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Cohen to succeed Moore as JSC Director

Dr. James C. Fletcher, NASA Administrator, announced Oct. 2 that Jesse W. Moore, Director of JSC, will be reassigned in response to his request.

Also announced was the appointment of Aaron Cohen to succeed Moore as JSC director. Cohen is currently director of research and engineering at JSC.

Moore will be reassigned as special assistant to the General Manager, NASA Headquarters, effective Oct. 12, 1986. It is anticipated that Moore will subsequently apply for a Senior Executive Service sabbatical.

"NASA and the country owe special thanks to Jesse, who held two very difficult jobs during the days following the Challenger accident — that of Associate Administrator for Space Flight and director of JSC. His skills and experience will be well utilized in whatever new assignment he ultimately undertakes," Dr. Fletcher said. Upon completion of the sabbatical, Moore is expected to be assigned to a key position within the Agency.

Moore came to NASA Headquarters in 1978 as Deputy Director of the Solar Terrestrial Division, Office of Space Science. In June 1979, he was appointed Director of the Space Flight Division. In Dec. 1981, he assumed the position of Director, Earth and Planetary Exploration Division. He was appointed Deputy Associate Administrator for Space Flight in 1983. He served as Acting Associate Administrator for Space Flight from April 1984 until he was appointed Associate Administrator on Aug. 1, 1984. While at NASA Headquarters Moore was awarded the NASA Exceptional Service Medal, the NASA Outstanding Leadership Medal and the Presidential rank of meritorious executive. He was named the JSC Center Director on Jan. 23, 1986.

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Jesse W. Moore

Aaron Cohen

Station Program poised to begin Phase C/D

With the work of the design task force now complete, NASA is poised to make the final decisions necessary to move into Phase C/D of the Space Station Program, Administrator James C. Fletcher said last week.

The design review, conducted by the Critical Evaluation Task Force (CETF) in August and September at the Langley Research Center, addressed overall design and assembly of the Station from a technical aspect. A second team addressed organization of work packages among the centers, and that plan was approved by the Directors of the NASA field centers.

Under the work package plan, JSC and Marshall would each be responsible for about 36 percent of the program tasks. The Lewis Research Center and the Goddard Space Flight Center would manage the other 28 percent of the program.

Dr. Fletcher said the design review was "an absolutely outstanding job, done by 60 or 70 people, seven days a week, sometimes 18 hours a day, and backed up by hundreds of people at the Centers and by our contractor support and international partners."

That work, Fletcher said, needs to be supplemented by further studies in three areas before he will be ready to make a series of final decisions.

"The analysis so far has been thorough and technically sound," Fletcher told the House Subcommittee on Space Science and Applications. "I am not yet ready, however, to make any final decisions." Additional information is required, he said, on the potential for use of expendable launch vehicles, on the costs of the design modifications, and on the relationship between Headquarters and the centers in management of the project.

Under the plan devised by the CETF, nodes connecting the habitable modules would increase in both size and importance, adding about 4,000 cubic feet to the overall habitable volume of the Station. These resource nodes would be outfitted with much of the equipment originally intended for placement on the trusswork of the Station, and would become the focal points for command and control of the Station functions.

Adopting an increased role for the nodes was a response to three technical problems—EVA assembly, EVA maintenance and reduced lift capability of the Shuttle (about 7,500 pounds) mandated by changes in the STS in the wake of the *Challenger* accident—said Andrew J. Stofan, Associate Administrator for the Office of Space Station.

Prior to the design review, Stofan said, the nodes were seen as passageways with no equipment mounted inside. "What the team came up with was larger nodes, about 4,000 cubic feet of space provided for the astronauts. We are now able to put racks of equipment in these nodes and make them serve the command and control functions of the Station."

With much of the equipment moved from the trusswork to the nodes, maintenance can be done in a shirt-sleeve environment, reducing EVA maintenance time by around 30 percent, Stofan said. CETF designers also moved some equipment from the lab and hab modules into the nodes, leaving more room for scinetific gear in the lab and making the hab module less crowded by life systems.

Specific equipment has been designated for three of the four nodes, he added. The fourth node will be given its designated complement of equipment during Phase C/D.

The CETF also modified the assembly sequence so that the Station can be permanently manned

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NSTS Engineering Office is established

An Engineering Office has been established in the National Space Transportation System Program.

Robert W. Moorehead has been appointed to the newly established position of Manager, National Space Transportation System (NSTS) Engineering Office, JSC Director Jesse W. Moore announced Sept. 26.

Moore said that Moorehead will report directly to Arnold Aldrich, NSTS Manager, and will be responsible for coordinating engineering activities between the Shuttle Program and project organizations.

"This office has been created to bring renewed emphasis to the engineering activities across the NSTS program. A specific objective is to facilitate technical interchange between all program and project elements," Moore said.

Approximately 30 employees will be reassigned from other NSTS organizations to form the initial staff of the NSTS Engineering Office.

Specific functions of the NSTS Engineering Office include definition and control of program requirements; integration of flight systems and ground systems performance; management of integrated systems analyses and design data base; Program-wide integration of project technical reviews, anomaly closeouts, and performance improvement; NSTS software requirements management and control; and NSTS avionics integration.

Moorehead, who joined JSC in February 1964, has more than 14 years of direct NSTS experience in key management positions. His assignment prior to this new appointment was as Assistant Manager of the NSTS Program Office.

Moorehead has also served as Deputy Director of the Kennedy Space Center's Shuttle Engineering Directorate, Deputy Manager of the STS Orbiter and GFE Projects Office, Manager of the Shuttle Avionics Office, and several other management positions within the Shuttle Avionics Office.

Moorehead received a bachelor of science degree in electrical engineering from Mississippi State University and a master of science degree in electrical engineering from the University of Southern California. He is married to the former Delores Carmen Saldana of Ft. Worth, TX, and they have three children, Marcus Kent, 17, Tracy Dawn, 16, and Kimberly Noel, 12.

Moorehead is the recipient of several NASA honors and awards, including the NASA Special Achievement Award and the NASA Exceptional Service Medal.

Puddy assigned to Ames

Donald R. Puddy, assistant director for systems in the Mission Operations Directorate at Johnson Space Center has been temporarily assigned as acting deputy director of the Ames Research Center, Mountain View, California.

The three-month assignment runs through mid-December while the Ames deputy director attends a management school at Harvard University.

Puddy came to JSC in 1964 as a flight controller monitoring lunar module systems for the Apollo program. He later headed up organizations at the center with responsibility for the lunar module used during the moon landings.

He also was a flight director during the Skylab program and the Apollo-Soyuz Test Project, the joint U.S.-Soviet flight in 1975. He served as lead flight director for the first Space Shuttle mission in 1981 and was a flight director on the second Shuttle flight.

From 1982 to 1985, Puddy was chief of the Mission Operations Systems Division, overseeing the activity of more than 200 engineers specializing in Space Shuttle systems. In his current JSC assignment as Assistant Director for Systems within the Mission Operations Directorate, he supervises approximately 700 personnel dealing with Space Shuttle-related systems.

Grumman unit to locate here

The Grumman Corporation will transfer a unit of its Space Systems Division from Long Island, New York, to Houston, Texas by the end of the year.

The civil space programs unit, which is responsible for work related to the Space Station and other non-military projects, will relocate by the end of this year.

John O'Brien, Grumman President, said, "In 1985, we restructured our operating management into divisions to align each division with the specific markets it serves and to reduce costs. We believe that Space Systems Division will improve service to its NASA customers by relocating this operating unit."

The transfer involves fewer than 100 employees who are principally engineers and highly skilled technicians. If plans now underway for new business development succeed, Space Systems Division's Houston work force could expand to more than 1,000.

Grumman Space Systems Division manages the company's military and civilian space programs. It holds several development contracts related to the Strategic Defense Initiative and for projects related to the NASA Space Station. Grumman is also a subcontractor to TRW on NASA's Orbital Maneuvering Vehicle program, a "tug" that will be used with the Shuttle and the Space Station to deliver and retrieve satellites to and from other orbits. Division sales were $20 million in 1985, Grumman said.

A separate operating unit, Grumman Technical Services Division, Titusville, Florida, is subcontractor to Lockheed on the shuttle processing contract at Kennedy Space Center, Florida, and Vandenberg AFB, California.

Grumman Corporation employs 32,000 people worldwide. On Long Island, where Grumman is the largest private employer, the company has 25,000 workers. This includes the 500 employees of Grumman Space Systems Division who represent two percent of Grumman's Long Island work force. Grumman's Texas work force already consists of nearly 700 in Houston and 250 at Sherman.

Bulletin Board

PSI to install officers at meeting

Officers elected for the 1986-87 year will be installed at a banquet meeting of the Clear Lake/NASA Area Chapter of Professional Secretaries International Oct 22. The new officers are Jessie Gilmore, President; Beverly Anderson, Vice President, Katie Parr, Secretary, and Ethel Reed, Treasurer. The featured speaker for the evening will be Adella LaRue, CPS, International President of PSI. Membership in the PSI chapter is open to all secretaries in the NASA/Clear Lake area and surrounding communities. The installation meeting is not limited to members only, and all interested individuals are encouraged to attend, Anderson said. The installation ceremonies will begin with no-host cocktails at 6:15 p.m., followed by a banquet at 7 p.m. The banquet cost is $12.50 per person, with reservations accepted through Friday, Oct. 17. For reservation information, call Caroll Cribbs at 488-7070. For membership information, call Betty Cobb, x3811, or Jesse Gilmore, x2411.

NASA Aerovan to visit JSC

NASA's Aerovan, a large traveling exhibit on the Agency's aeronautics programs, will be on display at JSC Oct. 14 and 15. The large, walk-through trailer features nine exhibits that focus on current research in safety, energy efficiency, environmental compatibility and on improvements in passenger comfort and convenience. Other exhibits highlight future directions in aeronautics and how this research benefits the nation. Aerovan lecturer Dale Christensen will be on hand to answer questions.

Armand Bayou star party scheduled

A chance to see the new night sky of fall will be offered by the Armand Bayou Nature Center from 7:30 to 10 p.m. Saturday, Oct. 11. Telescopes for observing the night sky will be located in the parking lot, and a free program will be held in the auditorium. The Nature Center is located at 8600 Bay Area Blvd. near the intersection of Red Bluff Rd. For more information, call the Nature Center at 474-2551 or Bill Williams at x4711.

JSCAS to meet Oct. 11 at Gilruth

The JSC Astronomical Society will hold its next meeting at 7:30 p.m. Oct. 10 at the Gilruth Recreation Center, Room 204. All persons interested in astronomy are welcome to attend. For more information, call Bill Williams at x4711.

BAPCO to meet Oct 21

BAPCO, The Bay Area PC Organization, will hold its next monthly meeting at 7:30 p.m. Oct. 21 at the Holiday Inn on NASA Road One. BAPCO is the local IBM PC users' group and is open to all persons with an interest in microcomputers. The group meets regularly on the third Tuesday of each month. For more information, call Earl Rubenstein, x3501 or Jack Calvin at 326-2983.

Clinic schedules influenza vaccine

Again this year, the JSC Clinic will be giving influenza vaccine innoculations, according to Charles P. Bergtholdt, Occupational Health Officer. The Center for Disease Control advocates vaccinations of identified risk groups, such as those with heart disease of any type or chronic bronchopulmonary diseases. Those who provide essential services or who merely want to reduce their chances of coming down with the flu this winter are encouraged to consider the innoculation. Adults will require only one dose, Bergtholdt said. Those who receive the vaccine will be asked to sign a consent form and will be given the opportunity to ask questions prior to the innoculation. The vaccine is available in the Clinic, Bldg. 8, from 10 a.m. to noon and from 2 p.m. to 4 p.m.

Large structures conference planned

The first conference on control/structures interaction technology for large, flexible spacecraft will be held Nov. 18 to 21 at the Omni International Hotel in Norfolk, VA. The conference, sponsored by NASA and the Department of Defense, will include discussions on large space structures technology, selected DOD program reviews and NASA control/structures interaction research topics. For more information, write or call Robert Wright, NASA Langley Research Center, Mail Stop 356, Hampton, VA 23665-5225. The telephone number is FTS 928-4990.

Dickens on the Strand tickets available

Tickets to see the 13th annual Victorian Christmas celebration, Dickens on the Strand, are available from the Employees Activities Association. The tickets are $3 for adults and $1 for children and seniors and may be purchased in the Bldg. 11 Exchange Store from 10 a.m. to 2 p.m. The tickets are good for the Dec. 6 and 7 performances, to be held from 10 a.m. to 10 p.m. each day on Galveston's historic Strand between 20th and 25th Streets.

JSC ST Users Group to hold first meeting

The JSC ST Users Group will hold its first meeting at 7 p.m. Oct. 22 at the Gilruth Recreation Center, Room 207. The group was formed to provide a forum for users of the Atari 520/1040 ST computer. The first meeting will be concerned with adopting bylaws and focusing on what directions members would like to see the group take. The users group plans to offer discounts on computer supplies and software. All interested persons are invited to attend.

IEEE/ISA to hold monthly meeting

The Institute of Electrical and Electronic Engineers and the Instrument Society of America will jointly hold their next monthly meeting at 11:30 a.m. Oct. 9 at the Gilruth Recreation Center. The speaker will be Tim Haney of Hewlett Packard's Information Technology Group, who will discuss Reduced Instruction Set Computer Architecture. A luncheon will be served beginning at 11:30 a.m., with the program to follow at noon. Reservations should be made by noon Oct. 6 by calling Joan at x4119. For more information, call Ray Baker at x4509.

Moore assesses the challenges ahead

Following is the text of the farewell address Center Director Jesse Moore delivered Oct. 2.

I want to speak to you this afternoon because of the rumors and public speculation about my position as Director of the Johnson Space Center.

Effective October 12, I will step down as your center director to accept a reassignment — at my request — as a special assistant to the General Manager of NASA. I have just returned from Washington where I worked out the final details of my reassignment with the NASA Administrator and I am pleased with the outcome.

This year has been an especially difficult year for me and it is beginning to have an adverse effect and take its toll on my family. After reflecting over the past several weeks on the events during the year, including the *Challenger* tragedy, the Space Station situation, and the strain imposed on my family, I have come to the conclusion that a change is in order. Therefore, I have asked the NASA Administrator to be reassigned in order to apply for a Senior Executive Service sabbatical. I will be spending the next several weeks working out the details of my sabbatical program.

Just as I am facing many tough issues at this juncture of my life and my career, so is NASA. During my eight plus years with NASA, I can confidently say that never were the challenges so great. JSC, as the Agency's leader for manned space flight, must be the unquestioned leader in restoring and rebuilding to a stronger level than ever this nation's manned space flight program. Strong and knowledgeable leadership will be required to accomplish this restoration.

Given my knowledge of the Center, the pressures I have felt recently, and the circumstances facing NASA, I believe it is best for NASA, best for JSC and most importantly best for me to step aside at this time.

I would like to share with you my thoughts on the challenges facing NASA and JSC in the future. By far our biggest challenge is to get America back in space — safely and reliably. During the past 9 months, I believe we have all found out the hard way — through a national tragedy — that this nation's future is increasingly dependent on maintaining its leadership in space.

The American people, I believe, understand that our ability to remain the leader in high technology is based on developments in the space program. We must not let our lead slip away.

You at JSC must play a very strong and pivotal leadership role in meeting the following prime challenges as I see them:

- *Return the Shuttle back to a safe flight status.* The Space Shuttle is a national resource and it must be treated as such. This must be our number one priority.
- *Build a replacement Orbiter.* The President has announced that we will initiate the building of a replacement Orbiter in FY 87. A fourth Orbiter will enable our Shuttles to accomplish the mission for which they were originally intended and to permit the United States to move forward with new, exciting endeavors such as the building of a permanently manned space station.
- *Get the Space Station Program formally approved by Congress in the Fiscal Year 1987 budget.* Much progress has been made in the recent past in this area and I am really optimistic about the final outcome as far as the Johnson role and the overall NASA program structure for the Space Station.
- *Strengthen the NASA family.* I believe we need to work to strengthen the NASA family, which includes our NASA contractors. We have to build teamwork, capitalizing on our individual strengths. We also must have a strong NASA team to return the Shuttle to safe flight and to develop and operate the permanently manned Space Station.

To meet these formidable challenges, NASA needs your enthusiastic support and leadership. It is not only important to your future, but it is essential to our nation's future.

To meet the challenges that I see ahead for JSC and NASA, I am very pleased that Dr. Fletcher has named Dr. Aaron Cohen to succeed me as Center Director. With Aaron's experience and knowledge of the Center, I am sure he will be a very strong leader for this pivotal Center for many years to come.

Aaron Cohen has my full and enthusiastic support. He represents the best traditions of NASA management and has demonstrated his abilities to lead and manage our most challenging and difficult programs beginning with the Apollo and culminating in the most difficult of tasks we now face.

I am confident that Aaron and the thoroughly experienced and professional people here at JSC and on our contractor team are poised to undertake the task of building a replacement Orbiter and to resolve all the issues that remain in order to resume safe, efficient Shuttle operations in the first quarter of 1988.

Let me say in closing that I have met many fine people here at JSC during my tenure as Associate Administrator for Space Flight and, more recently, as Center Director. I certainly believe that I have received from you much more than I have been able to give. You are doing some incredible work in very high technology areas. You must continue. I certainly will miss the interaction with the people here, for you represent the single most important resource the Agency has.

Best of luck to you in the future. I will be watching with great interest and pride in the accomplishments of JSC in the years ahead.

Cohen

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In prior assignments, Moore was employed at NASA's Jet Propulsion Laboratory, Pasadena, Calif., starting in 1966 and worked in a variety of areas. His last assignment was Science and Mission Design Manager for Project Galileo.

"Aaron Cohen has had a distinguished career in NASA which makes him especially fit for his new post as director of the center that supervises the Space Shuttle program," Dr. Fletcher said. "From 1972 to 1982 he served as the Space Shuttle Orbiter project manager. Perhaps no person in the country knows more about this unique vehicle than Aaron. He has earned the trust and admiration of his associates for his keen mind and exceptional management skills."

JSC is NASA's prime center for manned space flight activities. It is the focal point for development of manned spacecraft and space systems, and the training center for the astronaut corps. Manned missions are planned at JSC and controlled from JSC's mission control center.

Cohen came to NASA in 1962 in the Apollo Spacecraft Program Office at the Manned Spacecraft Center (now the Johnson Space Center). From 1970 to 1972, he served as Manager for the Command and Service Module (CSM), Apollo Spacecraft Program.

From 1972 to 1982, Cohen was Manager of the Space Shuttle Orbiter Project. In this assignment, he was responsible for directing the design, development, production and test flights of the Space Shuttle orbiter.

From 1982-1983, he was Director of the Engineering and Development Directorate with responsibilities for providing engineering development and test support for manned space flight programs assigned to the Johnson Space Center, such as the Space Shuttle and other advanced spacecraft.

In his present position, Cohen is responsible for the overall direction and management of all engineering and space and life science research and development in support of the major manned space flight programs assigned to JSC.

Cohen holds a bachelor of science degree in mechanical engineering from Texas A&M University (1952) and a master of science degree in applied mathematics from Stevens Institute of Technology (1958). He also has completed advanced graduate studies in mathematical physics at New York University and University of California at Los Angeles and was awarded an honorary doctor of engineering in 1982 from the Stevens Institute of Technology.

Cohen has received numerous NASA awards including two distinguished service medals and NASA Engineer of the Year (1982). He was honored with the Presidential rank of meritorious executive in 1981 and the Presidential rank of distinguished executive in 1982.

Station Program

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after the eighth assembly flight. Seventeen assembly missions, beginning in 1993, would be required to achieve the fully assembled dual keel design of the Station, and another 14 logistics flights, including assembly of the co-orbiting scientific platform and the polar orbiting platform, are envisioned.

Stofan said the first two or three missions would be the most technically challenging. The flights would be undertaken by seven member crews with three astronauts flying the ship and four available for EVA. On the first flight, one half of the transverse boom would be assembled, and would have a power supply, propulsion elements and a resource node attached. The node would contain all of the guidance, navigation and control equipment necessary to fly the assembly autonomously for nine months, or to be controlled from the ground.

The second assembly mission would be a mirror image of the first, Stofan said. The second half of the transverse boom, also outfitted with a resource node and power and propulsion equipment, would be built and then connected to the existing platform.

The details of the interactions between the JSC and MSFC work packages were defined by a team led by the heads of engineering at JSC and Marshall, Aaron Cohen and James Kingsbury, before going on to Stofan, the center directors and Fletcher for approval.

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