

## **SPACE CITY COVER SOCIETY**

P. O. BOX 53545

HOUSTON, TEXAS 77052



# **Space Log**

Volume I Number 2

June 1971

---

HOUSTON PICKED AS SPACE SHUTTLE CENTER... Even bigger news than the upcoming Apollo 15 flight or the Russian "space station" is the recent designation by NASA of the Houston Manned Spacecraft Center as the prime control center for the space shuttle program. Sen. John G. Tower, R-Texas, said the space agency will have the Manned Spacecraft Center do the same type of work for space shuttle flights as it does for the manned spaceflight program. "This designation insures that Houston will continue to play a prime integral role in our national space effort", Tower said.

Over-all management of the program, which will use reusable space boosters and spacecraft which return to earth, will be in the headquarters of manned space flight, Tower said. The Marshall Space Flight Center, Huntsville, Ala., will be responsible for the booster stage and main engines for the shuttle and Kennedy Space Center, Fla., will be responsible for design of launch and recovery facilities. The budget request NASA sent to Congress for fiscal year 1972 is for \$100 million for the shuttle's main engine development and for starting development or continuing design studies of the shuttle airframe.

### APOLLO 15 NEWS

APOLLO 15 ROCKET ROLLED TO LAUNCH PAD... The Apollo 15 moon rocket rolled to the launch pad Tuesday 11 May 1971 and mission commander David R. Scott called it "the beginning of one of the most singular, significant, scientific expeditions ever conducted". As the 36-story Saturn 5 spaceship moved out of its hanger at 5:30 am CDT toward the launch pad 3½ miles away, Scott gazed up at the giant rocket and said, There is more scientific equipment and capability contained in this one vehicle than man has ever conceived before.

APOLLO 15 PHOTOS TO AIM AT 16% OF MOON... Apollo 15 astronauts will photograph 16 percent of the lunar surface of their Moon voyage scheduled to begin July 26, command module pilot Alfred M. Worden said. Worden will accomplish most of the photography as he orbits the Moon in the mothership while commander David R. Scott and lunar module pilot James B. Irwin spend 67 hours on the lunar surface.

TELESCOPE TO TRACK APOLLO 15... As radar follows the Apollo 15 mission through space, engineers at the MSC will be visually tracking the spaceship through a small telescope. The 16-inch telescope is mounted on the top of the building at MSC which houses the guidance and control research offices. The telescope is connected to a television monitor and researchers watch a small television screen instead of looking through the telescope eyepiece.

COLOR TV FOR APOLLO 15....Three long Moon walks and the dust-swirling liftoff from the lunar surface on Apollo 15 will be televised to Earth in color. Scott and Irwin will drive the electric moon-car on their three lunar excursions and mounted on the car, called the lunar roving vehicle, will be a color television monitor that will allow home viewers to watch surface activities just two seconds after they occur more than 240,000 miles from Earth.

APOLLO 15 CRAFT NAMED....Since all three crew members of Apollo 15 are Air Force men they decided to call their lunar lander "Falcon" which is also the name of the mascot of the Air Force. At a recent press conference at the MSC they also revealed that the name "Endeavour" was selected for the command and service modules. Endeavour being the ship commanded by Capt. James Cook, which, as Scott explained, sailed in 1768 on a purely scientific mission - to view the transit of Venus, then to explore the South Seas. And the astronauts themselves, a scientist astronaut, and an MSC scientist, all said that as far as science is concerned, Apollo 15 will be challenged more than any other space mission.

MANNED FLIGHT CREW PATCHES....As soon as the announcement was made about the design of the crew patch that will be used by the Apollo 15 crew, the SCCS made arrangements to have some of these made for those of you that will be interested. The details of it will be on the announcement that goes out with our Apollo 15 order sheet. We might add that we have also been able to get a supply of the earlier crew patches, beautifully embroidered in original colors for all of the Gemini flights, plus all of the Apollo flights up to date, as well as the ones for the Mercury flight of Alan Shepard and the one for Gus Grissom. These are available for \$1.25 each and if you would like any of these you can order them now. Send in the proper amount and let us know which of these you want.

BRITISH "LOCALS"....During the recent post office strike in England, many Local Posts were set up by private companies to carry the mail. To our understanding it was not difficult to set one up, even though a "license" was required. These could even be given over the telephone. As a result there have been hundreds and maybe even thousands local stamps printed up by or for the firms and most of them were tailored toward the topical collector. Yes, there were quite a few with a space theme but all of those were way out of line as to price. When someone wants a dollar or more per stamp or set of two or three, and up to several dollars for a cover then we feel that is taking an undue advantage of collectors. We were offered some covers by one of these firms as they felt that many of you would be interested in them. They wanted \$1.00 each for them from us and said that they should "resell" for about \$2.00 or \$3.00 each. We gave them a fast NO answer as we don't want to be in on something that we feel is taking advantage of the stamp collector. We may be wrong and we are not telling any of you not to collect these things, but we would like to go on record as saying that the Space City Cover Society has not and will not have any part of it. We feel that once the fad is over a lot of collectors are going to have some expensive "junk" on their hands. Any comments?

A NEW SPACE COVER CATALOG....We are happy to report that a "Price Guide and Reference List of U. S. Space Covers (1963-1965) has been produced by R. Howard Courtney. This part Two catalog is a work of love and is one that we are happy to salute. If you would like a copy send \$1.50 direct to R. Howard Courtney, 5709 No. War Memorial Dr., Peoria, Ill. 61614. Please tell him that you heard about it from the Space City Cover Society.

SCCS SPACE ALBUMS HAVE ALL BEEN SHIPPED....By the time you get this all of you that ordered the Space Albums will have received them, or should have. It has taken us over three full weeks of getting the pages collated, into the binders, boxed up, postage affixed and mailed out. But notes are already coming in about them expressing the delight of you that have received them. For that we express our thanks and feel that all the work that went into them has been worthwhile. And many of you have said that the delay was worth waiting for. If you ordered one of these and it has not arrived yet, please give it a few more days as these were shipped out by parcel post. But if within a week after getting this, yours has not arrived, please drop us a note so that we can check on it. And those of you that did not order one, we have some left and will send you details on them for an addressed, stamped envelope. Also, there are some extra ring binders, without the pages, still available. Yes, we will issue supplements and pages for all 1971 covers up through Apollo 15 will be printed up a couple of weeks after splashdown. Sometime in August or first part of September we will mail out notices about the supplements. And we will also make the announcement then about extra blank pages that can be had.

10th ANNIVERSARY OF SHEPARD'S SPACE FLIGHT....We had a set of three covers to commemorate this historic event and if you did not get yours, please send us a stamped, addressed envelope and we will send details on them. One was postmarked from Houston, with U. S. stamp and also a copy of the special NASA Local Post, one postmarked from Cape Canaveral, from where Shepard was launched ten years ago on his flight, and the third cover postmarked on the premises of the Manned Spacecraft Center. This is the first time that any mail has been cancelled on the MSC area. This was done through the auspices of the MSC Stamp Club who had an exhibit and special post office set up during the event. During the four days of the exhibition, approximately 25,000 visitors came through the MSC auditorium, and viewed the stamp exhibits, Bureau of Engraving and Printing set-up and U. S. Post Office Sub-station. Our hats are off to Dr. M. I. Radnofsky, President of the MSC Stamp Club and to member Charles Sawyer who was Exhibition Chairman. Dr. Radnofsky has pointed out some things about the MSC Stamp Club and we would like to pass them on to you. He says "The MSC Stamp Club's primary purpose has always been to provide an organization for MSC employees who are stamp collectors and who want to meet with one another on a regular basis. There was never any thought, either at the beginning or now, to operate the club as a specialty society catering to only one area of philately. We are a philatelic fellowship and not a space collector society and we believe that our worldwide membership should continue to grow and remain diversified". He also stated "Any interested collector is welcome to join us - those not employed at MSC are admitted as Associate Members - but we always hope they are joining as much for what they can do for us as for what we can do for them". Any of you that were able to tour the exhibit during that event will vouch for a job well done by the MSC Stamp Club, and we appreciate what they have done for all stamp collectors.

YOUR COMMENTS ABOUT THE SPACE LOG....Thank you to each of you that took the time to write us about our first issue. The words are welcome. And several of you sent in articles for use, and we hope to get started with them in the next issue. We were going to start them with this one, but space has become a problem. To start off, we are limiting each issue to the eight pages, and a lot of space news is being made, and we are passing it on to you. Also, some of you sent in a sketch for consideration for our new masthead. If any more of you have an idea, please send it in, and we will make a decision sometime in the next few months, possibly so that we can start out next year with it. Your articles and comments are always appreciated and needed.

PERSONAL AD....If any of you have a want list of space covers that you need, or if you have some for trade, we will be glad to print your notice at no cost. But please, since we are not a commercial publication, limit them to "for trade" items only.

COSMONAUTS ESTABLISH FIRST SPACE LABORATORY...Three Soviet cosmonauts established the first orbital space laboratory on June 7 docking their Soyuz 11 spacecraft with the orbiting scientific station Salute. At least two of the cosmonauts that day entered Salute to begin the era of manned scientific study in space. It was the first time a crew has been transported to an unmanned scientific station in space, and scientific sources in Moscow said one or more manned spaceships may go aloft soon to join the space complex as a prelude to a permanent orbital laboratory. The Soviet Union is calling the orbiting laboratory "cosmodom" or space house and science experts are predicting that it will become a cornerstone of a colony and an eventual city in space to be named "Cosmograd". The three cosmonauts of the crew are Georgi Dobrovolsky, Viktor Patsayev, and Vladislav Volkov.

SALUTE TO BECOME HUB OF SPACE COLONY?....After boarding Salute, which is the size of a railway car, the official news agency Tass said that it was put into a new and higher orbit about 10 miles farther from Earth. Science experts are saying that it may function for as long as a year and become the hub of the first space colony, a cluster of manned spacecraft which one day will burgeon into a virtual space city with permanent orbital structures. Trofim Borisov, science commentator for the Soviet trade union newspaper, Trud, says "The station is launched into outer space for work and need not necessarily return to Earth. Science and technology will gradually successfully approach the development of gigantic institutes in orbit; in the first stage, orbiting stations evidently will have crews of several men and will function in outer space from several months to one year. Since return to Earth of the orbital station is not planned and it is launched into orbit with a crew, its function is conceivable only in concert with a space ferry craft". Salute was launched seven weeks ago and the cosmonauts, sent into space aboard Soyuz 11 June 6 linked up with it Monday, the 7th of June.

COMPLEX DESCRIBED...Konstantine P. Feoktistov, a veteran spaceman helping with ground control on the current mission, reported the two-craft "complex" is about 65.6 feet long, basically cylindrical in shape and has a volume of about 388 dcubic feet. The Salute end is about 12 feet in diameter. The two craft linked together weigh 25 tons. Salute is described as follows: "There is a cone with a docking unit at the end of it, then a small cylinder with a diameter of about two meters (6.5 feet) then a certain expansion of the cylinder to a diameter of three meters (9.8 feet) then a widening to roughly four meters (13.1 feet). All these cylinders are hermetically sealed. Then comes a spherical bottom and a cone - fuel tanks, Engine installations are mounted in a rear cylinder with a diameter of roughly two meters". The space station has two pairs of wing-like solar battery units protruding from it. Cosmonauts board Salute through the cone at the front end. This is called the "pasaage compartment" and it has "several control panels", but Feoktistov did not say what they were for. "Then comes the hatch leading to the basic compartment, the working one. After the hatch there is a small platform. Two cosmonauts sit in their work seats facing the hatch. In front of them are several control and instrument panels, and on their sides - command signal equipment of Soyuz-type and apparatus".

RETURN TO EARTH MAY POSE PROBLEM...Dr. Avetik Burnazyan, deputy Soviet minister of health said "the crew is in good health but will encounter considerable difficulties after they return to earth because of weightlessness problems. The longer the men stay in weightlessness, the longer the period of readaption will be. Serious research is needed to establish how the organism can be helped to prepare for landing, how the negative effects of weightlessness can be compensated for".

WILL THEY BREAK A RECORD?....After the three cosmonauts passed their 14th day in space the Soviet government newspaper Izvestia said, "The cosmonauts feel magnificent, their faces are gay, and their mood is cheerful". It is believed that the two and one-half hours of exercises the crew performs daily were a key factor in their successful adaptation to life aboard the first manned space station. Soviet space doctor Nikolai Gurovsky said "The period of the adaptation of each cosmonaut's organism to conditions of weightlessness passed without any surprises. Stabilization of physiological indicators set in approximately during the first two days and the health of all three is normal". Such comment at the two-week point left little doubt the cosmonauts will attempt to break the 18 day spaceflight endurance record set by Soyuz cosmonauts Andrian Nikolayev and Vitaly Sevastianov last June 19, 1970.

SOVIETS TO TAKE LEAD IN SPACE RACE?....Howard Benedict, Associate Press writer, and space authority has given quite an analysis of the U. S. - Russia space program and recently noted "The Soyuz 11-Salute space station flight is a major step toward the Soviet Union's avowed goal to regain world space dominance and the U. S. government appears ready to forfeit America's lead". He continues, "The U. S. stood high and proud after the Apollo 11 astronauts achieved man's first landing on the Moon in July, 1969. The historical event climaxed a decade of fantiastic technological advancement during which 420,000 persons labored to overtake the Soviet edge in space. The goal achieved, President Nixon and Congress began cutting the space budget; three Apollo Moon flights were cancelled and other flights and programs were delayed. All of this in the face of an accelerating Soviet program, much of it dedicated to forging a strong military space capability. The Soviets employ about 600,000 persons in space work and devote 2% of their gross national product to the program, compared with less than one-half of 1% by the U. S."

AMERICAN SPACE INTEREST SPURRED....The orbiting of the Soviet Union's new space station has given an unexpected boost to backers of the American space shuttle, the multibillion dollar gleam in the eye of the space agency and the aerospace industry. The shuttle is viewed by NASA as the transportation system necessary as a forerunner to the construction by the end of the decade of an American space station that would carry a dozen crewman. Current planning at NASA calls for an even larger station to be manned by 50 astronauts and scientists in the 1980's. On 3 June congressional supporters of the program shouted down attempts on the House floor to chop \$125 million in development funds for the coming year. The money would be used to design, build and test the gigantic piggyback spacecraft that would in effect be two vehicles in one, resembling in size a Boeing 747 mated to the C5A, the world's largest plane. The larger vehicle would act as a booster to blast the combination through the atmosphere to place the second craft, known as the orbiter, in position about 100 miles up.

NEW NASA CHIEF DEFENDS SPACE SHUTTLE....The proposed space shuttle will be more of a useful vehicle than a spectacular one, the new administrator of NASA said at the end of his first official visit to the Manned Spacecraft Center in Houston. Dr. James C. Fletcher said a senator's criticism that the reusable spacecraft cannot be justified on cost alone "is probably not inaccurate". The two-stage earth orbital shuttle will have many applications and those supporting its development should talk about its potential, he said. Fletcher, formerly president of Utah University and before that head of an electronics firm, further stated "Some of the things made possible by space program work, such as weather and communications satellites, are already taken for granted by the public". He assured reporters that the space program has the support of the Republican administration.

U. S. MARS LAUNCH....What started out to be a pair of unmanned U. S. spacecraft heading toward Mars is now down to just one, but all systems are working in a most satisfactory manner. The mission is to be the first spacecraft to orbit the planet Mars and to provide earth-based scientists with more information about the planet on which man will some day land. This will be the last Mars spacecraft from this country until two Viking spacecraft are launched in 1975. The first of the two was launched on May 8th, made it off the pad and up a bit, but then blew up. On May 30, Mariner 9 completed its vital orientation process at 9:26 pm CDT, four hours after launch, when it set its sights on the guiding star Canopus which it will watch as a celestial reference point for the next 5½ months. It is now racing flawlessly in pursuit of two Soviet Mars craft in a bid to be first to orbit the planet next November and radio back thousands of closeup pictures.

According to Jet Propulsion Laboratory in Pasadena, California, a 5.1 second rocket firing Friday June 5 lined up Mariner 9 with Mars. At 2 pm on June 14 the U. S. ship was 2.4 million miles from Earth in straight line distance and had traveled 25.5 million along the curving 247-million mile path it must follow to reach the mysterious Red Planet. Its speed in relation to Earth reached its minimum of 6810 miles per hour. Mariner officials are debating whether to fire the rocket again about October 24th to be sure it is working properly. The rocket is, of course, crucial to the success of the mission. Its job is to slow down Mariner 9 so that it can be captured by the gravitational field of Mars. To accomplish this, the rocket will have to be fired continuously for about 14 minutes. As it now stands, one of the two Russian spacecraft now on a journey to Mars will arrive no earlier than November 25th, 12 days later than America's Mariner 9, according to Soviet sources. This is due to the fact, that even though our Mars shot was launched after the Russian pair of launches, ours weighs only 2200 pounds at launch and the Russian probes each weighed 10,230 pounds.

RUSSIAN MARS LAUNCH....The two Soviet unmanned spacecraft now hurtling toward Mars will certainly orbit the Red Planet and probably attempt to land an instrument. The enormous weight of Mars 2, launched May 19 and of its twin, Mars 3, sent aloft May 28, suggested both may carry rockets which would enable a soft landing. The Soviet Union has gained considerable experience in such unmanned feats by landing an instrument package on Venus and the Luna 16 moonscooper and Lunokhod Moon robot on the Moon. On June 17, the Mars 2 probe carried out a critical mid-course adjustment to put it on target for the planet Mars. It was about 4.3 million miles from Earth and flying about 600,000 miles behind it is the second Soviet probe, Mars 3.

SOVIET SOYUZ10....The Soviet spaceship Soyuz 10, which was launched April 19, achieved rendezvous with the unmanned space platform "Salute" on April 24th and carried out docking and communications tests preparatory to establishment of mankind's first orbiting space station. This docking was made after a chase of more than 41 hours and they flew together for 5½ hours. Studies were conducted on checking the efficiency of perfected systems for mutual search, long distance approach, berthing, docking and separation of the ship and the station during the Soyuz 10's tw-day flight. Dr. Boris Ryabov, professor at the Moscow Aviation Institute, claimed a first for the Soviet Union, reaffirming Russian "mastery of cosmic space". He said it was the first time a manned craft and unmanned vehicle controlled from the ground had maneuvered independently and linked up in outer space. The crew for this flight were flight commander Vladimir Shatalov, flight engineer Alexei Yeliasyev and Nikolai Rukavishnikov, described as the test engineer for the orbiting space laboratory. Due to the shortness of the flight it has been suggested that one of the crew was a victim of space sickness.

## SPACE NOTES

SWEDEN PLANS 1976 SATELLITE....Sweden has tentative plans to launch her first satellite in 1976 from a U. S. space base. Sweden has a space base outside Kiruna, Sweden but the big rockets required for a satellite cannot be launched from there.

SOVIET UNION'S 426th EARTH SATELLITE....On June 6, Russia launched a satellite, numbered 426 in the Cosmos program in an orbit that takes it 1,250 miles from earth. As always in the Cosmos program, details of the satellite's mission were kept secret.

ASTRONAUT TO TAKE LEAVE....Dr. Donald L. Holmquist, one of the scientist-astronauts, will take a year's leave of absence from the Manned Spacecraft Center to teach and do research at the Baylor College of Medicine. Some of his research will be directed toward medical programs in the space program.

SPACE JANITORS IN THE FUTURE?....By the year 1990, space will be polluted by an estimated one million junked spacecraft that will create a danger of orbital collisions, a Soviet newspaper said recently. It also said that it will be necessary to devise "flying janitors" to keep space clean.

ASTRONAUT TO DESCRIBE TELEPATHY EXPERIMENT....What were the results of Capt. Edgar D. Mitchell's space telepathy experiment during the Apollo 14 mission? The answer to that and probably many more questions may be available when Mitchell appears before the summer meeting of the Foundation for Research into Future of Man, in Durham, N. D. Mitchell is the first human to attempt telepathy experiments from space. He said that it was strictly a personal experiment.

ASTRONAUT SAYS SPACE SPURS U. S....."Men and countries need a challenge and a goal or they wither up and die" astronaut Eugene Cernan said recently. Cernan, a crewman on both the Gemini 9 and Apollo 10 missions, said England lost its place in world leadership because of a lack of proper challenges to inspire the people. He further stated that "The space program provides the challenge that can keep America first in the world".

SHEPARD HOPKED FOR REAR ADMIRAL....Astronaut Alan B. Shepard Jr., America's first man in space 10 years ago, has been nominated by President Nixon for promotion to rear admiral. The 47-year-old Shepard, who climaxed his space career with a moon landing aboard Apollo 14 in February, was among 49 Navy captains selected for star rank. They were chosen from among 1,988 eligible officers.

APOLLO 16 TARGET....A rugged mountainous region of the moon near the crater Descartes will be the landing site for Apollo 16. There astronauts will set up a celestial observatory to photograph objects millions of miles beyond the moon. Apollo 16, to be commanded by Capt. John W. Young, will be launched in March 1972. Lt Col Charles M. Duke will explore the surface of the moon with Young. Lt Cmdr Thomas K. Mattingly II will remain in lunar orbit.

MSC'S DUFF WILL TAKE HEW POST....Brian M. Duff, public affairs officer at the Manned Spacecraft Center has left that post to take one with the Department of Health, Education and Welfare. Duff will be leaving the space program at a time when the assistant administrator for public affairs job at headquarters of NASA is also vacant. The post Duff will take at HEW is a new one.

FLETCHER IS NEW NASA DIRECTOR....James C. Fletcher, 51, a pioneer in America's space program and former president of the University of Utah, was sworn in on April 27, 1971 as the new chief of NASA. In a ceremony in President Nixon's White House office, the chief executive told Fletcher that he was "taking over a very important program" from Dr. Thomas O. Paine, who resigned September 15.

ASTRONAUT LOVELL TAKES DESK JOB....Navy Capt. James A. Lovell, the world's most experienced astronaut, has been named deputy director of the science and applications directorate at the Manned Spacecraft Center. Anthony J. Calio, head of the directorate said, "Lovell's background will be of great value to us as we near the peak of our activities in both the Apollo and Skylab programs." Skylab is a 1973 program in which a rocket stage will be converted into a space workshop for three missions in Earth orbit. Lovell has flown 715 hours in four space missions - both records - including some of man's most dramatic missions.

ASTRONAUT CUNNINGHAM RESIGNS FROM SPACE PROGRAM....Walter R. Cunningham, a member of the first Apollo crew to fly in space, announced his resignation from the space program on June 17. Cunningham, 39, said effective August 1, he will become vice-president of operations for Century Development Corp. In resigning, the astronaut criticized the nation's support of the space program. "The short-sighted, low level of support of the space program and the future best interests of my family have convinced me this is the right move for us at this time", he said in his announcement at the MSC. Cunningham was selected by the space agency in its third group of astronauts in October 1963. With astronauts Walter M. Schirra and Donn F. Eisele, he flew the 11 day Apollo 7 mission in October 1968. After Apollo 7, Cunningham was assigned the top astronaut planning position for Skylab, an Earth orbital series of flights that has been periodically delayed because of budget cuts and presently is scheduled for 1973.

SCIENTIST-ASTRONAUTS FACING UNCERTAINTY....Difficult years are upon the cadre of spacemen at the MSC, particularly the scientist-astronauts, most of whom can expect for the rest of this decade to fly no higher than their jet trainers will take them. The space agency has 48 astronauts, including 13 scientist-astronauts, on flight status. The pilot-astronauts were chosen primarily on the basis of aeronautical skills while scientific ability was the chief criterion in the case of the smaller group. The most serious factor has been budget cuts, which resulted in the cancellation of flights on which scientist-astronauts would have had many assignments. It will now be a waiting game to see if the new interest in our space program will have any effect in their status.

U. S. AND RUSSIA PLAN SPACE DOCKING TALKS....A delegation of 18 Soviet space experts arrived in Houston for meetings at the MSC. The meetings began June 21st and involve discussions about a common docking system for American and Russian spacecraft. The Russian delegation, headed by Boris N. Petrov of the Russian Academy of Sciences, was met at Houston Intercontinental Airport by MSC officials led by Robert R. Gilruth, MSC director. All of the talks will be conducted at MSC and are an outgrowth of an agreement reached in Moscow last October 28th between U. S. and Russian space officials, including Dr. Gilruth.

SPACE COVERS WANTED....Richard A. Kashdin, 1267 Brighton Road, Tonawanda, New York 14150 needs US space covers for personal collection. Complete want list available upon request and postage appreciated.