



**THREE-year-old Charlene Parson, the winsome young lady above, suffers from Cerebral Palsy. She cannot walk without braces today, but she is one of the many youngsters being trained to overcome their handicaps at the Central Brevard Crippled Children's Clinic. The Clinic is one of the 24 member agencies covered by the United Fund this year. KSC's goal for the UF drive is \$25,000.**

## Spacemobile Lecture Scheduled Next Week

All Kennedy Space Center employees — civil service and contractor — are invited to see the NASA Spacemobile lecture-demonstration, "Frontiers of Space," a week from tomorrow.

The one-hour presentation will be made at 9 a.m. in the KSC Training Auditorium. It will be given by Spacemobile lecturer Gabriel Cardova, who has just returned from a series of showings in Puerto Rico and the Virgin Islands.

"This lecture - demonstration covers the entire scope of NASA's operations, and affords a unique opportunity for KSC people to familiarize themselves with this scope," Hal Mehrens said. Mehrens is (See LECTURE, Page 4)



## To Take The First Step ... They Need Our Help

How can you help youngsters like Charlene Parson, above?

Nine-year-olds Suzy Crisco and Harriet Hudgins, daughter of KSC's Wally Hudgins, did it by holding a backyard party. They made \$3 and donated their entire profits to the Crippled Children's Aid Society. Their motivation: "We wanted to help."

Said Ruth Tennis, corresponding secretary for the society: "It's a wonderful inspiration to know that children who are healthy are concerned about the children who cannot walk, run and play."

As KSC employees, the United Fund doesn't ask us to hold backyard parties, or to solicit money in any other manner. All they ask is for us to contribute whatever we feel is our fair share.

When such funds will be used, among other things, to help crippled youngsters take their first step—it doesn't seem like too much to ask.

## West Coast OGO Launch Set Today

An Orbiting Geophysical Observatory satellite — OGO-C — is scheduled to be launched from the Western Test Range at Vandenberg AFB, California, no earlier than today.

It will be the first NASA satellite launched by a Thrust-Augmented Thor-Agena D rocket.

It will also be the first launch at the Western Range under the direction of the Kennedy Space Center. Robert H. Gray, Assistant KSC Director for Unmanned Launch Operations, will direct the launch activity. Joseph B. Swartz is assistant launch director, George Fike is spacecraft coordinator, and W. S. Courtwright is vehicle engineer.

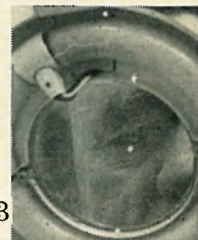
If successfully placed in orbit, the 1,150-pound OGO-C will concentrate on near-Earth space phenomena. Emphasis will be on global mapping of the geomagnetic field, on measurements of the neutral, ionic, and electron composition of the Earth's atmosphere.

Data will be correlated with solar ultraviolet and X-ray emissions, and such events as particle dumping in the auroral zones and airglow. The satellite will carry 20 scientific experiments.

OGO spacecraft contain more than 100,000 separate parts. With booms and solar panels fully extended in orbit, the OGOS measure 49 feet long and almost 20 feet wide.

### INSIDE

Who is this man?  
What is he doing?  
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## John Lacy Named Chief KSC Counsel

John P. Lacy has been appointed acting chief counsel for the Kennedy Space Center, succeeding Charles I. Longacre, who recently resigned from government service.

Lacy will provide legal advice and assistance to the Center Director and to all organizational elements of KSC. Specific responsibilities include legal counsel on procurement and labor matters, and on administrative actions within the Center.

He will advise on the legal relationships between the Center and all other agencies and will represent KSC in certain claim actions.

Lacy comes to KSC from NASA Headquarters in Washington where he served as an attorney in the Office of Chief Counsel. He was appointed by NASA Administrator James E. Webb to serve on the Board of Contract Appeals, a position he filled for two years.

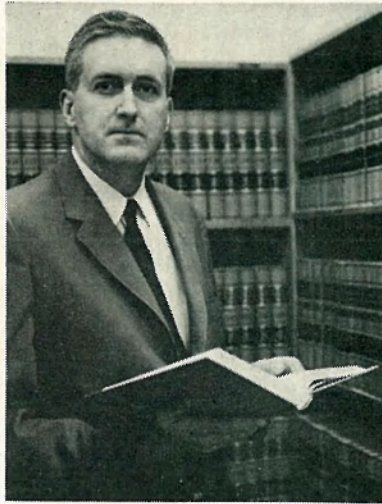
Previously, he was an attorney in the Office of General Counsel for the Navy's Bureau of Weapons. Prior to that he spent eight years in private law practice in Chicago and New York.

A law graduate of the University of Virginia, he also holds a degree from Harvard University.

Lacy lives in Cocoa Beach with his wife, Alice, and their four children.

### CABELL A CONSULTANT

General Charles P. Cabell (USAF ret.) has joined NASA as a consultant to Administrator James E. Webb on organization and management development activities.



John P. Lacy

## Eleventh Symposium Schedule Announced For Space Engineers

Plans for the Eleventh Annual International Space Electronics Symposium, to be held at the Fountainebleu Hotel, Miami Beach, November 2-4, have been announced by symposium chairman Edwin A. Speakman of the Franklin Institute in Philadelphia.

Hosting agency for the symposium will be the Institute of Electrical and Electronic Engineers (IEEE) with an internationally prominent panel chosen to highlight the occasion.

Panel members will include: Alexander H. Flax, Assistant Secretary of the Air Force, Research and Development; Dr. Robert R. Gilruth, Director, NASA Manned Spacecraft Center; Dr. Homer E. Newell, Associate Administrator for Space Science and Applications, NASA Headquarters; Dr. William H. Pickering, Director for Jet Propulsion Laboratory; Gen. Bernard A. Schriever, Commander, Air Force Systems Command; and Dr. Wehrner von Braun, Director, NASA Marshall Space Flight Center.

## Hunters Oiling Rifles As New Season Nears

Hunting on a portion of the Merritt Island National Wildlife Refuge near Titusville during the 1965-66 waterfowl hunting season will be open to the public according to the Bureau of Sport Fisheries and Wildlife and NASA.

The Refuge, comprising approximately 37,700 acres of land acquired by NASA for KSC, was established in August 1963 under terms of an agreement between the Department of the Interior and NASA.

This action is in keeping with the Bureau's program to develop the recreational potential of national wildlife refuges where such use is compatible with the management objective of each area.

The program also furthers the NASA Kennedy Space Center's policy of affording controlled public access without interference with operations.

Impoundments and access roads constructed by the Brevard County Mosquito Control District have materially improved opportunities for duck hunting on the refuge.

### Murphy Commended

Major James P. Murphy, a member of the Marshall Space Flight Center at the Kennedy Space Center, has been presented an Air Force Commendation Medal by Brigadier General Edmund O'Connor, Director, Industrial Operations.

Murphy, cited for "outstanding personal skill" from April 1962 to September 1964, was the launch operations officer for the first NASA launch from the Pacific Missile Range, September 28, 1962.

### Wives Hold Meeting

The NASA Wives Club meeting was held at the NCO Club last week. Hostesses were Mrs. W. D. Nowlin and Mrs. J. S. Kennedy.

New members that attended were Mrs. D. F. Benson, Mrs. D. J. Greenway, Mrs. M. C. Williams and Mrs. C. E. Mason.

The following procedures and rules will govern the Merritt Island Refuge hunt, in addition to other applicable Federal and State regulations:

1. Hunters 16 years of age and older will be permitted to apply for advance reservations. Blinds not reserved through the use of this system will be filled on a first-come first-served basis prior to each day's hunt.

2. All hunting will be from 24 blinds to be provided by the Bureau. A blind fee of \$3 per blind per day will be collected by the Bureau to defray the cost of blind construction and administration of the hunt. As many as three hunters will be permitted to hunt from one blind.

3. All hunters will enter the refuge hunting area through the Titusville security gate where they will pay the blind fee and obtain their permits and blind assignments. Routes to and from blinds will be established and designated on maps which will be distributed to all hunters. Parking sites for each blind will be indicated by numbered markers and shown on maps. Some access roads are narrow and rough.

4. Hunting will be permitted only from sunrise until noon five days per week, Tuesday through Saturday, during the period November 25 through December 6 and December 18 through January 9, 1966.

5. Participants in public waterfowl hunts are required to furnish either a retriever or some means of flotation for retrieving birds which fall into deep water. Air-thrust boats will not be permitted on the refuge.

6. Hunters desiring advance reservations must apply in writing prior to October 25 to the Refuge Manager, Merritt Island National Wildlife Refuge, P. O. Box 956, Titusville, Florida, 32780. Applications for advance reservations must contain the name and address of the applicant and the preferred date or dates for which the reservations are desired. Blind fees should not be submitted with application. Reservations for preferred hunting dates will be awarded by means of an impartial public drawing to be held after October 25. Applicants will be notified as soon as possible after the drawing.

7. Only one application will be accepted from any one individual. A maximum of one blind for a maximum of three dates may be applied for on one application. Applicants may specify up to four sets of alternate dates for consideration in the event that first-choice dates requested have already been filled. An applicant, at his discretion, may list the names of other members of his hunting party. Reservations are not transferable and will not be honored at the check station unless the applicant or one of the party members listed on the application takes part in the hunt.

# SPACEPORT



# NEWS

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# Roving Trouble Shooter Spots Tiny Flaws

It was a low point in the U. S. space program. The last Vanguard had unceremoniously blown to pieces three feet over its launch pad, and American rocketry prestige had taken a beating.

Now another Vanguard — test vehicle four — stood ready for flight. It was St. Patrick's Day 1958, and hopes were again buoyed.

Early the morning before, only hours from liftoff time,



Comer uses jeweler's glass . . .

a short, barrel-chested West Virginian, toting an odd assortment of apparatus, checked through the gates of Launch Complex 18, and sauntered up the service structure.

At each level he stopped and carefully, methodically inspected the rocket stages; probing here, checking there, until he was satisfied.

Time was growing short when he noticed something on the second stage. On closer examination he found a tiny screw that had somehow chewed its way into the underside of a fuel tube.

His discovery in the 11th hour halted the launch for a day, until repairs could be made.

The vehicle worked perfectly the next day, launching Vanguard I into orbit. It is, in fact, still circling the Earth today, and will continue to for years to come.

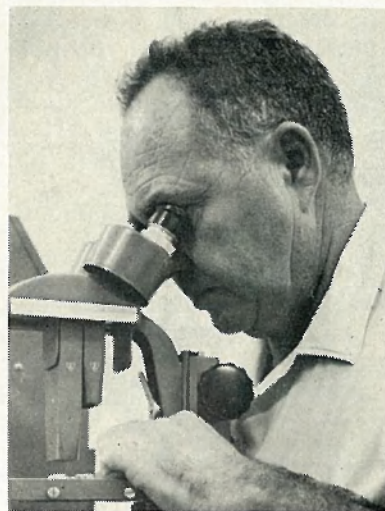
The man was Mason R. Comer, Jr., and he has one of the most unusual jobs in NASA. Although his official title is technical staff engineer, Comer is a roving trouble shooter for the Kennedy

Space Center.

Since he began work at Cape Kennedy nine years ago he has, through persistent, detailed inspections, found more than 150 major faulty items on launch-ready vehicles and spacecraft, many of which, if left unchecked, would have aborted or scrubbed the mission.

He has attained such a reputation, in fact, that his boss, KSC Assistant Director for Unmanned Launch Operations, Robert H. Gray, depends on his report, making sure Comer is satisfied everything is right, prior to allowing a launch to proceed.

Comer works by no set rule book or specifications sheet, but he has an uncanny perceptive knack for spotting possible trouble areas among the hundreds of thousands of



. . . . a microscope . . . .

parts that make up today's complex launch vehicles.

Because so many transistors and diodes and various other items are now made too small for the human eye to perceive any faults, he works a great deal with microscopes.

One unitron metallurgical scope, for instance, can magnify objects 2,200 times in photographs.

Other unusual equipment includes an electronic stethoscope, a flexiscope for "seeing around corners," leakage detectors and an X-ray machine.

Comer has two laboratories for his work, one in the EO Building and one in Building AE, both at Cape Kennedy.

Most of his time is devoted

to launch vehicles — Deltas, Atlas/Agenas and Centaurs.

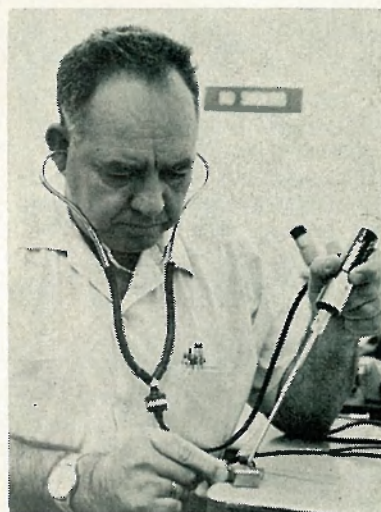
Occasionally, his unique skills are called upon during the final count. On a recent Ranger launch, for example, trouble popped up, and he hustled out to the pad to help find the source while the count was held.

He found a faulty battery that wasn't properly venting potassium hydroxide. The launch was delayed a day while repairs were made, but the Ranger scored a brilliant success.

Comer determined the reason for the trouble, and recommended corrective measures that could preclude such a defect occurring again. Action was taken and the trouble has never recurred.

On a Tiros satellite he found a wire that had been brushed loose in last-minute cleaning; on a Relay spacecraft he pointed out possible problem areas down to tiny inner cabling; and on the Syncom satellite, he correctly predicted a certain type plastic would fail under stress. His string of accurate diagnoses is unlimited.

He can instinctively spot minute solder flakes, stray



. . . and special stethoscopes . . .

metal chips, broken wires, brush bristles or a hundred other defects that would escape less trained eyes.

Comer relies on 20 years of experience in the rocketry business to help him ferret out such elusive flaws. And, during an inspection, if he isn't sure of something or doesn't understand it, he never hesi-

tates to call someone over and have it explained to him.

He began his aerospace career in 1945 while working on guided missiles with the Wilmotte Company in Washington, D. C. Following completion of a radio engineering school he worked on Aerobee experimental rockets with the Naval Research Laboratory, and later transferred to the Viking rocket project at White Sands, New Mexico.

Through the years he got to know rocket components inside and out, and in 1956 joined the Vanguard team at Cape Canaveral, later transferring to NASA when it was organized.

Where once he was eyed with suspicion by technicians and engineers as he questioned work on this part and that, he has now earned a reputation as a trouble shooter par excellence. He is, in fact, often consulted by other agencies to solve various problems bugging their vehicles.

Comer lives at 1249 Seminole Drive, Satellite Beach, with his wife Edith, and their four children.

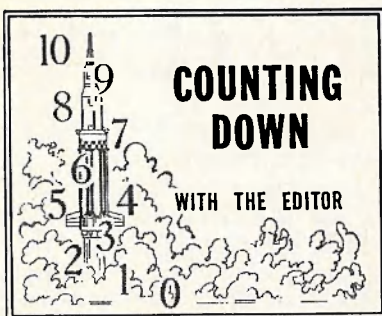
"My work is unorthodox," he admits. "I don't have any set checklist. I approach each problem with an open mind and try to narrow down possible causes until it is solved."

That he has been successful in his efforts is borne out by a glance at the launch records of the vehicles he's worked on. The Delta's, for example, is one of the best ever accomplished.



. . . To catch tiny flaws.





Procurement officers from NASA headquarters and from field centers all across the country will hold their annual meeting at the Kennedy Space Center next week.

The three-day Conference, which runs next Tuesday through Thursday, will feature speeches from NASA Headquarters personnel, briefings on the latest procurement procedures, and panel discussions on mutual ideas and problems.

KSC Director, Dr. Kurt H. Debus, will welcome the group Tuesday morning, and Center Procurement Chief M. E. Haworth will give the opening address.

Keynote speaker will be William Rieke, Office of Industrial Affairs, Deputy Associate Administrator, NASA Headquarters.

The procurement officers meet at a NASA center annually. A highlight of this year's affair will be a complete tour of the Spaceport.

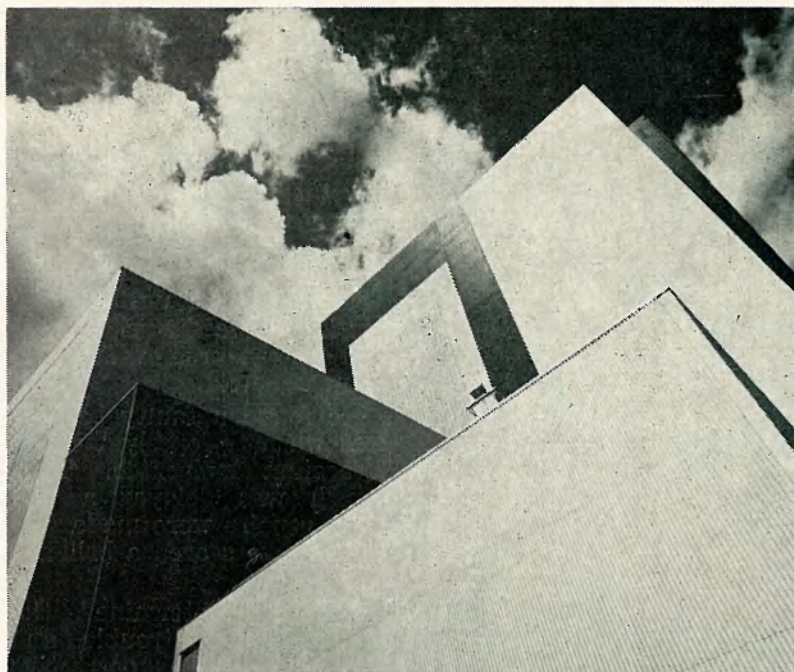
Haworth has overall responsibility for coordinating the meeting, and arrangements are being handled by Tom Davis, KSC industry advisor, and Ed Johnson of the Public Affairs Office.



Dear Sir:

I have a cat named April who is expecting kittens in a few months. I am very interested in rockets and spaceships, and wish to have my cat become the first mother to have kittens on the moon. Please notify me if you wish to have her sent down to Cape Kennedy.

Mary H.  
Tulsa, Okla.



**FORMING** an intriguing pattern of geometric angles in this photographic conception, the Vehicle Assembly Building was one of the many stops made during the Bendix-press tour of the Spaceport Tuesday. Local newsmen and media representatives from out of state were guests of Bendix, and were briefed on the work the company performs here under contract to the Kennedy Space Center. Bendix provides launch support services, engineering support, materials cleaning and testing, ordnance storage and checkout and propellant services. Raymond L. Clark, Assistant KSC Director for Support Operations, welcomed the group of Bendix officials and newsmen.

## Spacemobile Lecture

(Continued from Page 1)

Assistant Chief of Educational Services at the Center.

Cardova will cover the history of rocketry, propulsion and special problems relative to space research and exploration. Additionally, he will explain the functions of satellites, how they orbit and what benefits they provide, as well as covering the biological aspects of space flight, and man's responsibility in the Space Age.

He will further describe NASA's present activities, results of past programs and plans for future ones.

Scale models of spacecraft and rockets are used to help explain NASA's scientific programs, and experiments are conducted with propellants.

This will essentially be the same presentation presently given to more than half a million people per month by the 35 traveling Spacemobile lecturers.

The program is being held in conjunction with a full day of educational services activities, which includes a conference with school teachers.



**SUSIE Walls**, of the Marshall Space Flight Center's Resident Office at KSC, has a new title. She's been named "Miss Sea Dunes." She won in competition with several models during a summer long series of fashion shows.

## NAVIGATIONAL AIDS

NASA is studying a number of satellite techniques to meet the increasing demands of modern across-ocean transportation for improvements in means of position determination, communication and traffic control.

## Saturn IB Instrument Unit On Way

The Saturn IB instrument unit — the brain nerve center of the Saturn vehicle — is en route to the Kennedy Space Center. It is due here about next Tuesday aboard the NASA barge, Palaemon.

International Business Machines Corp., assembled the instrument unit at its Huntsville plant under the supervision of the Marshall Space Flight Center, which designed it.

MSFC and IBM are jointly responsible for the 21.7 foot diameter, ring-shaped unit. It is a three-foot-high "wafer," which weighs two tons. It will be fitted immediately above the second stage of the Saturn IB vehicle on the pad at Launch Complex 34.

The instrument unit provides commands for engine gimbaling, inflight sequencing of engine propulsion system, staging operations, telemetry and all primary timing signals.

Components are fastened on panels mounted to the inside perimeter of the instrument skin. The Saturn IB unit is essentially the same instrument section which will be used on later Saturn V launch vehicles.

The first Saturn IB is scheduled to be launched from KSC early next year.

## \$2 Million TV Pact

Convair Division of General Dynamics has been awarded a \$2,198,500 contract to design and install a broadcast-quality television system at the Kennedy Space Center.

It calls for installation of 85 television cameras, 280 monitors and a video switching system capable of handling 60 input channels and 100 viewing monitors simultaneously.

The closed circuit TV system will permit launch officials to watch pre-flight and launch activities of the Saturn V vehicle. The system will also be "broadcast compatible," so its pictures may be fed to commercial television networks for public viewing.