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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

GEORGE C. MARSHALL SPACE FLIGHT CENTER

SATURN V PROGRAM DIRECTIVE

NUMBER: 17

SUBJECT: PROCEDURE FOR CERTIFICATION OF FLIGHT WORTHINESS

ORIGINAL ISSUE DATE: March 30, 1966 REVISION NUMBER: _____

DATE OF REVISION: _____ PREPARED BY: SATURN V TEST OFFICE (I-V-T)
PHONE: 876-6556/McLaughlin

I. PURPOSE

This Program Directive establishes the implementation of:

"PROCEDURE FOR CERTIFICATION OF FLIGHT WORTHINESS", I-IB/V-TD Nr. 100, as a uniform method of assessing and certifying flight worthiness of Saturn V flight stages.

II. SCOPE

This Program Directive is applicable to all MSFC elements responsible for Saturn V stage design, fabrication, assembly, test, manufacturing checkout, post-firing checkout, shipment, and prelaunch checkout.

III. POLICY

A. The stage contracts shall be compatible with the Procedure for Certification of Flight Worthiness.

B. The Certificate of Flight Worthiness for each flight stage shall be endorsed at the completion of each of the following milestones (see enclosure 1, "Saturn V Review, Assessment and Certification Plan," Chart Nr. I-V-T-160):

1. Design definition
2. Manufacturing checkout
3. Post-firing checkout - (not applicable to I.U.)
4. Turnover of hardware to KSC
5. Stage modification and checkout

I-V-FORM NO. 538 HARTLEIN JAN. 3, 1966 (OT)

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III. POLICY (Continued)

C. The Certificate of Flight Worthiness shall be signed when all requirements have been fulfilled and the Certificate of Flight Worthiness and attachments have been properly executed.

D. Maximum use shall be made of information generated for other reviews and assessments.

IV. RESPONSIBILITIES

A. The Saturn V Test Office shall prepare and maintain the Procedure for Certification of Flight Worthiness.

B. The Saturn V Stage Managers shall:

1. Include the Procedure for Certification of Flight Worthiness requirements in the stage contracts.

2. Implement the Procedure for Certification of Flight Worthiness.

3. Appoint designees to sign the Certificate of Flight Worthiness.

4. Obtain assistance from the Quality and Reliability Assurance Laboratory to coordinate an evaluation of the stage and its processing.

5. Certify stage flight worthiness at the time of the Saturn V Program Manager's Pre-Flight Review. (If open items exist at the time of Program Manager's Pre-Flight Review, Stage Manager's certification may be delayed).

Arthur Rudolph
Manager, Saturn V Program

1 Enc:
As stated

Distribution:
(See page 3)

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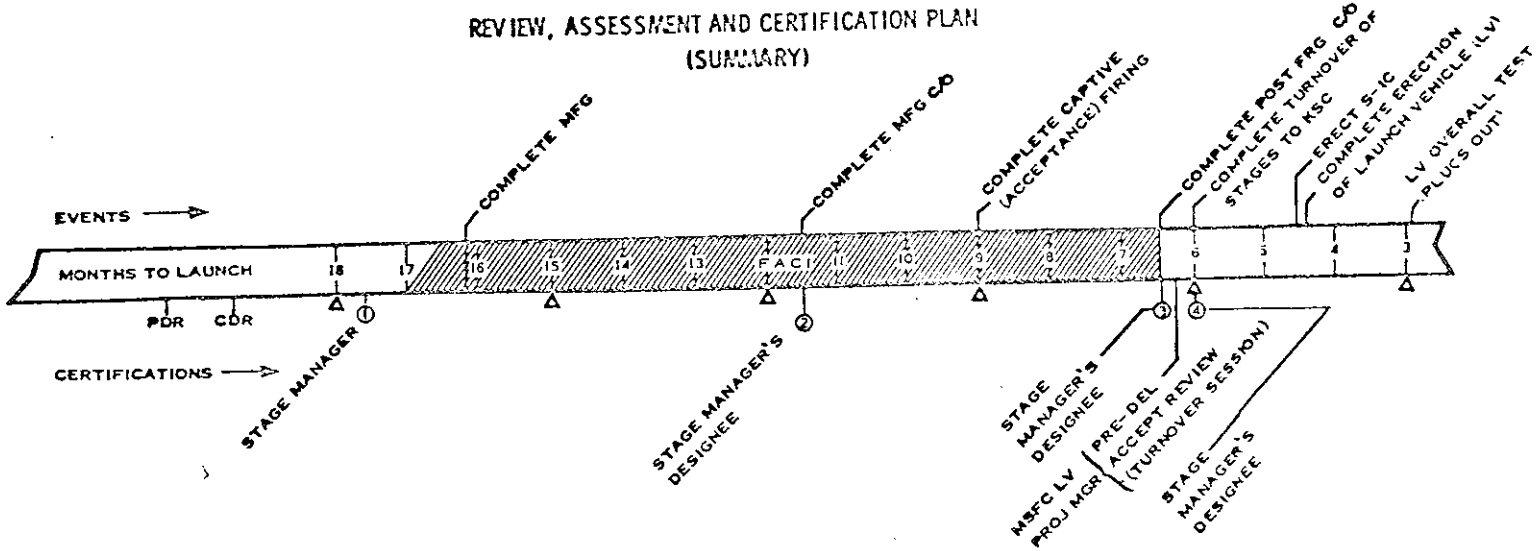
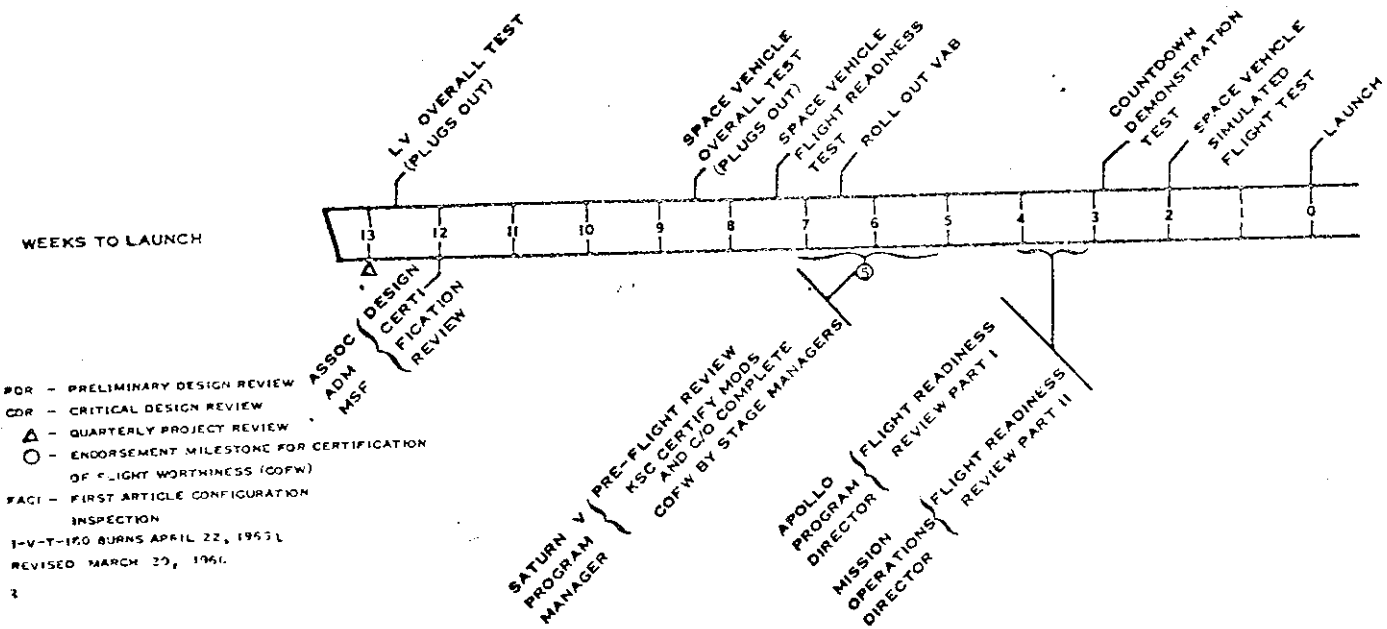
SATURN V

REVIEW, ASSESSMENT AND CERTIFICATION PLAN
(SUMMARY)





PDR - PRELIMINARY DESIGN REVIEW
CDR - CRITICAL DESIGN REVIEW
△ - QUARTERLY PROJECT REVIEW
○ - ENDORSEMENT MILESTONE FOR CERTIFICATION OF FLIGHT WORTHINESS (COFW)
FACI - FIRST ARTICLE CONFIGURATION INSPECTION

I-V-T-1100 BURNS APRIL 22, 1965
REVISED MARCH 29, 1966

Enc. 1