



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
JOHN F. KENNEDY SPACE CENTER
KENNEDY SPACE CENTER, FLORIDA 32899



REPLY TO
ATTN OF: AA-MFP-1

JUN 2 1975

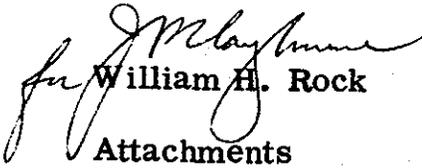
MEMORANDUM

TO: Distribution

FROM: AA/Manager, Sciences, Applications & ASTP Office

SUBJECT: Addendum 2 to Apollo Program Directive No. 19C

The attached copy of Addendum 2 to Apollo Program Directive No. 19C, "Apollo Mission Evaluating Reporting", is being sent to you for information only. Also attached is a copy of my briefing note to Mr. Scherer describing the change this addendum makes to the basic document.

for 
William H. Rock

Attachments

Distribution:
ASTP Distribution M

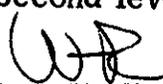
Briefing Note

5/19/75

TO: CD/Mr. Scherer
FROM: AA/Mr. Rock
SUBJECT: Addendum 2 to Apollo Program Directive No. 19C

Attached is a copy of Addendum 2 to Apollo Program Directive No. 19C, "Apollo Mission Evaluation Reporting." The basic document describes the various post-mission evaluation reports and the schedule of the completion of each report. This addendum changes the time of publication of the Final JSC Science Report from one year to fifteen months after the recovery of the astronauts. The addendum has no impact on KSC operations.

Addendum 2 to Apollo Program Directive No. 19C will be distributed to first and second level directorates for information only.


William H. Rock

Attachment



5/6/75

APOLLO PROGRAM DIRECTIVE NO. 19C, ADDENDUM 2

TO: DISTRIBUTION

FROM: *Chester M Lee*
PROGRAM DIRECTOR, ASTP

SUBJECT: Addendum 2 to Apollo Program Directive No. 19C,
Apollo Mission Evaluation Reporting

OFFICE OF PRIME RESPONSIBILITY (OPR): ASTP Engineering (MAE)

I. PURPOSE

This addendum modifies science reporting to meet ASTP requirements.

II. JSC SCIENCE REPORTING

Addendum 1 specified that the final Science Report is required one year after astronaut recovery. This addendum modifies that time period to 15 months to allow for publication of the Report.

15-DOC-12LD

April 9, 1971

GSA BULLETIN FPMR D-76
PUBLIC BUILDINGS AND SPACE

TO : Heads of Federal Agencies

SUBJECT: Designation of Federal buildings

1. Purpose. This bulletin announces changes in the names of four Federal buildings.
2. Expiration date. This bulletin will expire April 30, 1971.
3. Designation. The former and new names of the buildings being redesignated are as follows:

Former Name

New Name

Old VA Facility
Oteen, NC 28805

GSA Storage Facility
Oteen, NC 28805

U. S. Post Office
26 North McDonald Street
Mesa, AZ 85201

Federal Building
26 North McDonald Street
Mesa, AZ 85201

U. S. Post Office and Courthouse
South Walcott and East First Streets
Casper, WY 82601

Federal Building
U. S. Courthouse
South Walcott and
East First Streets
Casper, WY 82601

Babb Piegan Border Station
Babb Piegan, MT 59411

U. S. Border Station
Piegan, MT 59411



ROD KREGGER

Acting Administrator of General Services

GENERAL SERVICES ADMINISTRATION
WASHINGTON, DC 20405

15.DOC.12LD

April 12, 1971

GSA BULLETIN FPMR E-93
SUPPLY AND PROCUREMENT

TO : Heads of Federal Agencies

SUBJECT: Source Data Automation Equipment Guide

1. Purpose. This bulletin announces the availability of a revised edition of the GSA publication, Source Data Automation Equipment Guide.
2. Expiration date. This bulletin contains information of a continuing nature and will remain in effect until canceled.
3. General. The 1962 publication was limited to a brief catalog format of the picture, description, input/output features, speed, approximate cost, and the manufacturer of source data automation (SDA) equipment. The revised guide provides technical data for current SDA equipment and detailed information to assist managers during the analysis and selection process.
4. Content. The publication is divided into four parts as follows:
 - a. Part I, Introduction, which discusses the principles and advantages of the guide.
 - b. Part II, Descriptions of SDA Equipment Widely Used Within the Federal Government, which describes in detail the seven major SDA equipment classes utilized within the Federal Government.
 - c. Part III, Descriptions of SDA Equipment That is Less Widely Used Within the Federal Government, which briefly describes SDA equipment in the titled category.
 - d. Part IV, Manufacturers and Mailing Addresses, which lists the manufacturers whose equipment is described in the guide.
5. Availability. One copy of the guide is being distributed to agency publication liaison officers. Additional copies may be requisitioned from your servicing GSA region. The Federal Stock Number is 7610-059-2773 and the price is \$3 per copy.



H. A. ABERSFELLER
Commissioner, Federal Supply Service



JOHN F. KENNEDY SPACE CENTER, NASA
KENNEDY SPACE CENTER, FLORIDA 32899

REPLY TO
ATTN OF:

AP-SVO

MAR 20 1970

TO: Distribution

FROM: Apollo Program Manager, AP

SUBJECT: APD #19C, "Apollo Mission Evaluation Reporting Requirements"

REFERENCE: Briefing Note to Dr. Debus from AP, dated March 20, 1970,
Subject as above

APD #19C has been received and reviewed by this Office. As discussed in the attached briefing note, this Center is affected by the deletion of the previous requirement for the submission of two reports. Other changes, not affecting KSC, are also discussed in the attachment.


E. R. Mathews

Enclosures:

- (1) Briefing Note to Dr. Debus from AP
- (2) APD #19C

Distribution:
STD-L-B

BRIEFING NOTE TO: Dr. Debus

MAR 20 1970

SUBJECT: APD #19C, "Apollo Mission Evaluation Reporting Requirements"

This Office has received APD #19C, dated March 4, 1970, amending APD #19B.

The only change affecting KSC contained in this revised directive consists of the deletion of a previous requirement that this Center submit a Failure and Anomalies Report (F&A), and a Ground Systems Evaluation Report (GSER) to the Apollo Program Director within a specific time period. On January 26, 1970, we had requested that this requirement be deleted since we believed that the Five Day Report could be re-structured to contain the information prescribed by the other two reports. This deletion will result in an elimination of duplication and consequent savings in both time and reproduction costs.

In addition to the above, the following significant changes, having no impact on KSC, are contained in the revised APD:

- a. Paragraph III, B.3 - The Daily Science Reports to the APD will only cover the period of real time ALSEP support (MSC responsibility).
- b. Paragraph III, B.6 - Final Mission Evaluation Reports will be submitted to APD within 90 calendar days in lieu of 60 (MSFC and MSC responsibility).
- c. Paragraph III, B.6.h - A new paragraph has been added on scientific experiments (MSFC and MSC responsibility).
- d. Paragraph VI - A new paragraph has been added on back contamination (MSC responsibility).


E. R. Mathews

3/4/70

APOLLO PROGRAM DIRECTIVE NO. 19C

TO : DISTRIBUTION

FROM:

*Rocco A. Petrone*Rocco A. Petrone
Apollo Program Director

MAY 4 1970

SUBJECT : Apollo Mission Evaluation Reporting Requirements

OFFICE OF PRIME RESPONSIBILITY: Apollo Test (MAT)

- REFERENCES:
- (a) Apollo Test Requirements, NHB 8080.1
 - (b) Apollo Reliability and Quality Assurance Program Plan, NHB 5300.1A
 - (c) Apollo Program Directive No. 44A
 - (d) Apollo Program Directive No. 8A
 - (e) Apollo Program Directive No. 7
 - (f) Apollo Program Directive No. 52
 - (g) Apollo Mission Failure Contingency Plan

I. PURPOSE

This directive establishes mission evaluation reporting requirements for Apollo missions to ensure the maximum amount of systems, operational and scientific information is available to Apollo Program/Project Offices in a timely manner for use in follow-on mission preparation as well as for appropriate dissemination to elements of the government, the scientific community and the public. This revision supersedes Apollo Program Directive No. 19B dated July 22, 1969, and the Addendum dated September 23, 1969.

II. SCOPE

The Apollo Mission Evaluation Reporting Requirements described herein cover:

- A. Mission evaluation plans, reports, meetings and reviews.
- B. Scientific data from experiments and lunar surface samples.
- C. Identification of all space vehicle, launch active ground support equipment and experiment failures and anomalies.
- D. Determination of the cause of failures and anomalies, their closeout, corrective actions for subsequent missions, and impact on the Apollo Program.

III. PLANNING AND REPORTING REQUIREMENTS

Mission evaluation planning and reporting shall be accomplished by the Apollo Program Office (APO) and the centers (MSFC, MSC, KSC) in accordance with the general requirements in references (a) and (b). The following paragraphs summarize these requirements and identify the minimum plan and report contents as well as responsibilities for the contents:

A. Mission Evaluation Plans (KSC, MSFC, MSC)

Evaluation plans for each mission or block of missions will be prepared and submitted to the Apollo Program Director prior to the mission. These plans will include as a minimum:

1. Mission evaluation organization, reporting, and review requirements outlined in this directive.
2. Mission evaluation meeting schedules (including flight crew debriefing meetings) agenda, and coordination responsibilities.
3. Procedures for failure and anomaly closeout.
4. Intercenter coordination plan and responsibilities.

B. Reporting Requirements1. Daily Reports During the Mission (APO)

The Mission Director will issue Daily Reports throughout the mission. At the request of the Mission Director, or his designated representative, KSC, MSFC, and MSC will provide the necessary information to support the preparation of these reports. Each daily report will cover the previous twenty-four hour period and will be in two parts, as follows:

a. Operations

A summarization of mission progress, accomplishments, events and systems performance including failures and anomalies.

b. Science

Data on EASEP and ALSEP system and experiment status, performance and any events of scientific importance that have been detected. Failures and anomalies are to be included.

Significant results of other scientific and engineering experiments performed on or in conjunction with the mission as they become available.

2. Mission Director's Summary Report (APO)

The Mission Director will issue a Summary Report within twenty-four hours after astronaut recovery. The objective of this report is to provide management with a "quick look" summary of overall mission results and the specific content will be determined by the Mission Director. At the request of the Mission Director, or his designated representative, KSC, MSFC, and MSC will provide the necessary information to support the preparation of the report. In general, the Summary Report will summarize the mission in terms of primary and detailed objectives accomplished, mission events, science achievements and systems performance including failures and anomalies.

3. Daily Science Reports After the Mission (MSC)

The Center will submit Daily Science Reports to the APO for the period of real time ALSEP support. Each report will cover the previous twenty-four hour period. The scope of the Daily Science Reports will be as listed in III B 1b above plus the following:

Scientific data of general interest resulting from the examination of the lunar samples in the Lunar Receiving Laboratory.

Subsequent to the Daily Science Report period, the Center will report significant scientific and engineering events as they occur.

4. Five Day Report (KSC, MSFC, MSC)

The Centers will supply a report to the Apollo Program Director within five calendar days after astronaut recovery. The reports will contain the following information:

a. KSC Report

Summary of major KSC flow events leading to the launch, atmospheric conditions during final countdown and launch, active GSE performance and condition for next flight, active GSE failures and anomalies to the detail required by paragraph III. B. 5. a. thru d. below. Updates of the report will be transmitted to the Apollo Program Director until all significant failures and anomalies are closed.

b. MSFC Report

Report of the degree to which launch vehicle objectives have been satisfied, major launch vehicle trajectory results including comparisons with predicted conditions, launch vehicle failures and anomalies, failure investigation results and corrective actions/closures.

c. MSC Report

Report of the degree to which spacecraft objectives have been satisfied, major spacecraft trajectory results including comparison with predicted conditions, spacecraft failures and anomalies, failure investigation results, corrective actions/closures.

5. Failure and Anomalies Listing Report (MSFC, MSC)

Within 30 calendar days after launch, MSFC will provide to the Apollo Program Director a concise but complete report applicable to Center design responsibilities, of all significant countdown, flight, and experiment failures and anomalies. In the case of MSC, a similar listing including experiment equipment on the lunar surface or in earth or lunar orbit is due 30 calendar days after astronaut recovery. As a minimum requirement the listing will include the following:

- a. Description of the failure or anomaly, the time in the mission when it occurred, the possible mode or cause, the results of failure analysis, if available, and identification of any similar prior ground or flight test failures.
- b. Criticality of the failure or anomaly, the degree to which it compromised a primary or secondary mission objective and the impact on subsequent mission. Criticality categories of non-conformance are described in reference (c).
- c. Identification of any testing required in support of corrective action, the schedule for the testing, and whether it is a constraint on following missions.
- d. Corrective action to be undertaken: this will include identification of required redesign and/or modification, revisions to the qualification or certification testing or checkout activities; mission effectivity of any changes and a statement as to whether the failure or anomaly is considered resolved or open. Anticipated closeout dates for failure and anomaly corrective actions should be identified when practicable.

The above report will be used as a baseline for failure and anomaly tracking and closeout. It should be updated and included as the failure and anomaly section of the Final Mission Evaluation Report identified in III. B. 6. below. Additional updates will be transmitted to the Apollo Program Director until all significant failures and anomalies are closed.

6. Final Mission Evaluation Report (MSFC, MSC)

Final Mission Evaluation Reports will be submitted to the Apollo Program Director within 90 calendar days after astronaut recovery.

As applicable to each Center, the reports will include detailed coverage of the following:

- a. Identification of spacecraft and launch vehicle configuration, mission trajectory, and sequential events.
- b. Results and analysis of spacecraft and launch vehicle system and subsystem performance.
- c. Results and analysis of MSFN command tracking, communications, and data acquisition performance.
- d. Results and analysis of Center active GSE performance.
- e. Evaluation of atmospheric conditions during final countdown and early launch phase.
- f. Recovery operations.
- g. A separate failure and anomaly summary section as outlined in paragraph III. B. 5.
- h. Results and analysis of the performance of each scientific experiments system including failures and anomalies.

7. Objective Assessment Report (MSC, MSFC)

Objective Assessment Reports will be submitted to the Apollo Program Director within 90 calendar days after astronaut recovery. These reports will include individual assessments of the Principal Detailed Objectives and experiments which were assigned to the mission in support of Primary Objectives. Assessment of experiments will be limited to their conduct or deployment during the operational phase of the mission, and will not include the reports of the Principal Investigators.

8. Mission Science Report (MSC)

A preliminary Apollo Mission Science Report will be submitted to the APO 90 calendar days after astronaut recovery. It will include the following data on scientific experiments and sampling:

- a. Detailed descriptions and objectives of each scientific and engineering experiment performed on the mission and emplaced on the lunar surface.
- b. A preliminary analysis and interpretation of the data obtained from each experiment.
- c. A description of lunar sampling procedures and brief report of the Lunar Geology Experiment.

- d. A brief description of the returned lunar samples based upon the preliminary examination of the samples in the Lunar Receiving Laboratory.
- e. Photographs, as appropriate, are to be included with each of the above.

At the discretion of the Apollo Program Director, in coordination with the Administrator, the Mission Science Report may be published as a NASA Special Publication.

9. Follow-on Mission Science Reports (MSC)

Subsequent to the discontinuance of the Daily Reports after the mission, the Center will provide an informal letter report every month on the status and performance of each system and experiment emplaced on the moon. This requirement will be discontinued upon notification by APO.

10. FRR and DCR Documentation

For the subsequent Flight Readiness Review (FRR) and where applicable for Design Certification Reviews (DCR), the updated failure and anomalies identified in III. B. 5. are to be submitted as part of the FRR and DCR documentation and presented as part of the oral presentations at the Apollo Program Director's FRR. FRR and DCR documentation and presentation requirements are established by references (d) and (e).

IV. FLIGHT EVALUATION MEETINGS (MSC, MSFC)

The Centers will conduct flight evaluation meetings after each mission for Center and inter-Center coordination purposes and to support the reporting, review, and presentation requirements outlined in this directive. Flight crew debriefing meetings will be scheduled by the MSC Director of Flight Crew Operations. The APO and the other Centers will be notified of these meetings to allow appropriate participation.

V. FLIGHT EVALUATION PRESENTATION TO THE MANAGEMENT COUNCIL

Preliminary results of each mission are to be summarized by Center Program Office representatives at the Management Council Meeting following the mission.

VI. BACK CONTAMINATION (MSC)

Reports associated with back contamination will be those established in reference (f).

VII. CONTINGENCY PLAN

In the event of premature or unsuccessful termination of an Apollo Mission the requirements for security, investigation procedures, data handling, and reporting will be those established in reference (g).

VIII. ACTION

This Directive shall be implemented immediately for reporting the results of Apollo flights and to ensure that identification of mission failures and anomalies and suitable corrective actions have been taken.

IX. DEFINITIONS

The following definitions shall apply to this Directive:

A. Failure

The inability of a system, subsystem, and/or hardware to perform its required function.

B. Anomaly

Any deviation of system, subsystem, and/or hardware performance beyond previously established limits.

C. Significant Failure or Anomaly

Any failure or anomaly which creates or could create a hazardous situation or condition; results or could result in a launch delay or endanger the accomplishment of a primary or secondary mission objective; would indicate a serious design deficiency; or could have serious impact on future missions.

Attachment - Report Schedule

REPORT SCHEDULE APD 19C

