file

FINAL SCRIPT

for

SATURN IB QUARTERLY FILM REPORT

NO. 26

(Covering October, November, December, 1965)

2/8/66

FILM	NARRATION
SCENE 1-- NASA Seal	
SCENE 2-- "The George C. Marshall Space Flight Center Presents"	
SCENE 3-- Artwork, then pop-on words over artwork, "Saturn IB"	Quarterly Film Report No. 26 covers progress during the period October-November-December, 1965 and is the first to cover only the Saturn IB program. Previous reports included the now completed Saturn I Program.
SCENE 4-- Aerial view of the Marshall Space Flight Center or static firing of S-IB- or animation if applicable	Saturn IB, the second of three generations of Saturn-class rockets is being developed for manned space exploration under the direction of NASA's Marshall Space Flight Center. The vehicle consists of two stages and an instrument unit. It will have the capability of placing manned spacecraft or large scientific payloads weighing about 40,000 pounds in earth orbit.

FILM	NARRATION
SCENE 5-- Show Saturn IB booster at Michoud	The first stage, (S-IB), is an uprated, refined, and lighter version of the S-I stage, the first stage for the completely successful Saturn I vehicle.
SCENE 6-- Establishing shot of Chrysler's Administration Building or Logo	The Chrysler Corporation is the prime contractor for the Saturn IB first stage.
SCENE 7-- Show an S-IV B stage at Douglas	The second stage of Saturn IB, called S-IVB, is a larger, more powerful, and refined version of the Saturn I S-IV stage. S-IVB will also be used as the third stage of the Saturn V.
SCENE 8-- Establishing shot of Douglas Aircraft Company Logo.	The Douglas Aircraft Company is the prime contractor for S-IVB.
SCENE 9-- Show an I U at IBM facility	The instrument unit contains improved versions of the guidance, control, and telemetry subsystems proved in the Saturn I. This same design will be used for Saturn V. IBM is the prime contractor for these instrument units.

FILM	NARRATION
SCENE 10-- Cut model of Saturn IB	The first launch of a Saturn IB, which will be unmanned, is scheduled for next quarter. Manned flights will follow after several unmanned flights have proven vehicle integrity. Saturn IB missions represent an important step in advancing launch vehicle and spacecraft technology... providing the necessary technology leading to Apollo/Saturn V and manned exploration of space--including lunar landings.
SCENE 11-- Superimpose title over first scene. SA-201. Pre-flight checks of S-IB-1 at Cape Kennedy	At Cape Kennedy, pre-flight checks of S-IB-1, started last quarter, continued through this report period.
SCENE 12-- Erection of S-IVB-201, follow-up with pre-flight checkout of the stage.	S-IVB was stacked atop the first stage October 1 following pre-erection checks.

FILM	NARRATION
SCENE 13-- Show arrival of S-IU-201, checkout, and erection atop S-IVB.	S-IU-201 arrived at the Cape aboard the Palaemon. Following pre-erection checks, the instrument unit was stacked atop the second stage October 25. Vehicle pre-flight checkout began immediately and continued throughout the quarter.
SCENE 14-- Show checkout of service module and command module then erection of same. Show arrival and installation of GSE for LC-34.	The Apollo command module arrived at the Cape October 25th; two days later, the service module was delivered. Following extensive testing, including static firing of the Service Module, both units were erected December 26th. Also, at the Cape, installation of the final items of electrical support equipment was completed.
SCENE 15-- Shot of Launch Escape System	The launch escape system will be installed atop the Apollo spacecraft early next quarter.
SCENE 16-- Delivery of launch computer program from MSFC to KSC.	Following completion at Marshall's System Development Facility, the S-IVB Launch Computer Program Tapes were delivered to KSC December 15th=concluding the Saturn IB computer program tape deliveries for Saturn 201 automatic checkout and launch.

FILM	NARRATION
SCENE 17-- Superimpose title over first scene. S-IB STAGE MANUFACTURING. Show post-static checkout of S-IB-2 at Chrysler-Michoud.	S-IB-2 post-static checkout began October 4 at Chrysler-Michoud and was completed in mid-November.
SCENE 18-- Preparations for shipment of S-IB-2	Following completion of preparations for shipment, the stage will remain at Michoud until scheduled shipment to the Cape late January.
SCENE 19-- S-IB-3 static firings at MSFC	At MSFC, S-IB-3 underwent two successful static firings, the first on October 12th, the second on October 26th.
SCENE 20-- Input from Chrysler on S-IB-3 post-static activities	The stage was shipped from Marshall to Michoud November 4. Post-static modifications and repair continued throughout the quarter. Stage checkout is scheduled for mid-January.
SCENE 21-- Pre-static checkout of S-IB-4.	Also, at Chrysler, Michoud, S-IB-4 pre-static checkout began October 6th and was completed November 8th.

FILM	NARRATION
SCENE 22- Shipment of S-IB-4 to Marshall-arrival and installation of stage into static test stand.	Preparations for stage shipment started immediately. It departed Michoud December 7th and was off-loaded at Marshall December 13th. Static testing is scheduled for January.
SCENE 23-- Input from Chrysler on S-IB-5.	S-IB-5 stage assembly, started last quarter, was completed November 30th. Pre-static checkout got underway immediately and is scheduled for completion early next quarter.
SCENE 24-- Input from Chrysler on S-IB-6.	Stage fabrication for S-IB-6 was completed early this quarter. Tank clustering began October 22nd. Stage assembly continued throughout the quarter.
SCENE 25-- Input from Chrysler on S-IB-7 and S-IB-8.	S-IB-7 stage fabrication continued throughout the quarter. Stage fabrication for S-IB-8 is also underway.

FILM	NARRATION
SCENE 26-- Superimpose title over first scene. S-IVB MANUFACTURING. Input from Douglas on S-IVB/202.	On November 9th at Douglas' SACTO Facility, the second attempt to acceptance fire S-IVB/202, located in Beta Stand No. 3, was made. After 307 seconds of main-stage burning, the firing was automatically terminated due to problems within the Liquid Hydrogen Mass Sensing System. The problem was corrected, but during countdown for the next attempt, a battery subsystem malfunctioned, terminating the countdown. On December 1st, the stage was successfully acceptance fired, indicating successful solution to all the problems encountered.
SCENE 27-- Input from Douglas on S-IVB 203. O-1968.	Douglas' S-IVB-203 stage was shipped from Huntington Beach aboard the "ORION" October 29th. It arrived at the Sacramento River dock November 1st, unloaded, then transported to SACTO the following day. The stage was installed in Beta Stand No. 1 recently converted from a Battleship facility to an Acceptance test facility. Stage re-firing operations continued through the quarter with static firing scheduled for next quarter.

FILM	NARRATION
SCENE 28-- Show Battleship stage preparation for shipment to Tullahoma, Tennessee 0-1926.	The S-IVB Battleship stage, which was removed from Beta test Stand No. 1 last quarter, will be delivered in January to the Arnold Engineering Center at Tullahoma, Tennessee for altitude simulation firing tests.
SCENE 29-- Input from Douglas on S-IVB-204.	S-IVB-204 systems in-plant checkout was completed December 17th. Modifications and preparations for shipment are underway. Following final inspection, the stage is scheduled for shipment to SACTO early next quarter.
SCENE 30-- Input from Douglas on S-IVB-205.	S-IVB-205 installation of stage insulation, begun last quarter, was completed at the end of October.
SCENE 31-- Input from Douglas on S-IVB-206.	Mating of the LH_2 and LOX tanks for S-IVB-206 was completed in October. Installation of tank insulation began in November and is scheduled for completion in mid-January.

FILM	NARRATION
SCENE 32-- Input from Douglas on S-IVB-207.	Following bonding of the common bulkhead for S-IVB-207 last quarter, the LOX tank and forward LH_2 dome were shipped from Santa Monica to Huntington Beach in mid-October for mating.
SCENE 33- Input from Douglas on S-IVB-208.	Due to defective welds in the original aft LOX Dome for S-IVB-208, Douglas is fabricating a new aft Dome for the stage. No shipping delay is anticipated for the LOX tank to Huntington Beach. The common bulkhead is complete and awaiting the aft Dome for LOX tank assembly.
SCENE 34-- Superimpose title over first scene. INSTRUMENT UNIT. Show structural testing of S-IU-200/500 S-II at P&VE.	Structural testing of S-IU-200/500S-II, produced by North American, got underway at Marshall in late December. Testing of the unit, to verify the structural integrity of the fourth and subsequent flight units, will continue during the next quarter.

FILM	NARRATION
SCENE 35-- Stock footage of S-IU/202 at IBM.	At IBM, Huntsville, S-IU/202 assembly started last quarter was completed in mid-December. Checkout began immediately with completion planned for early February.
SCENE 36-- Stock footage of S-IU/203 at IBM.	Also, at IBM, S-IU/203 component installation continued through the quarter. Completion of assembly is planned for the middle of next quarter.
SCENE 37-- Stock footage of IU or input from IBM on S-IU/204.	Fabrication assembly for S-IU/204 was completed in December. Component installation is planned to start next quarter.
SCENE 38-- Superimpose title over first scene. ENGINES Static firing of a J-2 engine at Santa Susana	At Rocketdynes' Santa Susana Facility, J-2 Qualification testing, implemented to "man-rate" the engine was completed December 17th. The engine was fired 30 times for a total of 3,750 seconds.

FILM	NARRATION
SCENE 39-- Rocketdynes' Radio Interference tests. OM-1944.	Radio interference tests, a segment of the Qualification test Program, were conducted at Rocketdynes' Santa Monica facility. Purpose of the tests is to show that the engine will neither emit nor be susceptible to undesirable interference.
SCENE 40-- J-2 Oct. input.	Rocketdynes' research and development program on J-2 engine thermal insulation is now complete. A laboratory sample was subjected to various degrees of temperature using a plasma gun to generate heat.
SCENE 41-- Stock footage of J-2 engine production.	Two J-2 engines were delivered in December--one for the S-IVB-206 at Douglas, and the other for the S-IVB Battleship stage at Marshall.

FILM	NARRATION
SCENE 42-- Establishing shot of Marshall's Zero Gravity Drop Test Facility. (Saturn V Dynamic Test Tower), on cue-use drop-test footage.	Zero gravity drop tests are being conducted at Marshall's recently completed 400-foot Drop Tower Facility. These tests are a segment of a broad research program to determine the behavior of liquid hydrogen during orbital flight. These data will increase the confidence level of a successful re-start of the S-IVB engine, necessary for manned lunar missions. (on cue) This is a low gravity test package in process of being released from the 366-foot level for a free-fall drop time of approximately four seconds. Fuel behavior data gathered during these tests will establish a baseline needed for preparation of SA-203 flight. The second stage of SA-203 will carry approximately ten tons of LH_2 into low-earth orbit. During this time, studies will be made on the behavior of the fuel within the stage during its weightless condition.

FILM	NARRATION
SCENE 43-- SUMMARY	In summary, October, November, and December were months of continuing progress within the Saturn IB program. Continued buildup of Saturn IB stages and equipment..., ...completion of J-2 Engine Qualification testing at Santa Susana..., and pre-launch checkouts at KSC of the first Saturn IB launch vehicle.