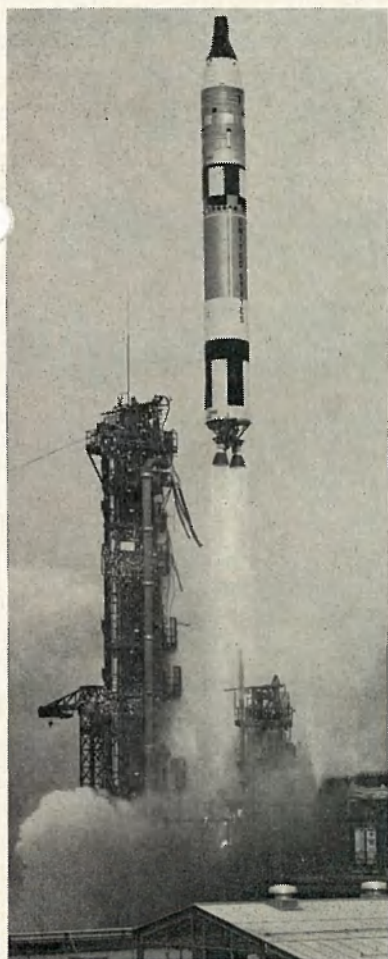




Borman, Lovell Doing Fine; Countdown On Gemini 6 Nears



GEMINI 7 Liftoff
... On the button

While spacecraft and launch vehicle personnel continue their around the clock preparations on Gemini 6 at Launch Complex 19, Gemini 7 astronauts Frank Borman and Jim Lovell were scheduled to be well into their 75th revolution of the Earth at Noon today.

If all goes well, Wally Schirra and Tom Stafford will be launched in their Gemini 6 vehicle within a few days to effect man's first rendezvous of two spacecraft in orbit - - early next week.

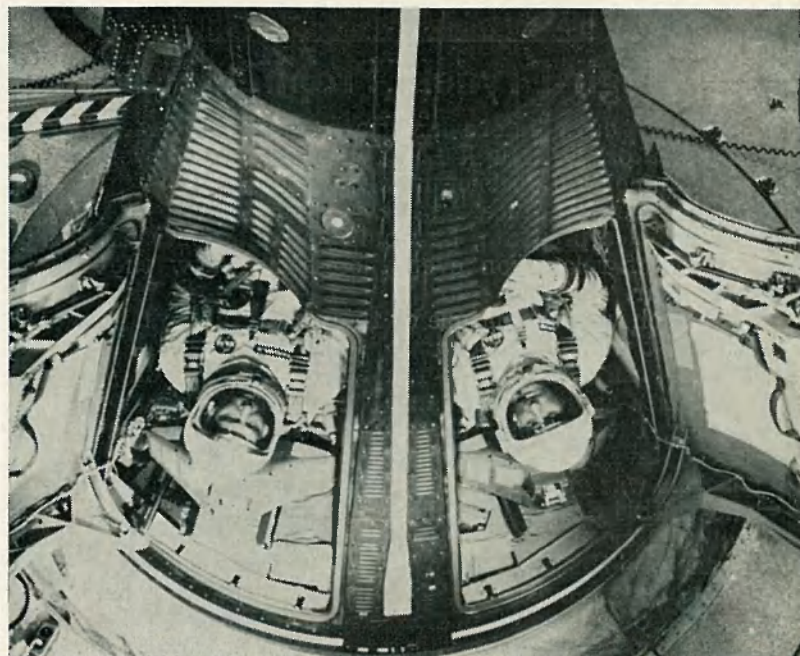
The launch of Borman and Lovell occurred at 2:30 p.m. Saturday following a trouble-free countdown. Within minutes pad personnel were on the scene inspecting blast damage.

Light Damage

The damage, according to G. Merritt Preston, Deputy KSC Director for Launch Operations, was relatively minor and created no unusual problems. The first stage of the Gemini 6 launch vehicle was raised into position on the pad less than 12 hours after the Gemini 7 liftoff. Spacecraft 6 was lowered to its booster and mechanically mated less than 23 hours after liftoff.

A key point in the turn around period—the simulated flight — was to begin early Wednesday morning. From this point to launch, the pre-flight preparations will be the same as on any Gemini mission.

As the launch day nears, flight controllers in Houston are preparing to have Borman and Lovell orient their spacecraft in orbit to get "in line" for the rendezvous attempt. Following this, the two spacecraft are to fly in formation for about two Earth revolutions.



ALL SET for their Gemini 6 rendezvous mission are astronauts Wally Schirra, left, and Tom Stafford.

More Engines Ordered

NASA has announced that 48 additional J-2 rocket engines will be purchased from Rocketdyne Division of North American Aviation, Inc., Canoga Park, Calif.

A total of 103 J-2 engines are now on order for the Saturn IB and Saturn V launch vehicle programs.

The 200,000 pound thrust J-2 engine will serve as the propulsion system in the upper stages of the manned space flight program Saturn launch vehicle. The engine uses liquid hydrogen and liquid oxygen for propellants.

Five J-2 engines are clustered to produce 1,000,000 pounds thrust for the S-II, second stage of the Saturn V. A single J-2 powers the S-IVB stage of both the Saturn IB and Saturn V.

In Coming Weeks

MAJOR LAUNCHES ON TAP

While astronauts Frank Borman and James Lovell are circling the Earth every 90 minutes or so and Wally Schirra and Tom Stafford are getting ready to climb into their Gemini 6 spacecraft, preparations are underway at the Kennedy Space Center for a number of other major launches, all scheduled later this year or early in 1966.

34 Activity Brisk

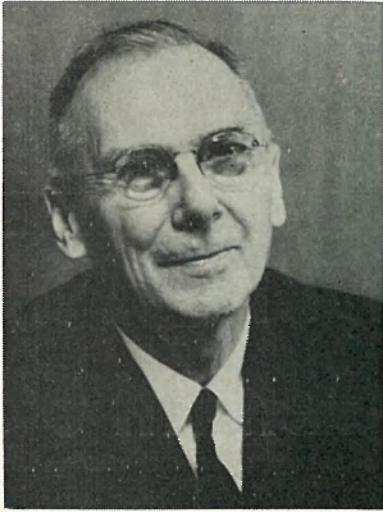
Activity is brisk, for instance, at Launch Complex 34, a short distance north of the Gemini pad. Here, KSC personnel are busy readying the first Apollo/Saturn IB launch vehicle for flight. Its launch is on the books for the first quarter of 1966.

Just south of the Gemini area, at Launch Complex 36,

members of KSC's Unmanned Launch Operations team are working closely with contractor personnel to prepare the Atlas-Centaur 7 vehicle for flight. It too is scheduled for the first few months of 1966.

Adjacent to the Centaur site, workmen are running checkout tests on an Atlas-Agena vehicle that will propel an Orbiting Astronomical Observatory into space, sometime early next year.

At the south end of Cape Kennedy, other KSC and contractor personnel, also under the direction of Unmanned Launch Operations, are preparing a Delta launch vehicle for its mission to orbit a Pioneer spacecraft in the near future.



Dr. Hugh Dryden: Prophet, Pioneer

Only days before his death, Deputy NASA Administrator, Dr. Hugh L. Dryden, was busy working on an important decision involving the Apollo Program. So intense and sincere was his dedication to the nation's space program, he would not allow himself the luxury of relaxation even though he knew the end was near.

Such was the nature of this remarkable man who died last week of cancer.

An internationally-renowned scientist-engineer who once said that he and the airplane grew up together, Dr. Dryden was recognized for his leadership in the development of aeronautics and astronautics. In fact, he was generally regarded as the man who guided the United States into the space age.

Center employees here have great cause to pay homage to this man of foresight, for he, possibly more than any other individual, was instrumental in seeing that KSC became a full-fledged NASA field center. He clearly recognized the full importance of launch operations to the fulfillment of overall space goals, and he worked tirelessly for recognition of this responsibility in the creation of the Kennedy Space Center.

"NASA has lost a great pioneer — a true prophet who led us into the age of space," KSC Director, Dr. Kurt H. Debus said.

How true a prophet he was is perhaps best reflected in one of Dr. Dryden's own statements, made in March 1964.

"I am reasonably sure that travel to the moon will not occur during my lifetime," he said, "But I am sure that the technical problems are solvable with a large but finite amount of manpower and money."

True, he did not live to see the first American manned landing on the moon, but in a very real sense he helped make such an achievement possible.

The problems are indeed today being solved—a great many of them directly through the unselfish, unflinching, untiring efforts of Dr. Hugh L. Dryden.

Open Letter To A Driver:

Open letter to the driver of a blue or green car: Last Friday, while traveling west on the NASA Causeway, you made a sudden U turn without bothering to signal. As you made this unexpected move during the height of the rush hour traffic, cars clogged both lanes behind you and had little chance to react.

Consequently, those immediately behind you swerved into the right hand lane, causing those in that lane to skid onto the road shoulder. Most drivers were fortunate enough to bring their vehicles to a safe stop, but Mike Fisher of Quality Assurance wasn't so lucky. As he veered off on the shoulder the air in his Volkswagen tires was released, and the car flipped and landed in the canal. It was completely demolished, but somehow Mike came out of it with only a bruised shoulder and a bad case of nerves. Other drivers were understandably shook up considerably.

Despite this loud squealing of tires and slamming of brakes, and the roll-over of Mike Fisher, you—the person who caused it all — left the scene of the accident without even so much as stopping to see if anyone was injured.

Had the traffic been moving any faster than the 50 mph pace it was doing there might have been a number of serious injuries, or even deaths — all because of your carelessness.

The KSC Security Office is looking for you today. We appeal to your conscience to give them a call and identify yourself. If you don't, things might be much tougher for you if witnesses are found who can describe your vehicle or perhaps call Security and give them your license number.

In either case the accident that resulted Friday was your responsibility. Are you man enough to own up to it?

TWA Christmas Plans Told

TWA's Employee Club Christmas dance will be held Saturday in a warehouse at Cidco Park on U. S. 1 opposite Pioneer Chester Groves.

Club officers said a smorgasboard, door prizes and liquid refreshments will be included in the price of \$1.50 a person for card carrying members and their wives, husbands or dates.

Two bands will offer continuous music for dancing, beginning at 8:30 p.m.

Members of the TWA Management Club will have a "Night On A Magic Carpet" at their annual Christmas dinner-dance to be held this year at the Cape Colony Inn on Dec. 17.

Program Chairman George Bella said the party will begin with cocktails around the Cape Colony pool at 6 p.m. Dancing in the Convention Hall will begin at 8 p.m. to the music of the Rod Smith orchestra.

Children of TWA employees at KSC will have a Christmas theater party sponsored by

the Employee Club Dec. 18 at the Pines Theater in Cocoa.

Members of the TWA Wives Club will assist. Movies and cartoons selected for the enjoyment of children 12 and under will be shown between 9 and 11 a.m., and Santa Claus will be present. Club representatives are furnishing forms for reservations and issuing tickets in advance.

Holiday Help On Way

If you wish to help the needy at Christmas this year you can by donating to charity the cost of Christmas cards you would normally have sent to fellow workers.

Donations should be forwarded to "Help the Needy," room 2209, KSC Headquarters Building. Cash should not be sent through the mail system and checks should be made payable to the Salvation Army.

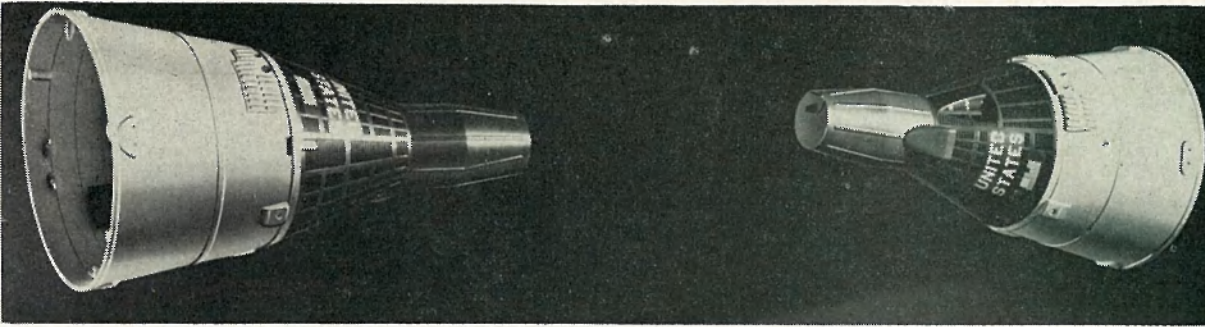
All receipts will be turned over to the Brevard County Salvation Army unit no later than December 17.

SPACEPORT



NEWS

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DEPICTED are the approximate positions in which Gemini 7 and Gemini 6 will be oriented at the terminal phase of the proposed in-flight rendezvous. Following rendezvous Gemini 6 will perform various station keeping exercises involving "formation flying" with Gemini 7.

Turn Around Operations At Pad 19 Began Within Minutes Of Launch

Around-the-clock efforts of hundreds of local NASA, Air Force and contractor employees have resulted in the on-schedule status of launch preparations at pad 19 for the Gemini 6 flight of astronauts Wally Schirra and Tom Stafford.

Within minutes of the successful liftoff of Gemini 7 Saturday, a special, integrated damage assessment team was on the pad and found only minimal damage to facilities.

Less than 24 hours after liftoff the Gemini 6 launch vehicle had been erected, the spacecraft mechanically mated to it, and pre-flight checkouts were underway.

Representing the Kennedy Space Center on the damage assessment team was J. M. Ragusa, KSC's complex engineer at pad 19.

McDonnell Inspectors

Chief Warrant Officer Elmer E. Barton was the Air Force representative on the team. McDonnell Aircraft, prime contractors for the Gemini spacecraft, had six representatives inspecting damage at the pad, headed by Dick Weinrich, engineer in charge of Aerospace ground equipment.

Bob Palm was concerned with ground networks and cabling; Lonnie Schmitt with environmental control systems ground equipment; Jim Thomson with fuel cell inspection; Frank Strazis with mechanical systems; and Harry Danham electrical systems inspection.

Lt. Colonel John G. Albert is chief of the Air Force effort supporting the Gemini launches. Major Joe Henry, chief of the Air Force Operations Branch, is responsible for checkout of the Titan booster erection.

The Martin Company is responsible for the erection, checkout and launch of the Titan II vehicle, under Air Force surveillance.

Joseph M. Verlander, is director of launch operations for Martin's Canaveral Division. William Williams is the Martin project engineer in charge of support operations.

Chief Test Conductor

Frank Carey is chief test conductor for Martin at Launch Complex 19. He is supervising 158 people working two 12-hour shifts during the Gemini 7/6 mission.

Pad control officer Ken Shipe is the last man into the blockhouse at 19 and the first man out after liftoff. He is assistant test conductor.

For the Kennedy Space Center, Don Cromer is Gemini 6 spacecraft test conductor, and George F. Page is the Center's chief test conductor.

Wiley E. Williams is KSC's assistant manager for Gemini operations, and Wilby T. Risler is in charge of data evaluation and spacecraft support.

McDonnell operations chief is Bill Mosely. Ralph Gendillee and Gene Wulfekuehler followed the Gemini spacecraft from the McDonnell plant to the Kennedy Space Center. Gendillee, as plantwide spacecraft manager, will keep tabs

on Gemini 6 through launch and recovery. Wulfekuehler's job is to determine that all systems on the spacecraft are "go" for launch.

At the Manned Spacecraft Operations Building at the Kennedy Space Center, H. H. Luetjen, McDonnell engineering manager, heads a team of engineers monitoring spacecraft systems for both Gemini 7 and 6 around the clock until after the recovery of both.

Ed J. Martin and Ray Oglesby are general foremen for McDonnell, and supervise the work of about 55 mechanics and technicians who moved the spacecraft to the pad and are preparing it for flight.

A McDonnell inspection crew, supervised by Ralph Knox, follows and verifies all work done on Gemini 6.

Wally, Tom Kept Busy

During the "turn around" time on the pad at Launch Complex 19 between the Gemini 7 and 6 liftoffs, astronauts Wally Schirra and Tom Stafford are busy at the Cape and at the Kennedy Space Center on Merritt Island rounding out their normal pre-flight duties.

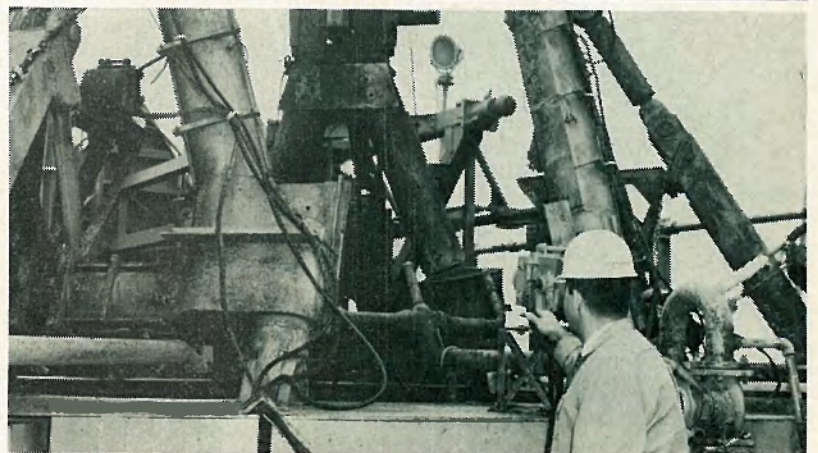
Hopefully, engineers and technicians will have the Gemini 6 space vehicle ready for flight nine days after 7's liftoff.

Schirra and Stafford are dividing their time between practice flights in the Gemini simulator at the Cape's Mission Control Center, and on flight plan reviews and mission briefings.

Donald (Deke) Slayton, Assistant Director of the Manned Spacecraft Center for Flight Crew Operations, emphasized that their pre-launch schedule is no different than normal. There are no specific variations planned because of the preceding Gemini 7 liftoff.

Slayton said there was no set day-to-day schedule for the period between the two launches. However, Schirra and Stafford were to participate in a simulated countdown and launch at pad 19 about four or five days before their actual liftoff.

"Their time is being spent just as it would be on any other Gemini mission," Slayton said.



TERRIFIC heat generated by the Gemini 7 space vehicle at liftoff is obvious in this photo taken at pad 19 hours after liftoff last Saturday. Despite the charred appearance of hold-down arms, examined here by a Martin engineer, overall damage was light, allowing pad crews to erect the Gemini 6 launch vehicle and spacecraft within 24 hours of the 7 liftoff.



PHONES ring, loud speakers blare and typewriters clack around the clock at the Gemini News Center during manned launches.

Amid The Clank And Clatter A Story Is Told

There is noise everywhere.

Telephones are ringing incessantly. The steady clatter of teletype machines echoes across the room. Typewriters hum. And there are the voices which range from muffled conversations to shouts. It is not a place for quiet meditation.

This is the scene daily at the Kennedy Space Center's Gemini 7-6 news center, located on the 10th floor of the Cape Royal Building in Cocoa Beach.

The participants are several hundred of the world's leading aerospace reporters—and a small but multiple-skilled team of NASA Public Affairs people — from KSC, the Manned Spacecraft Center, Washington and other points.

The newsmen are here, of course, to cover one of the biggest news stories of the year, the dual Gemini 7 and 6 launches. The NASA team has been assembled to help them in any and every way possible to better tell the manned space flight story to the peo-

ple of the world.

At the press center questions by the thousands are answered; news releases put out; tours of the Cape and Spaceport arranged; interviews with key Gemini people set up and monitored; press conferences arranged; "pool" copy by reporters' reproduced and handed out; TV and radio problems squared away; and an endless number of other activities are handled.

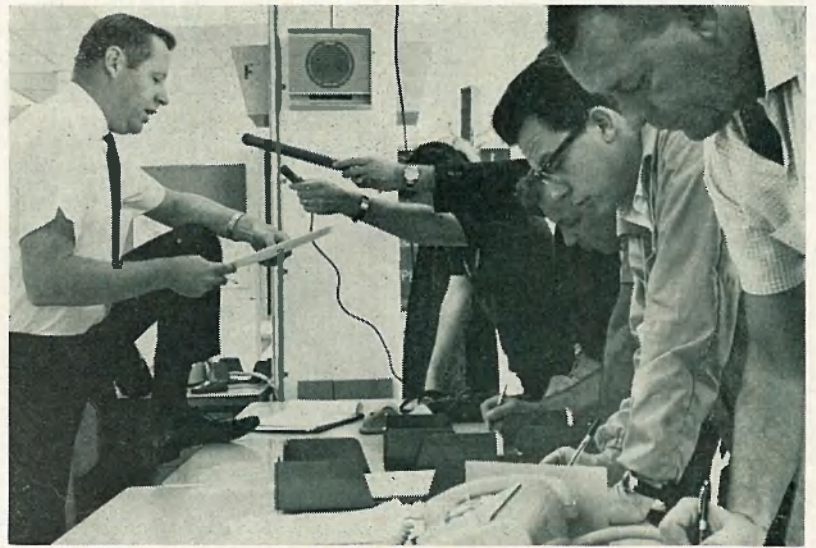
Naturally, with millions of readers hanging on every word written by this international corps of newsmen, painstaking measures are taken to insure accuracy.

The NASA corps of public information specialists have mounds of reference material at their fingertips to answer even the most technical of questions, and if they get stuck, they have a long list of engineering sources to contact first-hand at the Kennedy Space Center and in Houston.

All in all it's a hectic, loud, clashing, head-rattling operation — for the few days the news force is in town. Then, suddenly, all will be quiet and still at the news center, and machines will be packed up, phones taken out — until the next time when the cycle begins anew.

OPERATIONAL NAMES

Mississippi Test Operations is now known as Mississippi Test Facility; Michoud Operations is now Michoud Assembly Facility; and White Sands Operations is now White Sands Test Facility.



KEEPING newsmen posted to the minute on launch operations is an important phase of news center operations. Here, KSC Public Information Office Chief Jack King reads the latest status report as newspaper reporters jot notes and radio men tape the message.

New Library Books

The following new book has been received by the KSC Library and is now available to readers: "Handbook of Satellites and Space Vehicles" by R. P. Haviland and C. M. House, Princeton, D. Van Nostrand Company, Inc.

Review: A comprehensive treatment of subject areas and problems which must be considered during the preliminary stages of satellite or space vehicle design—factors believed to have an important effect upon the final system. Blending concise textual discussions with extensive technical data, and illustrations, this book indicates the upper and lower qualitative limits within which various aspects of the design must fall.



CAPE KENNEDY Associated Press correspondent Jim Strothman, right, and KSC Public Information Officer Zack Strickland look at the final result, a published story of Strothman's, in an area newspaper.



GEMINI 7 pilot James A. Lovell checks into the astronauts' quarters in the Manned Spacecraft Operations Building last week prior to his long-duration flight with Frank Borman which began Saturday. KSC guardette Ursula Neill wished the astronaut luck on his mission.

Sibert Wins Biggest Cash Award Ever

The largest cash suggestion award ever presented at the Kennedy Space Center—\$845 — has been won by Robert Sibert, a supply management specialist with Information Systems.

Sibert was honored for his money saving idea concerning the shipment to the Center of trichloroethylene — a cleaning fluid used to purge rocket fuel lines.

It is estimated the government will save \$39,839 a year as a result of his idea.

Previously, the fluid had been shipped from the manufacturing site to the Marshall Space Flight Center in Huntsville, Alabama, where samples were taken for testing before it was sent on to the Kennedy Space Center.

Sibert recommended that the shipments come directly to KSC and the testing be done here.

A native of Tulsa, Oklahoma, Sibert lives in Mims with his wife, Lucille.



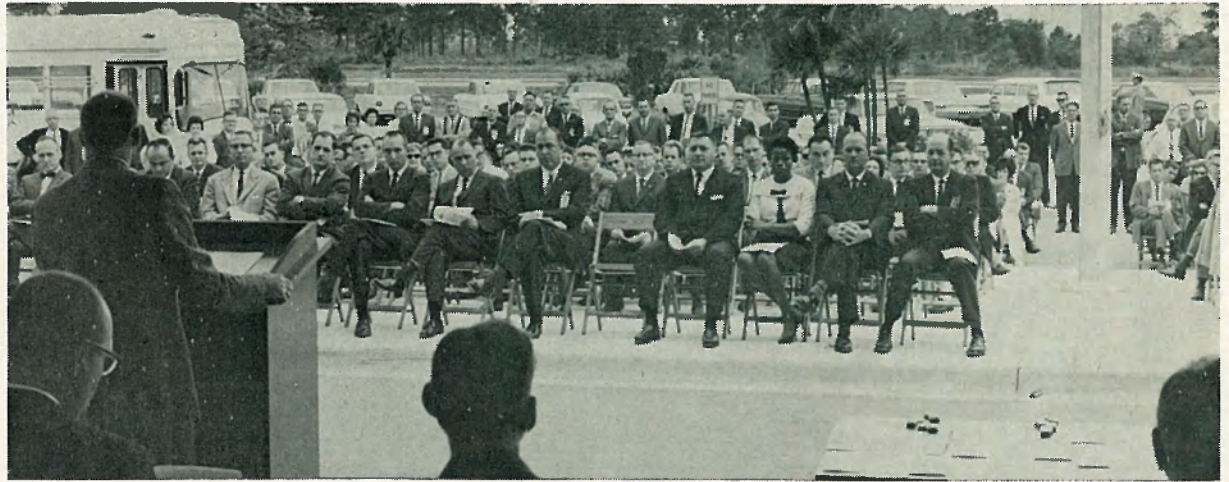
Robert Sibert

Booster Enroute Here

The Saturn barge Poseidon is carrying a Saturn V booster weight simulator on a round trip from the Marshall Space Flight Center's Michoud facility in New Orleans to KSC.

The barge was scheduled to leave New Orleans yesterday and is due here Tuesday. It will begin its return trip to Michoud Wednesday.

The simulator duplicates the weight and size of the Saturn V booster.



KENNEDY Space Center employees assembled in front of the Headquarters Building Friday for the first annual KSC Awards Ceremony.

Center Employees, Groups Honored At Initial KSC Awards Ceremony

The first annual Kennedy Space Center awards ceremony was held Friday at the Headquarters Building with some 26 civil service employees and six groups receiving official recognition during the ceremonies.

The following groups were presented achievement awards by Center Director, Dr. Kurt H. Debus:

—Launch Vehicle Operations (Saturn I firing team), accepted by Dr. Hans Gruene, Assistant Director for LVO.

—The Launch Support Equipment Engineering Division, accepted by Theodor A. Poppel, Engineering and Development.

—Information Systems, accepted by Karl Sendler, Assistant Director for Information Systems.

—Procurement Division Purchasing Branch, Base Operations Section, accepted by Philip F. Whitaker, Procurement Division.

—Manned Spacecraft Center's Florida Operations, accepted by G. Merritt Preston, Deputy KSC Director for Launch Operations.

Dr. John F. Clark, Director of the Goddard Space Flight Center, presented a group achievement award to the Goddard Launch Operations Division, (now KSC's Unmanned Launch Operations). Robert H. Gray, Assistant Director of ULO, accepted this award.

Dr. Debus also presented the following individual a-

wards:

—A presidential citation to Theodore Kafter of the Procurement Division.

—Special service performance awards to Walter F. Barney, Planning and Technical Support Office; Charles L. Buckley, Jr., Security Office; Robert E. Gorman, Launch Support Operations Division; Andrew J. Pickett, Mechanical and Propulsion Systems Division; Ike Rigell, Electrical Engineering Guidance and Control Systems Division; Darol B. Varnado, Telemetric Systems Division; and Grady Williams, Electronic Engineering and Instrumentation Systems Division.

—An outstanding perfor-

mance rating to Tom Millsaps of the Technical Services Division.

—Cash suggestions awards to Lynett L. Cue, Personnel Division; and Robert H. Sibert, Planning and Technical Support Office.

—30-year service awards to Joseph Hester, Real Property; and Thomas McGuire, Information Systems.

—25-year service awards to Albert F. Siepert, Deputy KSC Director; Robert H. Clark, Planning and Technical Support Office; John R. Hammond, Jr., Quality Assurance; Vernon L. Jansen, Base Operations; Robert E. Johnson, Public Affairs; Oliver Kearns, Industrial Relations; James J. Keith, Technical Service Division; and Harry W. Smith, Personnel Division.

—20-year service awards to Aldo H. Bagnulo, Assistant Director for Engineering and Development; Kathryn C. Perney, Operations Support Office; Raymond L. Clark, Assistant Director for Support Operations; Dr. Hans F. Gruene, Assistant Director for Launch Vehicle Operations; Allyn Litherland, Space Vehicle Technical Support Division; Theodore Poppel, Launch Support Equipment Engineering Division; Karl Sendler, Assistant Director for Information Systems; and Albert Zeiler, Office of the Assistant Director for Launch Vehicle Operations.



DR. B. E. Keiser, Manager, Plans and Programs, KSC Communications Project (RCA), has been elected chairman of the Institute of Electronics and Electrical Engineers' (IEEE) Canaveral Chapter.

Jet Standing By

A USAF T-39 jet aircraft is being provided for Gemini 7/6 by the Air Force Space Systems Division to serve as a courier plane for transport of personnel and parts should the need arise.

The 430-mph jet will be on 24-hour stand-by through the Gemini 6 launch.

Gemini launch vehicle program officials have taken this precaution because of the unique rapid turn-around requirement of the missions.

The plane also flew data tapes from the launch of Gemini 7 to Space Systems Division and Aerospace Corporation in El Segundo, Calif., for rapid analysis.



ALL THE DRAMA and excitement of a manned launch is clearly mirrored in the faces of, left to right, Mrs. Kurt H. Debus, wife of the KSC Director, Hollywood actress Shirley MacLaine (see column at right), and Mrs. Vincent G. Huston, wife of the Air Force Eastern Test Range Commander.



Here to witness the Gemini 7 liftoff Saturday was one of Hollywood's most glamorous and most talented actresses. She watched the liftoff from the VIP area on Cape Kennedy, left, yet surprisingly few people recognized her. She wore a disguise of scarf, dark glasses and virtually no make-up.

The star—none other than Shirley MacLaine.

In an exclusive interview with the Spaceport News at the Gemini News Center Friday she told why she was here.

"I've traveled around the world many times and this is the most exciting thing that I haven't seen before," Miss MacLaine said. "It's about time I saw things in my own country."

This was her first time in this area and Gemini 7 was the first rocket flight she has witnessed. She was thrilled.

"Why did I come? There's an old oriental saying the Japanese have," she explained. "Why do people climb Mt. Fuji? Because it's there. Why am I here? Because I wanted to see a launch."

* * *

Dear Sir:

I would like to know if I may be a junior NASA boy. I play in the rabbit pen like I was going into orbit—the rabbit pen is my spacecraft—and I stay there for almost two hours at a time. Once I stayed for three hours and I had water, candy and cokes, but my friend chickened out after half an hour.

Tony C.
Albuquerque, N. M.
* * *

After exceeding its operational life expectancy by 50 per cent, the second Orbiting Solar Observatory (OSO II) has been turned off by NASA.

OSO H, launched Feb. 3, 1965, completed more than 4,100 orbits and returned some 2,200,000 bits of scientific data each orbit.

Language No Problem For Foreign Ambassadors

When more than 65 ambassadors to the United States from foreign countries around the world visit a place en masse, as they did at the Kennedy Space Center Saturday to witness the Gemini 7 launch, some unusual arrangements have to be made.

With a language variance that ranged from Swahili to Indian dialects to Arabic, it might be assumed that space age terminology translation would be the most acute problem.

As it turned out, however, this was perhaps the least ranking problem. All foreign ambassadors to the United States speak fluent English.

A little more difficult to solve was the food situation. With a variety of appetites to appease, five different entrees were prepared by the Macke Company, the food service contractor at KSC. The five were: standing rib roast, baked sliced snapper mornay, roast sliced leg of spring lamb, chicken pieces printaniere and sliced baked Virginia ham.



JOHN A. Tschirhart, left, superintendent of shops and fields, has been elected president of TWA's Management Club. He won in a close runoff with Frank Herbaty, right, manager of production engineering. Elected to the board of directors were Jim Outersky, H. L. Wullbrandt, Pat O'Keefe, Bob Reed, Fay Nick and Mary Fenelon Cooper. Officers will be installed next week at a Christmas dance.

Langley Responsible For Scouts At WTR

A photo caption in last week's paper erroneously stated that the flight of the French-built satellite FR-1 would be under the direction of Robert H. Gray, Assistant KSC Director for Unmanned Launch Operations.

NASA direction of Scout vehicle operations at the Western Test Range is handled by the Langley Field Project Office headed by V. Dean Crowder of Langley. The part of KSC/ULO in NASA Scout operations is limited to spacecraft and mission coordination, tracking and data acquisition, and general support.



FIVE DIFFERENT entrees were on the menu Saturday for the 67 foreign ambassadors to the United States who were guests of the Kennedy Space Center for the Gemini 7 launch.