

# SPACEPORT



# NEWS

Volume 2, Number 46

NASA Launch Operations Center, Cape Canaveral, Florida

November 14, 1963



**THIS ABSTRACT** view could be the work of an inventive artist, or a closeup of the wrinkled skin of a century-old alligator, but it is neither. Actually, it's an aerial view, via helicopter, of cracked, dried up mud flats at the Merritt Island Launch Area.

## JFK DUE HERE SATURDAY ON SPACEPORT INSPECTION

President John F. Kennedy is tentatively scheduled to visit Cape Canaveral Saturday for a briefing on the space program and to view work at the Merritt Island Launch Area.

The schedule calls for the President to arrive by plane at Canaveral's skid strip Saturday morning. From there he will proceed by motorcade to Launch Complex 19 for a briefing on the Gemini and

### NASA Postpones Plans To Launch Satellite

NASA has postponed plans to orbit its first Interplanetary Monitoring Platform satellite (IMP A).

Originally scheduled for a Tuesday flight, the launch was scrubbed when ground tests of the Delta rocket's higher thrust X-258 third stage conducted under altitude conditions indicated that a spacecraft contamination problem might exist from exhaust of the third stage following burnout.

A new spacecraft separation technique will be devised to prevent possible exhaust contamination.

Titan II program.

He is also to visit Complex 37 for a briefing on the Saturn I and Saturn V programs.

Inspection of MILA is scheduled by helicopter and will include a close look at work on the Vertical Assembly Building and in MILA's Industrial Area.

The brief visit possibly will be climaxed by a missile launch.

The President is to be greeted on his arrival by NASA Administrator James E. Webb, Deputy Administrator Dr. Hugh Dryden, Associate Administrator Dr. Robert Seamans, LOC Director Dr. Kurt Debus, and Major General L. I. Davis, Commander of the Missile Test Center.

Briefings are tentatively scheduled to be conducted by Dr. George Mueller, Associate Administrator for Manned Space Flight, George M. Low, Deputy Associate Administrator for Manned Space Flight, and Dr. Wernher von Braun, Director, Marshall Space Flight Center.

The President is scheduled to be briefed by Dr. Debus during the helicopter inspection of MILA.

## Three Firms To Negotiate Services Pact

NASA has named three companies for negotiation leading to the selection of a prime contractor to provide administrative and management services at the Merritt Island Launch Area.

The three companies are Tech Rep Division, Philco Corp., Philadelphia; Range Systems Division, Chance-Vought Corp., Ling-Tempo-Vought Inc., Dallas, Texas; and RCA Service Company, Cherry Hill, New Jersey.

They were selected from 23 firms which submitted proposals to LOC. Proposals were issued to 216 firms.

### Cost Plus

The one year contract will be a cost plus incentive fee type, and may be continued for two additional years through exercise of annual options.

It is expected to total approximately \$2.5 million for the initial one year period.

Four types of services will be included in the contract—automatic data processing, technical information, photographic, and the operation of a field printing plant.

Administrative and management services is one of four major support services under which MILA will be operated. The other three are communications, base operations and launch support services.



**The  
Inside  
Story**

See page 3



## CLOSE THOSE GAPS

The recently-installed, fully activated traffic light at the intersection of A1A and state road 402 (the Titusville road) is a sensitive instrument.

It is set for the maximum flow of east-west traffic and is tripped by sensor units located in the road. During peak traffic hours, if there is a steady flow of vehicles, as many as 20 to 30 cars can pass through it in a 60 second period.

However, due to "football field" gaps in the traffic, the light is not being held for its full 60 seconds. It is often changing after being green for only 20 to 45 seconds.

To keep it green for the maximum amount of time, the sensors must be tripped at least once every five seconds. But by allowing these gaps to develop, the steady flow is interrupted. And since as many as 7,400 cars pass through this light in a 24 hour period, — nearly 2,000 between 6:00 and 7:30 a.m. — it is naturally causing some jams.

NASA officials have tried to manually operate the light, and have tried to manually direct the traffic, but they have found that neither works as well as the light itself — if drivers would close the gaps to keep the light green for the full 60 seconds.

This doesn't mean they advocate riding on each other's rear bumper. But there really shouldn't be any reason for having a five second gap between cars — unless someone just doesn't have his mind on driving.

So close those gaps. You'll get home sooner, and so will your neighbors.

## ON EDUCATION WEEK

Dr. Robert R. Gilruth, at a recent Space Age Symposium, made some remarks on the importance of schools and dedicated students that seem most appropriate during this, National Education Week.

Here are some excerpts from his talk:

"The space program is a great spur to education. Our challenge is to increase the flow of information and stimulus in both directions — with our educational institutions. We are not educators, but we are anxious to work with those who are, for the common interest.

"NASA has many technical people taking graduate work in courses offered by nearby universities at each Center.

"One point where education and background are of great and overriding importance is in the area of dedication and drive to see this country grow and hold its position as the world leader. We all rely on our educational institutions to help instill these high principles in our young people today.

"These are the kind of people we need in the space program. People whose technical excellence is balanced by the highest sense of responsibility."



Charles Horne



## Hard Hat Designer Given \$35 Award

Charles V. Horne, Quality Assurance aerospace technician, received a \$35 award last week for a suggestion he made while at the Marshall Space Flight Center.

Horne devised a special nylon headgear covering that allows workers to wear hard hats into such specially-cleaned areas as Saturn lox and fuel containers.

Prior to his suggestion, workers had entered these areas without protective headgear.

It was Horne's second award.

## Tech Writers To Meet

The Cape Canaveral Chapter of the Society of Technical Writers and Publishers (STWP) will meet next Wednesday at the Rivers' Edge restaurant in Cocoa Beach.

Maurice Larue of the Martin Company, Orlando Division, will be the guest speaker. His talk is titled "Can Technical Writers Be Replaced?" and deals with a new and revolutionary training technique which is currently being evaluated by the military services for application to missile system training programs.

For those who desire to have dinner before the meeting, an open-menu dinner is scheduled for 6:30 p.m. The meeting will start at 8:00 p.m. and is open to anyone with an interest in the field of technical communications.

## Industrial Engineers Hear Johnson Tonight

Members of the American Institute of Industrial Engineers (AIIE) will meet tonight at the Patrick AFB Officers Club to hear Lockheed engineer Frank J. Johnson discuss "Value analysis engineering as related to function oriented cost reduction."

Johnson, a past national president of the AIIE, will identify the proper relationship between price function and value of a product. Also to be discussed are the organization, planning and control of a value analysis engineering program with particular emphasis on methods and to the systematic, organized approach to each of the three phases.

Specific case histories will be used to demonstrate the effectiveness of value analysis.

The 7 p.m. dinner meeting will be preceded by a social hour. Anyone interested is invited to attend. For reservations, call Major H. L. Dillingham, UL7-7235, or Captain J. L. Kidder, UL7-6143.

## SPACE ALMANAC

A CHRONOLOGY OF  
EVENTS IN SPACE  
EXPLORATION AND  
RESEARCH.

**5 Years Ago** — November 19, U.S. and 19 other nations jointly introduced resolution in U.N. General Assembly calling for creation of a committee to bring about full international cooperation in the peaceful uses of outer space.

**1 Year Ago** — November 15, Venus-bound MARINER H spacecraft set new record for communications, transmitting engineering and scientific data to earth from nearly 18 million mi. in space.

November 16, Saturn SA-3 reached 104 mi. altitude in ballistic flight from Cape Canaveral, the fully-fueled S-1 stage performing as planned. Upper stages were filled with water simulating weight of live stages. (Project Highwater H).

# SPACEPORT



# NEWS

Published each week by the National Aeronautics and Space Administration's Launch Operations Center, Cape Canaveral, Florida.

## How To Win A Beard Growing Contest

Chances are you've seen him at the Cape waiting for his carpool ride. Or if you live in New Smyrna, you may have run into him at the shopping center. Or perhaps you've only heard about him.

In any case you've probably wondered who he is and what he does at Canaveral.

His name is Phil Coburn, and what makes everyone who sees him take a quick, quizzical second look is his lengthy set of reddish-brown whiskers and his long-flowing hair.

Coburn works in the Cape carpentry shop.

He started growing his beard on March 17, 1961, at the same time he started his vacation that year.

"Just for the heck of it, I told my wife I wasn't going to shave for the two weeks I was off," Coburn said. "Then, when it was time to go back to work, she told me it looked good and dared me to wear it to the shop.

"I did, and after the first few days of ribbing, it didn't bother me, and I just let it keep growing.

"I began letting my hair grow about a year and a half ago, when my wife said she wouldn't trim it anymore for me."

Coburn's hair is shoulder length and at work he uses bobby pins and a pony tail to keep it in place.

"One time I was working at home and got my hands dirty," he says. "I had to go to the store, so I asked my daughter to fix my hair, and she braided it. Then, at the store a little boy saw me and hollared 'hey Mom,



Phil Coburn

there goes George Washington!"

"I've been called everything from a billy goat to Moses," Coburn says, "but it doesn't bother me. I do think, however, a good sense of humor is almost necessary for a beard grower today."

Maintaining a full beard also has its share of unusual problems, Coburn admits.

"You have to be conscious of it," he says, "particularly when you're eating soup. And I've had to change my way of smoking. I used to leave a cigarette in the corner of my mouth, but I kept singeing my mustache. Then I'd have to trim off the other side to even it up."

But raising a crop of whiskers also has its rewards. Coburn has won two beard contests and placed second in another. "And they all paid cash prizes," he said.

"Also, if you figure in the price of a \$1.50 haircut every two weeks and the number of razor blades and amount of shaving cream that most men use, the savings begin to add up," Coburn said.

Invariably, wherever he goes, people stare, and often ask questions. "Most of them want to know if the beard itches," he says. "It doesn't anymore than your hair does," he answers.

How long will he let it grow?

"As long as my skin stays healthy. My wife said she can stand it as long as I can, so I guess I'll keep it awhile. It sure attracts a lot of attention."

## Career Award Nominations Now In Order

The National Civil Service League, a non-partisan citizens' organization for good government has announced its Tenth Annual Career Service Awards Program for 1963-64.

This program is undertaken to strengthen the public service by bringing national recognition to significant careers in the Federal service.

The League will present a Career Service award for outstanding achievement to ten career employees who have completed ten or more years employment with the Federal Government, including time spent in the military service.

### April Ceremony

Recipients will be presented with a scroll and will be guests of honor at a dinner in Washington, D. C. to be addressed by a nationally prominent speaker and attended by many leaders in government, business, and education. The presentation ceremony is scheduled for April 14, 1964.

Office and division chiefs are encouraged to submit nominations for employees who have a record of exceptional efficiency; of sustained superior performance and accomplishment; and of integrity and devotion to the principles of public service.

Information regarding the preparation of the record for nominees and other details regarding the awards may be obtained by contacting W. E. Hudgins, LO-GP2 (783-3753).

All nominations must be submitted to reach the Personnel Office no later than November 29.

## THINK IT'S GOLD HERE? TEMPERATURES OF $-143^{\circ}\text{C}$ RECORDED IN SWEDISH LAPLAND

Scientists at the University of Stockholm, Sweden, have announced recording by sounding rockets of temperatures which are possibly the lowest ever measured in the Earth's atmosphere.

Temperatures as low as  $-143$  degrees Centigrade were computed in Swedish Lapland in scientific experiments jointly conducted by NASA and the Swedish Space Committee.

The experiments were made to study the behavior and nature of noctilucent

clouds at altitudes up to 60 miles.

Four Nike-Cajun rockets, carrying scientific instruments, were launched from Kronogard earlier this year.

University scientists summarized the results as follows: Up to a height of 35 miles, temperature distribution closely follows results previously obtained in the United States and other countries. The temperature increases from about  $-50$  degrees Centigrade at 10 miles to slightly more than zero degrees at 32

miles, a warming caused by absorption of the Sun's ultra-violet radiation by the ozone molecules at this height.

Higher up, temperatures decrease again to reach a minimum at about 50 miles where it was measured at about  $-120$  degrees when noctilucent clouds were not present. However, when the clouds were present the temperature was computed at  $-143$  degrees.

This appears to be the lowest temperature ever measured in nature,

# WANT TO BE AN EDITOR? ANSWER THIS SURVEY

**EDITOR'S NOTE:** Next month Spaceport News will be a year old. And, since this is our 48th issue, we felt it was time that we give you — the readers — a chance to tell us what you think of the paper. Your opinions will help guide us in the months ahead in preparing articles and features that you enjoy most, while, at the same time, we try to keep you posted on the latest space age developments. Below is survey which we'd like you to fill out in your leisure, clip from the paper and drop in the mail to LO-GT45. If you're on the outside mailing list, address it to Editor, Spaceport News, LOC, Cape Canaveral.

(Circle one)

	Cover To Cover	Most Of It	Only Some Articles	Casually
I read Spaceport News	X	X	X	X
Others in my family read it	X	X	X	X

If I were editing Spaceport News, I would step up or cut down the following: (Circle one)

	More	Less	Same as Now	None
Space News Articles	X	X	X	X
Space Feature Articles	X	X	X	X
Stories on the Astronauts	X	X	X	X
Stories about operations of specific departments or offices	X	X	X	X
Management Announcements	X	X	X	X
Items of Feminine Interest	X	X	X	X
Items of Male Interest	X	X	X	X
Profiles of employees	X	X	X	X
Hobbies	X	X	X	X
Civil Service Articles	X	X	X	X
Government Benefits	X	X	X	X
Inquiring Photographer	X	X	X	X
Pinups	X	X	X	X
Editorials	X	X	X	X
Newcomers	X	X	X	X
Space Almanac	X	X	X	X
Dere Cape Canabrel	X	X	X	X
Counting Down	X	X	X	X
Service Award Photos & Stories	X	X	X	X
Birth & Marriage Announcements, etc.	X	X	X	X
Employee Training Programs	X	X	X	X
Community Living Activities	X	X	X	X
Items of Historical Interest	X	X	X	X
Use of Photographs	X	X	X	X
Use of Cartoons	X	X	X	X



**WITH PENCIL READY,** bright-eyed Becky Jackson, 18-month-old daughter of LOC's Millie Jackson, prepares to answer Spaceport News' readership survey. She urges fellow readers to follow suit.

Other types of articles I would like to see appear in Spaceport News are:

(List) .....  
 In general, how would you rate Spaceport News as an employee newspaper?

(Circle one)      Excellent      Good      Fair      Poor

How would you compare Spaceport News with employee publications you have read that are published by other NASA centers, government agencies or private companies?

Excellent      Good      Fair      Poor

What improvements do you feel are most needed?.....

Do you recall articles you particularly liked, and if so, which were they? .....

Are there any features you regularly read? .....

Which ones? .....

If Spaceport News cost a dime, would you buy it? .....  
 How often do your fellow employees mention to you articles they have read in Spaceport News?

Frequently      Occasionally      Never

You need not sign this, unless you wish to, but we would appreciate knowing whether you are male or female, and in which area you work.

Other comments about Spaceport News: .....

## Seven Pound 'Vehicle' Launched

Looking for a novel way to announce the birth of your baby? Try this one, composed by R. Boster, of Technical Information.

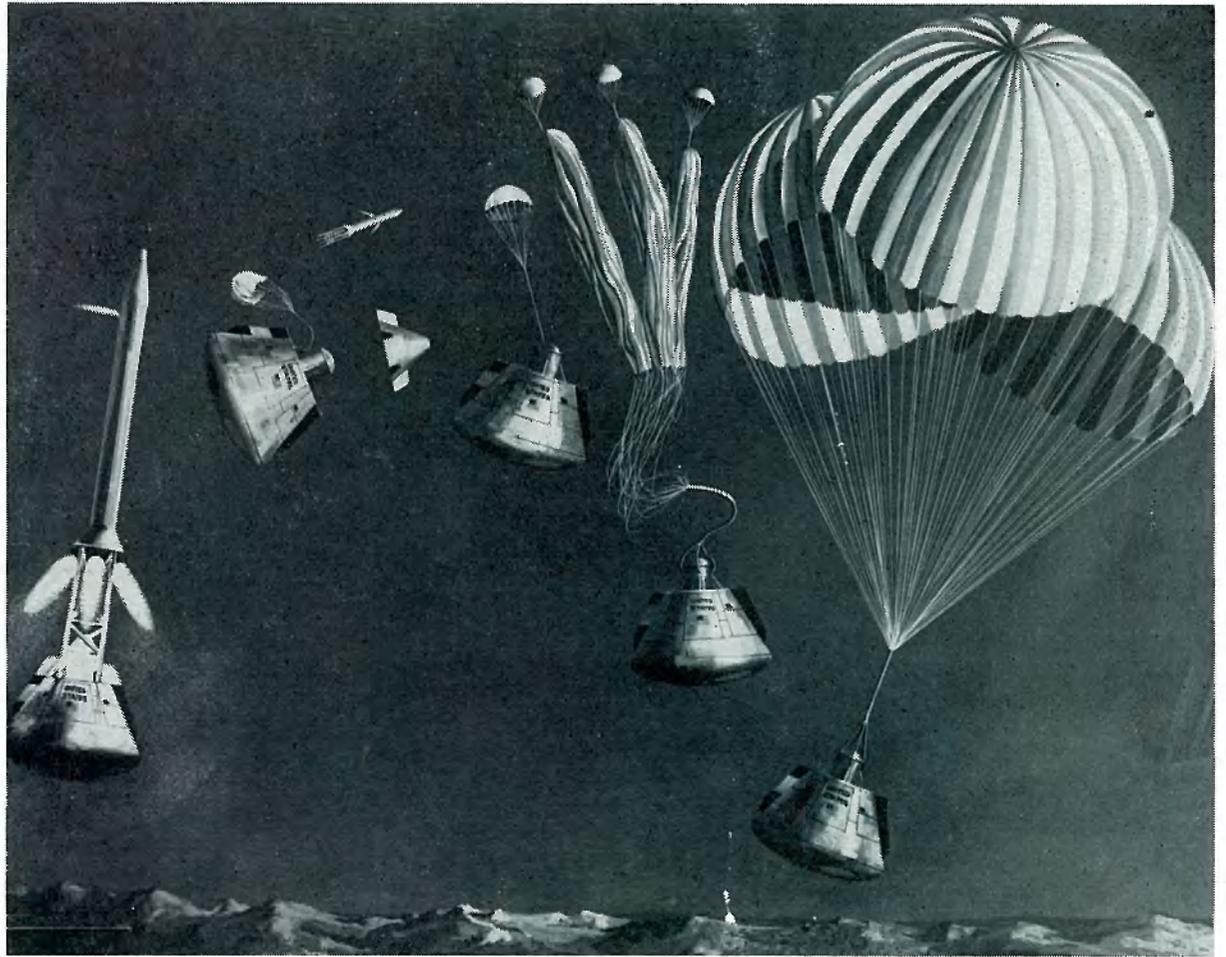
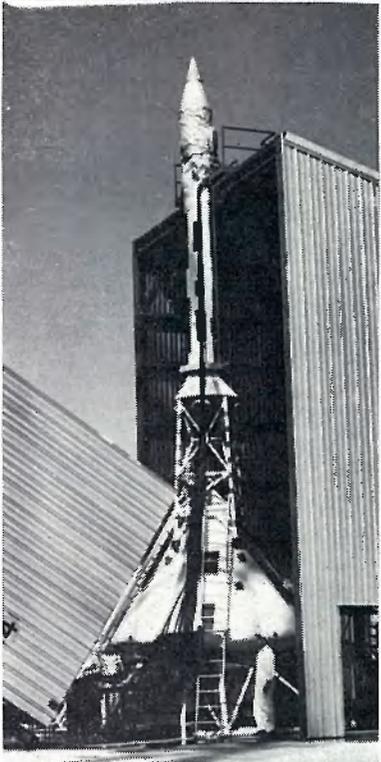
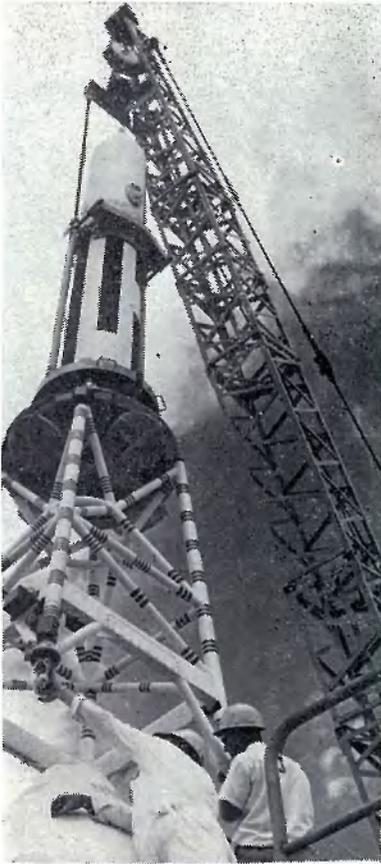
Vehicle "boy" (formal nomenclature has not yet been assigned), the fourth in a series of two boys and two girls designed by R. Boster and manufactured by Mary Boster, was suc-

cessfully launched from complex "Titusville Hospital" at 1205Z (0705 EST), November 4, 1963.

Liftoff weight was 7 pounds, 14 ounces; azimuth 100 degrees, trajectory zero; range nil.

No further launches in this series are planned, due to budgetary limitations.

# Apollo Off-the-Pad Abort Tests Begin



Off-the-pad abort tests, involving the Apollo spacecraft's launch escape system, began this week at the White Sands Proving Ground in New Mexico.

Mission objectives were to determine aerodynamic stability characteristics of the Apollo configuration during a pad abort; investigate the capability of the escape system to propel a command module to a safe distance from a launch vehicle during a pad abort; check proper operation of the launch escape tower release mechanism; investigate proper operation of the tower jettison motor; and see that the parachute recovery system operated properly.

The test sequence, above, shows the vehicle from launch escape motor ignition; jettison motor ignition and launch escape tower release; drogue parachute deployment; main parachutes in reefed condition; and main chutes fully inflated.

Above left, the launch escape tower is being prepared for mating to the Apollo boilerplate.

Left, the mated boilerplate and escape tower are readied for launch.

Right, the boilerplate command module cone is placed over the Apollo configuration housing the drogue and main parachutes. Below, the abort tower is checked out.





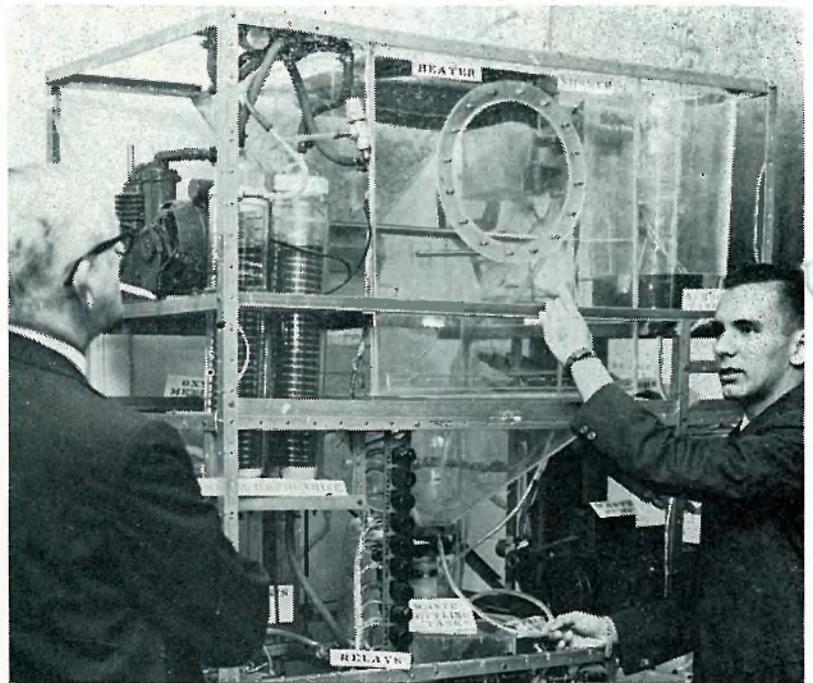
**ANOTHER NEW CAUSEWAY** is rapidly taking shape — this one will span the Indian River to link the Orsino-MILA area with the mainland.

## LANGLEY CENTER'S 'ELDER STATESMAN' CITED FOR SERVICE

Dr. Henry J. E. Reid, who served as director of NASA's Langley Research Center for more than 34 years, has been selected by the National Aeronautic Association as an "Elder Statesman of Aviation" in recognition of his contributions to the progress of flight over a period of four decades.

The NAA citation recognized Dr. Reid for "his significant and enduring contributions over the years to the progress of aeronautics, and his demonstrated qualities of patriotism, integrity, and moral courage worthy of emulation."

Dr. Reid, who received the award on the 60th anniversary of powered flight, retired from the NASA in June 1961 — about 40 years after he joined the Langley staff as an engineer. He was appointed to head the center in 1926 and continued as director until May 1960, when he was succeeded by Dr. Floyd L. Thompson, present director.



**STUDENT DAVID WILSON** shows a veteran space center employee the Mars survival capsule that he built when he was a 17-year-old high school student. The capsule, designed to keep monkeys alive on Mars for six months, has since won international acclaim.

## 'Do It Yourself' Capsule Designed By Young Student

A do-it-yourself planetary survival capsule built by a mere boy is holding down a place of honor in Huntsville.

The capsule, designed to keep several monkeys alive on Mars for six months, represents a blend of sage guidance from NASA missile men plus the imagination, know-how, and hard work of David Wilson, 17, of Athens, Ala.

After discussing the project with members of Dr. Wernher von Braun's rocket development team, David spent 2,000 hours building the capsule for a high school Science Fair in 1960.

Since then, his device — built at a cost of only \$200 — won second place out of 369 entries in the 11th National Science Fair - International and has been shown at the Berlin Industries Fair as part of the American Youth Exhibit at the invitation of the U.S. Information Agency.

The capsule proved to be a major attraction at the Fair with hundreds of thousands of persons viewing it and David on hand to explain how it works.

David, now 21, and a senior studying engineering physics at Auburn University, loaned the unit to the Marshall Space Flight Center where he

works during the summer as a laboratory trainee.

Named "Survival on Mars," the life-sustaining unit is said to be the first system of its kind built in the Free World. Seven feet tall, it is designed to maintain adequate living conditions for two to four squirrel monkeys.

The capsule is a sealed, completely automatic space environmental system, shaped like a big box with transparent walls.

Several ingenious home-made devices operate in a continuous cycle to supply oxygen, purify the air, maintain comfortable temperature, feed and water the monkeys, spray-wash the cage daily, dispose of waste and purify the water system.

To keep costs down, David outlined his project to small industrialists in his home town and got them to donate some materials. The rest he collected by probing junk yards or ordering it, when necessary, from a variety of sources. He even called on the U.S. Navy for help and got it.

He sorted valves, plastic piping, motors, pumps, switches and hundreds of other components until he was satisfied with the system.

## SUPER LUNAR 'SCOOTER' PONDERED

Hamilton Standard Division of United Aircraft Corporation has been awarded a \$64,717 contract by the Manned Spacecraft Center to study and recommend a one-man rocket powered device for movement in space and on the surface of the moon.

Major objectives of the study and design contract are to make it possible for a space pilot in a pressure suit to travel over portions of the moon that are not accessible on foot, and to maneuver outside of his spacecraft if necessary.

In space, the system would propel and guide the astronaut when he leaves the spacecraft to perform maintenance tasks or to transfer from one space vehicle to another.

The study asks for performance capabilities which will allow the astronaut to rise and descend vertically, boost himself into a controlled trajectory in any direction, hover and rotate. The study also calls for capability to perform rescue missions.

Hamilton Standard was requested to investigate methods which will permit the one-man rocket to operate under zero gravity conditions and in a vacuum.

The one-man rocket will be required to operate in temperatures ranging from minus 280 degrees Fahrenheit to a plus 160 degrees, in a gravitational field one-sixth that of the earth and in space where the gravitational field is negligible.

The device will be subjected to cosmic radiation, high solar energy particles, radioactivity emanating from the lunar surface and meteoroid hazards.

## MSC Staffs Reorganize, Add Strength

The Manned Spacecraft Center, has reorganized to strengthen the Apollo Spacecraft and Gemini program management structure.

MSC has been regrouped into seven major functions headed by four assistant directors, the managers of the major programs, and G. Meritt Preston, the manager of MSC Florida Operations.

Under the new structure, personnel who performed the highly successful Mercury flight program are being reassigned to support the Apollo and Gemini programs.

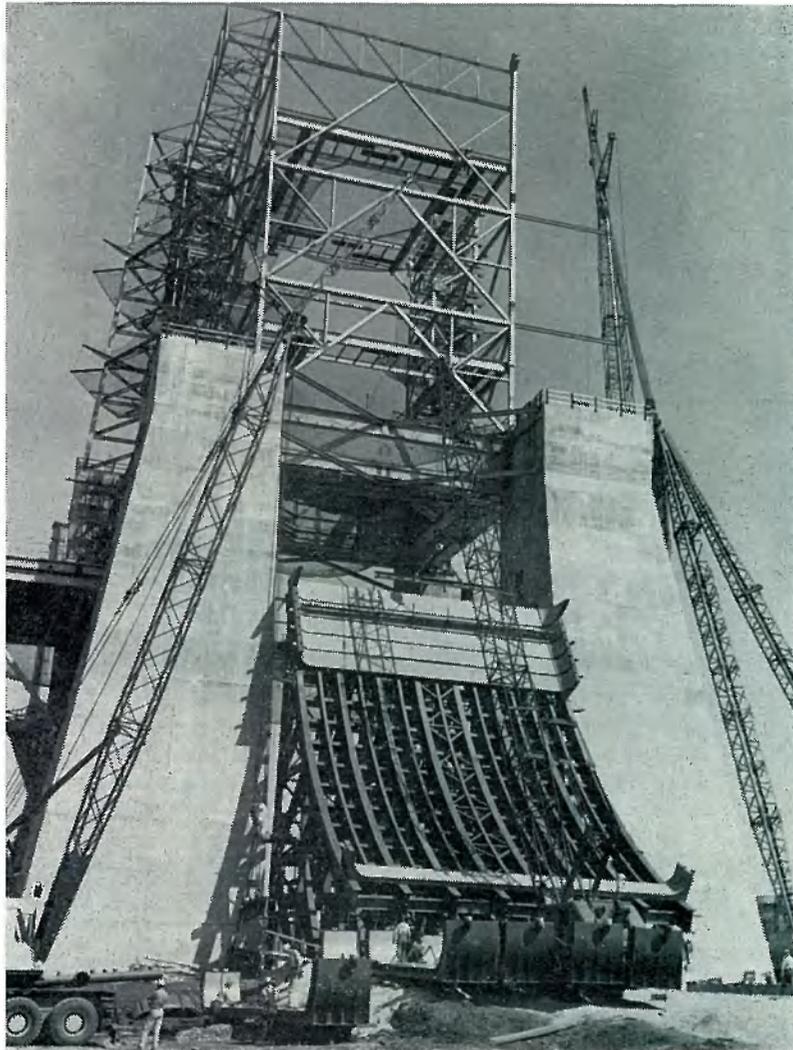
The Assistant Director for Flight Operations and the Assistant Director for Flight Crew Operations are the two new Assistant Directors established under the reorganization.

Under its new manager, Dr. Joseph F. Shea, and deputy manager Robert O. Piland, the Apollo Spacecraft Program Office will be reorganized into five functional units. These are the offices of Program Control, Systems Engineering, Test, Flight Operations, and Reliability.

Charles W. Mathews, who has been acting manager of the Gemini Program Office, has been named Gemini Program manager. Serving as deputy manager, Gemini Program Office, will be Kenneth S. Kleinknecht.

Engineering and Development divisions include Guidance—Maxime A. Faget, acting chief; Structures and Mechanics — Joseph N. Kotanchik, chief; Crew Systems — Richard S. Johnston, chief; Instrumentation and Electronics — George Graves, acting chief; Advanced Spacecraft—William E. Stoney, Jr., chief; Computation and Data Reduction—Eugene H. Brock, chief; and Propulsion and Energy Systems—Aleck Bond, acting chief. Bond has been named manager, Systems Test and Evaluation in the assistant director's office.

Christopher C. Kraft, Jr., former head of the Flight Operations Division, will become the new assistant director for Flight Operations.



**A SATURN V booster test stand is rapidly taking shape at the NASA-Marshall Space Flight Center. The concrete pillars seen here are nearly 150 feet tall; on top of them is going up more than 100 feet of steel superstructure. A derrick will be mounted atop the steelwork, giving the entire structure a height of 405 feet. The stand, to be completed early next year, will be used for static firing the 7.5 million pound thrust Saturn V booster.**

## Committee To Evaluate Center Site

Appointment of a fact-finding committee to evaluate the advantages and disadvantages of potential geographic locations for its proposed Electronics Research Center has been announced by NASA.

The new center is being established to give NASA (1) sufficient internal research competence to identify and put in motion in industry and universities the specific research activities needed for national space capability, and (2) project management competence in very advanced areas of electronics similar to that previously established in other areas of space and aeronautics research.

The space agency requested \$5 million for the electronics center in the 1964 fiscal year. Congress authorized \$3.9 million, subject to the report requirements, noting that an additional \$1.1 million was available for advanced planning.

The basic purpose of the Electronics Research Center is to provide NASA with the personnel and resources to properly plan, conduct, direct, supervise, and utilize electronics research and selected advanced development.

## CAPE'S BIGGEST BARGAIN COSTS \$1

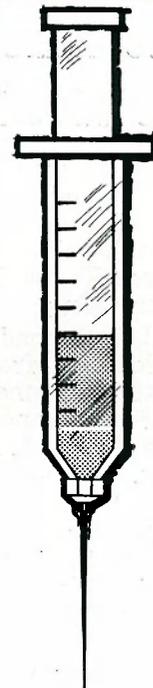
One of the biggest bargains available on the Cape — if you haven't already bought it — is a flu shot for one buck.

Dr. D. M. Mosher of the Canaveral dispensary says that one shot will give a person about a 65 per cent immunity to influenza, and a second shot within six or eight weeks will boost this up to 85 per cent.

"The more people that get flu shots, the less the chances are of it spreading," Dr. Mosher says. "Therefore, if enough people get them, you could build up a 100 per cent immunity."

He explained the vaccine itself is made from viruses grown in chicken embryos, and anyone allergic to chickens or eggs should not take the shots. Nor should anyone with an acute respiratory condition.

"Reactions to the shots, which contain several strains of deactivated influenza, are quite low," Dr. Mosher



says, "although there will be a little soreness in the arm for a while.

"It is doubtful if we will ever be completely free of flu," he adds, "because of the many new virus strains. The vaccine this year contains all the known viruses ever spread in the United States, but new ones continue to crop up."

Once flu is contacted, Dr. Mosher says, there is no specific effective treatment. He recommends rest.

"The influenza diagnosis is widely abused," he says. "People often have bad colds and call them flu. The actual symptoms are chills and fever and generalized aching, and sometimes a mild respiratory condition."

To anyone who missed them, shots are available at the Cape dispensary for one dollar. Dr. Mosher recommends they be taken in the Fall.

He added a cheerful note. "This doesn't appear to be a year of extraordinary incidents or epidemics."

# NASA Tops '63 UF Goal Of \$15,000

NASA employees topped their \$15,000 United Fund goal Friday, and last minute contributions were still being joined LOC in the past week. campaign draws to a close.

More than half of all NASA elements, 18 out of 32, reported 100 per cent participation by employees.

The 1963 total was time and a half the \$10,000 collected last year. Brevard County's overall goal this year is \$307,500.

Division	Participation %	Amount Contributed	Average Contribution
LO-A, Office of the Director	100%	\$177.25	\$17.70
LO-W, Regional Audit	100%	50.00	10.00
LO-RC2, Community Development	100%	62.00	12.50
LO-RB2, Public Information	100%	42.00	7.00
LO-RP2, Protocol	100%	63.00	9.00
LO-BA, Base Operations	100%	728.00	8.90
LO-GA, Quality Assurance	100%	140.00	10.00
LO-DA, Launch Supp. Equip. Engr. Div.	100%	150.00	18.70
LO-FA, Facilities Eng. & Const. Div.	100%	1104.00	11.15
LO-TA, Technical Staff	100%	35.00	11.65
LO-SA, Safety Office	100%	88.00	9.80
LO-GF, Financial Management	100%	452.50	5.96
JPL Operations Div., 40000	100%	567.30	25.80
LO-GS, Security	100%	184.00	10.83
LO-GP, Personnel	100%	555.00	15.40
LO-GR, Industrial Relations	100%	22.00	11.00
LO-GM, Management Analysis	100%	242.00	8.35
LO-GK, Traffic Management	100%	142.00	6.76
LO-P, Asst. Dir. Plans & Proj.	99%	584.00	11.10
LO-GC, Legal Office	90%	76.00	9.50
LO-GA, Administrative Services	90%	162.75	7.75
LO-GH, Procurement and Contracts	88%	714.50	8.12
Brown Engineering, 916000	84%	2650.00	
LO-E, Asst. Dir. Instrumentation	83%	956.80	9.97
Goddard Oper. Div. 400000	75%	644.00	14.31
LO-NA, NASA Test Support	70%	65.00	9.28
LO-GT, Technical Office	64%	496.00	7.75
LO-LA, Launch Supp. Oper. Div.	59%	448.00	9.20
MSC, 830000	54%	2088.50	11.35
LO-V, Asst. Dir. Launch Veh. Oper.	46%	1078.50	11.98
Mgt. Services, 918000	25%	226.00	6.60
Economy Blueprint, 919000	24%	216.00	8.34
<b>Total</b>		<b>\$15,205.20</b>	



**HERB MYERS**, membership chairman of the NASA/MILA Federal Credit Union, is all smiles as he accepts the initial deposit from the C. U.'s 500th member, Carolyn Gravel of LOC's Resources Office. Loans extended by the Credit Union are approaching \$60,000.



Dear Sir:

When I grow up I am going to try to be a missile engineer. But everyone says I am not because I need brains.

Jimmy D.  
Akron, Ohio

## Kerns To Address Titusville Klatsch

U. Wright Kerns of the NASA Community Development office will speak at the Greater Titusville Chamber of Commerce Kaffee Klatsch tomorrow morning.

The Klatsch is made up of business leaders from the Titusville area who meet each month over coffee and doughnuts to discuss matters of local interest.

Using slides and a film, Kerns will show the present status of the development on the Merritt Island Launch Area, and will give projected population figures for the Greater Titusville area.

## Life Support System For Gemini Sought

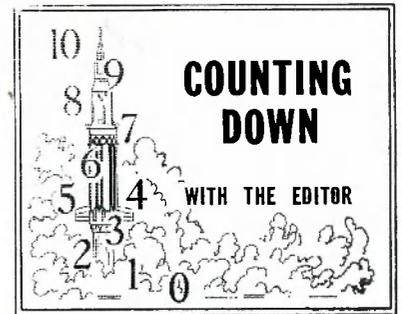
The space agency has requested industry to build a light-weight life support system which will allow Gemini astronauts to leave their spacecraft for periods up to three-quarters of an hour.

The pack, called an Extravehicular Pressurization Ventilation System by the NASA Manned Spacecraft Center, probably will weigh no more than 24 pounds and may be worn either on the abdomen or thigh.

MSC calls for a ventilation system capable of providing 100 per cent oxygen for astronaut consumption. There are also provisions for carbon dioxide and thermal control. In the event of a suit leak, the unit must have the capability of maintaining oxygen and pressure for five minutes. This theoretically will give the pilot time to reenter the Gemini spacecraft.

The oxygen reservoir will be contained in a nine inch diameter bottle shaped like a child's ball.

The life support system will consist of an oxygen reservoir and quantity indicator, valves to control the flow of oxygen, thermal insulation, connecting hoses and a suit pressure control.



If you've a yen for speaking before an enthusiastic audience, and you've a fairly good working knowledge of any one of ten subjects, the Indian River Astronomical Society is looking for you.

This educational society, composed of amateur astronomers, meets the second Wednesday of each month in the Eau Gallie City Hall. They are all eager to seek more knowledge, and wrote a letter to Spaceport News asking for speaking volunteers.

Their list of subject matter: (1) how radio waves were bounced off Venus and Mars, and the results; (2) chances of success in the first attempted landing on the moon; (3) possibilities of life on Mars; (4) hazards of space flight; (5) The possibility that some flying saucers may be unmanned probes from another planet.

(6) The Magellanic clouds — our closest galactic neighbors; (7) Nuclear physics — where it begins; (8) Mysteries of Jupiter; (9) Kepler and his law of equal areas; and (10) The "population" of the atom.

If you are versed on any one of these subjects and would like to speak, contact Corley P. McDarment, Route 1, Box 205, Eau Gallie.

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Waldemar T. Schaller, 81, must be setting some sort of record for length of civil service. He has completed 60 years on the job as a Federal employee.

His entire career has been with the Geological Survey in the Interior Department in Washington.

\* \* \*

Charles L. Buckley, Jr., LOC Security Chief, was barely beaten out of the number one spot in the Sports Car Club of America's regional Gymkhana Melbourne trials. Buckley finished only one second behind the first car in the class II trials, held Sunday.