

# 3



# SATURN V PROGRAM DIRECTIVE

SATURN V PROGRAM DIRECTIVE NUMBER: 3

DATE: January 15, 1965

SUBJECT: SATURN V MASTER TEST PLAN

## PROGRAM DIRECTIVE

This directive establishes the Saturn V Master Test Plan and requires compliance therewith by all MSFC elements responsible for Saturn V testing.

### I. PURPOSE

The purpose of the Saturn V Master Test Plan (MTP) is to establish, integrate, and control the Saturn V Test Program.

### II. SCOPE

The MTP will encompass ground tests, flight tests, and check-out activities necessary for development, qualification, acceptance, and operation of the Saturn V launch vehicle.

The depth of the MTP will be that deemed necessary to assure mission success within program constraints of funds, schedules, and operations. Therefore, the planning will be developed to the degree necessary for Saturn V Test Program integration and control.

### III. APPLICABILITY

The MTP is applicable to the following:

Saturn V/Apollo Space Vehicle (Those tests relating to the space vehicle responsibilities assigned to MSFC.)

Saturn V Launch Vehicle

S-IC Stage and Associated GSE

S-II Stage and Associated GSE

S-IVB Stage and Associated GSE

Instrument Unit and Associated GSE

Launch Vehicle GSE

## IV. RELATIONSHIP OF MTP TO OTHER DOCUMENTATION

The relationship of the MTP to other Saturn V test requirements and plans documents is shown in Figure 1. The planning and requirements specified in the MTP shall be fully reflected in subsidiary MSFC Saturn V test documents and related contractor scopes of work.

## V. RESPONSIBILITY AND AUTHORITY

A. Establishment of MTP

The Saturn V Test Office shall prepare, coordinate, integrate, approve and issue the MTP.

1. Supply of Saturn V Test Plans

Stage, IU, and GSE Offices (hereinafter referred to as stage offices) shall supply all stage approved test plans to the Saturn V Test Office for review and incorporation into the MTP as appropriate. Stage Offices will obtain the support of R&DO as required. R&DO shall identify the Saturn V test programs that apply to more than one stage and will supply all approved test plans to the Saturn V Test Office for incorporation into the MTP.

2. Review of Draft

A draft copy of each section of the MTP will be distributed to appropriate R&DO and IO elements for review and concurrence or submission of recommended changes.

3. Approval and Issue of MTP

The MTP will be approved and issued in sections by the Chief, Saturn V Test Office. Distribution will be made as appropriate.

B. Implementation of the MTP

The Stage Managers are responsible for implementing their stage test programs in accordance with the MTP. The Chief, Saturn V Test Office is responsible for implementation of tests applying to more than one stage and shall place requirements on R&DO and others as necessary.

C. Changes to the MTP

1. Requests for changes shall be submitted to the Saturn V Test Office with copies to other offices concerned. Offices concerned will submit comments upon the proposed change to the Saturn V Test Office within ten (10) working days after date of change request. The Chief, Saturn V Test Office, will approve or disapprove the change; or if the change:
  - a. Increases cost to exceed funds allocated within the approved Saturn V budget,
  - b. Increases cost to any degree which Stage Manager cannot cover within his budget,
  - c. Causes a slip of any major program milestone, such as flight, battleship test completion, all-systems test completion or dynamic test completion,
  - d. Substantially reduces engineering confidence in mission success,
  - e. Adversely affects launch or flight operations,
  - f. Has the nonconcurrence of Chief, Saturn V Systems Engineering Office, relating to test objectives, hardware configuration, or performance/design requirements,and the Chief, Saturn V Test Office, recommends the change, then the change will be submitted to the Saturn V Program Manager for approval or disapproval.
2. Requests for changes shall include the following:
  - a. Description of the proposed change.
  - b. Justification for proposed change.
  - c. Impact that proposed change will have on engineering confidence in mission success.
  - d. Impact of proposed change on costs and schedules.
  - e. Impact of proposed change on launch or flight operations.

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D. Deviations from the MTP

Deviations from the MTP will be obtained in the same manner as changes, except that expedited approval (by telephone) may be requested from the Saturn V Test Office. Within five (5) working days after receipt of an expedited approval, a written request shall be submitted containing the same information as that required in paragraph C for changes.

VI. SATURN IB AND V COMMON REQUIREMENTS AND RESTRAINTS

A. Common Requirements

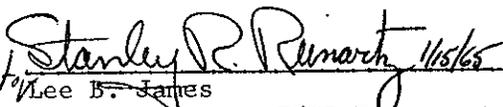
The test plans (and requests for changes to the test plans) for the stages, modules and GSE common to Saturn IB and V will require concurrence of both the Saturn IB and V Test Offices.

B. Restraints

Saturn V test plans which place restraints on the IB program will require the concurrence of the IB program manager.

  
Arthur Rudolph  
Manager, Saturn V Program

Concurrence:

  
Lee B. James  
Manager, Saturn I/IB Program

Distribution:

- C (Through Branch Level)
- S (Through Section Level within Saturn V Program)

# SATURN V PROGRAM TEST DOCUMENT RELATIONSHIPS

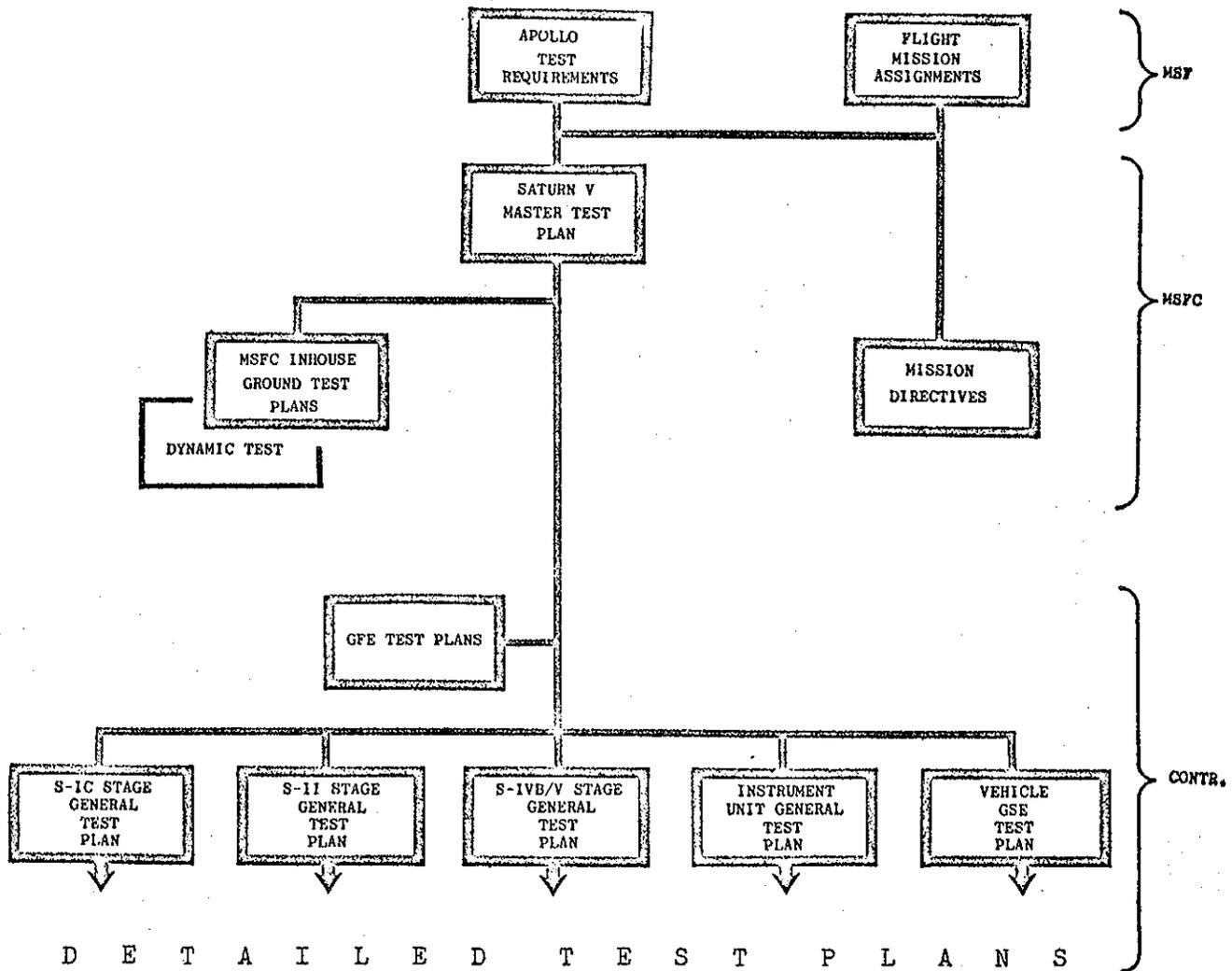


FIGURE 1