Kennedy Makes MSC Third Stop In ‘Space Tour’

Visits Canaveral, Huntsville, St. Louis With Johnson, Webb

“We talk about doing this in five or six years,” President John F. Kennedy said last Wednesday of this country’s planned landing on the moon. “This indicates how far and how fast we have come, and how far and how fast we must go.”

President Kennedy arrived in Houston Tuesday night, Sept. 11, on the third stop in his two-day whirlwind tour of the nation’s space facilities. During the day Tuesday he visited Marshall Space Flight Center in Huntsville, Ala., and Cape Canaveral, Fla. From Houston he continued to St. Louis, Mo. and the McDonnell Aircraft Corp. plant, and was back in Washington Wednesday night.

Wednesday morning, he told a crowd of 45,000 gathered in Rice Stadium:

“The exploration of space will go ahead, whether we join it or not . . . . no nation which expects to be a leader of other nations can expect to stay behind in this race for space.

“In the last 24 hours we have seen the facilities now being created for the greatest and

MSC Names Nine New Pilot Trainees

Nine new Manned Spacecraft Center flight test pilots were presented to the public Monday afternoon in a Houston press conference before being assigned to a comprehensive training program designed to prepare them for possible space flight.

The nine were Neil A. Armstrong; Air Force Major Frank Borman; Navy Lieutenant Commander James A. Lovell, Jr.; Air Force Capt. James A. McDivitt; Elliot M. See, Jr.; Air Force Capt. Thomas P. Stafford; Air Force Capt. Edward H. White, Il; and Navy Lieut. Commander John W. Young.

From these nine and the present seven astronauts will come the flight crews for future space missions.

Their selection culminated more than six months of extensive evaluation of 200 volunteers.

The new test pilots will not all necessarily participate in actual space flights. MSC Director Robert R. Gilruth, at the press conference, “Assignment to flight crews,” he said, “will depend upon the continuing physical and technical status of the individuals concerned, and upon the future flight schedule requirements.

“Important Role”

“The new flight test personnel will, however, have an important role in the Manned Spacecraft Center space program, in addition to any flight participation. This role will include contributions to engineering design, to the development of future spacecraft, the monitoring of flights, and to the development of advanced flight simulators.

The original invitation for volunteers for the flight test program was announced last April. Criteria for selection included experience as a jet test pilot, preferably still going on, status as an experimental flight test pilot acquired either through military service, through aircraft industries, or

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A TOUR OF HANGAR S was conducted by Cape Operations Manager Merritt Preston (left foreground). Here he explains a point to Vice President Lyndon B. Johnson, President Kennedy and NASA Administrator James E. Webb.

VISITING CAPE CANAVERAL Tuesday on his two-day tour of the nation's space facilities, President Kennedy is briefed by Astronaut Walter Schirra at Complex 14. In the background is the MA-8 configuration that will lift Schirra into orbit late this month.

ON HIS WAY TO RICE STADIUM Wednesday morning to speak to a crowd of 45,000, the President waved to thousands more that lined the streets of downtown Houston, beginning outside the Rice Hotel shown here, where he spent the night Tuesday.

BACK-UP PILOT for the MA-8 mission Gordon Cooper explains the complex instrument panel of spacecraft #19 to the President. Later, Kennedy spoke to a crowd of NASA employees outside Hangar 5, telling them "we shall be first" in space.

JUST BEFORE the President's arrival at Manned Spacecraft Center, the J. P. Cornelius grade school on Westover turned out for a look at Chief Executive in person. Wearing sun hats they made themselves, 700 children lined the roadway opposite the side entrance to the Rich Building.
THE PRESIDENT stepped from his car at the Rich Building after his morning speech at Rice Stadium. Still seated in the rear seat is Texas Governor Price Daniel. MSC Director Robert R. Gilruth can be seen just behind Kennedy. The men opening the doors and those in the convertible in the background are Secret Service agents.

STARTING INTO THE BRIEFING ROOM at MSC, Kennedy is flanked by MSC Director Gilruth, (left) and Vice President Johnson. The classified briefing lasted over an hour.

ASTRONAUT JOHN H. GLENN, JR. gives the President a quick run-down on the display of survival gear as the Chief Executive took a quick tour of a dozen displays set up for him after the classified briefing.

ASTRONAUT Alan B. Shepard, Jr. told Kennedy about the first preliminary proposal mock-up of the lunar excursion module. At left is NASA Administrator Webb and Vice President Johnson. Above them is the model of the Rogallo wing for bringing a spacecraft down safely on land.

LOOKING RATHER IMPROBABLE, since it does not need a streamlined shape for an airless moon landing, the lunar excursion module mock-up attracted perhaps more attention than any other single exhibit in its first public display.

MSC Director Robert R. Gilruth presented the President with this mounted model of the Apollo spacecraft at the end of Kennedy's visit.
New Group Slightly Younger; Includes Two Civilian.

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through NASA, or else a certificate of graduation from a college of sciences, or in engineering; U.S. citizenship; age less than 35 at the time of selection; a height of six feet or less; and a recommendation from the applicant's organization.

The qualifications were similar to those for the original seven astronauts, but unlike earlier ones they were not restricted to military volunteers. The new standards also allowed candidates with experience below 5 feet 11 inches tall and reduced the age limit required, the latter because of the advanced age nature of the program.

From Seven States

teen each from Ohio and Texas and one each from California, Indiana, Massachusetts, Minnesota, and Oklahoma. (The Project Mercury astronauts were born in Colorado, Oklahoma, New Jersey, New Hampshire and Wisconsin.)

Four Air Force, three Navy and civilian pilots form the new group. The Project Mercury team is composed of three Navy, two Air Force, and one Marine pilot.

The pilots selected in 1969 had an average age of 34.5 years, an average weight of 139 pounds, and an average flying time of 1,900 hours, including 760 hours in jet aircraft. The new group has an average age of 35 years, an average weight of 138 pounds, and an average flying time of 2,800 hours, including 1,500 hours in jet aircraft.

As of July 1, 1962, the average number of the pilots, the Mercury pilots will be 5 feet, 11 inches tall, weighs 163 pounds, has blond hair and blue eyes. He is five feet, six inches tall, weighs 138 pounds. Conrad has blond hair and blue eyes.

His wife is the former Jane DuBois of San Antonio, Tex., and the Conrads have four sons — Pete, 8; Thomas, 5; Andrew, 3; and Christopher, 2.

The Conrads' hobbies include golf, swimming, and water skiing.

James A. Lovell, Jr.

James A. Lovell, Jr., was born March 25, 1928, in Cleveland, Ohio.

He attended the University of Wisconsin from 1946 until 1948 and the U. S. Naval Academy from 1948 to 1952.

His last Navy assignment was as an instructor and safety officer at the Naval Air Station at Oceana, Va. From January 1, 1955 until July 1, 1961, he was a test pilot at the Naval Air Test Center at Patuxent River, Md. His work there included involvement in the development of the F4H weapon system, including work on advanced simulators, and as a flight instructor and program manager for the F4H Weapon System Evaluation. He was graduated from the Aeronautical Safety School at the University of Southern California in 1961.

Lovell has logged more than 2,300 hours flying time, including 1,600 hours in jet aircraft.

The son of Mrs. Blanch Lovell, Eloy Lovell Beach, Fla., is five feet, 11 inches tall and weighs 165 pounds. He has blond hair and blue eyes.

Lovell is married to the former Marilyn Lillie Gerlach of Milwaukee, Wis., and they have
Four Air Force, Three Navy Pilots Born In 7 States

JAMES A. McDIVITT

Elliot M. See, Jr.

Thomas P. Stafford

Edward H. White, II

John W. Young

Captain, USAF

Test Pilot, General Electric

Captain, USAF

Lieutenant Commander, USAF

Formerly of St. Petersburg, Fla., Edward White, II, a Navy pilot, was chosen for a place on the Mercury rocket test pilot crew. White, who is five feet, 11 inches tall, weighs 175 pounds, has brown hair and blue eyes.

The four men who will attempt this new conquest of the sky are all from the United States, but are all from different states.

JAMES A. McDIVITT

Elliot M. See, Jr.

Thomas P. Stafford

Edward H. White, II

John W. Young

SPACE NEWS ROUNDOUP

SEPTEMBER 19, 1962

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Trainee Comment On ‘Why?’

The final nine selections from more than 200 applicants for space pilot trainee slots were asked Monday what drew them to apply for the job.

NASA test pilot Neil Armstrong turned to the group and asked, ‘Why do you want to be a space pilot?’

‘I like to be on the first with those other eight guys,’ said Frank Borman, ‘and if I ever had a chance, I would have done the same thing.’

All eight of the others converged, added some of them added their own comments.

I like to be on the first team,” said Frank Borman.

‘I want to be part of it,’ agreed Charles Conrad, Jr. ‘I made up my mind years ago that if I ever had a chance, I would do this for this.’

‘I am going to be part of the program, and the general assignment of this part of it with our national goals. The program, and the general alignment of the program and the general assignment of this part of it with our national goals.’

All eight of the others converged, added some of them added their own comments. ‘I like to be on the first team,’ said Frank Borman. ‘I want to be part of it,’ agreed Charles Conrad, Jr. ‘I made up my mind years ago that if I ever had a chance, I would have done the same thing.’

I felt I had something to give to this program,” said Edward White. “I am going to be part of the program, and the general alignment of this part of it with our national goals.”

Edward White, II

Last to speak was John W. Young, who drew a laugh when he muttered “I agree with those other eight guys,” then added seriously, “I couldn’t turn down a challenge like that.”

Young joined the Navy in June of 1952. His last assignment was as a maintenance officer for Fighter Squadron 53 at the Naval Air Station, Miramar, Calif.

Earlier this year he set world time-to-climb records for the 3,000 meter and 25,000 meter events in Project Hell Jump. He has logged 2,300 hours flying time, including 1,700 hours in jets.

From 1959 until 1962 he was program manager and test pilot for the Navy’s F4H project. Flying and writing technical reports and test results for preliminary evaluation by the Navy.

His father, William Young, lives in Orlando, Fla. Young is five feet, nine inches tall, weighs 175 pounds, has brown hair and green eyes.

He is married to the former Barbara White of Savannah, Ga. and they have two children, Sandra, 5 and John, 3.

His hobbies include swimming, water skiing and physical fitness exercises. He is also a member of Toastmasters International.
President Visits Here (Continued from Page 1) most extensive exploration in man’s history.

Of Houston, he said, “What will happen in the frontier of the West will be the furthest outpost on the new frontier of science and space. During the next five years, NASA expects to double the number of scientists and engineers. If this is accepted, it will increase outlays for salaries and expenses to 860 million a year. This will result in a tremendous expansion of plant and laboratory facilities; and to direct or contract for new space efforts over $1 billion within the space budget in the next few years.”

“This year’s space budget is three times what it was in January, 1961, and it is more than the space budget of the previous eight years combined. That budget now stands at five billion four hundred million dollars a year—a staggering sum, though somewhat less than we pay for cigarettes and cigars every year. (But) I think we must pay what needs to be paid. I don’t think we ought to waste money but I think we ought to do the job. And this will be done in the decade of the 60’s.”

President Kennedy was greeted by a crowd of 25,000 at Houston Municipal Airport Tuesday night and presented with a key to the city by Houston Mayor Lewis Calder as token of the city’s appreciation. He spent the night at the Rice Hotel. An estimated 175,000 people lined the route to the hotel, where 3,000 more were congregated.

A company of 36 Airmen from Houston were Vice President Lyndon B. Johnson; Rep. Albert Thomas of Harris County; Harris County Judge Gene House; Transportation Committee Chairman; George Miller (D-Calif.) and Rep. Jack Brooks (D-Texas); an Astronaut from NASA; and Sam Johnson of the Space Task Group.

Crowds also lined the route from the Rice Hotel to Rice University Stadium Wednesday morning and from the stadium to the Rich Building. Opposite the side entrance to the Rich Building stood a hundred girl students from J. F. Cornellus school cheering the President’s arrival.

At Cape Canaveral Tuesday, President Kennedy told a cheering crowd gathered around Launch Complex 37, “We shall be first” in space. He said the Mercury-Atlas which will take Astronaut Alan B. Shepard into space and was met upon his arrival by Shepard himself, who explained the project. He will launch in a Titan IV booster and tabled briefly at public and classified briefings on this and other space programs. He visited Complex 37, launch site for Saturn C-1 boosters, and tabled briefly with Astronaut L. Gordon Cooper before visiting the high altitude chamber there.

MSC Personalities

Executive Asst. Ray Zavasky Had A Long NACA Career

“It’s a trouble-shooting job in the planning and programming areas,” said Raymond L. Zavasky, executive assistant to the director. “As our organization grows, we take on a number of new functions. Frequently, until we pass these things on to whatever office is set up to handle them directly, they must be handled by Dr. Gilruth’s staff.”

A veteran of government research and development work, Zavasky began as a junior aeronautical engineer with NACA at Langley Field in 1938, after his graduation from the University of Pittsburgh in 1942 in Mechanical Engineering. Prior to that he had spent a couple of college summers as lab technician with Eric Resinor Corporation.

He is a native of Erie, growing up in the Great Lakes coal country,

In 1943 he transferred from the full scale wind tunnel at Langley to the Langley Aerodynamics Division and became the chief of the Aerodynamics Division. By 1945 he was head of the Research Staff Office, handling research correspondence and budget and equipment justifications. Presenting in the preparation of laboratory progress reports.

Designated aeronautical technical assistant, and then aeronautical research scientist, Zavasky acquired more responsibility in the same office advising laboratory officials on research policy and procedures and on the development of such procedures applicable to new situations.

By the summer of 1958 he was working primarily in the field of space research and development planning and coordination, helping draft the technical programs in a variety of scientific areas.

With the creation of NASA in October of 1958, Zavasky went to Washington, D. C. with the Space Task Group, and was appointed executive assistant Robert R. Gilruth, who was then Director of Projec- tect Mercury. In February, 1959, he returned to Langley.

Zavasky headed the committee planning the facilities for the new Manned Spacecraft Center at Clear Lake and more recently served as MSC representative in the industrial applications program. He has been a speaker in the Apollo program, space science activities, and miscellaneous assignments in programming and budgeting.

He is married to the former Edith Halton of Decatur, Ga., and the couple has one son, Mitchell, now serving in the Air Force.

An accomplished pianist, according to his friends, Zavasky is also an avid record collector. He says his large record collection "would equal any record shop in the world" and leans heavily to classical music and contemporary jazz.

WELCOME ABOARD


Protection System (Continued from Page 8)

LTV has also received another contract from NASA to furnish the NASA's Space Station III, a propulsion and ablative material which will be bonded to the beryllium chute canister of a Mercury spacecraft. The material will be given a re-entry test on the spacecraft scheduled for orbital flight in September.

On The Lighter Side

Hundreds of thousands of Americans, Englishmen, Canadians, Germans, Poles, Italians, Japanese, Turks, Swedes, Greeks, Egyptians, Australians, Hungarians, Swiss, Frenchmen, Russians and even some Texans have swarmed into the NASA exhibit at the Seattle World’s Fair to see what is new in space. Most of them had some idea of NASA’s programs.

The others are quoted herein:

Lady (looking at the F-1 engine): “Where does the astronaut sit?”

Woman (looking at the base of the Saturn C-1): “I suppose this is one of your space stations and those little people will someday work and track it from Earth.”

Guide: “And this is a model of the Ranger IV which hit the moon last month.” Visitor: “How did you get it back?”


Men, (looking at Ranger I and II): “Man 1: “I wonder what that is.” Man 2: “Oh, that’s the Ranger. Leave it alone.” Woman (talking to daughter): “These solar cells are painted so the transmissions will be over a variety of frequencies. The ones on the top are for recording X-rays from the sun.”

Guide: “This is a model of the Ranger which will place a capsule on the lunar surface.” Visitor: “Oh, that’s between Venus and Mars, isn’t it?”

Question: “Do they give gold space capsules pins to all those good guides who are acquainted with space visions in the heads of operations?”

Woman: “What happened to Ranger II?” Guide: “It missed the moon and is now orbiting the sun.”

Woman: “Oh! Then you’ve lost a man!”

Man: “What kind of protective covering does Ranger have?” Guide: “It has a nose cone which is released after the satellite is outside the earth’s atmosphere.”

Man: “What other covering does it have?” Guide: “Outside the atmosphere there is no need for any other such covering as there is no air resistance.”

Man: “But what happens when it rains?”

Man: “What is this asymmetrical dimethylhydrazine . . . ?” Guide: “That’s the name of one of our exotic fuels.” Man: “Exotic nothing! How about Lolaalkalalakulate or something like that?”

-Taken from “Is This Where They Have Glenn’s Space Needle?” Seattle World’s Fair, 1962.

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Conferees Get Close Look At Gemini Spacecraft

A SPACECRAFT BUILT FOR TWO, the two-man Gemini mock-up, was exhibited to 140 industry and NASA representatives at the St. Louis Plant of McDonnell Aircraft last month. "Pilots" are McDonnell technicians.

PART OF THE 140 CONFERENCEES present at the review look over the mock-up during the two-day session. Besides 32 personnel from MSC the conference was attended by representatives from six other NASA centers, five industrial firms, the Air Force and the Navy.

ASTRONAUT VIRGIL I. "GUS" GRISSOM tried the model out at the Project Gemini Mock-up Review. Grissom is wearing a prototype of the Gemini space suit now under development, which will have detachable arm and leg sections to promote comfort in missions which could last up to 14 days.

SEPARATED INTO THREE major components, the Gemini spacecraft is composed of the equipment section (far left) which houses most of the oxygen for the life support system, the fuel cells for electric power, and hypergolic fuels for the propulsion system. Second from left is the retro-rocket section, carrying solid fuel rockets which slow down the spacecraft's descent from orbit. Both these sections are to be jettisoned before re-entry. Second from right is the re-entry module which houses the two-man crew throughout the flight. At far right is the adapter of the Agena D with which Gemini will rendezvous and dock in space. McDonnell is the prime contractor for the design, development and construction of the Gemini spacecraft.

IN ORBITAL POSITION, with the astronauts sitting upright with respect to earth, the re-entry, retro-rocket and equipment sections will circle the globe as one unit prior to docking maneuvers. McDonnell is to construct a dozen of the Gemini spacecraft.

CLIMBING INTO THE MOCK-UP, a McDonnell engineer prepares to simulate movements of the pilot in his data monitoring and control functions. Suggestions were encouraged from those taking part in the conference and ranged all the way from the placing of instruments to major design changes.
WELCOME ABOARD

THE APOLLO ESCAPE ROCKET motor case prototype is inspected by J. W. Thompson (left), North American Aviation's resident representative for material at Lockheed Propulsion Company, and Robert F. Hurt, LPC president. The prototype case is for the Apollo launch escape rocket motor. The red, bald, rocket firm is developing escape rockets under subcontract to North American, prime contractor to the National Aeronautics and Space Administration for the Apollo lunar spacecraft.

Market Survey Shows Employee Needs By '63

Manned Spacecraft Center will have 2,760 employees, three fourths of them married, with a total of nearly 4,500 children by June of next year.

Three quarters of the employees will have come from outside Houston Metropolitan area. More than 2,100 of them will want to purchase single-family houses. About the rest will want to rent apartments. A typical house will be a new ranch-stye brick with three bedrooms, two baths, and a price between $16,000 and $19,000.

There are among the figures contained in a 38-page basic market survey on housing, school and community facilities and needs of MSC employees which was released early this month as a guideline report for-suppliers of these needs.

Prepared jointly by the Houston Chamber of Commerce Research Department under Howard M. Martin, manager, and editor of the report.

At that time, the 584 represented more than half of the total 1,100 employees. Anticipated full employment of the Center by the time of Oct. 53 will be 2,760. Of the 1,004 will have annual salaries of $5,355 and below; 1,020 salaries in excess of $5,355 and $8,955; and 736 salaries of $8956 and above.

Percentages Weighted

Since the number of questionnaires returned in each of the salary range groups did not correspond exactly to the anticipated number in each group, all percentages in that order, are corrected to represent data by salary ranges were weighted accordingly. About 75 percent of MSC employees will be married, according to the report. They will represent 2,134 family households, based on the five member families of children and will have a total of nearly 4,500 children. Some 85 percent of the children will be teenagers.

Ninety-five percent per cent of employees in the top salary range will come from outside metropolitan Houston, as will 85 percent of those in the middle range and half of those in the lowest salary bracket.

Manned Spacecraft Center employees will total about 9,300 persons.

Housing

Of 2,760 employees, 629 will want to live in apartments; 48 percent of these will want those apartments furnished, and 44 percent will be willing to pay $110 a month or more for rent.

Another 2,121 employees will want to purchase single-family homes. A composite house, based on the most frequently chosen features, would be a new ranch-stye brick with between 1,600 and 2,000 square feet of floorspace, including three bedrooms and two baths and costing between $16,000 and $19,000.

Air conditioning, a range, and a double-garage, in that order, are wanted by 90 percent of the employees; a screened porch and water-front lot are considered the least essential.

Swimming pools, recreation centers and playground areas are among community facilities which will be used most often, and public transportation and nursery series will be used least often.

Manned Spacecraft Center acquired 146 new employees between Aug. 19 and Sept. 12, all but three of them stationed in Houston.


Ling-Temco-Vought Gets Contract For Protection System

Ling-Temco-Vought, Inc., has received a contract from the National Aeronautics and Space Administration to develop a unique composite entry heat protection system for manned spacecraft.

The 13-month contract concerns work to be performed by the Astronautics Division of LTV's Chance Vought Corporation.

The contract calls for the company to develop a composite material for afterbody heat protection of manned spacecraft entering the earth's atmosphere at velocities exceeding those of earth orbital vehicles.

This heat shield development program is unique in that the proposed shield will minimize heat transfer in all three heat transfer modes, namely: radiation, convection and conduction. It will require a new entry heat shield itself, provisions will be made for the inclusion of an outer "overcoat" of erosion material to protect the heat shield during the booster phases of flight.

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