



# STG Renamed; Will Move

## Manned Spacecraft Center To Have Texas Home



Recent changes affecting Space Task Group include the September announcement of the move to the Houston, Texas, area, and the resignation of STG as Manned Spacecraft Center.

Manned Spacecraft Center personnel have opened offices in the Gulfgate Shopping City in Houston under the direction of Martin Byrnes, Site Manager, in the approximate 3,000 square feet of floor space donated for the purpose by the Gulfgate management. MSC will have a continuing operation there until space can be leased and made ready for occupancy according to the Site Procurement Chief, W. A. Parker. The major operations being conducted at the Gulfgate offices are largely concerned with procurement, personnel, and public affairs.

MSC personnel who have been in the area many of them shuffling

back and forth between Langley and Houston, have held many meetings with various Chambers of Commerce, Realtors, and other groups.

The meetings with the Chamber and Realty groups have resulted in MSC personnel receiving much needed information relative to housing, schools, recreational and other facilities which will be available to personnel transferring from Langley to the Houston area. Further, these groups have been made aware of the MSC requirements on housing, schools, etc.

The people of the Houston area have literally welcomed MSC personnel with open arms and have offered complete cooperation in all facets of the operation.

Typical of the pace of activities is the number of visitors and sales

(Continued to page 3)

From  
LANGLEY AFB —  
To  
HOUSTON, TEX.

## Holmes Takes Over MSF Office Today

D. Brainerd Holmes, RCA executive and electrical engineering expert, is scheduled to assume duties today as Director of Manned Space Flight Programs. The appointment was announced in September by James E. Webb, space agency administrator.

Holmes visited Manned Spacecraft Center October 6 and was briefed by MSC Director Robert R. Gilruth and members of his staff. Following the briefing he visited MSC's portion of the display which had been prepared for Open House October 7.

For the past three and one-half years he has served as RCA's Project Manager of the Ballistic Missile Early Warning System (BMEWS). In his new job he will be responsible for direct program supervision of NASA's accelerating and expanding manned space flight activities

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### SATURN SHOT SUCCESSFUL

The initial test of the Saturn rocket last Friday was a success and when the giant vehicle majestically soared into its flight pattern it marked the first small step Project Apollo has made toward its ultimate goal as far as the booster vehicle is concerned.

The giant rocket's lift-off from its pad at Cape Canaveral was timed at 10:06 am, after two short weather delays. The rocket, powered by eight engines, roared skyward to a height of 95 miles, propelled by 1.3 million pounds of thrust, then dipped downward and plunged into the Atlantic Ocean approximately 200 miles down range.

This was the first of ten tests scheduled for the Saturn vehicle and 300 tons of fuel were used in the shot. The Saturn attained a top speed of 3,700 miles per hour during the flight which lasted eight minutes.

## GILRUTH SPEAKS AT ARS MEETING

Robert R. Gilruth, Director of Manned Spacecraft Center, speaking in New York City October 12, during the American Rocket Society's Space Flight Report to the Nation, reviewed the progress of Project Mercury and outlined future manned space flight plans.

Speaking of the current status of Mercury Gilruth said, "... we are approaching the end of the beginning." Citing the record of achievement to date in Project Mercury, he pointed out that the challenge presented at the outset was to:

- First, investigate man's capabilities in the space environment;
  - Second, and concurrent with the first, develop manned space flight technology for use as a basis for the conduct of much more ambitious undertakings, including manned exploration of space and the planets.
- Continuing, he pointed out seven of the major accomplishments achieved during the past three years.
- The development and expansion

of a solid management capability for the conduct of manned space flight research activity.

- The selection and verification in flight of the design of the Mercury spacecraft.

- The selection of a family of launch vehicles with which to carry on the flight program.

- The development and expansion of industrial know-how and capacity for the design and manufacture of very complex spacecraft and related systems.

- The progressive build-up of flight operations which has been drawn up and is now well underway. This involved the development of the new launch capabilities and techniques.

- The building of an earth-girdling tracking data collection and flight control network.

- The development of a pool of trained space pilots—a vitally important resource upon which can be built in support of the more

(Continued to page 3)

# Relocation Information Center Operating In Building T-107

A Relocation Information Center has been established in Room 205, Building T-107, to provide Manned Spacecraft Center personnel with information pertaining to the relocation of MSC and the area in and around Houston, Tex. The Center is open Monday through Friday from 8:30 a.m. until 4:30 p.m. and on Saturday from 8:00 a.m. until noon. Mrs. Shirley Hatley of the Public Affairs Office is able to provide certain leaflets and pertinent information concerning many questions arising about the move. Her phone number is 2323.



TEXAS-BOUND PERSONNEL check at the Relocation Information Center concerning housing and other problems. Pictured above, left to right, are Voula Tsitsera, Shirly Hatley, and Jim Brady. —Photo by Bill Taub

## Recruiting Task Faces Personnel

Manned Spacecraft Center's Personnel Division faces a continuing problem of finding qualified employees for the rapidly expanding organization. There are currently approximately 950 persons on the payroll with an authorized strength for Fiscal Year 1962 of 1,640 which gives an indication of the job facing personnel.

Added to this problem of finding qualified personnel to bring MSC up to strength is that of finding replacements for those personnel who cannot move to the Houston, Tex., area.

In an effort to anticipate the personnel loss due to the move, Personnel circulated a questionnaire to determine the intent of all MSC personnel scheduled for relocation.

When the results were tabulated it was found that 80 per cent plan to move to Houston, 15 per cent do not intend to go, and the remaining 5 per cent have not yet decided. It was pointed out that in most cases in the 15 per cent bracket the employees concerned cannot go because of commitments to families, etc.

A large number of this group will be replaced through the recruiting campaign currently being conducted in the Houston area by the Branch of the Personnel Division which has an office in Gulfgate Shopping City.

Following are the categories for which MSC has a continuing need, along with basic requirements and grade levels available.

(1) Aerospace Technology - GS 7-13. Employees are needed with work experience of varying degrees of responsibilities in such fields as telemetry, guidance, control, flight instrumentation, data systems, life systems, mission analysis, recovery operations, flight simulation, and research and development experience in transonic, supersonic experimental aircraft in such fields as aerodynamics, stress analysis, and heat transfer.

Applicants must have a degree from an accredited university or

college in such academic areas as Mechanical Engineering, Electronic Engineering, Aeronautical Engineering, Chemical Engineering, Electrical Engineering, Physics and Mathematics.

(2) Medical Doctors - GS 12-15.

(3) Clerical GS 2-5. Positions are available for clerk typists, clerk stenographers, secretaries and various clerical positions in such fields as Travel, Procurement, Payroll, Personnel, etc.

In addition there are a limited number of vacancies in the following areas of specialization.

(1) Physiology - GS 9-15.

(2) Human Factors Engineering - GS 12-15. Professional engineering and academic background plus extensive experience in human engineering preferred.

(3) Low Pressure Altitude Chamber Operators - GS 7-9. Duty at Cape Canaveral.

(4) Management Analysis - GS 11-12. Masters degree in business administration preferred. Applicants must have at least a bachelor degree and experience in organization and methods examining.

## Contest

(Continued from page 8)

rogram. Spacegram. Space for Space. Space News Vehicle. Spacecraft Chronicle. Spacecraft. Space Riders. Space Sage. Space Chronicle. Space News Roundup. Spacial News. Sidereal Times. Space Gazette. Spacerafter. Space Probe. Spacecraft News. Space Traveler. Turning Times. Tall Story. Telescope. Upstairs Bulletin. Void. Vacuum. Voyager. Vox-Pop. Way Out. "X" Transponder.

## Hammack and Heberlig Give Report on Mercury Program

Jerry Hammack and Jack Heberlig of Manned Spacecraft Center presented a report on the Mercury-Redstone Program at the ARS Space Flight Report to the Nation meeting in New York in October.

They reviewed the program as to its mission and results, and dis-

### HOLMES TAKES OFFICE TODAY

(Continued from page 1)

at NASA centers and in industry. This includes eventual manned lunar landings embraced in Project Apollo.

Holmes brings to NASA broad experience gained in various supervisory and management positions involving complex design and engineer development work and is known for his ability to bring multi-million dollar projects in on time and within predictable costs. As BMEWS Project Manager for RCA, Holmes was responsible for coordinating for the Air Force the vast effort which embraced the government and some 2,900 individual companies.

He joined RCA in 1953, following eight years in development engineering work with Western Electric Company and the Bell Telephone Laboratories. His work with RCA also included earlier responsibilities as Project Manager of both the land based systems for the Navy's Talos missile and the Atlas launch control and check-out equipment development.

He received his Bachelor of Science degree in electrical engineering from Cornell University in 1943. He continued studies in this field as a commissioned officer in the U. S. Naval Reserve at Bowdoin College and Massachusetts Institute of Technology.

Three other headquarters offices are being organized in Washington parallel with the Manned Space Flight Office. They are the Office of Space Sciences (unmanned scientific exploration of space), the Office of Advanced Research and Technology (nuclear and other advanced propulsion), and the Office of Applications (communications and meteorological satellites).

All four of the newly established offices will report directly to the space agency's top echelon.

cussed the performance of the spacecraft with and without pilot, the influence of the astronaut as an operating link in the overall system, and the relative difficulties of manned versus unmanned flight.

The report pointed out that the Mercury-Redstone Program, the first step in the United States effort of manned space flight, was successfully completed July 21 with the achievement of the second manned flight.

The test objectives of the program were summarized as (1) the familiarization of man with brief space flight, and (2) the partial qualification of the spacecraft for orbital flight. They noted that most of the elements necessary for conducting manned orbital flight were exercised and improved upon throughout the test history of the program.

The presentation included a description of the spacecraft systems. The basic philosophy of the pilot's role in the Mercury system which is "where feasible, he shall have a backup and override function for all of the major spacecraft systems" was cited. This approach permits maximum utilization of the pilot as an aid to system reliability and the overall success of the mission.

Systems discussed included the control system, environmental control system, landing system, electrical system, and the communications system.

They also discussed the flight plan and gave a brief history of each of the five flights completed in the Mercury-Redstone Program, citing the problems encountered during each flight in addition to giving the statistics concerning those flights individually. The tabulated results of the Mercury-Redstone flights provided some answers and information concerning the following problem areas: launch procedures spacecraft system behavior in-flight

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WALTER C. WILLIAMS, MSC Associate Director for Operations, right, makes a point as he discusses MA-4 with Robert R. Gilruth, MSC Director, left, and D. Brainerd Holmes, Director of Manned Space Flight Programs, as they toured the display set up for Open House during Mr. Holmes visit to MSC Headquarters October 6. —Photo by Bob Nye

## Educational Co-op Program For MSC Being Stressed

Colleges and universities throughout the country are presently being contracted by Civilian Personnel's Training Branch in an effort to expand the cooperative education program of Manned Spacecraft Center.

Students enrolled in this program alternate periods of academic study with periods of work, and are able to complete the normal four-year college course in five years. Participation in the co-op program in some schools, for example, means that the student attends school 12 quarters and works at MSC installations seven quarters during the over-all period.

The NASA Co-op Program is designed to give the student-trainee an opportunity to prepare for a career in professional research, development, and designs on missiles and spacecraft in Aerospace Technology areas.

In this program the trainees are given the opportunity to observe and obtain experience in several facets of aerospace engineering—primarily in design and development of spacecraft communications, structures, and instrumentation.

Participation by the trainees provides them with practical experience in applying basic engineering principles and theories, furnishes them an opportunity to determine the kind of work for which they are best suited, and acquaints them with Manned Spacecraft Center and its mission. At the present time, according to Jack Lister, Chief of the Training Branch, there are six students participating in the program.

The primary requirements for entry into the program include meeting all requirements of the college or university concerned and all students selected must also meet the requirements for entering the College Co-op program of their school.

During the five-year training pro-

gram students are considered regular Civil Service employees throughout their training periods and are placed on leave without pay during their academic periods. They accrue leave at the same rate as other employees, and are eligible for group life and health insurance plans.

All school expenses are the responsibility of the trainee but travel expenses are paid by Manned Spacecraft Center with the exception of the initial trip to the work-site and the final trip back to school. Graduates of the Co-op Program may be offered positions in design, development and research in aerospace technology fields.

Further information concerning the Co-op Program may be obtained by contacting the Training Branch in MSC's Personnel Division.

### Operation Aerospace

Houston, Tex., is offering a salute to Aviation in the Space Age by holding "Operation Aerospace" October 29 through November 5.

Highlights of the activities of the week include an open house at Ellington AFB which will include both military and space exhibits (to include a Mercury capsule) a performance by the Blue Angels; a speech by Captain Eddie Rickenbacker; and speeches by other noted aviation experts.

The schedule will end November 5 with an open house at Houston's International Airport where commercial and general aviation aircraft will be on display.



STATE OF TEXAS  
EXECUTIVE DEPARTMENT  
AUSTIN

October 20, 1961

PRICE DANIEL  
GOVERNOR

TO NASA SPACE TASK GROUP EMPLOYEES  
AND THEIR FAMILIES:

As Governor, it is a great pleasure to extend to all NASA employees and their families a warm welcome to Texas.

We are pleased and proud that you will soon be citizens of our State. Your knowledge, your enthusiasm and your dedication to the continued scientific progress of our Nation will make valuable additions to the Texas traditions of courage, determination and vision.

You will find Texas a friendly State whose citizens will greet you with true hospitality. Texas gets its name from an Indian word meaning "friendly" and "friendship" is the State motto.

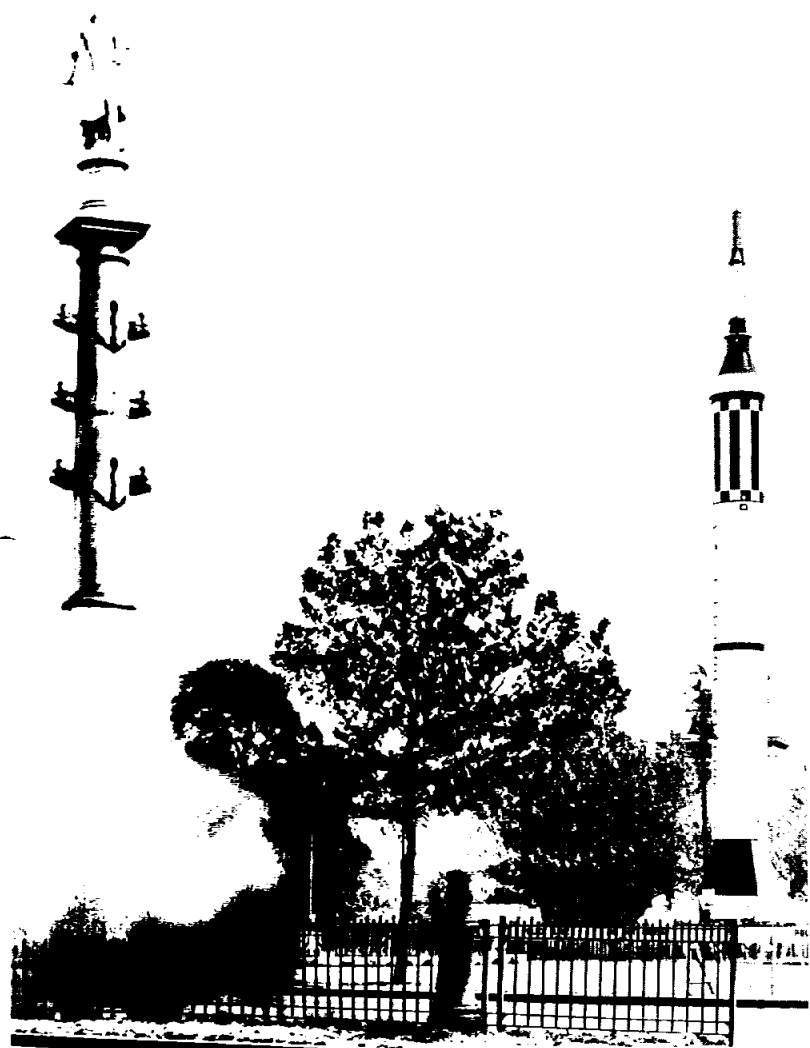
I look forward to meeting you and welcoming you personally in the future.

Sincerely yours,

Governor of Texas

PD:maf

### My Gawd, They Pushed the Wrong Button!



A BIT OF TRICK PHOTOGRAPHY highlighted the Columbus Day issue of the American Rocket Society BOOSTER, published daily during the meeting by Aerojet-General Corporation, as the statue of Columbus takes off while the Redstone-Mercury model on display stands idly by.

## Gilruth's Speech at Meeting Points Up Progress, Plans

(Continued from page 1)

ambitions flight undertakings.

In speaking of the future manned space flight plans, Gilruth referred to the challenge spelled out to the Congress by President Kennedy on May 25—the national goal which he set of sending man to the moon, accomplishing a successful landing on the moon and return to the earth during this decade.

He pointed out that aggressive steps have already been taken to move forward to meet this challenge:

- Steps involving accelerated research into some of the technical problems involved.
- Steps into the expansion of management capability.
- Steps into the expansion and, in some cases, literal creation of new resources in research, fabrication, and launch facilities.
- Steps toward the acquisition of the essential industrial manufacturing capability required.

Speaking of the manned segment of the lunar landing program, known as Project Apollo, he emphasized that Apollo is only the manned segment. He said, "It is by no means the only project involved—nor can we accomplish the desired end result alone. The NASA-JPL lunar sciences program, including Projects Ranger, Surveyor, and Prospector, is essential to the manned lunar landing operation. Many

of the other space research efforts being conducted by the NASA, the military and supporting scientific and educational institutions will be of vital importance to the successful achievement of the Apollo mission."

In summarizing, Gilruth pointed out that "manned exploration of space is coming of age." He stated that the two major manned space flight programs—Projects Mercury and Apollo—are well underway. He said "Mercury is on the threshold of achieving its specified mission—manned orbital flight. Apollo is now ready to enter the detailed engineering and design phase within the Aerospace industry, and the first of the large launch vehicles on which is now at Cape Canaveral ready for flight." (EDITOR'S NOTE: This flight was successfully completed October 27).

In conclusion the Director of the Manned Spacecraft Center said, "In addition to contributing the best our minds can produce to carry out these programs as efficiently as possible, each of us bears a share of the burden in the development and expression of national will.

"We look forward to all of you in the aerospace industries, and in the scientific, engineering and technical fraternity for support in this vital area so that we can proceed at a pace limited only by our technical competence."

### MSC MOVE IS ANNOUNCED

(Continued from page 1)

representatives who call on procurement personnel. A check was maintained one morning and during the first two-hour working period 48 businessmen arrived for information, and it was observed that this was a "slow" morning.

The procurement operation at the Gulfgate location has been directed toward obtaining the services and equipment initially needed by the cadre of MSC personnel; however, a great deal of effort is going into the establishment of source lists or bidder's files to be used in the future when the movement of MSC to the Houston area goes into full swing. This effort involves contacting the numerous area businessmen, better business bureaus, Chambers of Commerce, small business administration, etc.

According to Byrnes, several potential sites for temporary space to be occupied between now and the time the building project for Manned Spacecraft Center is completed have been offered and a study is now underway to determine which of these sites can best be utilized.

Burney Goodwin of the Personnel Office revealed that during the first two weeks of operation of the Personnel Office there were 837 applicants for employment with MSC, and many times there have been long lines of these applicants waiting for interviews.

# The Houston Area Offers A



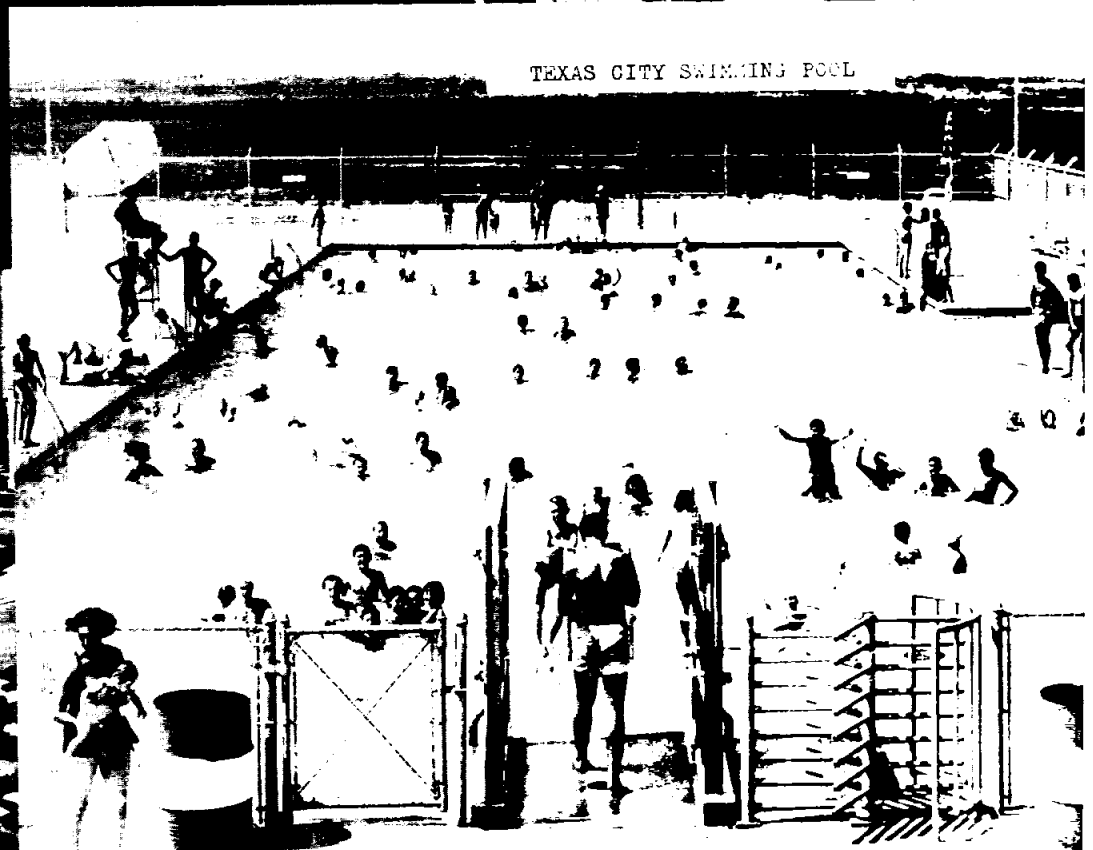
ELEMENTARY SCHOOL, DICKINSON, TEX.



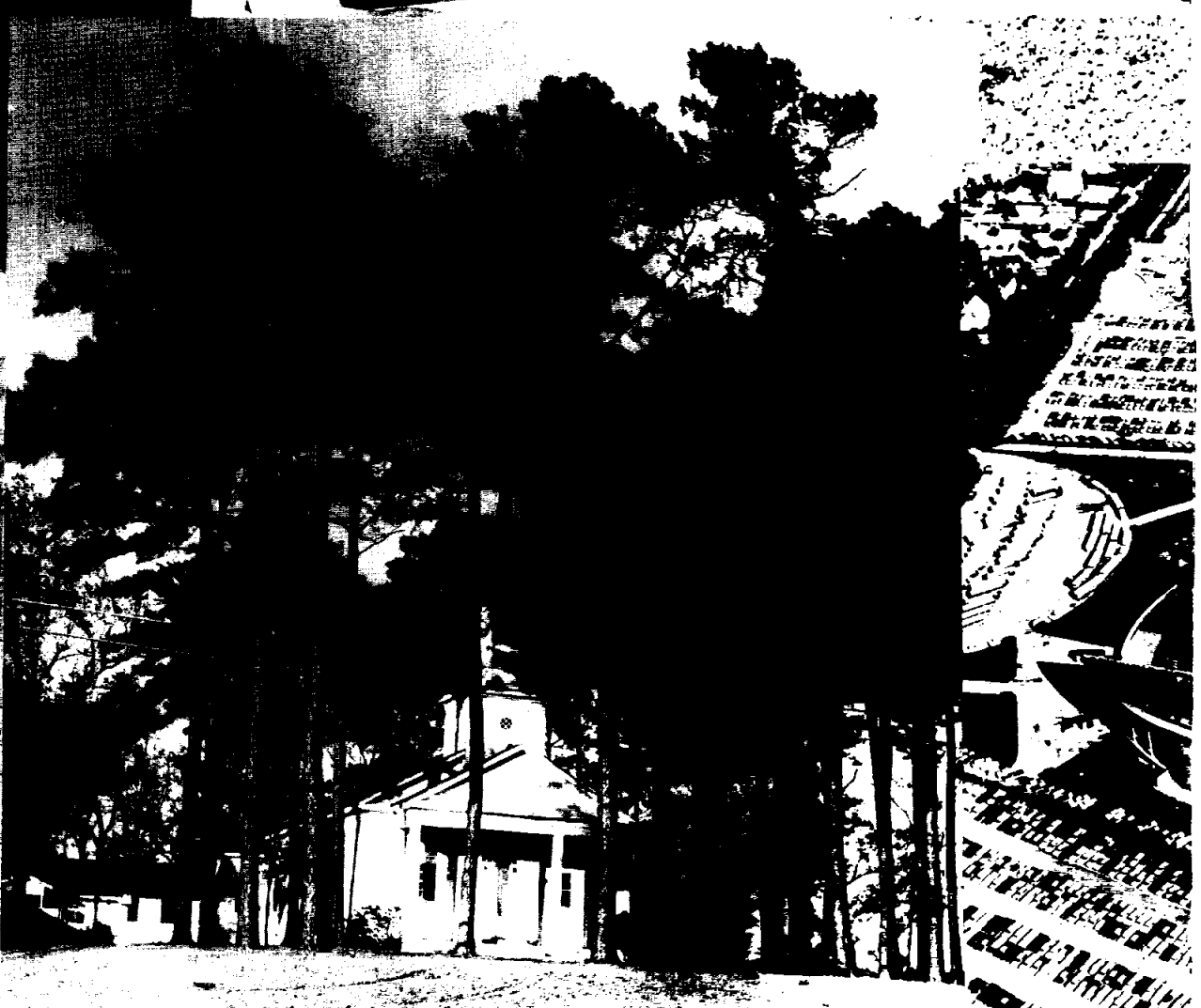
TEXAS CITY HIGH SCHOOL



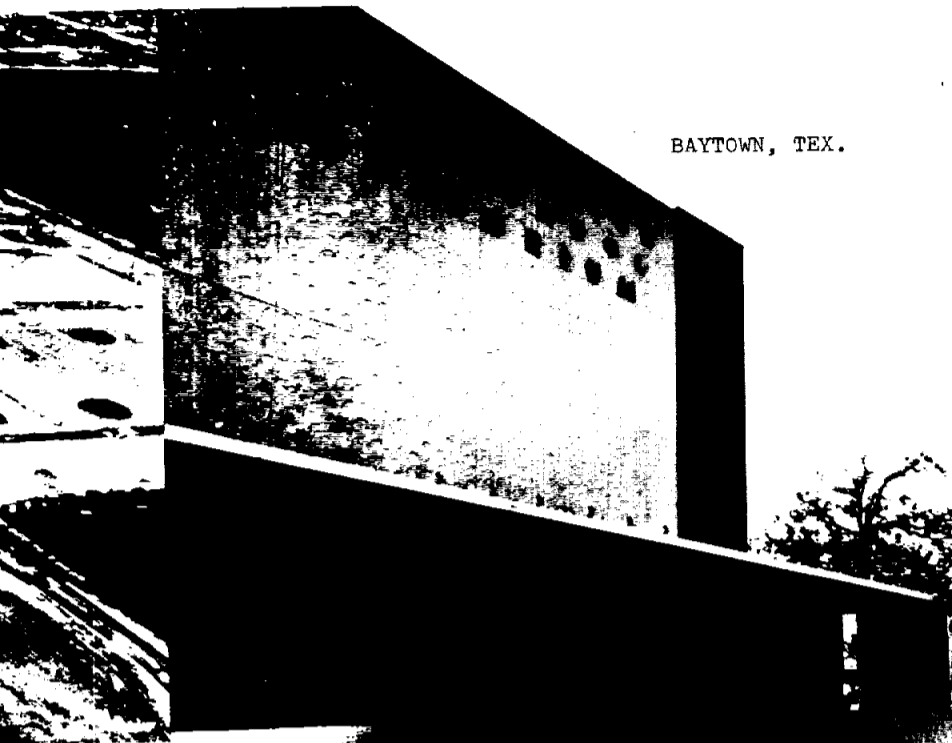
COLISEUM AND MUSIC HALL, HOUSTON



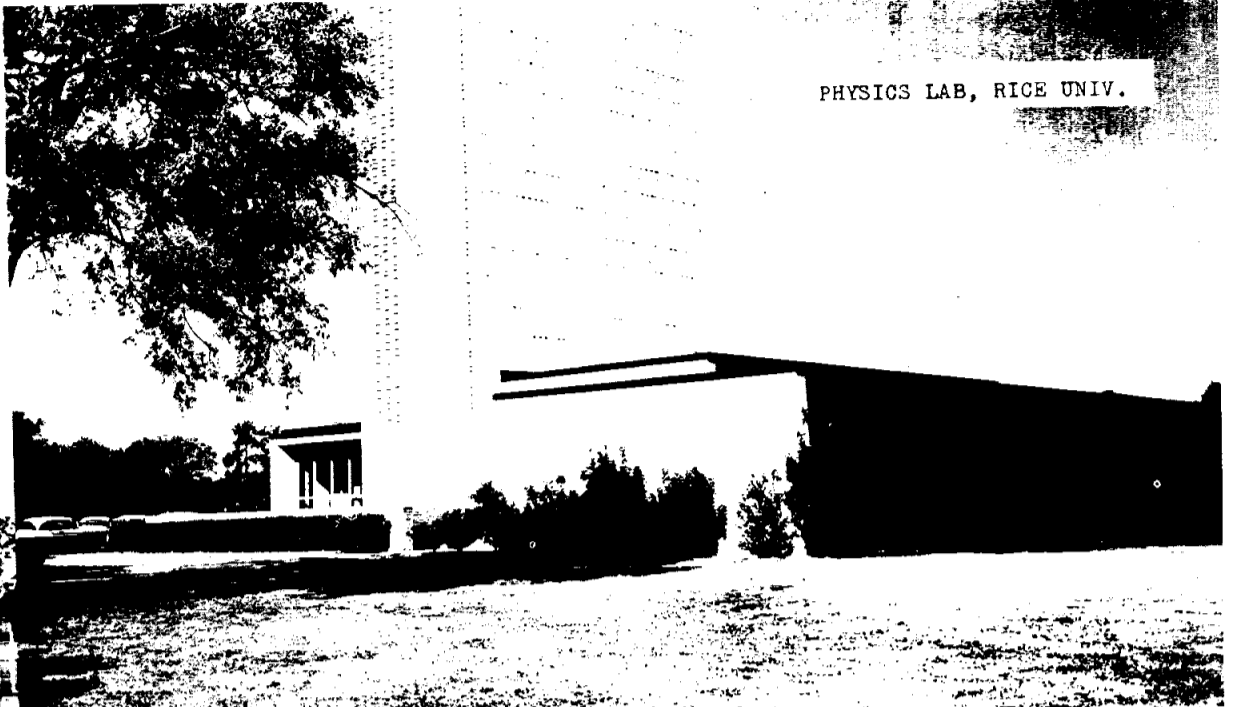
TEXAS CITY SWIMMING POOL



# Great Variety of Facilities



BAYTOWN, TEX.



PHYSICS LAB, RICE UNIV.



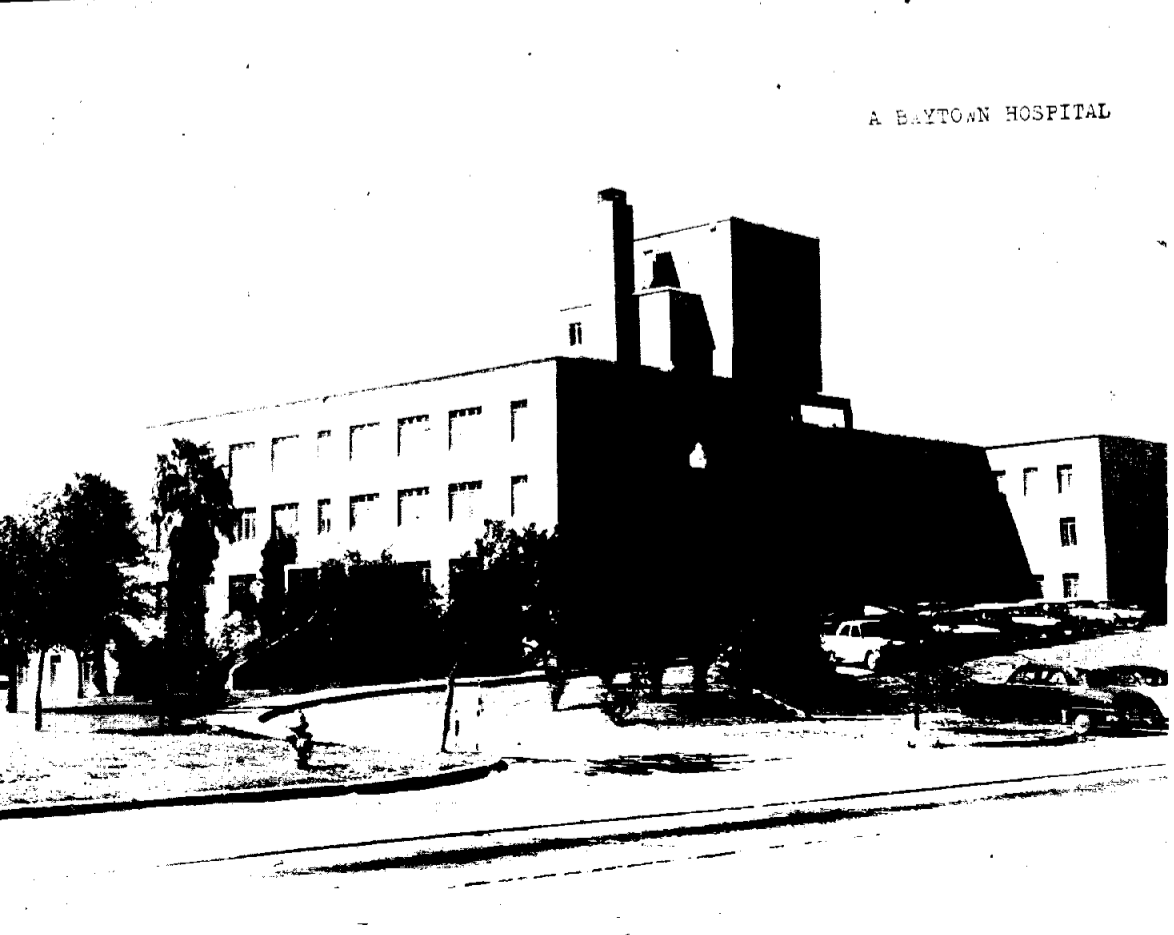
ELEMENTARY CLASSROOM, BAYTOWN



GARDEN SCENE - HOUSTON



RICE UNIVERSITY STADIUM

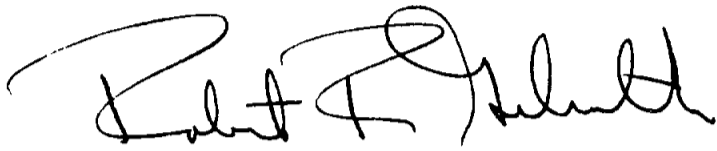


A BAYTOWN HOSPITAL

As Director of the Manned Spacecraft Center, I take great pride in welcoming the SPACE NEWS ROUNDUP as a vehicle through which the staff of MSC may pass on to all employees information of vital interest concerning the Mercury and Apollo Projects, plans for the future including our announced move to the Houston, Texas, area, and other pertinent information.

I am certain that within a short period of time you will look forward to receiving your copy of the SPACE NEWS ROUNDUP on a regular basis and that you will consider it as a valid source of information concerning both special groups and all of the employees as a unit.

All members of the staff will cooperate to assure that the SPACE NEWS ROUNDUP will be utilized to keep you fully informed of important developments with the ultimate goal of using this publication as a means of keeping in touch with all members of our rapidly expanding organization.

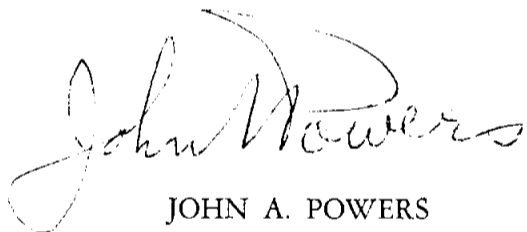


ROBERT R. GILRUTH  
Director

Space Task Group—now Manned Spacecraft Center—the Free World's first and only research facility devoted exclusively to manned space flight—is growing and moving. More important it is keeping Projects Mercury and Apollo going just as fast as possible.

This is a time when all of our people need to be kept well informed. The SPACE NEWS ROUNDUP is intended to help do just that. We hope we will be able to provide you with up-to-the-minute information about the programs, about our move, about our new team members and about our new home.

The SPACE NEWS ROUNDUP will only be good as you want it to be. We need your ideas, your suggestions and information. The SPACE NEWS ROUNDUP will be published bi-weekly beginning with this issue. This is your paper. Help us make it a good one!



JOHN A. POWERS  
Public Affairs Officer

## On The Lighter Side

While returning from a rip o Houston, recently, four MSC personnel, W. A. "Tex" Parker, Burney "Tex" Goodwin, Gene "Tex" Horton and the Editor, three of them sporting the traditional Stetsons, were given a lengthy and thorough going-over by a lady seated on the other side of the plane. Finally her curiosity got the best of her and she said "Pardon me, but I just know I recognize you—you're musicians aren't you?"

When the foursome was too stunned to reply, she accepted silence as consent and asked "What instruments do you play?" After finally being convinced that tthe group was not a Hillbilly combo, but really members of MSC, she still would not be denied.

She continued to stare at one of the unsuspecting victims and said "I knew I recognized you. Your wife's name is Louise and you live on Virginia Beach, don't you?"

When the "Texan" concerned assured her that he was not Al Shepard, she stared a bit longer, then admitted defeat with a parting shot "I guess you're right—your nose is more crooked than his."

## MSC PERSONALITY

### Director Robert R. Gilruth Is Recognized As Expert

Robert R. Gilruth, Director, Manned Spacecraft Center, is a native of Nashauk, Minn. He received a Bachelor of Science degree in Aeronautical Engineering in 1935 and a Master of Science degree in the same field in 1936. Both degrees were earned at the University of Minnesota.

Gilruth entered government service in January 1937 in the Flight Research Division at the Langley Laboratory of the National Advisory Committee of Aeronautics.

He began his career in the Flight Research Divison where he undertook a series of investigations related to the flying and handling qaulities of airplanes. This work culminated in NACA Report No. 755 entitled "Requirements for Satisfactory Flying Qualities of Airplanes." This work provided the basis for the establishment of quantitative requirements for the flying and handling qualities of both military and civil aircraft in this and other countries.

#### Conducted Experiments

In 1945 Gilruth was selected by NACA management to create and establish an organization and facility for conducting free-flight experiments with rocket-powered models at transonic and supersonic speeds. This activity resulted in the development of the Pilotless Aircraft Research Divison and of what is now the NASA Wallops Station launching site.

These installations gained international recognition for their contributions to the science of transonic and supersonic flight and for the development of many techniques of conducting aerodynamic, propulsion and structures research utilizing rocket-propelled models in free flight that have since been adopted by similar installations throughout the western world.

#### Pioneering Recognized

In 1952, in recognition of his leadership, pioneering and superior contributions to the science of flight and research techniques, Gilruth was designated as an assistant director of the Langley Laboratory. In this assignment he was given the responsibility for directing the efforts of three research divisions—Pilotless Aircraft, Structures, and Dynamic Loads. In this capacity, he directed the future development of highspeed research techniques in free flight and the development of equipment and techniques for research in high-temperature structures, materials, and aircraft loads.

In October 1958, Gilruth was selected to direct the initial program for achieving manned space flight, now known as Project Mercury.

His accomplishments have been such that he has been a nationally and internationally recognized authority progressively through the years in stability and handling qualities of aircraft, high-speed flight research, high-temperature structures research, and space flight research.

#### Awards Listed

Gilruth's technical achievements have been partially recognized by his receiving the 1950 Sylvanus Albert Reed Award, presented annual-

ly by the Institute of the Aeronautical Sciences for "A Notable Contribution to the Aeronautical Sciences Resulting from Experimental or Theoretical Investigations, the Beneficial Influence of Which on the Development of Practical Aeronautics is Apparent." He also received from the National Advisory Committee for Aeronautics, the Federal Government's



ROBERT R. GILRUTH

superior accomplishment award in July 1951, and the Outstanding Achievement Award form the University of Minnesota in October 1954.

#### Boards and Committees

His leadership and technical abilities have also been recognized by his appointment to the following boards and advisory committees:

Ad Hoc Committee on High Temperature Research and Development Facilities, Office of Assistant Secretary of Defense for Research and Development, 1956.

Ballistic Missile Defense Committee, Chief of Staff, United States Air Force, 1955.

NACA Committee on Aircraft Construction, 1952.

Scientific Advisory Board to Chief of Staff, United States Air Force, 1952.

Technical Capability Panel, Science Advisory Committee, Office of Defense Mobilization. (Killian Committee)

Industrial Survey Board, Office of Chief, Naval Operations, Department of the Navy.

NACA Subcommittee of High-Speed Aerodynamics.

Panel on Aerodynamics and Structures, Committee on Guided Missiles, Research and Development Board (Chairman)

Planning Consultants to Committee on Guided Missiles, Research and Development Board (Later called Technical Evaluation Group)

In 1959 Gilruth was elected a Fellow of the Institute of Aerospace Sciences. In 1961 he was elected Governor of the National Rocket Club and a Fellow of the American Rocket Society.

#### Personal Data

He is married to the former Esther Jean Barnhill of Subury, Ontario, Canada, whom he met while both were students at Minnesota. She has a degree in aero-

## EDITORIAL EXCERPTS

HOUSTON CHRONICLE —  
September 20

Moon. Noun. The satellite of the earth, revolving about the latter from west to east in a little less than a calendar month and accompanying it in the annual revolution about the sun.

—Webster's New Collegiate Dictionary.

And how do you get there? Well you start at a place called Houston, Texas.

"The National Aeronautics and Space Administration will develop and build space capsules here in a laboratory costing \$60 million that some day will squirt free of earth's gravity and land on the moon. Houston was picked because it meets the stringent requirements for such an ambitious undertaking.

A nation's standing in a field involving learning can be roughly established by the number of advanced degrees its experts earn. Throughout the United States 25,379 doctorates in the physical sciences—the field the new laboratory encompasses — were earned during the 11-year period, 1948-1959. Of these, 650 were earned in Texas and 114 were earned locally at our own Rice University.

It can be put more bluntly. Between the Massachusetts Institute of Technology in the East (which awarded 1,631 doctorates during the period) and the University of California and California Institute of Technology (which together awarded 2,149) there is a doctoral desert in this country. We may have had the will locally, but we have not had the way.

All this is about to change. Our local universities in the decade to come, will take their place in the very first rank. This is not in itself so exciting until you realize that this civilization of ours is increasingly geared to the knowledge and to the skills that will be taught."

### Hammack, Heberlig Present Report

(Continued from page 2)

monitoring, effect of a weightless condition on man, pilot performance during space flight, and recovery operations.

Hammack and Heberlig said that "the program provided information on man as an integral part of a space flight system, demonstrating that man can assume a primary role in space as he does in other realm of flight. The Mercury-Redstone program demonstrated that the Mercury spacecraft was capable of manned space flight, and succeeded in partially qualifying the spacecraft for orbital flight.

nautical engineering and has held a pilot's ticket.

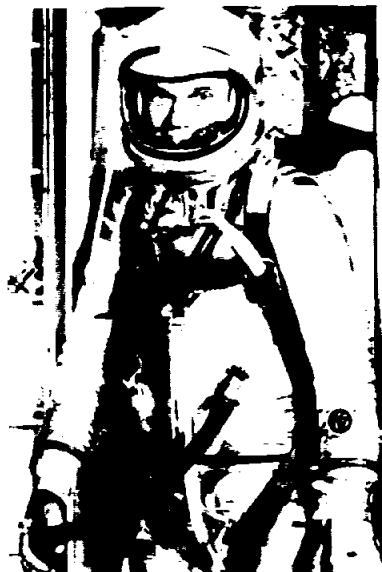
The Gilruths have one daughter, Barbara Jean, who attended Oberlin College. At the present time she lives at Oakland, Calif., with her husband and two children, while he is working on his doctorate at the University of California.

In addition to his achievements in his chosen field, Gilruth has been active in other fields. He is a sailboat enthusiast, developed hydrofoils for use on small powered boats, and built his own home in Seaford, Va.

The SPACE NEWS ROUNDUP, an official publication of the Manned Spacecraft Center, National Aeronautics and Space Administration, Langley Field, Va., is published for MSC personnel by the Public Affairs Office.

Director . . . . . Robert R. Gilruth  
Public Affairs Officer . . . . . John A. Powers  
Editor . . . . . Ivan D. Ertel  
Staff Photographer . . . . . Bill Taub

# The Project Mercury Astronauts



**J. H. GLENN, JR.**  
Lt Col, USMC

John H. Glenn, Jr., 40, was born in Cambridge, Ohio. The five-foot 10½ inches tall, 168 pound astronaut considers New Concord, Ohio, as his permanent home. It is also the home of his wife, the former Anna Margaret Castor. The Glenns have two children: John David and Carolyn Ann.

He attended primary, high school and Muskingum College, all in New Concord, before entering the Naval Aviation Cadet Program in March 1942. He was graduated from this program and commissioned in the Marine Corps a year later.

During his World War II service he flew 59 combat missions. During the Korean conflict he flew 63 missions with Marine Fighter Squadrons 311 and 27 while an exchange pilot with the Air Force in F-86 Sabrejets. In the last nine days of fighting in Korea he downed three MIG's in combat along the Yalu River.

Following his duty in Korea he attended Test Pilot School at the Naval Air Test Center, Patuxent River, Md. Glenn was assigned to the Fighter Design Branch of the Navy Bureau of Aeronautics from November 1956 until April 1959 when he was chosen as an astronaut for Project Mercury.



**M. S. CARPENTER**  
Lt Cmdr, USN

Malcolm S. Carpenter, a native of Boulder, Colo., is 36 years old, five feet 10½ inches tall and weighs 155 pounds. He and his wife, the former Rene Louise Price of Boulder, have four children: Mark Scott, Robyn Jay, Kristen Elaine, and Candance Noxon.

After completing high school in Boulder, Carpenter entered the Navy's V-5 flight training program in 1943 and attended Colorado College, St. Mary's Pre-Flight School at Moraga, Calif., and had primary flight training at Ottumwa, Ia. When the V-5 program ended at the close of World War II, he entered the University of Colorado and received a degree in aeronautical engineering in 1949.

Following graduation he joined the Navy, and after receiving flight training at Pensacola, Fla., and Corpus Christi, Tex., he attended the Fleet Airborne Electronics Training School.

In 1954 Carpenter entered the Navy Test Pilot School at the Naval Air Test Center, Patuxent River, Md. After completion of his training there he was assigned to the Electronics Test Division of the NATC. He has accumulated more than 2,900 flying hours, including 400 in jet aircraft.

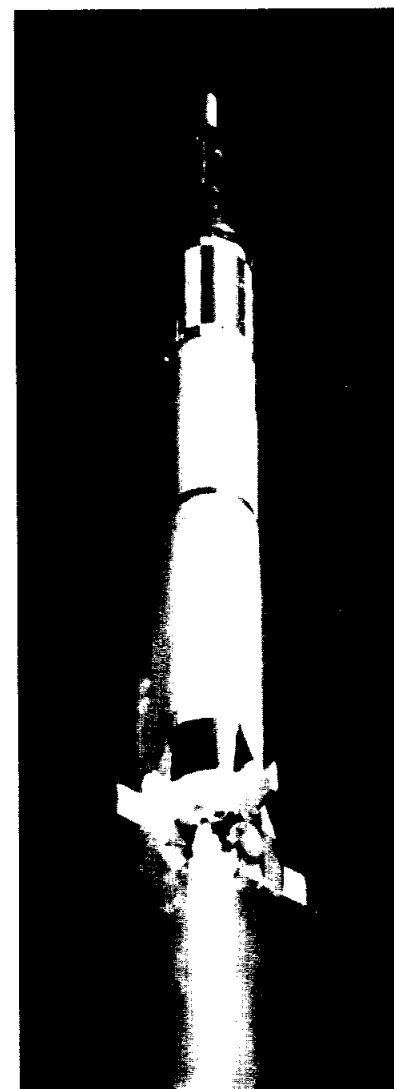


**L. G. COOPER, JR.**  
Major, USAF

Leroy G. Cooper, Jr., was born in Shawnee, Okla., and attended primary and secondary schools there. The 34-year-old astronaut is five feet nine inches tall and weighs 150 pounds. He is married to the former Trudy Olson of Seattle, Wash., and the couple have two children: Camelia K. and Janita L.

Cooper attended the University of Hawaii for three years and while there he received a commission in the Army. He transferred this commission to the Air Force and was called by that service in 1949 for extended active duty for flight training.

Cooper attended the Air Force Institute of Technology at Wright-Patterson Air Force Base, Ohio, for two years and received a bachelor's degree in aeronautical engineering in August 1956. He next attended the Air Force Experimental Flight Test School at Edwards Air Force Base, Calif., and after graduation was assigned duty in the Performance Engineering Branch of the Flight Test Division there. He has 2,600 hours of flying time, 1,600 of which are in jet fighters.



**W. M. SCHIRRA, JR.**  
Cmdr, USN

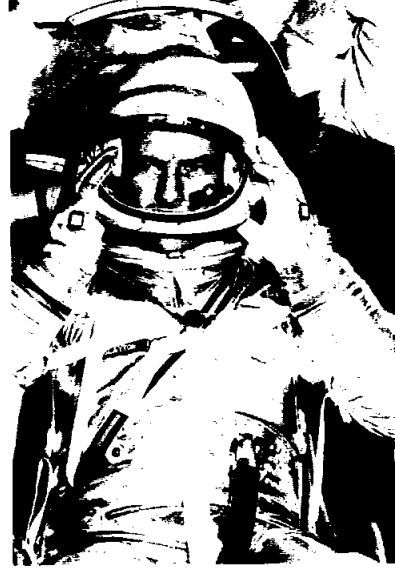
Walter M. Schirra, Jr., 38, is a native of Hackensack, N. J. He is five feet 10 inches tall and weighs 170 pounds. He is married to the former Josephine C. Fraser of Seattle, Wash., and they have two children, Walter III and Suzanne.

Following his early education in Oradell, N. J., he was graduated from high school at Englewood, N. J., and attended Newark College of Engineering one year prior to entering the U. S. Naval Academy. He was graduated in 1945.

He had flight training at Pensacola, Fla., served in Navy Fighter Squadron 71. Serving as an exchange pilot with the 154th Air Force Fighter Bomber Squadron, he went with the unit to Korea and flew 90 combat missions in F-84E aircraft.

Schirra took part in the development of the Sidewinder missile at China Lake, Calif., and was project pilot for the F7U-3 Cutlass and instructor pilot for the Cutlass and the FJ3 Fury.

He attended Naval Air Safety Officer School at the University of Southern California and had test pilot training at the Naval Air Test Center, Patuxent, Md. He has 3,200 hours of flying time, 2,000 hours in jets.



**D. K. SLAYTON**  
Major, USAF

Donald K. Slayton, 37, is a native of Sparta, Wis. The five-foot 10½ inches tall astronaut weighs 160 pounds. He is married to the former Marjorie Lunney of Los Angeles, Calif., and the Slaytons have one son, Kent.

Slayton attended primary and high schools in Sparta, graduating in 1942 and entered the Air Force as an aviation cadet in 1942. After winning his wings in April 1943 he flew 56 combat missions in Europe with the 340th Bombardment Group (Medium) and later during the war flew seven combat missions over Japan.

He entered the University of Minnesota in January 1947 and was graduated with a degree in aeronautical engineering in 1949.

In June 1951, Slayton entered the Air Force Test Pilot School at Edwards Air Force Base, Calif. From January 1956 until April 1959 he was an experimental test pilot at Edwards, where he flew most jet fighter-type aircraft built for the Air Force, and some foreign fighters. He has 3,600 flying hours, 2,200 in jets.

Slayton's hobbies include hunting, fishing, shooting, archery and skiing.

## A. B. Shepard, Jr., Cmdr, USN, First US Astronaut in Space

Alan B. Shepard, Jr., 37, was the first American to make a trip into space. The five-foot 11-inches tall astronaut, who weighs 160 pounds, made his historic flight May 5, 1961, in a Mercury spacecraft, launched by a Redstone booster.

He is married to the former Lou-

ise Brewer of Kennett Square, Pa., and they have two daughters, Juliana and Laura. A native of East Derry, N. H., he attended primary school at East Derry and was graduated from Pinkerton Academy in Derry in 1940. He studied one year at Admiral Farragut Academy, Toms River, N. J., then entered the Naval Academy and was graduated from Annapolis in 1944.

Following World War II duty in the Pacific aboard a destroyer, he had flight training at Corpus Christi, Tex., and Pensacola, Fla. Shepard went to USN Test Pilot School at Patuxent, Md., in 1950 and served two tours in flight test work there.

He took part in high altitude tests, and in testing and developing the Navy's in-flight re-fueling system, carrier suitability trials of the F2H3 Banshee, and Navy trials of the first angled deck carrier.

Shepard has 3,700 hours of flying time, 1,800 in jets.



## V. I. Grissom, Capt, USAF, Makes Second US Space Flight

Virgil I. Grissom, 35, was the second of the Project Mercury astronauts to complete a space flight. This flight was completed July 21, 1961, in a Mercury spacecraft launched by a Redstone booster.

Grissom, a native of Mitchell, Ind., is five feet seven inches tall and weighs 150 pounds. He is married to the former Betty L. Moore of Mitchell and the couple have two children, Scott and Mark.

After attending primary and high schools in Mitchell, he entered the Air Force in 1944 as an aviation cadet and was discharged in November 1945. He was graduated from Purdue University in 1950.

Grissom returned to aviation cadet training after his graduation and received his wings in March 1951. He flew 100 combat missions in Korea in F-86's with the 334th Fighter-Interceptor Squadron.

In August 1955 he went to the Air Force Institute of Technology at Wright-Patterson Air Force Base, Ohio, to study aeronautical engi-

neering. In October 1956 he attended the Test Pilot School at Edwards Air Force Base, Calif., and returned to Wright-Patterson Air Force Base in May 1957 as a test pilot assigned to the fighter branch. He has flown more than 3,400 hours, over 2,500 in jets.



*Space News* **ROUNDUP!**  
SECOND FRONT PAGE

**ALBERT THOMAS DAY IS CELEBRATED**

Albert Thomas Day is being observed in Houston, Tex., today as a part of "Operation Aerospace."

The Congressman from Texas is being honored for his efforts toward making the Houston area stand out in aeronautical and aerospace activities.

Among those scheduled to attend a luncheon honoring Congressman Thomas today are MSC Director Robert R. Gilruth and Associate Director W. C. Williams.

**Apollo Bids Studied After Presentations**

Manned Spacecraft Center officials got a first-hand report October 11 from five industrial teams bidding on the contract for the Project Apollo lunar spacecraft in the Virginia Room of the Chamberlin Hotel.

Each of the five teams were permitted to make an hour-long presentation to the assemblage of NASA officials, the Source Evaluation Board, Technical and Business Subcommittees, and Assessment

Panel members.

Following the presentations the 11 Panels, under the direction of business and technical subcommittees, began studying the proposals. The panels were set up with regard to the following areas of responsibility; Systems Integration, Propulsion, Flight Mechanics; Structures, Materials and Heating; Human Factors, Instrumentation and Communications, Onboard Systems, Ground Operational Support Systems and Operations, Technical Development Plans, Reliability, and Manufacturing.

Actual work by the group was initiated October 9 at the Chamberlin with a discussion of the evaluation plans, pertinent project information, and a "look" at the proposals submitted.

The Technical Assessment Panels completed their evaluation October 20 and made their final report to the Technical Subcommittee October 25.

The Technical Subcommittee is due to make its final report to the Source Evaluation Board today. Walter C. Williams, Associate Director of Manned Spacecraft Center, is chairman of that board. Other board members are Robert O. Piland, Wesley J. Hjernevik, Maxime A. Fager, James A. Chamberlin, Charles W. Mathews, and Dave W. Lang, all of Manned Spacecraft Center; George M. Low, Brooks C. Preacher, and James T. Koppenhaver, all of NASA Headquarters; and Dr. O. H. Lange of Marshall Space Flight Center.

**NASC Executive Secretary Presents Space Race Views**

Dr. Edward C. Welsh, the executive secretary of the President's National and Aeronautics and Space Council, presented some of his personal views on the space challenge to the Air Force Association Symposium on "Space and National Security" on September 22.

Excerpts of his presentation follow:

"By way of introduction, it might be useful for me to make three broad generalizations which, in a sense, express my philosophy of this space challenge.

"First, we are in a space race, and it is absurd to pretend that we are not. We are, moreover, not in the contest just for the fun of racing, but rather for our survival as a nation determined to protect its freedom and also as a nation determined to maintain and increase the margin of the material and spiritual advantages of a free society. We have no honest choice to do otherwise in view of the Communist threat. Having finally decided to run instead of walk, we can and, I believe, we will win the

race. "Second, we should be making a vigorous effort in space development, in space exploration, and in space competence, even if no other nation were doing anything at all in space. The potential benefits flowing from this effort are so great that we would have no right to deprive our children or future generations of them, regardless of what the Communists decided to do.

"Third, I believe that the values received from our space efforts will exceed the costs many times over. These values will be reflected in education, in medicine, in metallurgy, in international prestige, in diplomatic negotiations, in defense against aggression, and in higher standards of living generally. We can get all that for an annual expenditure averaging perhaps one per cent of our gross national product . . .

"The National Aeronautics and Space Act of 1958 states that it is the policy of the United States that activities in space should be devoted to peaceful purposes for the benefit of all mankind"



Phoncille DeVore points out the name chosen for the paper to Paul E. Purser, Special Assistant to the Director, as the two got a preview peek at the front page.

**150 Entries Are Submitted In Contest to Name Paper**

A committee of five from the offices of the Special Assistant to the Director, Flight Systems Division, Life Systems Division, Operations Division, and the Personnel Office met October 2 to choose the name of the Manned Spacecraft Center house organ from the 150 names submitted by personnel of the organization.

The name selected, after a period of elimination was "SPACE NEWS ROUNDUP", submitted by Phoncille De Vore, Office of the Director. The committee members were given only the list of names submitted for use in making their choice.

In order that proper recognition might be given to the many persons who submitted suggested names for this paper, all suggested

follow. They are: *Adventurers, Astromariner, Argonaut, Astro-Note, Astronauts' Almanac, Astro-Star, Apollo Picture, A-O-K, Astronaut, Astro News, Astro-tots!, Apollo Applause, Apollo Apotbegems, Apollo Apologies, Apropos, Astro Times, Apollo, All About The Moon People.*

*Air-Lock, Asteroid, Asteroid Beep, Apobez, Astropost, Astrapost, Argonaut, Ad Astra, Analune, Astron, Astroneus, Astro-tox, Au Gratin, Blastoff, Big Star, Booster, Bi-weekly Rendezvous, Capsule, Celestial Times, Celestial Frontiers, Cat and the Fiddle, Cherry Pickin' Neus, Capsule Call, Changing Times, Countdown, Cynthian.*

*Das Capsule Fliegenabout Propagandischer Bladt, Explorer, Ecliptic, Extraterrestrial, Eyes and Ears of Space, Freedom Line, File 13, Galaxy, Galactic, Galactic Gazette, Green Cheese Gazette, Heat Shield, Informer, Jet Stream, Laker, Lunar Latest, Lunar Probe, Launching Pad, Lutation, Lunar News, Lunar Booster, Luminous Journal, Lone Star, Lunar-Tics, Lunarian, Lunar Newser, Lunar Love.*

*Meteor, Meteorwrite, Milky Way, MSC Message, MSC Moonbeams, Manned Space Flyer, Moonbeam, Moondust, Moon Observer, Missile, Man Upstairs, M.C.S.N., Moon Probe, Moon Beam, Moon Message, Moon Shiner, Moon Memos, Nebula, NASA News, News of History, Nasams Views, Newtonian, New Frontiers, Nasanaut, Nasanaut Log, Orbit, Outerglobe, Probe, Plasma Scoop, Planetarium, Planetary News, Pioneer, Pocket Rocket, Planetoid.*

*Rocket Roar, Rocket, Stairway to the Stars, Spaceway Scoop, Space Probe, Space Traveler, Space Pioneer, Space Frontiers, Spaceship, Space Vehicle, Space Sanskrit, Spaceman, Space Probe, Space Raider, Space-Capadev, Space Blazer, Spade, Satellite, Spectograph, Spec-*

(Continued to page 2)

**Al and Gus and Bing and Bob Swap Suits**



AL AND GUS were ready, willing and able to respond in kind when they received a picture of Bing Crosby and Bob Hope attired in space suits. They quickly donned their blazers, grabbed their straws and canes, and posed for the answering photo.

