



MARINER II'S VENUS FLY-BY DUE TOMORROW

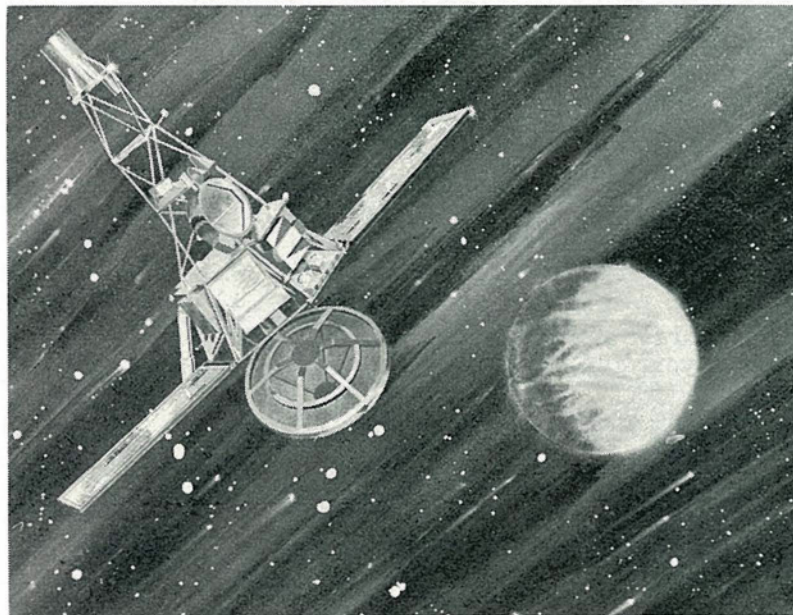
Name Contest Prize Copped By Whiteside

C. A. Whiteside, Deputy Chief, of LVOD's Navigation Group, topped more than 500 entries to win the newspaper name contest with "Spaceport News."

He will receive a cash prize of \$75, less withholding.

Whiteside edged three other entrants with similar titles.

Dr. A. H. Knothe, Technical and Scientific Staff, and N. F.



WAY OUT — Artist H. A. Perez depicted Mariner II's flyby of the cloud-shrouded Venus with the above interpretation.

'RECORD BOOK' VOYAGE BEGAN HERE IN AUGUST

Sometime tomorrow man may get his first closeup "glimpse" of the cloud-shrouded planet Venus through the "eyes" of the Mariner-II spacecraft.

If all goes well, the 447-pound, butterfly-paddled craft will pass within 21,000 miles of Venus and send back data on six separate experiments.

Launched from pad 12 at LOC last August 27th atop an Atlas-Agena rocket, Mariner-II has traveled close to 180 million miles during its historic 109 day journey.

It has already set innumerable milestones, including transmission of intelligible signals from record distances in space.

If all spacecraft experiments perform well:

- A detector will measure the density of cosmic dust.
- A microwave radiometer will determine the temperature of the planet surface and details concerning its atmosphere.
- A magnetometer will measure changes in the planetary and interplanetary magnetic fields.
- An infrared radiometer will determine any fine structure of the cloud layer.
- A solar plasma spectrometer will measure the intensity of low energy protons from the sun.
- An ion chamber and particle flux detector will measure charged-particle intensity and distribution in interplanetary space and near the planet.

Once Mariner-II has passed Venus, its mission will be completed and it will probably enter a permanent solar orbit.

Cal Tech's Jet propulsion Laboratory was responsible (See MARINER, Page 4)

HOLD GREETING CARDS, SEND CASH FOR BASKETS

Employee interchange of Christmas cards will be foregone by many this season, so that underprivileged families in the area may receive needed food and clothing.

A device is underway to collect money that ordinarily would go for purchase and mailing of Christmas cards.

These funds will be turned over to Captain Vern Hall of the local Salvation Army, who will use them to provide food, clothing and other essentials to the most needy families within Brevard, without partiality to city of residence.

The idea for the drive was developed by Harry P. Shockey of the Vehicle and Missile Systems Group.

In a letter to LOC Director Dr. Kurt H. Debus, Shockey said, "Every year at this time the tiresome task of buying, addressing and mailing Christmas cards to the many people we work with and often see every day occurs. Wouldn't it be a gratifying gesture to donate to a NASA basket for

the needy?"

Contributions should be forwarded to the Support Services Office of the Administrative Branch (LO-OA). Deadline is next Wednesday.

Names of donors and the total collection will be published later, and if the drive is successful it may become an annual event.

Four-Day Holiday Set For NASA Employees

NASA and other Federal employees at Canaveral will have a four-day Christmas holiday — courtesy of an executive order signed by President Kennedy.

With Christmas falling on a Tuesday this year, Mr. Kennedy has declared Monday, December 24th, a legal holiday for Federal workers.

The time off will not be charged to annual leave.

There will be no holiday decreed for New Year's Eve, Monday, December 31st, however.



C. A. Whiteside

Hinds, LVOD Data Office, each submitted "Space Port News," and Patti Konneker of MSC offered "NASA Space Port News."

"Spaceport" was chosen as one word because it was described as "a catchword that best connotes Cape operations." News was picked as being "concise and to the point".

The winning entry was selected as "symbolic of all (See NAME Page 5)



SPOTLIGHT

It is with great pleasure that I welcome Spaceport News to our growing NASA team. It joins other Center-level newspapers as a medium of expression by and for NASA employees.

Basically, every paper's function is threefold: to educate, inform and entertain, and Spaceport News will attempt this through news, feature articles, and editorials.

More specifically, it will provide a communications media so that each of us may get a better understanding of the purpose and objectives of our place in the nation's space programs.

Spaceport News will also discuss employee benefits and present news and features on individuals and departments. It will report on suggestion plans and award winners and community activities, and keep us apprised of economic facts and legislation that may affect us.

But above all, it is a newspaper by and for all NASA-AMR employees, and I urge that you give it your full support.

Kurt H. Debus
Director
Launch Operations Center

WE'RE A WEEKLY

LOC this week launches its own newspaper, Spaceport News. A weekly, the paper will average eight pages per issue and is designed to cover all NASA activities and people at Canaveral, as well as report on items of interest from other centers and from various contractors.

Being a weekly we will constantly be on the lookout for news and feature stories, and we plan to run the gamut from straight news to personal columns, and from features to editorials.

We welcome suggestions and will be most receptive to news tips. Although we are trying to set up a correspondent in each major office at the Cape, there will always be areas that need coverage and we can just spread ourselves so thin.

Therefore, if you know of news or feature possibilities for the paper, call UL-3-6575 or 76 and pass the word along. A staff writer will follow it up.

We are specifically looking for contract awards, construction progress, employee promotions, awards, retirements, speeches, people with unusual hobbies, etc. And, if a son of a NASA employee wins a scholarship, or a daughter wins a beauty contest, this again would make news.

With such a large area of activities at Canaveral it will be impossible to cover everything properly without the help of all NASA people here. So when you run across an item of interest, call us. Your fellow workers may be interested in reading about it.



Published every Thursday under the direction of the Public Information Office of the National Aeronautics and Space Administration's Launch Operations Center, Cape Canaveral, Florida.

RAISES ANNOUNCED; EFFECTIVE DEC. 9

Santa came early for all NASA crafts, trades and laboring employees when salary increases became effective Sunday.

Following is a listing of the new wage board rates:

| Non-Supervisory | | | | |
|-----------------|--------|--------|--------|--------|
| WB | Step 1 | Step 2 | Step 3 | Step 4 |
| 1 | 1.79 | 1.88 | 1.97 | 2.07 |
| 2 | 1.95 | 2.05 | 2.15 | 2.26 |
| 3 | 2.09 | 2.20 | 2.31 | 2.42 |
| 4 | 2.23 | 2.35 | 2.47 | 2.59 |
| 5 | 2.38 | 2.50 | 2.63 | 2.75 |
| 6 | 2.52 | 2.65 | 2.78 | 2.92 |
| 7 | 2.67 | 2.81 | 2.95 | 3.09 |
| 8 | 2.81 | 2.96 | 3.11 | 3.26 |
| 9 | 2.95 | 3.11 | 3.27 | 3.42 |
| 10 | 3.10 | 3.26 | 3.42 | 3.59 |
| 11 | 3.31 | 3.48 | 3.65 | 3.83 |
| 12 | 3.54 | 3.73 | 3.92 | 4.10 |
| 13 | 3.67 | 3.86 | 4.05 | 4.25 |

| Leader | | | | |
|--------|--------|--------|--------|--------|
| WL | Step 1 | Step 2 | Step 3 | Step 4 |
| 1 | 1.97 | 2.07 | 2.17 | 2.28 |
| 2 | 2.15 | 2.26 | 2.37 | 2.49 |
| 3 | 2.30 | 2.42 | 2.54 | 2.66 |
| 4 | 2.46 | 2.59 | 2.72 | 2.85 |
| 5 | 2.61 | 2.75 | 2.89 | 3.03 |
| 6 | 2.77 | 2.92 | 3.07 | 3.21 |
| 7 | 2.94 | 3.09 | 3.24 | 3.40 |
| 8 | 3.10 | 3.26 | 3.42 | 3.59 |
| 9 | 3.25 | 3.42 | 3.59 | 3.76 |
| 10 | 3.41 | 3.59 | 3.77 | 3.95 |
| 11 | 3.64 | 3.83 | 4.02 | 4.21 |
| 12 | 3.90 | 4.10 | 4.31 | 4.51 |

| Supervisory | | | | |
|-------------|--------|--------|--------|--------|
| WS | Step 1 | Step 2 | Step 3 | Step 4 |
| 1 | 2.53 | 2.66 | 2.79 | 2.93 |
| 2 | 2.83 | 2.98 | 3.13 | 3.28 |
| 3 | 3.12 | 3.28 | 3.44 | 3.61 |
| 4 | 3.26 | 3.43 | 3.60 | 3.77 |
| 5 | 3.41 | 3.59 | 3.77 | 3.95 |
| 6 | 3.55 | 3.74 | 3.93 | 4.11 |
| 7 | 3.70 | 3.89 | 4.08 | 4.28 |
| 8 | 3.84 | 4.04 | 4.24 | 4.44 |
| 9 | 4.03 | 4.24 | 4.45 | 4.66 |
| 10 | 4.18 | 4.40 | 4.62 | 4.84 |
| 11 | 4.49 | 4.73 | 4.97 | 5.20 |
| 12 | 4.80 | 5.05 | 5.30 | 5.56 |
| 13 | 5.11 | 5.38 | 5.65 | 5.92 |
| 14 | 5.42 | 5.71 | 6.00 | 6.28 |

Shift Differentials:
2nd Shift: - .12
3rd Shift: - .18

Adm. Boone Appointed

Retired Admiral Walter F. Boone joined NASA December 1, as Deputy Associate Administrator for Defense Affairs.

His primary responsibilities are to strengthen the flow of technical and management information between NASA and the Department of Defense.

SPACE ALMANAC

A CHRONOLOGY OF EVENTS IN SPACE EXPLORATION AND RESEARCH.

Five Years Ago

Dec. 1, 1957—Sputnik 1 re-entered after 57 days in orbit.

Dec. 6, 1957—An attempt to launch Vanguard TV 3 from the Cape was unsuccessful.

Dec. 17, 1957—The first Atlas ICBM, predecessor of the launch vehicle now used for manned Mercury flights, was launched from the Cape.

Three Years Ago

Dec. 1, 1959 — N A S A launched the third Little Joe from Wallops Island as part of the development program for Project Mercury. The vehicle carried a monkey, Sam, 95 miles into space. Re-entry was successful and Sam was recovered.

Dec. 8, 1959—Maj. Gen. D. W. Ostrander, USAF, was named Director of NASA Launch Vehicle Programs, with responsibility for launch vehicle development and operations.

Dec. 15, 1959—A NASA team completed studies of designs for the upper stages of Saturn launch vehicles.

Dec. 16, 1959—Vanguard 3 became silent after emitting radio signals for 85 days. The satellite may remain in orbit until 2000.

One Year Ago

Dec. 5, 1961 — Discoverer 26, launched from Vandenberg AFB on July 7, re-entered.

Dec. 12, 1959—Discoverer 36 and Oscar were launched from Vandenberg AFB.

RIFT ASSEMBLY SET

NASA's RIFT (Reactor in Flight Space) nuclear rocket stage will be manufactured and assembled at Moffett Field, California.

It will be used to flight test NERVA (Nuclear Engine for Rocket Vehicle Applications.)

The RIFT stage will be 33 feet in diameter and 88 feet long. It is to be flight tested in 1967 or 68 as the top stage of Saturn C-5.

Earth Orbit For RELAY Due Tonight

The countdown was scheduled to be on today for RELAY - NASA's low-altitude, active repeater communications satellite.

The 150-pound spacecraft is mounted atop a three-stage Delta rocket - the last NASA vehicle to be launched from Canaveral this year.

If all goes well, RELAY will be placed later today into an elliptical orbit ranging from 800 to 3,000 miles above earth.

It is designed to:

- Test transoceanic communications via satellites.
- Measure the amount of radiation particles in its orbital path.
- Determine the extent of damage caused by radiation to the solar cell power supply and electronic components.

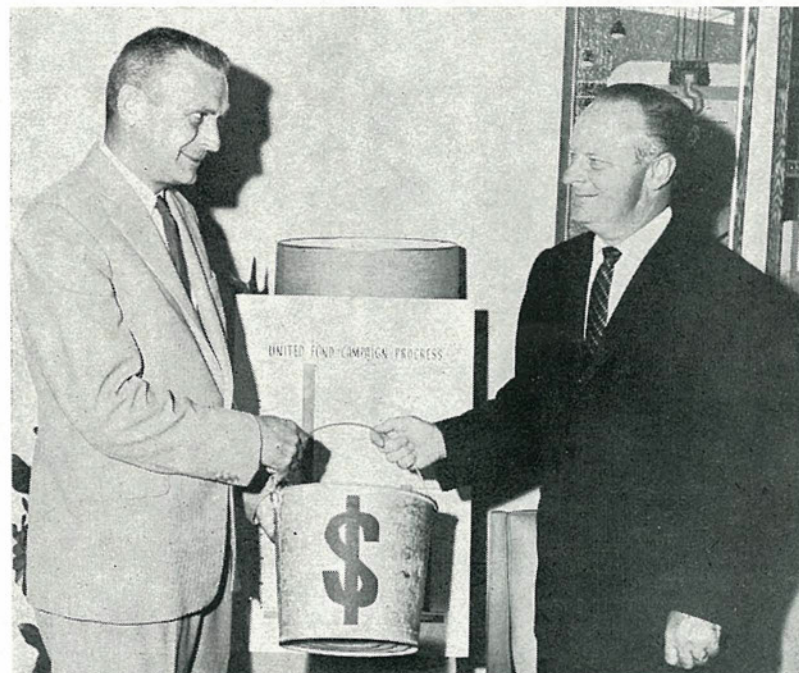
Similar to Telstar, RELAY is capable of flashing television and radio programs instantaneously from one continent to another.

Coverage includes South America as well as Europe and North America.

Built by RCA under a contract to NASA's Goddard Space Flight Center, RELAY is an eight-sided, prism-shaped object tapered at one end. It measures 29 inches in breadth by 32 inches in height.

The satellite's surface is covered with 8,215 solar cells which supply power to nickel cadmium batteries. These solar cells are protected by a layer of quartz to protect them

NASA-AMR Score In United Fund Drive As Employees Double 1962's \$5,000 Goal



PASSING THE BUCKET is NASA Community Development Chief Paul Siebeneichen, left. He's handing a symbolic bucketful of money to Douglas Graves, General Chairman of Brevard County's 1962 United Fund campaign. NASA-AMR employees raised \$10,022 during the drive — more than double their goal.

from excessive radiation damage.

Data transmitted from the satellite's four telemetry antennas to the worldwide NASA Satellite Instrumentation Network stations will be relayed directly to the Goddard Space Flight Center's Operations and Control Center.

RELAY satellites are expected to operate at maximum efficiency in orbit and render useful data for one year.

The launch by a Douglas Aircraft crew, will be directed by Goddard's Field Projects Branch.

Holmes Authorizes Lunar Soil Study

A research program that will include studies of lunar soil characteristics, movement and excavation techniques is to be defined by the Corps of Engineers at NASA's request.

D. Brainerd Holmes, Director of NASA's Office of Manned Space Flight, authorized the six-month, \$100,000 study in a letter to Brig. Gen. T. J. Hayes, assistant to the Chief of Engineers for NASA support.

Study objectives are to:

- Define the research and development effort required to provide a U. S. lunar research capability.
- Define experimental facilities on earth needed to carry out such a research effort.
- Prepare schedules and budgetary estimates required to carry out a lunar construction research program.

In addition to lunar soil characteristics, movement and excavation techniques, areas of research will include construction materials, structural design, power generation, storing and handling of life-supporting atmosphere, water supply and sanitation, construction tools and human engineering and training.

NASA-AMR employees, solicited separately as a group for the first time during the county's United Fund drive, topped all local organizations by collecting a record-setting 200.4 per cent of their goal.

NASA-UF Chairman Paul Siebeneichen, Community Development Officer, said \$10,022 was raised during the month-and-a-half-long campaign. NASA's goal was \$5,000.

Some \$260,147 was raised throughout the country. This was 95.6 per cent of the overall goal.

Douglas E. Graves, UF's General Chairman, said NASA's contribution was "an outstanding accomplishment."

Goal Estimates

In a letter to LOC Director Dr. Kurt H. Debus, Graves added that the goal of \$5,000 was established on estimated employment and the giving rate per capita experienced during last year's campaign.

NASA collected \$2,100 in 1961 when participation was tied into the AFMTC.

Dr. Debus said, "I am, and NASA can be extremely proud of the showing made by the employees and contractors associated with us."

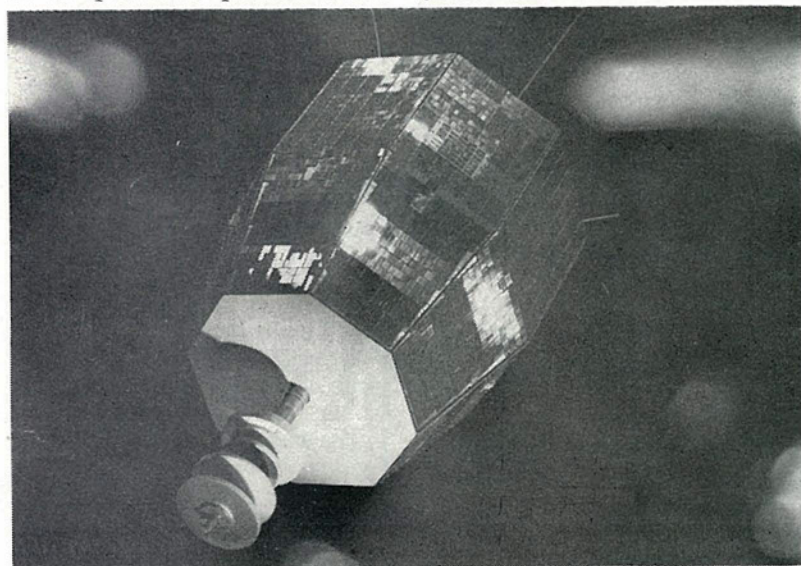
"The fact that 200 per cent of our goal was achieved this year, with a total contribution of more than \$10,000 is indeed an outstanding accomplishment."

A Child May Walk

Siebeneichen added, "this has been an extremely gratifying endeavor. Due to our efforts, a family may eat, an infant may find a new happy home, a child may walk again, a boy may leave the path of delinquency, and the cure of cancer may be a step closer."

Siebeneichen praised the work of John Donovan of Community Development, who served as coordinator for the drive, and he thanked all contributors and employees representatives for helping make the drive successful.

United Fund money collected in Brevard is divided among 18 local, state and national agencies.

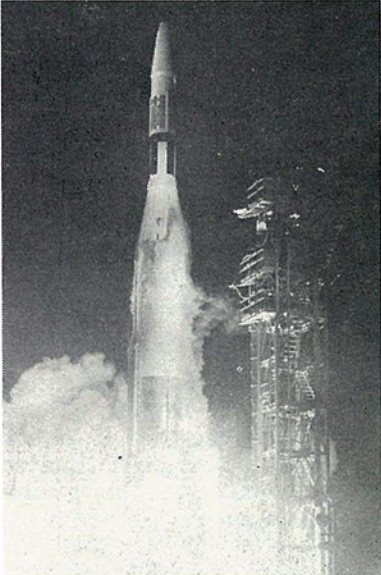


A TINFOIL AND TIME exposure was used by RCA photographer Bob Special to produce this creative portrait of RELAY.

MARINER

(Continued from Page 1)
for the spacecraft system and space flight operations. In the Cape's JPL office, station manager Hank Levi and his staff of engineers and technicians provided support for Mariner's assembly and check tests.

The test was conducted for NASA by the Air Force Space Systems Division and the 6555th Aerospace Test Wing of the Air Force Systems Command with General Dyna-



LIFTOFF - Atop Atlas-Agena mis Astronautics as the contractor.

At LOC Dr. Kurt H. Debus was overall Test Director, and Charles Cope of the Light and Medium Vehicles Systems Office, served as Atlas-Agena Project Engineer.

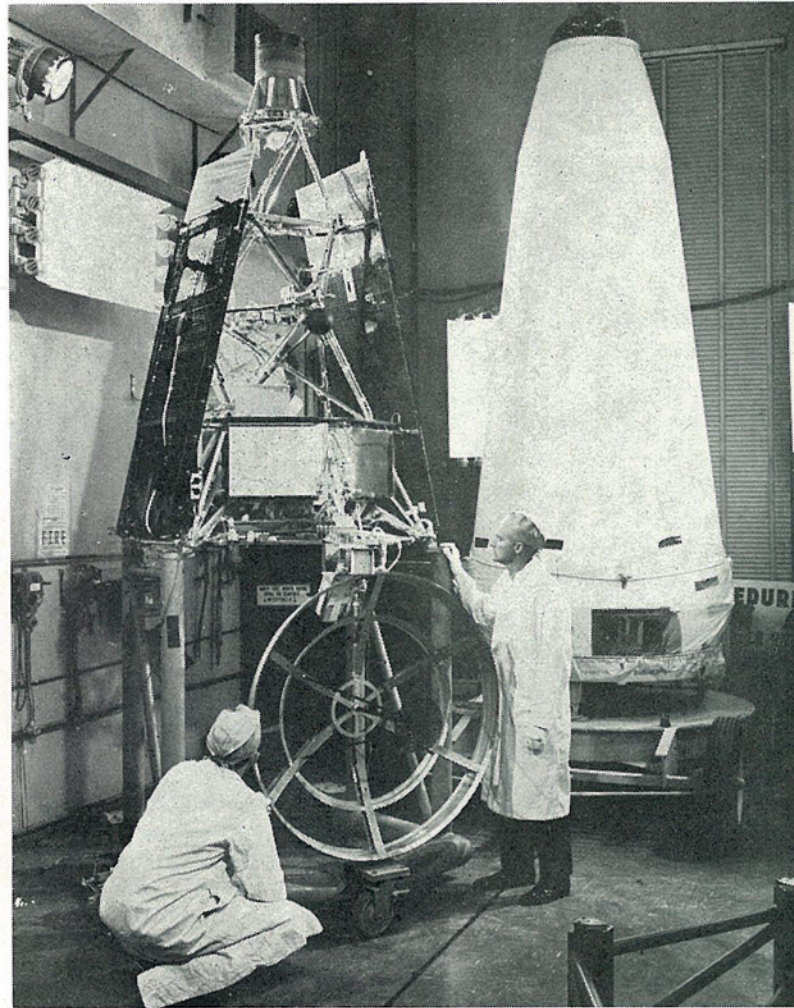
John Bell, Randall Youmans and Bennett Fultz, of LVOD Guidance and Control Office monitored the Atlas-Agena checkout.

Azusa, radar beacons and telemetry were monitored by Peter Minderman, Robert Blanchard, Jack Williams and Noble Hines of the Electronic Engineering office.

Robert Sayers and W. C. Brown of Mechanical Engineering monitored propulsion and systems.

Project Engineer Cope was supported by Ed Mathews, Chief of LOC's Light and Medium Vehicle Office and Eldon Ward was Range Support Coordinator. Dr. Adolf Knothe and Art Moore coordinated range safety with the Air Force Missile Test Center.

No more Mariners will be launched until 1964, when Venus and also Mars will again swing into target range.



SPIN TEST and checkout of Mariner-II was run by JPL Mechanical Engineer Jay Schmuecker at Canaveral last August prior to launch of the record-setting spacecraft.

VENUS TRIP FORESEEN

A manned trip to Venus or Mars within 20 years is the prediction of Dr. Glenn T. Seaborg, chairman of the Atomic Energy Commission.

"We'll be well advanced in the use of nuclear power in space, both for propulsion of rockets and for auxiliary power within orbiting satellites," he said in a recent interview.

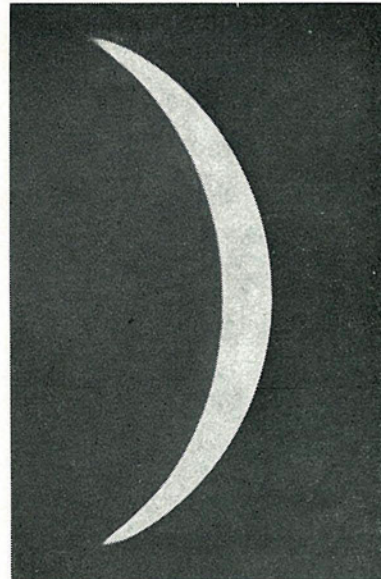
"Around the year 1982 we will have already made, or be seriously planning, a manned journey to one of the near planets."

"And we'll be using nuclear energy rather routinely in satellites," he added.

BIDS OPENED TODAY ON ORSINO CAUSEWAY

Bids were opened today to select a road construction contractor for the Orsino causeway.

The contract calls for sub-surface and paving of a six-mile, two-lane stretch from Canaveral across the Banana River to Orsino's industrial area site, as a part of the limited access causeway.



VENUS appeared crescent-shaped in this photo, taken from the Palomar Observatory.

Included will be a 90-foot double-leaf bascule bridge to span the river.

Awarding of the contract will probably be announced within the week.

Last month an \$895,800 contract was awarded to the Gahagen Dredging Corporation of Tampa for hydraulic fill in the river:

VAB Design Contract Let For \$3 Million

The Corps of Engineers, acting for NASA, let a contract for \$3,332,000 to four New York architect-engineer firms last week to design the vertical building for the 350-foot advanced Saturn C-5 space vehicle to be launched from Cape LC 39.

The building will be the dominant feature of the new mobile concept in launch complexes. Standing 48 stories high and approximately two blocks long, it is expected to cost \$100 million.

Protection from wind, rain and sun, and the ability to assemble and checkout more than one space vehicle in a single location are but a few of the building's advantages.

Checkout and vertical assembly of the Saturn stages will be done inside the building on a combination launcher-umbilical tower. The assembled space vehicle and Apollo spacecraft with umbilical connections intact will then be transported by a tracked crawler to the launch site.

The four firms that will collaborate on the building design are Max O. Urbahn; Robert and Schaefer Co., Inc.; Seelye, Stevenson, Value and Knecht; and Moran, Proctor, Mueser and Rutledge.

Their joint headquarters in New York will be at 636 Madison Ave.

VENUSIAN VIGNETTES

Venus, our sister planet, is just a shade smaller than earth. Because it is always shrouded in a dense, white cloudy atmosphere, we know little of what the planet's actual surface is like. Named after the mythological goddess of beauty, Venus is believed to have seasons.

It is in a solar orbit 67 million miles out, or about 26 million miles closer to the sun than earth. It appears so bright in our horizon that as late as 100 years ago a French warship tried to shoot it down because it was thought to be an enemy balloon. More recently it has often been reported as a flying saucer.



RICHARD J. BURKE WINS \$460 AWARD FOR RING TRIMMING

Richard J. Burke, a space-flight mechanic for LVOD on LC 34, received a suggestion award of \$460 from MSFC Friday for devising a method to prolong the life of LN2 converter piston rings on 34's cryogenic pumps.

Dr. Kurt H. Debus, LOC Director, presented the award to Burke in brief ceremonies and commended him for his money saving idea.

By prolonging the life of the piston rings from an average of less than 10 hours each to 240 hours, Burke has saved the government more than \$9,000 a year.

Using a sharp knife, Burke trimmed down the end of each ring to allow smoother piston performance.

LC 34 has two pumps with five pistons apiece and a pair of rings to each piston.

Burke, a 15-year Civil Service veteran, has been at Canaveral for seven years.

NAME

(Continued from Page 1)

NASA activities at Canaveral."

Judges were C. C. Parker, Deputy Associate Director, Administration and Services; Cmdr. S. J. Burttschell, Assistant to the Associate Director, Administration and Services; Emil Bertram, Technical Coordinator for the Apollo Spacecraft; S. E. Carlson, Facilities Office Executive Assistant, and Jack King, Chief Information Office.

Whiteside submitted 10 entries and expressed surprise at winning.

ACCEPTING congratulations for his money-saving suggestion is Richard Burke, center. Albert Zeiler, left, and Dr. Kurt Debus presented the award.

Bertram, Melton To Head Incentive Awards Groups

SAVINGS BOND DRIVE NEARING COMPLETION

NASA-AMR's Savings bond drive is nearing completion.

Chairman Wally Hudgins of Personnel announced there were 21 employees in the bond payroll savings plan as of last week.

He said there was an insufficient number of bond applications when the drive was first launched, but the payroll office now has some extra forms which may be obtained upon request.

The drive was launched last month when LOC Director Dr. Kurt H. Debus issued a memorandum calling for "wholehearted support."

LOC Director Dr. Kurt H. Debus announced last week the appointment of two incentive awards committees—one for performance and honorary awards, and one for suggestion awards.

Emil Bertram, LO-H, has been selected Suggestion Chairman, and Lewis Melton, LO-FIN, is Performance and Honorary Chairman.

Both committees will work closely with Wally Hudgins of Personnel, who has been named executive secretary, Incentive Awards Committee.

Designed to encourage suggestions for improvements and to recognize accomplishments and achievements, the recently-formed Incentive Awards Program is also set up to strengthen employee-management relations and stimulate high levels of performance.

Committeemen chosen are responsible for determining eligible applicants and deciding the amount or type of award most appropriate.

Walt Barney, LO-C, is Vice Chairman of the Performance and Honorary Awards Committee, which includes members Phil Claybourne, LO-H, Gerald Michaud, LO-P&C, and Charles Hall, LO-F, and alternates Grady Williams, LO-F, Robert Moser, LVO-G, and Robert Gorman, LVO-M.

Vice Chairman for the Suggestion Committee is Raymond Daley, LO-F. Members include Robert Body, LO-Q, Michael Haworth, LO-P&C, Paul Siebeneichen, LO-U, Eugene Kapica, LO-FIN, William Pearson, LO-C, and alternates Wallis Rainwater, LVO-MV, Milton Chambers, LVO-GA, J. B. Russell, LVO-MF, William Jafferis, LOV-GN, and Terry Greenfield, LVO-GE.

Within the next few weeks representatives from each office will be appointed to assist the committees in administering the program.

Name Response—Excellent; Contestants—Imaginative

Response to the name-the-newspaper contest was encouraging, almost overwhelming, and, at times, humorous.

More than 500 entries - from "Ascending Astron" to "Zero Minus," and from "Apogee" to "Zoom to the Moon" - were received by the Public Information Office.

Participants responded to a November 20th memorandum that called for a name fairly short, clear, concise, and indicative of the NASA operation at Canaveral.

Titles ranged in length from "Pulse," to "NASA Space News Cape Canaveral, Florida, Frontiersman."

One employee submitted 14 different names, and many others sent in multiple entries. Most contestants displayed an imaginative flair, some as way out as our space programs. In fact, one proposed title was "The Way Out Report." Another was "Out of This World."

Such key words as Cape, Lunar, NASA, LOC and Launch appeared in a good portion of the submissions, and Countdown was the most popular of all.

Some of the more exotic entries included: "Cosmoramo," "Capezette," "Astropaths," "NASAtorial Weekly," "Slipstream," "The Blip," "Extraterrestrial," "Planetary Courier," and "NOVApollo News."

Many linked their lingo to the moon. These included: "Lunartoons," "Moonglow News," "The Lunar Rag," "The Lunar Trumpet," and "Moon or Bust."

NASA was also tied into several themes, including: "NASA's Morgue," "The NASA Beep," "NASA Nasties," "NASA Niceties," "The NASA Tattle-Tail," "NASAtellite News," and "NASA's Shooting End News."

A couple were slanted on the Florida theme: "The Sunshine Spacial," and "NASA Palm Spacial,"

One security-minded entrant sent in "The Need to Know," and a safety-conscious employee used "The Non-Destruct."

Many were geared directly to launchings, including: "Blast Off News," "LOC's News Blast," "The Launch Thrust Commit," and "Celestial Blast."

Others of interest included: "Blockhouse Banter," "Center Sensor," "Space Aho," "Interstellar," "Look Ma, An Earthman," "Mister Space," "Manned What?," "Three-Two-One," "Yawlines," "Peon News," "Rocket Docket," "Systems Go," "Space Hobo," "The Pulp Pad," and "Go - Go."

METEOR DUE TO HIT

The world is due to be hit by a mile-wide meteor, claims Dr. Eugene M. Shoemaker of the U.S. Geological Survey.

"Statistics show that North America should be struck by a large meteor once every 10,000 years," he said.

Debus Maps Lunar Plans For Local Rocket Society

Dr. Kurt H. Debus, LOC Director, briefed members of the American Rocket Society Tuesday night on the sequence of events, following launch, that will lead to a manned lunar landing before 1970.

Speaking at the year-end ARS banquet at Patrick AFB's Officers Club, Dr Debus said, "the lunar orbit rendezvous will require the earth launch of a Saturn C-5, boosting a three module spacecraft into a parking orbit."

"The spacecraft," he said, "will include a command module housing the crew, a service module providing a mid-course correction and return-to-earth propulsion, and a lunar excursion module."

Dr. Debus explained the three modules will be injected into the trans-lunar trajectory to the vicinity of the moon and then placed in lunar orbit as a unit.

"Two astronauts will then transfer to the lunar excursion

module and descend to the moon while the Apollo mother craft remains in lunar orbit," he said.

"After a period of exploration extending up to four days, the two men will use the lunar excursion module to ascend from the moon to a rendezvous with the Apollo."

"Following crew transfer," Dr. Debus continued, "the lunar excursion module will be jettisoned, and the command module carrying the three-man team will be boosted into trans-lunar trajectory toward earth by the service module."

"Just before entering the earth's atmosphere, the service module will be jettisoned and the command module oriented for re-entry and landing."

Dr. Debus supplemented his talk with slides, and told the ARS members the moon is only the stepping stone of future space explorations.

He observed the moon was the logical target for initial investigation of the universe.

"However," he added, "everything learned from space exploration thus far indicates the knowledge lying in wait for those who will observe the universe from the moon or other planetary bodies, will be superior to anything uncovered to date."

"From these explorations," Dr. Debus concluded, "we may learn the origin of our universe and the method of its functioning."

MSFC Readies Saturn Block II For Testing

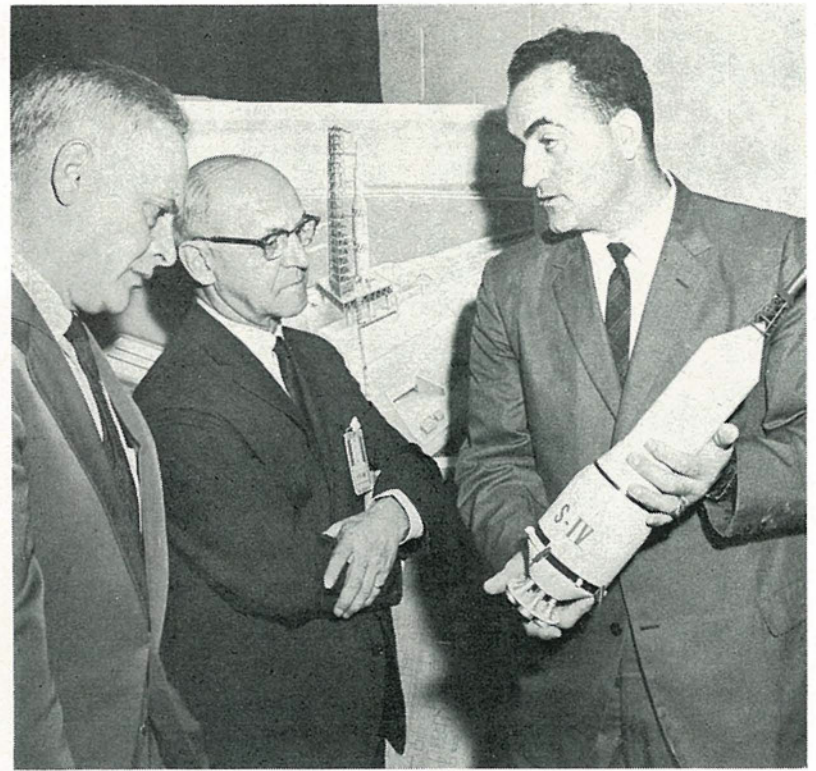
A 172-foot-tall Saturn Block II space vehicle has been installed in Marshall Space Flight Center's "shake table" dynamic test tower for checkout.

Being readied for man-carrying missions, the Block II version includes several changes.

Among these are tail on the booster fins for better vehicle stabilization. The booster tankage is six feet longer, to increase fuel capacity.

The Block II will carry a dummy Apollo spacecraft and a live second stage.

Dynamic tests on this configuration are scheduled to



SATURN STORY — Major Rocco Petrone, right, Chief Heavy Space Vehicles Systems Office, briefs Congressman Walter Riehlman (R-NY), center, and House Space Committee Staff Member Philip Yeager on the Saturn family of space vehicles during their recent tour of NASA facilities at Cape Canaveral.

PHOTO SYSTEM APT TO PICTURE CLOUDS

An experimental system for sending direct local cloud cover pictures from meteorological satellites to inexpensive ground stations has passed initial ground-based checkout tests.

The new system, called the Automatic Picture Transmission Subsystem (APT), will require relatively simple ground station equipment costing about 30,000 per set.

It is expected to have wide application in weather analysis and forecasting internationally when it is perfected and put into orbit operationally.

Although designed for the NIMBUS satellite system, a preliminary flight test on the TIROS satellite may take place in mid-1963.

The APT subsystem in NIMBUS will enable meteorologists to obtain a few immediate local area cloud pattern photos of high quality when the satellite is within a 1700-mile range of a receiving station.

The cloud-cover photos, when the system is used in NIMBUS, will show an area about 1,000 by 1,000 miles.



GUEST CONDUCTORS in Saturn blockhouse 34 last week were newly-elected Democratic Senator Birch Bayh and his wife, Marvella, of Indiana. They were given a tour of NASA-Cape facilities, including stops at Mercury Control and Hangar 5.

run for about five months.

Following these checkouts, the Block II vehicle will be shipped to Canaveral for flight testing.

First Cape launch is scheduled for late 1963.

Getting Crowded

Space is populated by stars, planets, asteroids, meteoroids, comets and satellites.

Earth is only the fifth largest planet in our solar system.

Sigma Seven Model, Miss America, Floats To Highlight Parade

NASA-AMR's much traveled model Mercury spacecraft, an exact replica of astronaut Wally Schirra's Sigma Seven, will share the spotlight with Miss America, Jackie Mayer, in Titusville's Christmas parade Saturday.

Sponsored by the Titusville Jaycees, the parade will also feature 40 floats, 10 bands and 15 marching units.

It will begin at 2:30 p.m. at St. Johns Street and Washington Avenue and proceed north on Washington to Palmetto, then west to Hopkins and north again for two miles. The parade will then turn around and go south on Washington.

It will last almost two hours and will be televised in its entirety by WLOF-TV, channel nine, Orlando.

Jackie Mayer will also appear at the Miss America Christmas Ball Saturday night beginning at 9 p.m.

Information on the parade or ball can be obtained by calling AM-7-3619 in Titusville.

WILLIAMS COMPLETES BEC GRAD STUDIES

Jack Williams of LVOD's Flight Instrumentation Planning and Analysis Group, is the first Cape-based employee to complete graduate studies under NASA's evening course training program.

He has successfully completed studies and tests at Brevard Engineering College for his Master's Degree in Space Technology and will formally receive his diploma next June.

A graduate of the University of South Carolina (BS-Physics), Williams began his BEC studies in the summer of 1961.

His Master's thesis was on Ion Propulsion.

Warehouse Contract Let

Bucon Construction Company of Port Canaveral has been awarded a \$207,900 contract to build a warehouse at Canaveral for use primarily in the Apollo manned space flight program.

The building will be located in the Cape's present industrial area.



A LUNAR TOURIST BOOM? IT'S ONLY 30 YEARS AWAY

Have a yearning for faraway places? Looking for something out of the ordinary?

How about a trip to the moon — that is if you can wait 30 years?

That's how long it will be before commercial moon flights says H. H. Koelle, MSFC's director of future projects. Such travel might be possible even sooner, Koelle says, if there is an unexpected breakthrough in rocketry.

"There is still a long way to go," he cautioned, "before space trips become possible for anyone other than test pilots. However, by 1980 or 1990 we can expect to open the first commercial space line to earth orbit and to the moon."

Koelle made his remarks in a recent report to the American Rocket Society's committee on missiles and space vehicles.

In the report he envisioned rocket-powered planes "large enough to transport more than 50 passengers into orbit at a time."

These planes would be big brothers of today's experimental X-15, and would have controllable engines to limit blastoff and touchdown speeds for the sake of passenger comfort.

Koelle said the hope was to see earth-to-orbit trips become as convenient and inexpensive as a trip to Europe, with a flight to the moon no more expensive than a trip around the planet today.

He indicated this could be achieved by developing reusable rockets so the "aerospace planes" could make many trips, like jetliners, rather than just one costly voyage as missiles now do.

Transportation Chief J. H. Herring admits he has had no requests as yet for the first flight.

Space Related Books Include "We Seven"

Recent space-related book releases include "We Seven" by the original astronauts, "Rendezvous in Space," by Martin Caidin, and "John H.

"We Seven" (Simon and Schuster) recaps the astronauts flights into space via vivid first person accounts.

Caidin's book (Dutton) goes further than Project Mercury, and gives much

more explanation of how things work.

The profile of Glenn (Watts) recaps the story of the first orbiting astronaut in clear, simple language.

Skyscraper Status

NASA's Vertical Assembly Building, scheduled for completion in 1965, will, at 450 feet, be the tallest building in the state of Florida.

SOLUTION SOUGHT FOR STORMY SEAS

A study is underway at Canaveral for a solution to curb storm waters that have flooded the area fronting between Saturn complex 34 and Titan pad 20 in recent weeks.

This location, facing the northeast, is particularly vulnerable to storms from that direction.

The problem of flood damage has been known for some time and was accentuated during the recent nor'easter storm that hovered off the coastline for several days.

Thousands of gallons of water sloshed over man-made dykes, causing drainage problems. This water has since been drained off, but a permanent solution to the problem is still being sought.

Two possibilities are being considered, either a jetty a few hundred yards off shore or a bulkhead along the coast.

Missiles and Rockets Features NASA Issue

Missiles and Rockets, the weekly magazine of space systems engineering, came out Nov. 25th with its second annual NASA issue.

Featured are an address by NASA Administrator James E. Webb and a comprehensive survey of the space effort by programs.

The magazine is on file in LOC's Technical Library in the E and L building.

LETTER OF THE WEEK

Editor's note: Space exploration has excited the minds of the nation's youngsters, and thousands write to NASA centers across the country requesting information and photos, offering advice and volunteering for future flights. A large percentage of letters are addressed to the Cape, and many wind up in our mailbox. From such a volume, come a few gems of pure, unintended humor, and as a change-of-pace feature, the News will run one such letter each week. Here's the first:

"What you should use for rocket fuel is potassium chlorate and sugar. It works perfect in my uncle's shotgun shells."

Richard S.
Santa Clara, Calif.

PURELY PERSONAL

The new Advanced Saturn C-5 Branch of Heavy Space Vehicle Systems Office is the setting for one of the more unusual reunions on the Cape.

Three of the complement of four — Branch Chief William Clearman Jr., Willard Halcomb and Charles Hart, are former employees of the Naval Air Station in Jacksonville.

All three not only worked as civilians there, but also saw active duty with the Navy during the war.

Lest there be too nautical a flavor to the group, the fourth man on the team, Richard Dutton, served with the Air Force.

Birthday Bulletins

NASA people celebrating recent birthdays include Robert Gray, chief, Goddard Field Projects Branch, last Wednesday; security clerk Frances James, last Thursday; security specialist William Horner, Tuesday; security assistant Gordon Robinson, yesterday; Ernest Whitney, assistant chief, Delta Project Office, yesterday.

Today, security clerk typist Carolyn Warren blows out the candles, and tomorrow it's Bobbi Miller's turn. She's the secretary in Industrial Relations.

Diaper Derby

New additions to NASA families include Karen Ann, eight-pound four-ounce daughter of Mr. and Mrs. Charles Buckley. He's LOC's Security Office Chief.

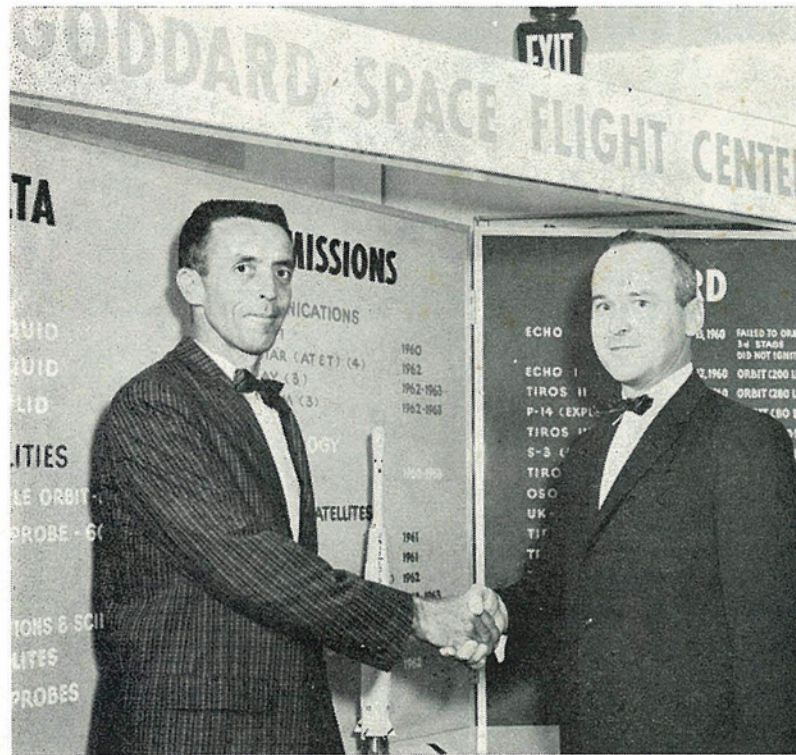
Mr. and Mrs. James Johnson welcomed a seven-pound, nine-ounce son, George, recently. The proud father is with Goddard's Field Project Office.

Artist Fred Bauer of Technical Information, was passing out cigars last week. His wife Lois gave birth to a five-pound, three-ounce girl, Kim, last Monday.

NASA TAPS TRAPP

Robert F. Trapp, a nuclear research specialist, has been named Chief of NASA's Man-System Integration Division in Headquarters Office of Advanced Research and Technology.

He and his staff are responsible for research programs related to man, man-machine and manned systems to advance the life science field for the total space program.



20-YEAR-MAN — Frederick G. Thorne, left, a Systems Engineer with NASA's Goddard Field Projects Branch at Canaveral, recently received his 20-year service pin and congratulations from Branch Chief Bob Gray. Thorne has been at the Cape since March, and is assigned to the Delta project. He joined NASA in August 1958.

CD Courses Commence In Cocoa, Eau Gallie

Two Brevard County Civil Defense classes began last week, but interested employees still have an opportunity to enroll.

A four-week course began Tuesday, December 4, at the Eau Gallie Junior High School, and another began last Thursday at Clearlake Junior High School in Cocoa.

The classes meet weekly and complete 12 hours of study.

Subjects covered include an introduction to nuclear explosion and protection measures against heat and blast, radiation fallout, family fallout shelters, first aid, role of the government in disaster, national disaster in Florida, and community and family survival plans.

Persons desiring to attend these or other classes may call Brevard Civil Defense headquarters — NE-6-2141 — for further information.

7 Astronauts Elected To Cocoa Beach C of C

Project Mercury's seven astronauts, always welcomed as part-time Cocoa Beach citizens, were made honorary members of the city's Chamber of Commerce last week.

NASA NEWCOMERS

NASA-Cape employees have increased by 10 since the first of the month.

Instrumentation & Planning: Herbert B. Meyers, Bernon Gerald Hitchcock.

Personnel: William J. Holm. Launch Support at Huntsville: James J. Hart.

Launch Support at Huntsville: Harold T. Dodson.

Support Services: Leo A. Dennison, James E. Miller.

Technical Information Office: Mildred Konjevich.

Program Coordination and Management: Richard G. McNeill.

Financial Management: Julia S. Raney.

NASA Wives Meeting Held at Officers Club

Canasta and bridge were featured at last week's NASA Wives Club meeting, held at the Patrick Air Force Base Officers Club.

Following a luncheon of baked ham and the trimmings, Mrs. E. R. Mathews won the top door prize — a candy Santa jar.

Co-hostesses for the meeting were Mrs. W. E. Andruss and Mrs. W. E. Pearson.

NASA wives meet the first Wednesday of each month. Their next gathering will be on January 2.

NASA OFFICES PLAN ROUND OF PARTIES DURING YULE SEASON

The holiday season will be toasted during the next few days at a round of Christmas parties covering practically every NASA-AMR office.

Three LOC offices — Technical Information, Program Coordination and Management and Security — combined forces for an early start with a dinner and dance last Friday night at the Indian River Hotel in Cocoa.

Manned Spacecraft Center and McDonnell personnel also held a joint party on the 7th. The semi-formal BYOB affair was held at the Cocoa Armory.

Several offices will hold their socials this week, beginning with the Financial Management party at the Officers Club. The 6 p.m. to 8 p.m. cocktail hour will be followed by a turkey dinner at 8, and dancing from 9 till 1 a.m. The June Graham dancers will entertain at 10.

Procurement and Contracts has scheduled their dinner and dance tomorrow night in the Polaris Motel's Driftwood Room. Cocktails will be served from 6 p.m. to 8. Dinner begins at 8, and dancing at 9, with entertainment by the Harts.

Tomorrow night at the Holiday Inn in Melbourne, LOC Instrumentation and Planning will get together with Electronics Engineering, Measuring and Tracking for a buffet dinner and dancing.

Electrical Engineering, Guidance and Control has planned a BYOB party at the Tradewinds Cafeteria in Cocoa's Byrd Plaza Saturday evening. Dancing will follow the 7 p.m. dinner.

Heavy Space Vehicles Systems, Technical and Scientific Staff, and Light/Medium Space Vehicles Systems will windup the parties next Saturday night at the Officers Club. Dinner and dancing will be featured.

Fashionable Footwear

At a recent exhibit in Eau Gallie of NASA's Mercury model spacecraft, with a dummy astronaut inside, the following, exclaimed by a bug-eyed three-year-old, was overheard: "Gee, Mommy, what big shoes he has."