

# SPACEPORT

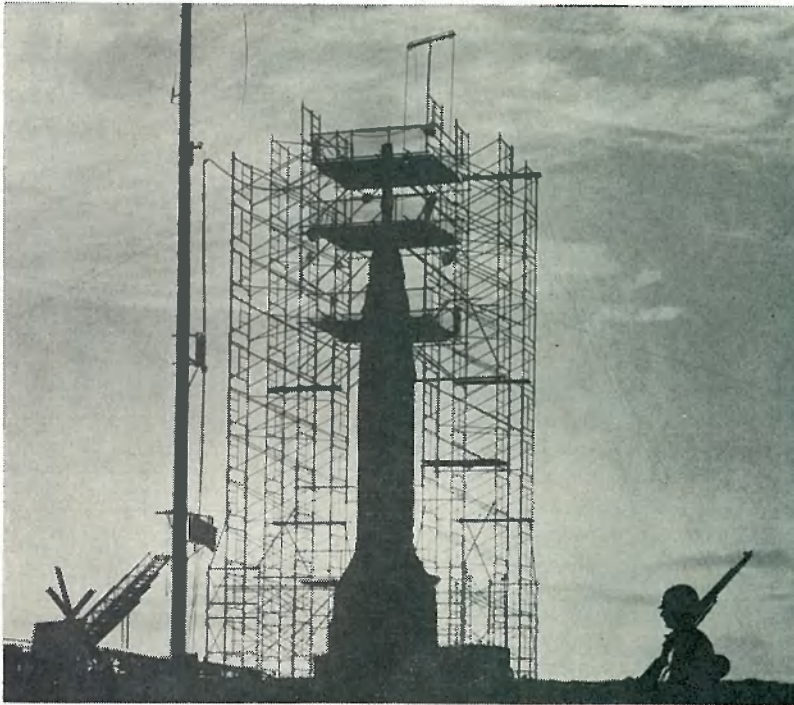


# NEWS

Volume 2, Number 29

NASA Launch Operations Center, Cape Canaveral, Florida

July 18, 1963



**THIS WAS THE SCENE** at Canaveral 13 years ago, as Army guards kept watch on Bumper No. 8, which, on July 24, 1950, became the first missile launched from the Cape. For a colorful eyewitness account of the flight and the conditions at Canaveral then, turn to Page 3.

## Second Syncom Satellite Being 'Tuned' For Launch

A second Syncom active repeater communications satellite is undergoing final check-out tests this week, and is scheduled for launching no earlier than July 23.

Like the first Syncom, launched last February, the 125-pound hat box-shaped spacecraft is aimed at an orbit 22,300 miles above earth.

Syncom is designed to test the feasibility of a synchronous altitude communications satellite system. The experimental satellite would handle voice, teletype, and facsimile transmission.

Although the launch of Syncom I was successful, a malfunction in the satellite's power system caused the communications, command, and telemetry system to fail when the satellite reached its synchronous altitude.

Syncom II will ride into space atop a Delta booster. The Field Projects Branch of NASA's Goddard Space Flight Center is responsible for the launch.

## ECLIPSE DUE SATURDAY; VIEW IT WITH CARE

The first total solar eclipse to pass over North America in nine years will take place Saturday, but optical experts warn not to watch it without eye protection.

Path of the total eclipse will start in northern Japan, cross the northern Pacific, Alaska, northern Canada, Maine and the North Atlantic.

Floridians will see only a partial eclipse — about 50 per cent — in the late afternoon, between 4 and 6 p.m.

### Official Observers

Astronaut Scott Carpenter will be aboard a jet aircraft that will fly across Canada, eight miles up, at a speed of 575 mph Saturday, to give scientists the longest possible viewing time of the solar eclipse.

Among the phenomenon to be viewed will be "Baily's Beads," a crescent of minute, gleaming beads of light strung in an irregular outline along the moon's edge.

The beads last only a few seconds before the total eclipse. They result from the sun's rays silhouetting the mountains and valleys of the lunar rim.

Also aboard the aircraft will be Dr. Jocelyn Gill of NASA, a lady astronomer. She will point out to Carpenter various scientific details which astronauts may encounter in future space flights.

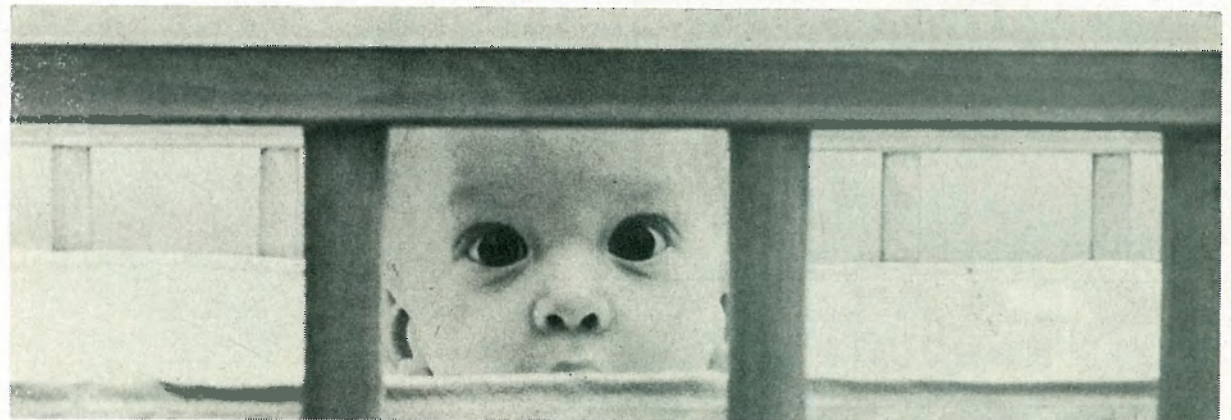
Observers have been warned not to view the phenomenon with the naked eye, telescopes, binoculars or sunglasses. Permanent retinal damage and blindness have been reported after eclipses in the past.

It is advisable to watch the eclipse through overexposed photographic film or a "pin-hole device" which avoids the harmful infrared rays.

This can be made by punching a clean hole with a pin through a piece of cardboard. The viewer should turn his back to the sun, hold the punched cardboard over one shoulder and let the sun rays come through the hole onto another piece of white cardboard.

The sun's image is thus projected on the white cardboard with no damage to the viewer's eyes. No attempt

(See ECLIPSE, Page 8)



**WIDE-EYED** six-months-old John Hollinshead, was the subject for this prize-winning photograph, snapped by his father, Chuck, of LOC's Technical Information Office. The picture won top place in the babies and children division of the Orlando Sentinel's weekly photo contest.





## THE ROAD TO INFINITY

Thirteen years ago next Wednesday, at 9:28 a.m., a 56-foot, two-stage missile — "Bumper No. 8" — thundered skyward from Cape Canaveral and launched an era.

Although the Bumper would be hopelessly dwarfed in the shadow of a modern-day Saturn, it did christen the Cape and pave the way for more sophisticated vehicles to follow.

The Bumper, a V-2 booster with an Army WAC Corporal as a second stage, flew 200 miles down the Atlantic Missile Range.

Since that time, more than 1,400 vehicles have been launched from the Cape, with destinations ranging from the South Atlantic to Venus.

What will lie ahead in the next 13 years is open to speculation and only the most imaginative speculator will be able to visualize where we'll be in space.

By 1976, lunar colonies, space stations and interplanetary travel should all be realities. And, again, the prime launch area for all missions should be here.

Bumper No. 8 may have gone only 200 miles, but the launch path it trailblazed leads to infinity.

## CONTINUE TO LEARN

In line with this week's feature story on NASA's cooperative training program (Page 4), the following editorial, based on excerpts from a graduation speech by DeMarquis D. Wyatt, Director of NASA's Office of Programs, is printed for its value to full-time students and to those of us who continue our studies after our formal education has been completed.

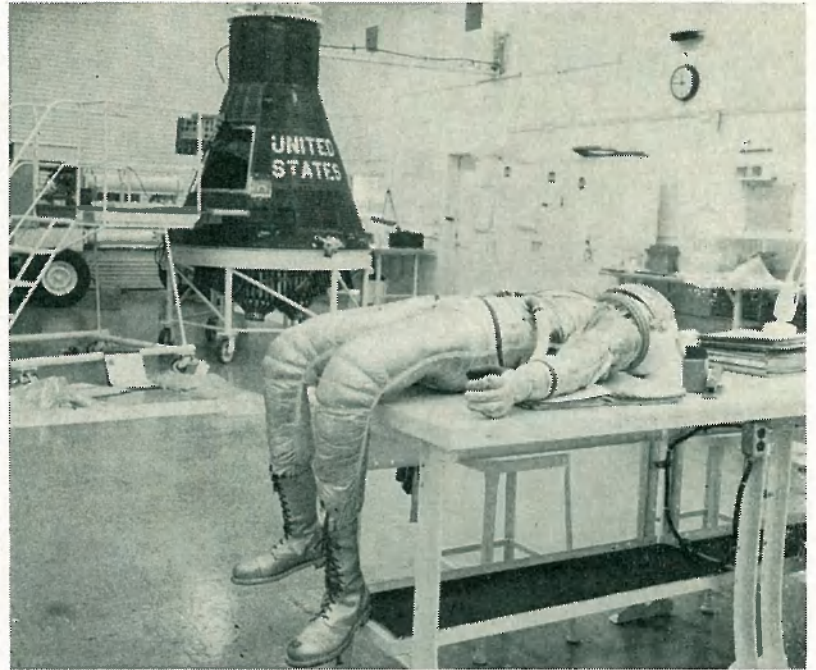
"Today's graduate must maintain a continuing learning process, if he expects to achieve leadership. The space age is the age of change.

"If you think you can rest on what you have already learned, you will find yourself overtaken and pushed aside by the eager young graduates of tomorrow.

"Never before has a civilization seized upon and exploited a new technology at the rate man is now exploring the new dimension of space. In the 2,060 days since the Russians launched Sputnik, NASA has conducted 96 major space vehicle launchings, an average of one every 22 days. In this period, the USSR has announced about 35 successful space flights.

"NASA's impressive accomplishments will be dwarfed by United States activities during the rest of this decade as our understanding of the nature of space, the sun, and the map of the Universe are greatly enhanced.

"In an age of exploding knowledge in all of the physical sciences no area of human activity better focuses and dramatizes the meaning of today than does this boldest, most challenging arena of space."



**THIS SCENE**, in the White Room or Hangar S, caused a considerable amount of double takes from passersby last week. No, it isn't Cooper napping — merely a wax dummy spaceman, who has since been strapped in a mock Mercury spacecraft that will be exhibited around the country.

News Photo by Ed Thomas

## CANAVERAL DISTRICT CORPS OF ENGINEERS DEDICATE BUILDING

The Canaveral District Corps of Engineers, whose job it is to see that NASA gets the most for its construction dollar, dedicated a building of their own Tuesday afternoon at Merritt Island.

The handsome, two story edifice, located just south of the Barge Canal on A1A, houses for the first time all district members of the Corps.

Major General A. C. Welling, U.S. Army Division Engineer, gave the dedication address before a large crowd. He said the Canaveral District Corps has before it the largest construction mission in the world — one that will make the construction of the pyramids look like a child's game with building blocks.

"What the Canaveral District and its Air Force and NASA clients are creating here is, among other things, a spaceport for interplanetary travel," he said. "The advanced nature of the ground facilities will parallel the scientific progress out in space itself. The demands on the construction community are as momentous as the scientific breakthroughs which are making space travel possible.

## SPACE ALMANAC

A CHRONOLOGY OF  
EVENTS IN SPACE  
EXPLORATION AND  
RESEARCH.

### 5 Years Ago

July 23, 1958 — Thor-Able re-entry test vehicle made another successful 6,000-mile flight; the nose cone and mouse passenger, however, were not recovered.

### 3 Years Ago

July 18, 1960 — Dr. Robert C. Seamans, Jr., was named Associate Administrator of NASA to replace Richard E. Horner.

"Already at Canaveral we have constructed the world's tallest moving structure. Now the District has let contracts leading the way to the construction of even a mightier, taller skyscraper of the transportable variety.

"If some future launching concept dictates bringing the pad to the missile rather than vice versa, we expect the Canaveral District to be equal to the task."

LOC was represented at the ceremonies by Colonel Clarence Bidgood, Chief, Facilities Office.

**SPACEPORT**  
  
**NEWS**



# CAPE VETERAN RECALLS FIRST LAUNCH

**EDITOR'S NOTE:** Next week marks the 13th anniversary of Cape Canaveral's emergence as the free world's chief missile test facility and spaceport.

At 9:28 a.m. on Monday, July 24, 1950, a Bumper (V-2) booster with an Army Wac Corporal second stage was launched near the Cape's easternmost tip, and traveled 200 miles over the Atlantic.

Few of Canaveral's thousands of workers today were on the job then to eyewitness this bit of space history. One who was, Cape Fire Chief Norris C. Gray of Pan American, recalls that memorable day in the following account of the first launch and the conditions surrounding it.

\* \* \*

"There wasn't much on the Cape in 1950, except the lighthouse and a few private homes. The central control building was made by putting together some trailers and old fish shacks.

"The launch pad itself was in a clearing just a little north of the lighthouse. The gantry was just some painters' pipe scaffolding put together around the missile. It was pretty rickety, and we had to climb it every hour on the hour to check the fuel pres-

sure in the second stage.

"The blockhouse was an old tar paper shack surrounded by sand bags. Wires leading from the blockhouse to the pad were in an open wooden trough.

"Water for fire protection was pumped in from a nearby pond.



Chief Gray

"The first launch was scheduled for July 19, but was scrubbed after a long day of delays.

"Because the fire department crews had to stay near the missile 24 hours a day we slept on the pad itself. I didn't get home for two weeks.

## Bathed In A Pond

"Food was sent up daily from Patrick and we bathed in a nearby pond. We shaved about every third day.

"There were a million mosquitoes at the Cape then and they pestered us day and night. They were so thick, when I sprayed repellent on my arms, they would get matted in the hair and my arm would look black. We had to sleep under nets.

"Some of the men slept in tents down by a pond, a little way back from the pad. During the night snakes

would crawl right through their tents to get to the water. It got so bad they had to take fire extinguishers to bed with them and squirt the snakes when they crawled through.

"There weren't any gates or security police then, and soldiers from the Third Infantry Division served as guards around the pad area.

## Woman Wouldn't Budge

"On the day of the first launch, all the Cape residents were evacuated to safety. That is, all except one. There was an old lady who lived about a half mile south of the missile site, and she refused to budge.

"When anyone approached her house, she aimed a double-barreled shotgun at them and they scrambled for cover. For some reason though, she would talk to me, and I finally convinced her to leave. She told me she didn't even know how to load that shotgun.

"On the day of the launch it was pretty cloudy, and I remember the test conductor waited until there was a hole in the sky and he hit it.

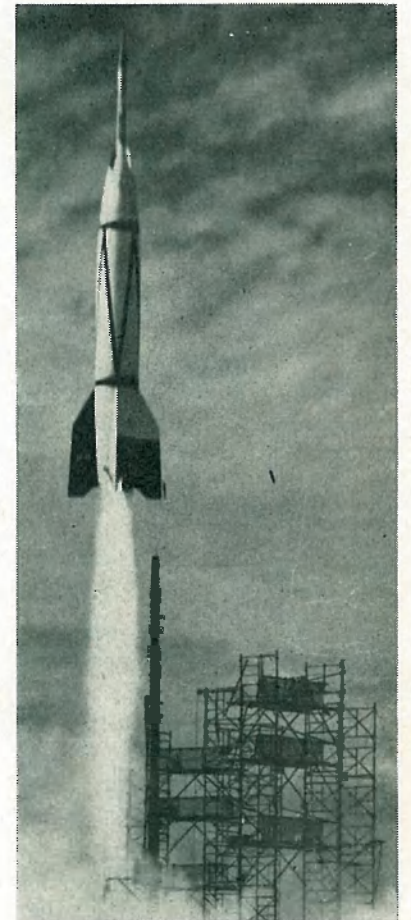
## Rigged Mirrors

"We were in the blockhouse about 800 feet away and had mirrors rigged up so we could see the bird.

"I had seen some missile firings at White Sands, New Mexico, and knew what to expect, but the others didn't.

"When the vibration waves hit the blockhouse, they shook it quite a bit, and when I looked around, everyone was squatting on the floor as if a bomb was about to explode.

"Then I ran outside to watch the Bumper disappear through that hole in the sky."



## Champagne Flight

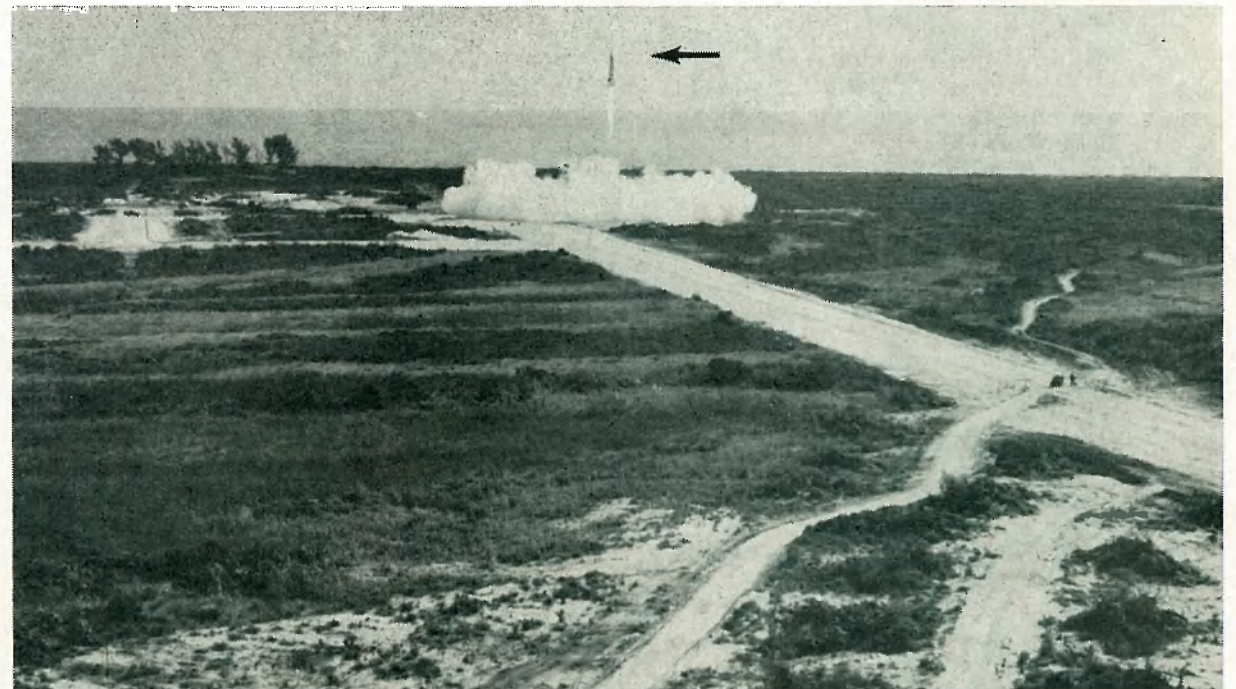
Bumper No. 8, launched July 24, 1950, was actually five days late. The original firing had been scheduled for July 19.

The following article on Bumper 7's first, abortive launch attempt was published in the Florida Times Union, July 20, 1950.

"An attempt will be made again next week to launch a reluctant rocket which never got off the ground in nine trying hours yesterday.

"Just about everything that could go wrong with the first experiment in low-angled firing of a guided missile did.

"When they finally got around to pulling the firing switch on the giant device — it produced only a popping noise, hardly worthy of a champagne cork."



**LIGHTHOUSE VIEW** of the Bumper launch (arrow), graphically shows how barren Canaveral was 13 years ago. There were no paved roads, and, other than private residences, no buildings.



# Students Gain Experience Via Co-op Program

Eighty students, from nine universities, are working on space projects here at the Cape as part of NASA's participation in a work-study cooperative program.

Directed and administered by the Training Branch of the LOC Personnel Office, the program enables students to add valuable practical experience to their academic work.

A spokesman from the Training Office said the program was started 57 years ago at the University of Cincinnati. Its originators believed that programs which provided academic work alone were inadequate. Principles, they believed, could be studied in the abstract, but direct observation and actual work experience were imperative if the student was to be most effective.

## Alternate Terms

In its present form, the cooperative plan is a combination of classwork and practical experience in an organized program in which students alternate one term of classwork with one term of employment.

The program requires that the work be directly related to the student's field of study and that it be diversified. It requires also that the work shall increase in difficulty and responsibility as the student progresses through his academic studies.

Here's how the program operates: A full time job is obtained in an industrial concern or government agency. The job is shared by two students; one works on the job while the other attends college. At the end of a given period of study, they exchange places. Thus, the job is kept filled and each student is able to spend at least half his time in college.

## Benefit To All

"I think that the reason the program has worked so well for so long is that it is of real benefit to all parties concerned," a program coordinator from the Training Office said.

"But I know very well why it has worked well here on the Cape," he went on. "Throughout all the offices here where these students work, there are people who have seen the value of the program and who have simply seen to it that it was properly utilized. These people — and the students — deserve a great deal of credit."

He listed some of the advantages of the program:

\* The employer can train



Clifford Wood

promising students in the techniques of his organization — with an eye to permanent employment after the student's graduation. Students can often free high salaried personnel from confining but necessary tasks.

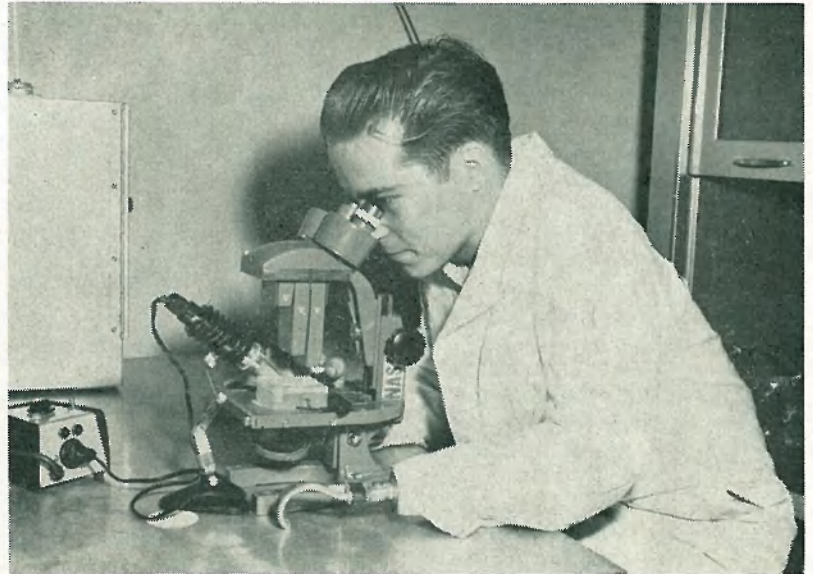
\* A student gains because the program combines learning and experience. He usually has one year of experience when he graduates. And he can earn partial — and in some cases total — funds to pay for his education. He can usually command a better salary upon graduation.

Universities represented by students in the program here are Auburn, Drexel Institute, Florida State, Georgia Tech, Louisiana State, Virginia Polytechnic, Miami, Florida and the University of South Florida.

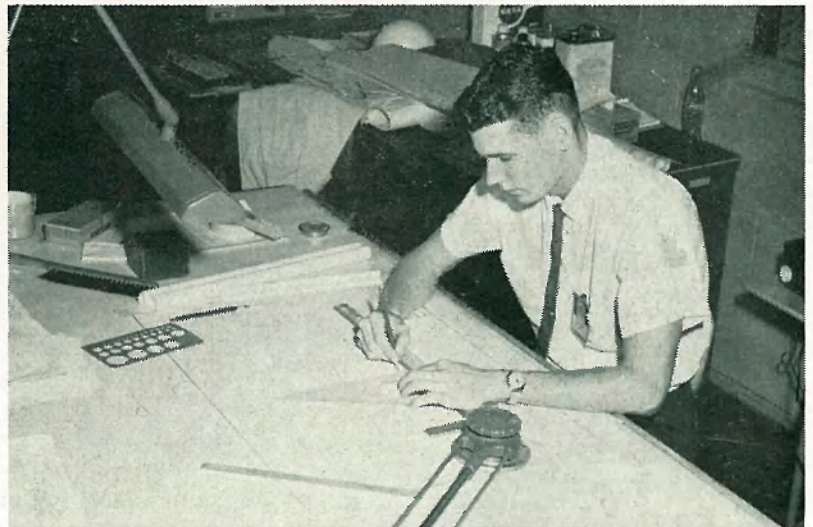
Major fields are accounting, economics, engineering physics, engineering science, physics, math, electrical engineering, industrial engineering, and mechanical engineering.

## MSFC Hires Scholars

The Marshall Space Flight Center has hired 255 college students and professors for 90-day temporary positions during the summer months.



James E. Scott



Douglas McGuffie



George Von Arsdall



# MSC Offers Aerospace Intern Plan

Faced with the challenge of sending men to the moon and returning them before the end of this decade, NASA's Manned Spacecraft Center has developed two programs to recruit talented personnel in support of its mission.

Already 37 top-ranking college students and recent graduates have started work in these programs.

Twenty-seven comprise the first Aerospace Summer Intern Program. Initiated by MSC, this plan gives outstanding students an opportunity to correlate experience with academic training.

The remaining ten are graduates who make up the second annual Management Intern Program. Their administrative apprenticeship lasts one year, while the summer program is for a 75-day period of employment.

The summer interns were selected from among undergraduates who have completed their junior year, and from graduate students planning to return to school for graduate work.

They have all attained a "B" average or better and have been recommended by the dean of their college. They represent schools and universities in thirteen states.

The 17 scientific and engineering summer interns have a one hour class daily in Spacecraft Engineering, Design, and Operation. This course has been developed by senior technical staff members of MSC and will constitute a special course based on experience and data gained to date from the Mercury, Gemini and Apollo projects.

There are ten summer interns in public and business administration fields. They will attend a weekly two hour seminar comparable to graduate courses in management theory.

The summer program will benefit MSC in recruiting exceptional graduates and improve communications between colleges and NASA.



Larry Turner — Florida



Charles Schry — Florida



Tom Wright — Auburn

## Capeside Inquirer

# Collegians Thankful For Opportunities Offered Through NASA's Co-op Program

NASA's Co-operative Student Program is going full blast this summer, with some 80 collegians working in the Canaveral area.

How do they feel about the unique opportunities presented by the program? That's what the Capeside Inquirer asked them.

**Larry Turner:** "It is an ideal way for a prospective engineer to acquire practical experience in his chosen field. The program also makes it possible for students to finance their own education."

**Charles Schry:** "I think the plan is all right. It gives us an opportunity to receive OJT to see how engineers and mechanics coordinate jobs. Besides, it sure beats the new

trimester system, giving us a break from steady classroom participation."

**Tom Wright:** "I think the Co-op plan provides a wonderful opportunity for its participants. As in my case, it finances my way through college and at the same time provides me with invaluable work experience towards my future career as an engineer."

**Harry Schindehette:** "I believe the NASA student program is one of the most worthwhile opportunities offered to college students."

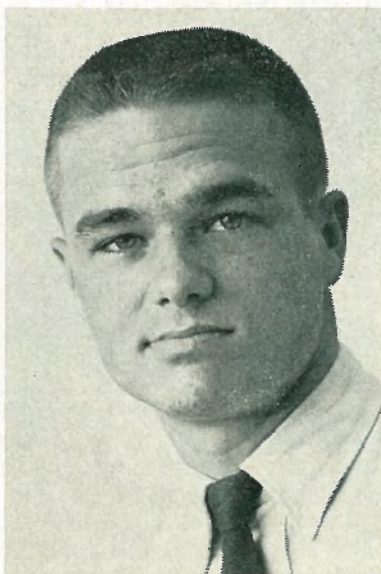
**Jim Carleto:** "The Co-op plan helps round out a student's education by supplementing his studies with practical experiences in applying classroom techniques.

It also gives him the opportunity to explore the various aspects of his prospective field and decide whether or not he has chosen the right major."

**Richard Bird:** "Essentially, the Co-op program was devised for two reasons: (1) to give the student an opportunity to imbibe knowledge which will help him in his studies; and (2) to train the student in the company's procedures, so that upon graduating and the acceptance of a position with that company, the student will be of greater immediate value than the graduate who has had no practical experience. To this end, NASA's program has flourished."



Harry Schindehette — Florida



Jim Carleto — So. Florida



Richard Bird — Florida





**LOOKING LIKE ANYTHING BUT** an aircraft, this Aero-Spacelines ex-stratocruiser taxis at Canaveral's skid strip after delivering a dummy S-IV stage from California. The "Pregnant Guppy" can cut delivery time on the S-IV from three weeks to 12 hours.

News Photo by Russ Hopkins

## 'PREGNANT GUPPY' ARRIVES AT GAPE ON MAIDEN FLIGHT

Aero Spacelines Corporation's "Pregnant Guppy," the ex-Boeing stratocruiser, converted to airlift the S-IV Saturn I second stage, arrived on the skid strip at Cape Canaveral with a dummy vehicle aboard last week, to complete its maiden flight from the west coast.

The basic stratocruiser was lengthened 16 feet eight inches by installing a special mid-section just aft of the wing, giving the aircraft a total length of 127 feet. The diameter of the fuselage was almost doubled, to 21 feet.

The biggest design change in the "Guppy" is the entire fuselage part just aft the trailing edge of the wing. After landing, the rear section is mounted on a wheeled tripod dolly and is pulled away by a tug, exposing the front section of the fuselage with the S-IV stage nestled in the side of the expanded body.

The top of the cabin was raised over 13 feet and the fuselage was expanded by 12 feet making it the largest plane in the world in terms of cubic capacity.

According to the crew, the flight characteristics were improved and, despite the extreme modification, speed was decreased by only 15 mph, giving the "Guppy" a cruising speed of 250 mph.



**ED JOHNSON** of Protocol, right, points out pad facilities at Launch Complex 37 to Brevard City Managers. Left to right are Joe Hendrick, Titusville; Walter Brown, Eau Gallie; and Jerry Singer, Cocoa Beach. Florida city managers toured NASA-Cape facilities last week.

## Study Seeks To Apply Space Nuclear Power

Two contracts totaling \$123,319 have been awarded to General Electric Company, Inc., and Martin-Marietta Corporation to study the application of nuclear electric power to manned orbiting space stations by NASA's Lewis Research Center.

The studies will provide data to evaluate the potential of nuclear electric power for manned space stations, allow space station designers to incorporate nuclear power into the space station early in the design phase, and help direct the development of nuclear power systems so that they will be available when required for the manned space-

craft.

Two classes of space stations will be considered in the studies and design phases of the contract. The first one would support three to six men over a one to two year period and require a two to five kilowatt power plant.

The second type space station would be the rotating "Y" type about 150 feet in diameter capable of supporting as many as 30 men from one to five years. Twelve to thirty-five kilowatts of generating capacity would be needed for the station which could be launched between 1967 and 1969.

## Retirement Legislation To Congress

Civil Service Commission recently recommended to Congress a major forward step in the long-range financing of the Civil Service Retirement System.

In proposed legislation, the Commission asked that Federal agencies make supplemental contributions to the Retirement Fund each fiscal year beginning in 1965. These contributions would be 0.5 percent of the employing agency payrolls in 1965 and would be increased by 0.5 percent each year until 1986 when they would level off at 11 percent. The supplemental contributions would be in addition to the 6.5 percent of payrolls agencies have been contributing by law since 1957.

No increase is proposed in the 6.5 percent of basic salary now contributed by covered employees. CSC said that employees are paying 52 percent of the cost of the retirement benefits they are now earning.

### Systematic

CSC Chairman John W. Macy, Jr., described the proposal as "a systematic method by which the Government can meet its obligation to its employees who have earned or are earning retirement benefits."

Although employees, by law, have been contributing a percentage of their salaries to the Retirement Fund since the system was established in 1920, it has been only since July 1957 that the employing agencies have been contributing systematically to the fund. Direct appropriations to the fund made before that time were not enough to meet the Government's obligations which have accumulated year by year.

The new method of systematic financing also assumes a continuation of the present level of retirement benefits. If any new or increased benefits were provided, they would not become effective and no benefits would begin to accrue until after funds had been appropriated to cover the estimated past service liability.





NASA AND NORTH American Aviation executives inspect the pitch control motor and the launch escape motor (background); the first Apollo spacecraft components delivered to Canaveral. Left to right are, Sam Beddingfield, Pyrotechnic and Airlight and Structures Section; Orton L. Duggan, Chief, Vehicle Integration and Test Operations Branch, both of MSC; John Moore, Test Manager and Cecil R. Knowles, Quality Control, both of NAA at Canaveral.

## First Apollo Components Arrive Here

The Manned Spacecraft Center at Canaveral received the first Apollo spacecraft components recently, in preparation for the approaching Apollo program tests later this year.

These components, a launch escape motor and pitch control motor, are parts of the Apollo spacecraft launch escape system.

The launch escape motor powers the spacecraft escape system that pulls the Apollo command module clear of the launch vehicle in the event of a malfunction.

An Apollo spacecraft including the command module, the service module, and the remainder of the launch escape system will arrive at the Cape later this year.

Together, these components will make up the first Apollo spacecraft to be launched from Canaveral. The mission of the scheduled launch will be to check launch vehicle/spacecraft compatibility.

Unmanned Apollo spacecraft will be boosted into earth orbit in 1964 for test and evaluation of the many spacecraft systems. These will be followed by manned Apollo flights for training of space crews and development of operational techniques.

Circumlunar flights to develop guidance and control tasks for lunar landing, will precede actual Apollo spacecraft landings on the surface of the moon.

### Bridge Game Monday

A duplicate bridge game, co-sponsored by the Mercury NASA Social Club and the Boeing Bridge Club, will be held Monday at the Patrick Air Force Base Officer's Club.

All interested persons who attend will compete for fractional master points and cash prizes.

Players are urged to be seated for playing by 7:15 p.m. Gentlemen will please wear coats and ties.

Admission charge of 50c per player will be made. Free coffee will be served. If interested, contact Henri Kent, UL 3-4538.

## FRICTIONLESS 'CHAIR' TESTS SPACE SUITS

A frictionless platform to simulate five degrees of freedom, or the forces exerted by an astronaut working in free space, is being developed for the Manned Spacecraft Center.

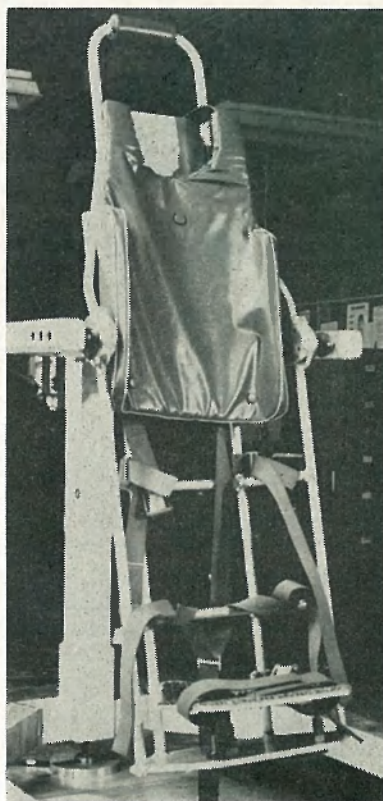
It will be used by MSC's Crew Systems Division to test and evaluate space suits, stabilization devices, tethering lines, and space maintenance tools.

In space, a force applied in one direction is realized with an equal force in the opposite direction. For example, an astronaut about to tighten a bolt in a weightless environment may find himself being torqued instead. This "reaction" in five different directions is simulated by the Martin frictionless platform.

The simulator, weighing about 175 pounds, is lifted from the floor on a cushion of compressed air.

The simulator duplicates five degrees of freedom — pitch, yaw and roll, and two on the horizontal plane (forward-backward, side-to-side). It can rotate and roll a full 360 degrees.

Capable of duplicating only the first moments of the reaction to a force applied by



'Space Chair'

the subject in free space, the simulator cannot overcome the one-gravity pull of the earth.

The simulator, however, floats so freely on its cushion of air that the slightest movement of the subject will cause a reaction, and for all practical purposes, creates the working problems the weightless astronaut would encounter.

## Thermonuclear Fusion May Provide Power

If thermonuclear fusion, the source of the sun's energy, can be controlled, it might someday provide an ideal power source for space propulsion purposes.

Requiring no power-plant or energy conversion system, a thermonuclear plasma would be a self-sustaining source of high-temperature exhaust. This exhaust — electrically charged by-products of fusion — at a billion or more degrees could be used to heat a propellant to provide thrust for a rocket.

Scientists at NASA's Lewis Research Center, currently working toward controlling thermonuclear fusion, estimate the power available from this source would provide ten million kilowatt hours of electricity for each 100-pounds of fuel.

### Deductions Pending

Presently pending before Congress is a bill that would allow Federal employees to have deposits to their credit union savings accounts withheld from their salary. The legislation is supported by the National Association of Credit Unions.



## TICKETS GOING FAST FOR NASA CRUISE

If you haven't bought your Labor Day weekend Nassau cruise tickets yet, time's-a-wasting.

Ralph Harkness, supervisor/treasurer of the NASA Exchange, reports the ducats, scaled from \$64 to \$120 per person, according to accommodations, are going fast.

The cruise is open to all NASA and NASA contractor employees and their families.

Sponsored by the NASA Exchange, the cruise, aboard the SS Yarmouth, will depart Port Canaveral at 11 p.m. Friday, August 30, and arrive the next afternoon at 2 p.m. in Nassau.

It will return to the Port at 2 a.m. Tuesday, September 3. This will give passengers Saturday afternoon, all day Sunday and half a day Monday in Nassau.

Ticket cost includes all meals and air conditioned quarters for the entire stay. Also included are two captain's cocktail parties, a trip to Paradise Beach, a floor show, dancing, and port and customs charges.

If the ship's 402 berths are not filled by August 1, the remaining tickets will be placed on sale to the public.

## ECLIPSE DUE

(Continued from Page 1)

should be made to view the eclipse through the pinhole itself.

The moon will cross the solar surface at a speed of about 2,100 mph.

Because of its brief duration and the very limited area within which it is visible, a total solar eclipse is a phenomenon which many persons never see.

Only 15 sightings have been recorded in the United States since 1806. The last total eclipse visible in Florida was June 8, 1918. The next will be March, 1970.

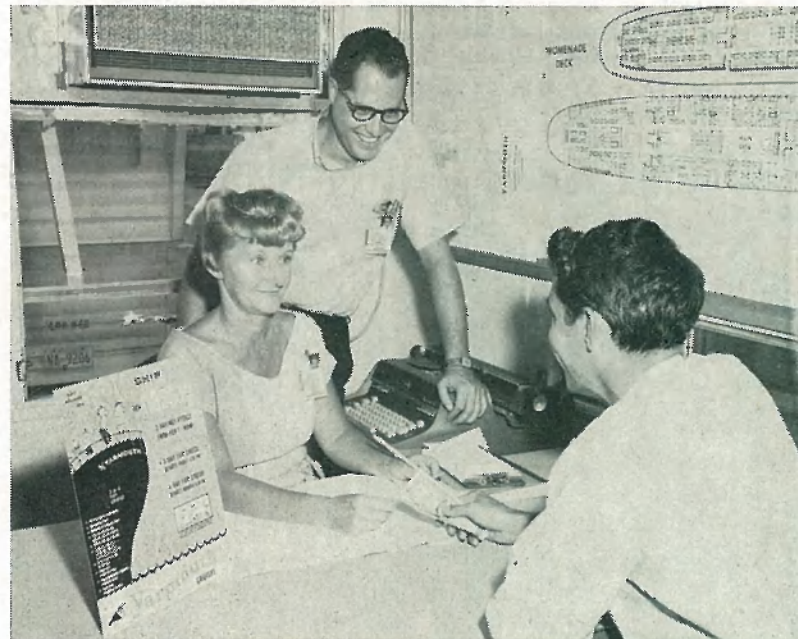
A total solar eclipse affords a unique opportunity for many important investigations, such as:

—Studies of the sun's corona.

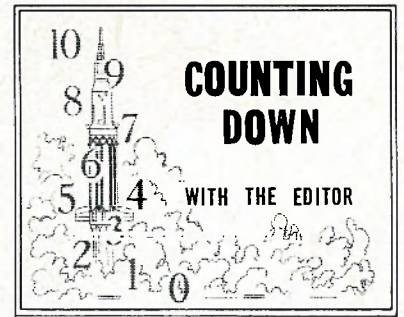
—The search for new planets and other bodies near the sun.



NASA AND CONTRACTOR employees and their families who purchase tickets for the Labor Day weekend cruise to Nassau, will sail aboard the S. S. Yarmouth, above.



TICKET SALES on the Labor Day weekend cruise to Nassau have been moving at a brisk pace. Above, Mrs. Bert Williams books reservations for Herb Myers, center, and Vernon Hitchcock.



If you're a science-fiction buff who likes enough realism in stories to make them believable, there's a real treat in store.

Plans are underway for the first multi-million dollar movie about outer space. It is to be on Mars, based on a selection of short stories — "The Martian Chronicles" — by Ray Bradbury.

"Now that an American has orbited the earth more than 20 times," one of the movie's producers said, "it is time for a serious movie about outer space."

Author Bradbury, happy that five to 10 million dollars will be spent on the film, believes the movie industry has been shortsighted in failing to realize that it can reach a huge market by handling science-fiction with taste.

"Most S-F movies are made by fly-by-night producers," he said. "Serious treatments, done without pontificating, enables our generation to see itself on film in perspective."

"The movie will deal with the relationship between Martians and earth men who arrive to colonize Mars at the end of this century.

"It will show how man is affected by his new environment and how he reacts toward Martians, who are intellectually in advance of man and are peaceable.

"We want something much more than a movie with piles of rocks and desert views in a strange light and with unusual musical effects."

In trying to create an environment for their movie, the producers may consult NASA officials and leading authorities on science, industrial design and art.

\* \* \*

Tom Swifties, chapter two, contributed by Eldon Ward, Test Support Office:

"My guidance system doesn't function," the astronaut said aimlessly.

"I forgot to bring my crayons," he said colorlessly.



Dear Sir:

"To help get your missiles off, why don't you build an overgrown ski ramp with a half mile slant at the right end?"

Harry B. Prescott, Arizona

## NASA NEWCOMERS

Fifteen new employees have joined NASA in the past week.

LVO: Edwin W. Manry, Jr., and Paul D. Toft.

MSC: Billy McWhorter.

Daytona Operations: John M. Shahrigan and Elizabeth F. Brittain.

LOC: Betty L. Smith, Adolph J. Urc, Margaret F. Clark, Fredrick S. Greenfield, Catherine M. Stone, Thomas H. Parton, Jr., Robert L. Cason, John W. Rice, Jr., Joseph P. Reap, and Joseph V. La-Clave.