilities of Guidance and Control Division” by Fred Pierce, Chief of Simulation Branch. August 1964
- NASA Fact Sheet #256, “Apollo Program Lunar Excursion Module Mission.” 6 August 1964.
- NASA Fact Sheet #287, “Lunar Landing Research Vehicle” by Richard E. Day, Assistant Chief for Spacecraft Training. 27 July 1964.
- NASA Release, “Realignment of Contractor Relationships for Apollo Guidance and Navigation,” 20 June 1964
- NASA Fact Sheet #255, “Apollo Mission” May 1964
- NASA Fact Sheet #253, “The Apollo Mission” by Alan B. Shepard Jr., 4 May – 7 May 1964.
- NASA Fact Sheet #243, “Apollo Program Evolution and Background,” by R. O. Piland, Acting Manager, Apollo Spacecraft Office, April 1964.
- NASA Release, “MSC News Briefs,” 20 February 1964

- NASA Fact Sheet #222, "The Manned Space Flight Program: A Progress Report," by Robert R. Gilruth, 29 January 1964.
- NASA Release, "NASA to Launch Fifth Saturn" 23 January 1964
- NASA Release, "NASA to Negotiate with Bendix for Saturn Guidance Equipment" 22 January 1964

Folder labeled "Apollo Press Releases 1968-1970."

- NASA Release, "Apollo 14 Landing Site Selected" 7 May 1970
- NASA Release, "Fra Mauro Apollo 13 Site" 10 December 1969
- MIT Release, "Guidance on Apollo 11" 24 July 1969
- MIT Release, "List of Apollo Books Mailed to Journalists" 26 June 1969
- NASA Release, "Apollo 11 Goodwill Messages" 27 June 1969
- NASA Release, "McDivitt in New Job (Manager, Lunar Landing Operations)" 25 June 1969
- NASA Release, "Apollo 11 to Broadcast Live" 24 June 1969
- Raytheon Release, "Raytheon Produces 'Brain' of G&N System" 23 June 1969
- NASA Release, "Apollo Flight Plan Changes" 13 June 1969
- NASA Release, "Apollo 11 Timeline, Crew, People" 2 June 1969
- NASA Release, "Duff and Haney Appointments to NASA" 2 April 1969
- NASA Release, "Apollo 12 Crew Assignments" 10 April 1969
- NASA Release, "Apollo 10 Mission Scheduled" 24 March 1969
- NASA Release, "Apollo 10 Launch Date" 17 March 1969
- MIT Release, "MIT AFROTC Congratulates Schweikart" 13 March 1969
- Milwaukee Journal Stations Release, "CSD Speaks About Jim Lovall and Space Program" 22 February 1969
- MIT Release, "Jim Lovall to Visit Cambridge" 11 February 1969
- MIT Release, "Lovall and Kraft to Speak at MIT" 9 February 1969
- NASA Release, "LM Fittings Changed" 31 January 1969
- AC Sparkplug Release, "AC's General Manager Receives NASA Award" 14 January 1969
- NASA Release, "Frank Borman Promoted to Deputy Director, Flight Crew Operations," 9 January 1969
- NASA Release, "Review Board Reconvened for LM Simulator Crashes," 8 January 1969
- NASA Release, "Apollo 9 Scheduled for February 28" 8 January 1969
- AC Sparkplug Release, "Success of G&N in Apollo 8" 27 December 1968

- Boston Museum of Science Release, “Science Seminar Simulates Mission Using Equipment Donated by MIT” 20 December 1968
- NASA Release, “Apollo 8 to Broadcast” 15 December 1968
- NASA Release, “Lunar Landing Experiments” 15 November 1968
- NASA Release, “Apollo 10 Crew Selected” 13 November 1968
- NASA Release, “Apollo 8 Moon Orbital Flight” 12 November 1968
- NASA Release, “Apollo 8 Decision Due” 28 October 1968
- NASA Release, “First Manned Apollo to be Launched” 6 October 1968
- NASA Release, “Injector Selected” 25 September 1968
- NASA Release, “Saturn V Tests Complete” 18 July 1968
- NASA Release, “Apollo 7 Spacecraft Testing” 18 June 1968
- NASA Release, “Apollo 7 CM Shipped to NASA” 29 May 1968
- NASA Release, “Manned Apollo Flight” 27 April 1968
- NASA Release, “Apollo 6 Scheduled” 26 March 1968
- NASA Release, “Apollo Spacecraft Cabin Atmosphere to be Mixture of Oxygen and Nitrogen on the Ground” 14 March 1968
- MSC Release, “MIT / IL Contract Extended by Thirty Months” 29 February 1968
- NASA Release, “Apollo 6 Scheduled” 20 February 1968
- NASA Release, “Landing Site Selected” 8 February 1968
- NASA Release, “LM2 Shipment Delayed” 30 January 1968
- NASA Release, “Apollo 5 Successful” 27 January 1968
- NASA Release, “Four Additional CSMs Requested” 18 January 1968
- NASA Release, “Apollo 5 First Lunar Module Test in Space” 11 January 1968

Folder labeled “Apollo Pamphlets.”

- NASA Fact Sheet #290 “Astronaut Training”
- Raytheon Inertial and Computation Abilities. Note: Largely a discussion of Raytheon’s aerospace programs.
- MSC Organizational Chart, January 1964

Folder labeled “Apollo Newsclippings 1962.”

Folder labeled “Apollo Newsclippings 1963.”

Folder labeled “Apollo Newsclippings 1964-1975.”

Note: These folders contain clipped news items, largely reprints of press releases. The collection tapers off in the early 1970s.