

NEWS

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November 4, 1965

GEOS A

Geodetic Explorer To Map Earth's Mass

The Kennedy Space Center is scheduled to launch a 385-pound Geodetic Explorer satellite — GEOS A — into an Earth orbit today.

It contains five geodetic instrumentation systems to provide simultaneous measurements that scientists require to establish a more precise model of the Earth's gravitational field and to map a world coordinate system relating points on or near the urface to the common center of mass. Geodesy is the mathematical determination of the Earth's size, shape, mass and variations in gravity.

variations in gravity.

Robert H. Gray, Assistant KSC Director of Unmanned Launch Operations, will direct the flight. Hugh A. Weston is Manager of Delta Operations for KSC and James W. Johnson is spacecraft coordinator for GEOS.

Launch vehicle is NASA's Thrust-Augmented Improved Thor built by Douglas Aircraft. It is the first launch for the Improved Delta second stage, which has enlarged fuel

(See GEODETIC, Page 4)

CHECKOUT TESTS UNDERWAY FOR RENDEZVOUS SPECTACULAR

Preparations were continuing at the Kennedy Space Center this week to prepare Gemini 7 and Gemini 6 for an unprecedented one-two space rendezvous mission, as announced by President Lyndon B. Johnson.

The Gemini 7 spacecraft was erected at Launch Complex 19 Friday, and pre-mate systems tests are being run this week on both the spacecraft and the launch vehicle.

When these are completed the radar and reentry module will be removed to incorporate several changes in the spacecraft to meet new mission requirements.

Meanwhile, the Gemini 6 spacecraft has been taken to the Pyrotechnic Installation Building at the Center.

"It was completely tested and in a flyable condition, so there isn't too much that will have to be done to it," said Wiley Williams, Manager, Gemini/LEM Operations.

Williams said the spacecraft seats have been removed and are being reserviced, and there were a few other items that would need work, but that, essentially, it can be made flight ready prior to being taken back to Launch Complex 19 as soon as Gemini 7 has been launched.

"Our most critical period will be after 7 has gone," Williams noted. "We are planning for only a few days 'turn-around' time on the pad. That is, we hope to erect the Gemini 6 spacecraft and launch vehicle, check them out fully at the pad and launch within the 14-day flight period of Gemini 7."

The revised mission plan calls for Gemini 6 astronauts Wally Schirra and Tom Stafford to rendezvous in space with Gemini 7 pilots James Lovell and Frank Borman.

Such a mission will push KSC and contractor personnel to maximum effort. Williams said it will require a 24-hour a day, seven day a week operation.

"Barring unforeseen problems," Williams said, "we feel (See CHECKOUT, Page 4)

Ft. Bliss 'Oldtimers' Gathering

Several veteran Kennedy Space Center employees are in Huntsville this week to attend the annual meeting of one of the nation's most exclusive organizations.

These men are members of the Fort Bliss, Texas, "Oldtimers." Most of them are former German rocket scientists and engineers who will celebrate their 20th anniversary in the United States this year. Others are pioneer U. S. rocket men who worked in Ft. Bliss with the original group.

KSC members of the group include Center Director, Dr. Kurt H. Debus; Assistant Director for Launch Vehicle Operations, Dr. Hans Gruene; Assistant Director for Information Systems, Karl Sendler; T H. Poppel, Chief of the Launch Support Equipment Engineering Division; Dr. A. H. Knothe, senior scientist; Albert Zeiler and Joe Gonzalez, both of LVO. Several of these veterans will attend the meeting this week.

At Fort Bliss, this group worked on an assortment of V-2 rockets and related equipment that came from Germany. They started launching rockets a little later at (See FT. BLISS, Page 2)

Activities Association To Elect New Officers

The NASA Exchange — Kennedy Space Center has announced the formation of an "Activities and Welfare Association."

This new branch of the Exchange will consist of a general assembly of KSC employees, elected by KSC employees, to foster a common sense of purpose and friendship through the development of athletic, recreation and social activities.

Election of the Activities and Welfare Association's first officers will take place at the Center on November 29. Representatives will be chosen, on a proportional basis, from each primary organizational element of KSC.

Election supervisors will be named tomorrow from each major element to handle all matters within their respective electoral groups.

James F. Russo has been appointed chairman of the 1965 election committee, and Robert H. Clark and Thomas E. McGuire will serve on the committee.

Nominating petitions for Association officers must be turned in to the election supervisors by November 17. Ballot sheets will be distributed to all eligible

(See NEW, Page 4)

Classification Act Schedule With 3.6 Percent Increase

Grade	Per annum rates and steps									
	1	2	3	4	5	6	7	8	9	10
GS-1	\$3,507	\$3,626	\$3,745	\$3,864	\$3,983	\$4,102	\$4,221	\$4,340	\$4,459	\$4,578
GS-2	3,814	3,943	4,072	4,201	4,330	4,459	4,588	4,717	4,846	4,975
GS-3	4,149	4,289	4,429	4,569	4,709	4,849	4,989	5,129	5,269	5,409
GS-4	4,641	4,797	4,953	5,109	5,265	5,421	5,577	5,733	5,889	6,945
GS-5	5,181	5,352	5,523	5,694	5,865	6,036	6,207	6,378	6,549	6,720
GS-6	5,702	5,894	6,086	6,278	6,470	6,662	6,854	7,046	7,238	7,430
GS-7	6,269	6,476	6,863	6,890	7,097	7,304	7,511	7,718	7,925	8,132
GS-8	6,869	7,079	7,325	7,553	7,781	8,009	8,237	8,465	8,693	8,921
GS-9	7,479	7,733	7,987	8,241	8,495	8,749	9,003	9,257	9,511	9,765
GS-10	8,184	8,464	8,744	9,024	9,304	9,584	9,864	10,144	10,424	10,704
GS-11	8,961	9,267	9,573	9,879	10,185	10,491	10,797	11,103	11,409	11,715
GS-12	10,619	10,987	11,355	11,723	12,091	12,459	12,827	13,195	13,563	13,931
GS-13	12,510	12,945	13,380	13,815	14,250	14,685	15,120	15,555	15,990	16,425
GS-14	14,680	15,188	15,696	16,204	16,712	17,220	17,728	18,236	18,744	19,252
GS-15	17,055	17,645	18,235	18,825	19,415	20,005	20,595	21,185	21,775	22,365
GS-16	19,619	20,297	20,975	21,653	22,331	23,009	23,687	24,365	25,043	
GS-17	22,217	22,994	23,771	24,548	25,325					

Pay Raise Bill Passed

GS-18

25,382

President Lyndon Johnson signed into law last week the Federal Employees Salary Act of 1965. New salary levels are listed in the chart above, and are effective as of October 1 or the beginning of the first pay period thereafter.

In addition to the new pay rates, the bill:

—Authorizes payment of severance pay to Federal employees who, through no fault of their own and because of dislocations resulting from technological innovations and improved governmental efficiency, have lost their jobs.

—Gives employees the right to appeal to the Civil Service Commission on adverse determination of acceptable level of competence for step rate advancement.

The existing relationship for the scientists and engineer group GS-5, step 7, through GS-11, step 2, will be continued as before.

It takes YOU to prevent accidents.



MANAGER Curtis Wilson, left, of the Merritt Island National Wildlife Refuge, and Henry Gocia, of the Welaka National Fish Hatchery, pour bucket full of 500 bream fingerlings into the lake in front of the KSC Headquarters Building. Within a few months the waters should be rippling with activity, but, alas, there will be no fishing allowed.

Ft. Bliss 'Oldtimers'

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nearby White Sands Missile Range in New Mexico.

This year the group plans an official observance of the 70th birthday of Dr. Walter Dornberger, who commanded the Peenemuende Rocket Center in Germany.

SPACEPORT



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Russell F. Hopkins, Staff Photographer

UF Drive Falls Short OF \$ Goal

Due to poor employee response to the Kennedy Space Center's 1965 United Fund campaign, the drive has been extended until November 18.

"We're very much disappointed in the returns to date," KSC chairman John Donovan said.

The campaign was to have ended last Friday, but only \$17,000, or about two thirds of the Center's \$25,000 goal had been raised at that time.

"Individual employee participation has been very uneven," Donovan pointed out. "Only about half the people at the Kennedy Space Center have contributed at all.

"We've had a proud record in the past," Donovan continued. "We've always met our goal and then some, but this year people just aren't out getting the job done, and as a result we are falling far short of our commitments.

"I'm hopeful, with the deadline extension, people will become aware of their community obligations. The United Fund, after all, is set up to serve those in need in our own immediate area."

SOUNDING PROBES

NASA's sounding rocket program probes the vast region of the Earth's atmosphere that is too high for balloons to reach and too low for satellites.



BOB GORMAN, Chief of KSC's Launch Support Operations Division, cuts cake at a United Fund gathering in his office last week. He used the occasion to urge all division employees to meet their fair share in the campaign. LSOD's quota is \$1,830, and when additional contributions were taken up after cake and coffee, the division was only a few dollars short.

Veteran KSC Cameraman Wins Photographic Prize

Russell F. Hopkins, staff photographer for Spaceport News, has been named a winner in the 1965 Evaluation and Awards program of the Southern Council of Industrial Editors

Hopkins' prize winning entry was an action photo taken at the Spaceport last year of a duck banding project. The resentation was made last ight at the SCIE's annual conference banquet at the University of Georgia in Ath-

His picture was selected by a special panel of judges from more than 200 entries. It was the first and only such photographic award made by the

Enlarged prints of the photo were displayed at the University, and slides were made of it for presentations throughout the southeastern states

The Southern Council of Industrial Editors, an organization of which Spaceport News

Watch Your Words!

When you're on network television which reaches millions of Americans from coast to coast you have to be careful what you say. Ask Jack King, Chief of the Public Information Office about that.

King was in the Mission Control Center at Cape Kennedy recently, and his voice was carried live over the networks as he reported activities in the Gemini 6 mission which was later post-

He subsequently got a letter from a man in Ft. Lauderdale who said that King was misleading thousands of school kids with his pronounciations of "status" and "data." King was saying sta-tus and da-ta. The man contended they should be stay-tus and day-ta.

"Both versions are acceptable in the dictionary," King commented, "but it shows how closely some people listen.'

is a member, covers territory stretching from North Carolina to Louisiana.

Hopkins, an employee of Technicolor Corp., was assigned in 1964 to cover duck banding operations at the Merritt Island National Wildlife Refuge on the Spaceport.

For an action shot, he had wildlife officers release ducks following their banding. In the photo sequence. Hopkins caught a duck winging in flight a split-second after it had been released.

Judges praised the photo for its overall action and composition. The picture will be exhibited in the KSC Headquarters Building lobby this week.



TECHNICOLOR photographer Russ Hopkins exhibits the photograph that took top honors at the Southern Industrial Editors' Conference last night at the University of Georgia.

Editorial:

You See Him Everywhere To Be Theme

You see him everywhere — in the hallways, at the launch pads, on roof tops, in the palmetto scrubs of the wildlife refuge — everywhere!

He carries a camera around his neck and he's probably known to more Kennedy Space Center employees

than anyone other than Dr. Debus.

He is affectionately, and sometimes not so affectionately, called "Hoppy." For the record, it's Russell Hopkins and he's employed by the Technicolor Corporation to provide photographic services at the Cen-

Hoppy has been shooting public information type photographs for KSC for as long as anyone cares to remember. He has been the staff cameraman for Spaceport News since its inception, nearly three years ago.

Like the mailmen, he gets the job done regardless of deadline or meteorological conditions. He's snapped pictures when it was dusty and 100 in the shade, and when hurricanes were whipping sheets of pelting rain into his lens.

He's scaled the tallest launchers and lain flat on his back in mud — all to get the best angle possible. He's shot presidents and phone operators; senators and secretaries; celebrities and stock clerks the same attentiveness and care to detail.

We've felt all along his finished products were prize winners, and now our beliefs have been confirmed. Of more than 200 entries from all over the southeastern United States, Hoppy's action shot of a duck banding operation at KSC won the top award at the annual conference of Southern Industrial Editors.

It's official now — the Kennedy Space Center has a blue ribbon photographer. It couldn't have happened to a more deserving person.

Flu Up 450 Percent In State of Florida

If you haven't received your free flu shots for the year yet, sign up soon. There is a

450 per cent rise in cases of influenza throughout Florida this year.

QC In Space

"Quality's Role in Space" is the theme that will be explored by over 600 aerospace engineers, managers, and scientists at the American Society for Quality Control's 1965 Aircraft and Missile Conference to be held at the Ramada Inn, Cocoa Beach, November 8, 9, and 10th.

Topics discussed at the conference, which is sponsored by the Cape Canaveral Section of the Society, will include quality assurance, configura-tion management, and selec-tion and testing of materials for aerospace application.

Speakers will include: Dr. Kurt H. Debus, KSC Director; Major General Vincent, G. Huston, Commander, Air Force Eastern Test Range; and Phillip B. Crosby, Director of Quality for International Telephone and Telegraph. The banquet keynote ad-

dress will be delivered by NASA's George A. Lemke, Director of Reliability and Quality Assurance for the Apollo Program at the Office of Manned Space Flight, Wash-

ington, D.C. Next Wednesday, Lemke will meet with KSC Reliability and Quality Control personnel and with Center managers to discuss Apollo reliability and quality control status.



There was an unusual flag raising and lowering ceremony in front of the KSC Headquarters Building Friday morning. The flag was taken down, another run up the mast, and then it was taken down and the regular one sent back up.

The ceremony was held at the request of William K. Leppanen of Philadelphia. Seems Mr. Leppanen has an unusual hobby. He sends his flag to installations and outposts all over the world to be flown for a few minutes or a day.

His flag is the standard five by eight foot size. He began his unusual avocation back in 1959—when there were only 48 stars on the flag. His current one started cycling the world in 1960.

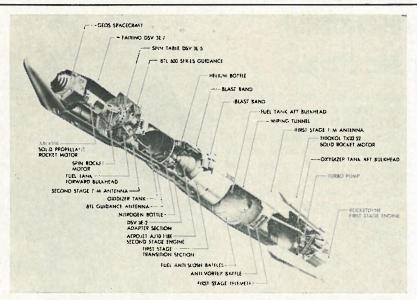
Naturally, Leppanen's flag began its journey at Independence Hall. It has also flown at the Capital in Washington, and at a number of state capitals, including the one in Hawaii.

In October 1961 it was raised at the Marie Bryd station near the South Pole, where it had been air dropped to a hardy band of personnel participating in "Operation Deep Freeze."

The flag has crossed the Pacific to be flown atop Mount Suribachi on Iwo Jima, and leaped the Dardanelles to fly over an American embassy in Turkey. It has also been raised at the U.S. Embassy in Belgrade, Yugoslavia.

In Africa, the globe trotting stars and stripes were flown on a staff at Wheelus Air Force Base, which also displayed a propeller from the "Lady Be Good" bomber lost in the Libyan desert during World War II and found just a couple of years ago.

Prior to being unfurled over the Spaceport, Leppanen's flag was raised by the Air Force at Cape Kennedy, and is next scheduled to fly at the Manned Spacecraft Center in Houston.



A FAT TANK second stage for greater power, a redesigned third-stage firing to accommodate larger payloads, and restart capability for a second burn in orbit are features of NASA's Improved Delta, pictured in cutaway rendering. NASA has ordered 15 Improved Deltas from Douglas Missile & Space Systems Division to boost meteorological, communications, pioneer, and bio-satellite payloads from the Kennedy Space Center. With the new stage, the Improved Delta can launch 1,400 pounds into Earth orbit and 225 pounds to escape veloicty.

New Officers To Be Elected

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voters (civil service employees at the Kennedy Space Center) by November 26.

An executive board, elected by and from the members of the general assembly, will exercise general supervision over the affairs of the Association.

The new branch will: promote athletic events, banquets, dances, parties, picnics, and other activities which are entertaining and recreational in nature.

Purpose of the Association will be to develop athletic, recreation and social activities which present an opportunity for social contact between government and industry employees in a manner devoid of any official conflicting interests.

Geodetic Explorer

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tanks to provide a longer engine burning time.

Said Hugh Weston, of the new Delta stage: "the increased tankage capacity and the addition of a restart capability in the Improved Delta launch vehicle will provide for heavier payloads for both Earth orbits and deep space probes."

The United States Geodetic Satellite Program, a coordinated undertaking of NASA, the Department of Defense, and the Department of Commerce (Coast and Geodetic Survey), is run by NASA.

Talk more about safety—hear less about accidents.

FLU SHOT SCHEDULE

Booster flu shots for the coming few days will be given at the following locations and times:

Today, the KSC Headquarters Building, Conference room 2201, from 12:30 to 3:45 p.m., and tomorrow at the same location, from 8:15 a.m. to 3:45 p.m.

Next Tuesday, at the In-

Next Tuesday, at the Information Systems Building, room 342, from 8:15 a.m. to 12:15 p.m.

Next Wednesday, at the VAB Corps of Engineers resident office, from 8:15 to 9 a.m.; at the Morrison-Knudsen-Perini-Hardeman conference room from 9:15 to 10 a.m.; and in the VAB bay area, from 10:15 a.m. to 3:00 p.m.

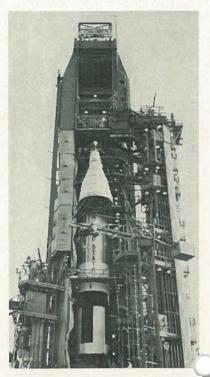
CHECKOUT

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there's no reason why this schedule, tight as it is, cannot be met."

The major question mark will be the extent of pad damage from the Gemini 7 blast-off. Assuming it is light, as has been the case on most previous launches, the Gemini 6 launch vehicle can be erected later in the same day as the Gemini 7 liftoff, and the new spacecraft can be put ur the next day. This is required in order to meet the short-time turn-around commitment.

KSC complex engineer Jim Ragusa said such routine repair jobs as repainting, and replacing liftoff switches, can be done with the Gemini 6 launch vehicle in place on the pad.



GEMINI 7 spacecraft is hoisted atop service structure at Launch Complex 19.

Saturn V Stage Here

A Saturn V, S-IVB aft innerstage arrived at the Kennedy Space Center Monday evening via commercial freighter, and was transported on the "KSC 1" barge to the Vehicle Assembly Building. It is a non-flight facilities checkout stage and will be initially used to checkout equipment in the VAB's low bay area.