APPENDIX G BOARD ADMINISTRATIVE PROCEDURES

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ADMINISTRATIVE PROCEDURE NO.1

TITLE:

Authority to act for the Chairman of the Apollo 13 Review

Board.

POLICY:

1. The Chairman of the Apollo 13 Review Board will designate a member of the Board to act for him during his absence from MSC.

2. The authority delegated to the Acting Chairman is full and complete and includes all the authorities vested in the Chairman by virtue of the NASA Administrator's letter of April 17, 1970.

PROCEDURES:

Delegation of authority to act for the Chairman in his absence from MSC will be prepared by the Secretariat.

ADMINISTRATIVE PROCEDURE NO. 2

TITLE: Official File of the Apollo 13 Review Board.

SCOPE: This procedure covers the accumulation and preservation of all documents required for the official Apollo 13

Review Board file including documents acquired and main-

tained by Panels and supporting offices.

POLICY: The documentation of actions taken by the Board and Panels is required by the Board's Charter. The orderly organization of the documentation is essential for the preparation

of the Board's Report to the Administrator.

PROCEDURES: 1. All documents received by the Board or emanating from the Chairman or Members of the Board will be maintained by the Secretariat.

- 2. All documents received by Panels or Sub-Panels will be maintained by these organizations until incorporation into the Board's files at the time Panel Reports are accepted by the Board.
- 3. Support offices of the Board will maintain all documents pertinent to their areas of responsibility.
- 4. Documents intended for incorporation in the Panel and Board's Reports will be identified as such by Panel Chairmen and the Board, as appropriate.
- 5. Documents referenced in the Panel and Board's Reports will be identified as such, and classified in a manner that will permit quick retrieval.

DEFINITION: 1. "Documents" means any form of communication (written, recorded, or photographic).

ADMINISTRATIVE PROCEDURE NO. 3

TITLE: Response to Offers of Assistance or Recommendation

POLICY: Offers of assistance or recommendation addressed to the Apollo 13 Review Board (Chairman, individual members, or any Board participant) will be answered by a member of the Apollo 13 Review Board or by individuals designated by the

Chairman of the Board.

PROCEDURE:

1. All messages (letters, telegrams, or other written communications) addressed to the Apollo 13 Review Board or to any of its participants which are identified as suggestions or offers of help or assistance will be forwarded to the Public Affairs Office of the Apollo 13 Review Board.

2. The Public Affairs Office will arrange for the preparation of replies to all such messages.

3. Copies of all incoming and outgoing correspondence or offers of assistance will be maintained for the Board by the Public Affairs Office.

4. The Head of the Apollo 13 Review Board Public Affairs Office is authorized to acknowledge all messages of assistance covered by this Procedure, and to reply to messages in the name of the Chairman of the Apollo 13 Review Board.

ADMINISTRATIVE PROCEDURE NO. 4

TITLE:

Apollo 13 Review Board Organization and Structure.

SCOPE:

This document establishes the basic organization and responsibilities of the Apollo 13 Review Board. This procedure is an implementation of the Administrator's memorandum of April 21, 1970.

POLICY:

- 1. The Apollo 13 Review Board was established by the Administrator, NASA, on April 17, 1970, pursuant to NASA Management Instruction 8621.1, dated April 14, 1966. The following responsibilities and duties were assigned to the Board:
 - a. Review the circumstances surrounding the accident to the spacecraft which occurred during the flight of Apollo 13, and the subsequent flight and ground actions taken to recovery, in order to establish the probable cause or causes of the accident and assess the effectiveness of the recovery actions.
 - b. Review all factors relating to the accident and recovery actions the Board determines to be significant and relevant, including studies, findings, recommendations, and other actions that have been or may be undertaken by the program offices, field centers, and contractors involved.
 - c. Direct such further specific investigations as may by necessary.
 - d. Report as soon as possible its findings relating to the cause or causes of the accident, and the effectiveness of the flight and ground recovery actions.
 - e. Develop recommendations for corrective or other actions, based upon its findings and determinations or conclusions derived therefrom.

- f. Document its findings, determinations, and recommendations, and submit a final report.
- 2. The membership of the Apollo 13 Review Board has been established by the Administrator in letters to individual Board members, as follows:

	<u>Members</u>	Date of Appointment
a.	Mr. Edgar M. Cortright Director, Langley Research Center, Chairman of the Apollo 13 Review Board	April 17, 1970
ъ.	Mr. Robert F. Allnutt Assistant to the Administrator, NASA Headquarters, Member	April 21, 1970
c.	Mr. Neil A. Armstrong Astronaut, Manned Spacecraft Center, Member	April 21, 1970
d.	Dr. John F. Clark Director, Goddard Space Flight Center, Member	April 21, 1970
е.	Brig. Gen. Walter R. Hedrick, Jr. Office of Deputy Chief of Staff, Research and Space Headquarters, USAF	April 21, 1970
f.	Mr. Vincent L. Johnson Deputy Associate Administrator (Engineering), Office of Space Sciences and Applications, NASA Headquarters, Member	April 21, 1970
g.	Mr. Milton Klein Manager, AEC-NASA Space Nuclear Propulsion Office, Member	April 21, 1970
h.	Dr. Hans M. Mark Director, Ames Research Center, Member	April 21, 1970

3. Technical support to the Board:

Mr. Charles W. Mathews Deputy Associate Administrator, Office of Manned Space Flight, NASA Headquarters April 21, 1970

4. Counsel to the Board has been appointed by the Administrator:

Mr. George T. Malley April 21, 1970 Chief Counsel, Langley Research Center

5. Observers to the Apollo 13 Review Board have been appointed by the Administrator, NASA, as follows:

	Members	Dat Appo	te oi intme	
a.	Mr. William A. Anders Executive Secretary, National Aeronautics and Space Council	April	21,	1970
Ъ.	Dr. Charles D. Harrington Chairman, NASA Aerospace Safety Advisory Panel	April	21,	1970
c.	Mr. I. Irving Pinkel Director, Aerospace Safety Research and Data Institute	April	21,	1970
d.	Mr. James E. Wilson Technical Consultant to the Committee on Science and Astronautics U.S. House of Representatives	April	22,	1970

- 6. Heads of Apollo 13 Review Board Supporting Offices have been appointed by the Chairman of the Apollo 13 Review Board. These officials are:
 - a. Secretariat Mr. Ernest P. Swieda, KSC
 - b. Public Affairs Mr. Brian Duff, MSC
 - Legislative Affairs Mr. Gerald J. Mossinghoff,
 NASA Headquarters
 - d. Report Editorial Group Mr. R. G. Romatowski, LRC

PROCEDURES:

- 1. The following organization of the Apollo Review Board is established:
 - a. Panels
 - (1) Mission Events
 - (2) Manufacturing and Test
 - (3) Design
 - (4) Project Management
 - b. Board Offices
 - (1) Public Affairs
 - (2) Report Editorial Office
 - (3) Legislative Affairs
 - (4) Secretariat
- 2. In addition to the Board organization established by the Chairman, the Administrator, NASA, has established a number of observers to the Board. Each observer shall have a direct access to the Board Chairman.
- 3. Sub-panel structure and assignment of responsibilities will be authorized by the Chairman.
- 4. Changes to the basic organization of the Apollo 13 Review Board may only be authorized by the Chairman. All such changes will be officially implemented in documentation prepared by the Secretariat.

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ADMINISTRATIVE PROCEDURE NO. 5

TITLE: Overview responsibilities assigned to Apollo 13 Review

Board Members.

SCOPE: This document establishes overview responsibilities

assigned to members of the Apollo 13 Review Board.

POLICY: Assignment of overall responsibilities to members of the

Apollo 13 Review Board will be made by the Chairman. Specific assignments may be made in memorandum form signed by the Chairman. Any specific assignments will be made part of the official records of the Apollo 13

Review Board.

PROCEDURES: 1. Overview assignments to members of the Apollo 13

Review Board are established as follows:

Member	of	the	Board	<u>Overview</u>	Assignment

Neil Armstrong, MSC Mission Events

Dr. John Clark, GSFC Manufacturing and Test

V. L. Johnson, OSSA Design

M. Klein, SNPO Project Management

Brig. Gen. Hedrick, USAF Apollo 13 Panel Integration

Dr. Hans Mark, ARC Special Studies and Coordina-

tion of Expert Advice and

Assistance

R. F. Allnutt, NASA Hqs Report Editing and Board

Documentation

ADMINISTRATIVE PROCEDURE NO. 6

TITLE: Designation of Apollo 13 Review Board Panel Chairmen and

general responsibilities.

SCOPE: This document establishes the general assignments made to

the Chairmen of Apollo 13 Review Board Panels.

POLICY: The assignment of tasks and responsibilities to Panel

Chairmen will be made by the Chairman of the Apollo 13 Review Board. Each Panel Chairman will draw upon the data, analyses, and technical expertise of the staff at MSC and the Apollo contractors. In addition, sufficient independent checks and analyses will be made to constitute

a clear and sufficient validation of key findings.

PROCEDURES: 1. The following Panel Chairmen are designated:

Panel Chairman

a. Mission Events F. B. Smith, NASA Hqs.

b. Manufacturing and Test H. M. Schurmeier, JPL

c. Design S. Himmel, LeRC

d. Project Management E. Kilgore, LRC

- 2. Panel Chairmen are the Board's principal reviewing agents for specified areas of the Apollo 13 Mission. General responsibilities of Panel Chairmen include:
 - a. Maintaining a day-by-day record of activities including such information as:
 - (1) Meetings
 - (2) Subject matter
 - (3) Attendance
 - (4) Minutes (when appropriate)
 - b. Collecting and retaining for the Board all records, tapes, photographs, studies and other documents which

may be needed to substantiate Board findings and determinations within a Panel area of inquiry.

- c. Preparation of preliminary findings and determinations for evaluation and assessment by the Board.
- 3. General area assignments for each Panel Chairman are appended to this procedure. These may not be changed without the approval of the Apollo 13 Review Board Chairman.
- 4. Each Panel Chairman will coordinate his reviews, analyses, and findings with the other Panels as appropriate.
- 5. Each Panel Chairman will work under the overall guidance and direction of a Board Member designated by the Board Chairman. (See Procedure No. 5)
- 6. Each Panel Chairman is responsible for designating an alternate in case of temporary absence. This alternate must be approved by the Board Member assigned to overview Panel activities.
- 7. Each Panel Chairman is responsible for recommending membership on the panel. Such memberships must be approved by the Chairman of the Apollo 13 Review Board.
- 8. Specific Task Assignments made to Panel Chairmen by the Board Chairman will be cataloged and maintained by the Secretariat.
- 9. Panel reports of findings, determinations, and recommendations (together with complete supporting documentation) will be required of all Panels. Any minority positions relative to Panel Reports will be brought to the attention of the Board.

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General Assignment for Mission Events Panel

It shall be the task of the Mission Events Panel to provide a detailed and accurate chronology of all pertinent events and actions leading to, during, and subsequent to the Apollo 13 incident. This information, in narrative and graphical time-history form, will provide the Apollo 13 Review Board an official events record on which their analyses and conclusions may be based. This record will be published in a form suitable for inclusion in the Review Board's official report.

The Panel will report all significant events derived from telemetry records, air-to-ground communications transcripts, crew and control center observations, and appropriate documents such as the flight plan, mission technique description, Apollo Operations Handbook, and crew checklists. Correlation between various events and other observations related to the failure will be noted. Where telemetry data are referenced, the Panel will comment as appropriate on their significance, reliability, accuracy, and on spacecraft conditions which might have generated the data.

The chronology will consist of three major sections: Preincident Events; Incident Events; and Postincident Events. The decision-making process leading to the safe recovery, referencing the relevant contingency plans and available alternates, will be included.

Preincident Events. This section will chronicle the progress of the flight from the countdown to the time of the incident. All action and data relevant to the subsequent incident will be included.

Incident Events. This section will cover that period of time beginning at 55 hours and 52 minutes after lift-off and continuing so long as abnormal system behavior is relevant to the failure.

<u>Postincident Events</u>. This section will document the events and activities subsequent to the incident and continuing to mission termination (Splash). Emphasis will be placed on the rationale used on mission completion strategy.

General Assignment for Manufacturing and Test Panel

Review the manufacturing and testing, including the associated reliability and quality assurance activities, of the flight hardware components involved in the flight failure as determined from the review of the flight data and the analysis of the design. The purpose of this review is to ascertain the adequacy of the manufacturing procedures, including any modification, and the preflight test and checkout program and any possible correlation of these activities with the inflight events.

The Panel shall consist of three activities:

1. Fabrication and Acceptance Testing

This will consist of reviewing the fabrication, assembly, and acceptance testing steps actually used during the manufacturing of the specific flight hardware elements involved. Fabrication, assembly, and acceptance testing procedures and records will be reviewed, as well as observation of actual operations when appropriate.

2. Subsystem and System Testing

This will consist of reviewing all the flight qualification testing from the completion of the component level acceptance testing up through the countdown to lift-off for the specific hardware involved. Test procedures and results will be reviewed, as well as observing specific tests where appropriate. Results of tests on other serial no. units will also be reviewed when appropriate.

3. Reliability and Quality Assurance

This will be an overview of both the manufacturing and testing, covering such things as parts and material qualification and control, assembly and testing procedures, and inspection and problem/failure reporting and closeout.

General Assignment for Design Panel

The Design Panel shall examine the design of the oxygen and associated systems to the extent necessary to support the theory of failure. After such review the Panel shall indicate a course of corrective action which shall include requirements for further investigations and/or redesign. In addition, the panel shall establish requirements for review of other Apollo spacecraft systems of similar design.

The Panel shall consist of four subdivisions:

1. Design Evaluation

This activity shall review the requirements and specifications governing the design of the systems, subsystems, and components, their derivation, changes thereto and the reasons therefor, and the design of the system in response to the requirements, including such elements as design approach, material selection, and stress analysis; and development and qualification test programs and results. This activity shall also review and evaluate proposed design modifications, including changes in operating procedures required by such modifications.

2. Failure Modes and Mechanisms

This activity shall review the design of the systems to ascertain the possible sources of failure and the manner in which failure may occur. In this process, they shall attempt to correlate such modes with the evidence from flight and ground test data. This shall include considerations such as energy sources, materials compatibility, nature of pressure vessel failure, effects of environment and service, the service history of any suspect systems and components, and any degradation that may have occurred.

3. Electrical

This activity shall review the design of all electrical components associated with the theory of failure to ascertain their adequacy. This activity shall also review and evaluate proposed design modifications, including changes in operating procedures required by such modifications.

4. Related Systems

This activity shall review the design of all systems similar to that involved in the Apollo 13 incident with the view to establishing any commonality of design that may indicate a need for redesign. They shall also consider the possibility of design modifications to permit damage containment in the event of a failure.

General Assignment for Project Management Panel

The Project Management Panel will undertake the following tasks:

- 1. Review and assess the effectiveness of the management structure employed in Apollo 13 in all areas pertinent to the Apollo 13 incident. This review will encompass the organization, the responsibilities of the organizational elements, and the adequacy of the staffing.
- 2. Review and assess the effectiveness of the management systems employed on Apollo 13 in all areas pertinent to the Apollo 13 incident. This task will include the management systems employed to control the appropriate design, manufacturing, and test operations; the processes used to assure adequate communications between organizational elements; the processes used to control hardware and functional interfaces; the safety processes involved; and protective security.
- 3. Review the project management lessons learned from the Apollo 13 mission from the standpoint of their applicability to subsequent Apollo missions.

Tasks (1) and (2), above, should encompass both the general review of the processes used in Apollo 13, and specific applicability to the possible cause or causes of the mission incident as identified by the Board.

ADMINISTRATIVE PROCEDURE NO. 7

TITLE:

Use of Consultants, Advisors, and other special assistants

to the Apollo 13 Review Board.

POLICY:

This procedure provides for the utilization of consultants

and advisors to the Apollo 13 Review Board.

PROCEDURES:

1. All official advisors and consultants to the Apollo 13

Review Board will be appointed by the Chairman of the

Board.

2. Advisors and consultants will be given task assignments whenever practicable so as to focus their efforts

on behalf of the Board.

3. Whenever appropriate, experts and consultants utilized by the Board will submit their advice or opinions in writing and these documents will become part of the Board's

official file.

ADMINISTRATIVE PROCEDURE NO. 8

TITLE:

Requisition and Control of Data and Equipment Related to the Apollo 13 Review Board Activities.

POLICY:

The Chairman of the Apollo 13 Review Board has been authorized by the Administrator to impose controls on the use of Apollo data and/or equipment when such constraints are deemed necessary for the conduct of the Board review. Such acquisition and control may only be authorized by a Member of the Board acting for the Chairman. Whenever the sequestration of data or equipment may delay or hinder program needs, the control will be for a minimum of time adequate for the needs of the Board.

PROCEDURES:

- 1. Data and/or equipment required by a Panel or the Board will be identified in a Data Control Request approved by the Chairman or Member of the Apollo 13 Review Board.
- 2. The Data Control Request will be submitted to the program organization through the MSC Apollo Office. The MSF Technical Representative to the Apollo 13 Review Board will transmit all such requests on behalf of the Board.
- 3. Each Data Control Request will be logged by the Secretariat and closed out at the earliest appropriate time. All such requests, MSF acknowledgements, and subsequent closeouts will be part of the official files of the Board.

ADMINISTRATIVE PROCEDURE NO. 9

TITLE:

General Assignments to Apollo 13 Review Board Supporting

Offices.

PROCEDURES:

1. The Heads of Apollo 13 Review Board supporting offices were established in Administrative Procedure No. 4, dated April 24, 1970.

2. General assignments of responsibility to the Heads of these offices are attached to this document. Changes may be made only with the approval of the Apollo 13 Review Board Chairman.

ATTACHMENT A - SECRETARIAT

The Secretariat of the Apollo 13 Review Board will:

- 1. Provide for complete administrative support to the Board, including clerical assistance, office space, supplies, equipment, transportation, travel, housing arrangements, and other logistic and administrative support.
- 2. Maintain all official files, minutes, and other Board documentation and correspondence.
- 3. Coordinate Board Schedules and plans so as to maximize the most efficient utilization of time and effort.
- 4. Act as the liaison point with MSC and other Center officials on all administrative matters.

ATTACHMENT B - REPORT EDITORIAL OFFICE

The Head of the Report Editorial Office will:

- 1. Recommend to the Board the form and content of the Board's Report to the Administrator.
- 2. Organize the report, supervise its preparation, and provide for the complete review of all preliminary and final drafts.
- 3. Insure that Counsel to the Board is consulted on all report material with respect to legal sufficiency and substance.

ATTACHMENT C -- PUBLIC AFFAIRS

The Head of the Apollo 13 Public Affairs Office will:

- 1. Provide all public affairs support to the Chairman and Members of the Board including preparation, review, and distribution of press releases, statements, and other information releases.
- 2. Maintain a complete file of all Apollo 13 related press releases and statements made by officials of NASA and supporting agencies which bear on the events and incidents in flight.
- 3. Maintain biographies, photographs, and other records with respect to Board officials.
- 4. Provide all liaison with Public Affairs officials in NASA Headquarters, other Centers, and outside agencies.
- 5. Maintain a complete inventory of letters received from the public which are addressed to the Board Chairman or any Members, including copies of all replies.
- 6. Report to the Board on a regular basis in order to summarize all significant PAO activities.

ATTACHMENT D --- LEGISLATIVE AFFAIRS

The Head of the Apollo 13 Legislative Affairs Office will:

- 1. Provide the Board with complete congressional support, including arranging visits, recommending replies to inquiries, and monitoring a complete record of all congressional activities related to the Board's Charter and responsibilities.
- 2. Make periodic reports to the Board on the status of congressional activity directly affecting the Board's operations.

ADMINISTRATIVE PROCEDURE NO. 10

TITLE: Apollo 13 Review Board Sessions

- 1. The Apollo 13 Review Board meeting schedules are established, as follows:
 - a. General Sessions. These will be daily sessions held each evening at a time prescribed by the Chairman of the Apollo 13 Review Board. The purpose of these sessions will be to review the progress of Panel efforts and to establish priorities for further reviews. All participants in the Apollo 13 Review Board organization should attend. Agendas for these meetings will be prepared by the Secretariat after consultation with the Board and the Panel chairmen.
 - b. Executive Sessions. These will be held at the call of the Chairman (generally each morning). The purpose of these sessions will be to discuss among the Board itself progress and plans for Panel and Support Office activities. Attendance at Executive Sessions will be limited to Members of the Apollo 13 Review Board, and Counsel to the Board, as well as such other members of the Board's organization as are invited by the Chairman. Each Executive Session will be recorded and transcribed.
 - c. Action items assigned by the Chairman in either the General Session or in Executive Session will be recorded by the Secretariat, and made part of the official files of the Board.

ADMINISTRATIVE PROCEDURE NO. 11

TITLE: Work Orders

SCOPE: This procedure covers the origination and documentation of

Work Orders to the MSC Apollo 13 Investigation Team, here-

inafter "Team," and other organizations.

POLICY: All work by other sources connected with the Board's or

Panel's investigation will be documented and preserved

for the Board's official files.

PROCEDURE: 1. The Panel Chairman, with the concurrence of the cogni-

zant Board member, will originate a Work Order, if the course of the Panel's investigation requires support from

outside sources.

2. The Work Order (memorandum form) will include:

A Statement of Work (detailed step-by-step procedures or work items, when appropriate)

Identification of Board, Panel, or other personnel who may visit the work site at the time the work is being performed

Procurement requirements, if known

The kind of data, reports, drawings, and other information required

Period of Performance

Other items essential for a complete understanding of the Work Order

3. The Work Order will be assigned a number by the secretariat and transmitted to the Team.

- 4. If the Work Order duplicates, in whole or in part, prior work done for the Team, the Team Leader will advise the Panel Chairman to that effect.
- 5. If the Work Order initiates work not previously performed, in whole or in part, by the Team, the Team Leader will advise the Panel Chairman of the need for amending the Statement of Work to include such work items that are needed by the Team.
- 6. When coordination between the Team and the Board has been effected, the Team will prepare a Test Preparation Sheet in accordance with its procedures and advise the cognizant Panel Chairman of actions taken, together with periodic reports, when feasible.
- 7. When the work has been performed the Team Leader will advise the cognizant Panel Chairman and transmit work products, if any, to the Chairman.
- 8. The Board Secretariat will document close-out actions or final disposition of all Work Order requests.

ADMINISTRATIVE PROCEDURE NO. 12

TITLE: Interrelationship of activities of the Apollo 13 Review

Board with those of the MSC Apollo 13 Investigation Team.

SCOPE: This procedure covers the methodology in conducting a

concurrent investigation of the Apollo 13 mission failure.

The investigation and review by the Board and the investigation by the Team shall be in accordance with NMI 8621.1, April 14, 1966; and as implemented by the Administrator's memorandum of April 20, 1970 to the Associate Administrator for Manned Space Flight. Further, the Board will conduct its own independent review and conduct such further specific investigations as empowered by the Administrator's memorandum of April 17, 1970: Establishment of Apollo 13 Review

Board.

POLICY:

PROCEDURE: 1. Liaison between the Board and the Team is the responsibility of Mr. C. W. Mathews, who provides OMSF technical support to the Board pursuant to the Administrator's memor-

andum of April 21, 1970.

2. The Board and the Team will establish a working relationship between the Panels of the Board and Team Groups in areas of investigation of mutual interest. Information and data will be freely exchanged between the Panels and the Team Groups.

This information and data, together with information and data obtained independently by the Board Panels, will be analyzed and, when approved by the Board, will be included in interim reports and the final report to the Administrator.

3. All documents published by the Team shall be furnished the Board for its official files.

4. Requests for personnel details of Team members to the Board will be approved by the Chairman and implemented by the OMSF Technical Support representative.

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ADMINISTRATIVE PROCEDURE NO. 13

TITLE: Records of the proceedings of the Executive and General

Sessions of the Board.

SCOPE: This procedure covers the methods and responsibilities

related to recording the proceedings of the Board during

its review and investigation activities.

POLICY: The proceedings of all the General Sessions of the Board shall be mechanically recorded and placed in transcript

shall be mechanically recorded and placed in transcript form for inclusion in the files of the Board. The Secretariat is responsible for transcribing and initial editing of the record for content and accuracy. Counsel shall be responsible for final review of the transcript. The proceedings of Executive Sessions of the Board shall

be mechanically recorded but no transcripts shall be pre-

pared.

PROCEDURES: 1. The Secretariat shall record all Executive and General Sessions of the Board.

2. The Secretariat shall transcribe the recordings of General Sessions. The Secretariat shall maintain a log and suspense for each transcription during the review process. The rough transcripts shall be edited by the

Secretariat for content and accuracy.

3. To the extent feasible, the transcript shall be retyped after the editing and then Counsel shall perform the final review of the transcripts.

4. Following the review, the transcripts of the General Sessions shall be typed in final form and filed by the Secretariat. The tapes for both General and Special Sessions shall be included in the files of the Board by the Secretariat.

ADMINISTRATIVE PROCEDURE NO. 14

TITLE: Coordination and Control of Test Support for Apollo 13

Review Board.

POLICY: Test support for the Apollo 13 Review Board is to be coordinated within the Board and controlled throughout

the tenure of the Board by use of Test Preparation Sheet

(TPS).

REFERENCE: 1. Administrative Procedure No. 11, dated April 27, 1970.

2. Memorandum from Donald D. Arabian to Apollo 13 Investigation Team, subject: TPS procedures and requirements,

dated May 5, 1970.

PROCEDURES:

- 1. Whenever any Member, Panel Chairman, or Panel participant requires a test activity by MSC or one of its contractors to support the Board's review of Apollo 13 events, a request should be made in writing using the procedures set forth in the referenced Administrative Procedure.
- 2. Each such request will be reviewed by a designated Board Member and M&T Panel Chairman before it is submitted to the MSC Team Leader (Simpkinson) for implementation.
- 3. The designated Board Member and the M&T Panel Chairman will be responsible for maintaining a Master List of Support Tests on which tests will be related to incident events.
- 4. After coordination within the Board, the support test request (work order) will be submitted to the MSC Team and logged as an official TPS by the Team.
- 5. Support tests to be carried out by other than MSC or its contractors will also be sent to the M&T Panel Chairman for review and will also be coordinated and logged in as a TPS by the MSC Team. In this case, the intent is to use

the Project's TPS numbering, control, and filing procedures as a central data system for the Review Board and the MSC Investigation Team.

6. The above procedure should be applied to any support test activity initiated by an official member of the Board organization from its inception on April 21, 1970.

ADMINISTRATIVE PROCEDURE NO. 15

TITLE: Custody of and access to Apollo 13 Review Board Materials

SCOPE: This procedure covers the custody of and access to Apollo 13 Review Board materials upon the completion of the

Board's activities at the Manned Spacecraft Center (MSC).

POLICY: The files and other material used in preparing the Apollo

13 Review Board Report shall be stored in the custody of the Langley Research Center. The files and report materials of the Panels shall be made part of the Review Board files. The files, documentation, and other data of the MSC Investigating Team will not be controlled by the Apollo 13 Review Board. Custody and disposition of the materials preserved by the MSC Team shall be left to MSC Center management. Apollo 13 hardware and original data received from the spacecraft during flight shall be con-

trolled and stored in accordance with the usual MSF

procedures.

PROCEDURE: Reports, files, tapes, and working materials determined by the Chairman to be included in the final repository shall be in the final custody of the Director, Langley

Research Center. Access thereto shall be determined by him or by the Chief Counsel, Langley Research Center.

Adequate secure storage and warehousing will be provided

by the Langley Research Center.

Edgar M. Cortright

NASA - MSC