# Lyndon B. Johnson Space Center Space News Roundup

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National Aeronautics and Space Administration

## Solar Max observes major Sun flare

life, luck is still with the Solar Maximum Mission satellite.

At about 6 p.m. CST April 24, thirteen days after being repaired during Shuttle Flight 41-C, Solar Max was able to observe the largest solar flare seen on the Sun since 1978

The flare observation came less than one hour after Solar Max's 30day checkout was interrupted for an operational look at a volatile region on the Sun. It was a pointing maneuver combining skill and luck which has delighted scientists at the Goddard Space Flight Center.

Solar flares are violent events most commonly associated with magnetic interactions and sunspot activity, and are a major source of the intense geomagnetic storms felt throughout the solar system. By almost every measure, they are the Sun's most catastrophic and energetic events. One of the major goals for Solar Max is to study the mechanisms which trigger solar flares.

When erupting solar flares are lined up with the Earth, various particles and rays stream through space and bombard the upper atmosphere and magnetic field of the planet. Effects of this bombardment range from pipelines corroding faster to homing pigeons becoming lost, and the effect on communications and delicate instrumentation is significant.

Under either of the two classifications common to solar flares, the event seen by Solar Max was a major occurance, the largest flare seen by the satellite yet, according

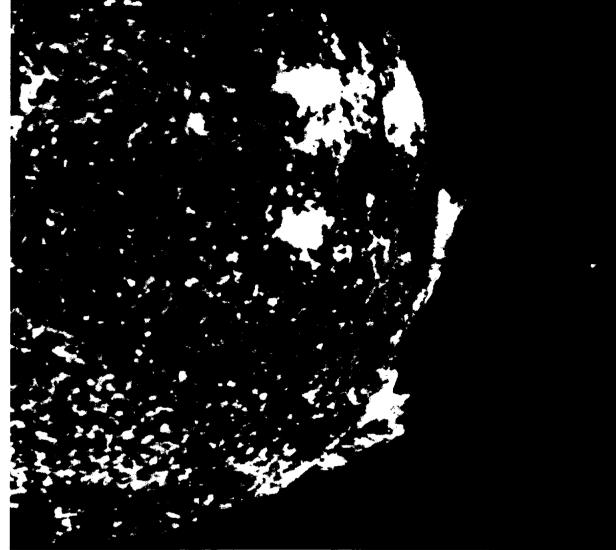
A month into its new lease on to Dave Speich, Chief Observer for Solar Max.

> Flares commonly are classified according to optical size and brightness or as a measure of peak intensity of soft X-rays emitted. Under the first classification, the flare was a 3B, or 3-bright (4-bright being the highest). Under the second classification, the flare was an X-13, meaning the terrestrial effects were major and its X-ray output was considerable (13 times 10-4 watts/meter<sup>2</sup>)

> The 1978 flare, the largest seen in this current solar maximum cycle, was classified as an X-32, Speich said. Since the cycle reached its maximum in 1979 and is now in a declining phase (the solar minimum will be in 1988), Goddard scientists believe it is doubly fortunate that Solar Max was able to observe the flare.

> "Solar Max is very much a flare machine," Speich said. "Skylab was able to show us a great deal about the quiet Sun. Solar Max was launched to study the active Sun. So by all purposes, designs and concepts, Solar Max is up there to study flares such as this. And it's the large ones we're out to hunt."

> Solar Max was aimed at this active region until May 7, when it rotated out of view over the west limb of the Sun. At Roundup press time, scientists planned to use the coronagraph/polarimeter instrument-the device brought back to life by a main electronics box changeout during 41-C-to see the flare region in profile as it passed out of view.



The mottled face of the Sun is highlighted by a massive solar flare in this photograph taken during the Skylab 4 mission in December 1973. The flare of April 24 seen by Solar Max, while not as large, was the most prominent flare observed since highly sensitive instruments developed over the past few years have been trained on the Sun.

### optimistic about participation beggs

NASA Administrator James M. Beggs said last week he expects several European nations, Japan and perhaps Canada to participate in the U.S. Space Station Program.

"It's just a question as to how they will participate," Beggs was quoted as saying.

The Administrator recently returned from a global tour, undertaken at the direction of President Reagan, for talks in London, Paris, Bonn, Tokyo and Ottawa on foreign participation in the project.

The space station also will be a topic during the London Economic Summit Conference in June between the U.S., United Kingdom, France, the Republic of Germany, Italy, Canada and Japan, he said. Beggs said he delivered three

key messages during the recent talks. "The first was that international investments would not only add to the Space Station's \$8 billion budget, but to its capabilities as well," he said. "In this connection, we discussed a Euro-

pean investment in excess of \$2 billion, or 25 percent of their combined space budget, and a Japanese investment in excess of \$1 billion, or about 15 percent of that nation's space budget. A dollar figure for the potential Canadian investment was left open.

'The second message," Beggs said, "was that potential participants should be willing to make a substantial investment if they wish substantial benefits. Such benefits could include preferred access for

research and experimentation, crew assignments and so forth.

"And the third point we stressed." he continued, "was that if a country wishes to participate to its maximum advantage, its decision must come quickly. This is because we plan to begin a two-year contracted definition effort with industry following Congressional approval of the Space Station proposal, which we expect will come this year."

Beggs said that would be followed over the next two years by preliminary design and definition phases, the point at which other countries could best include their inputs.

"Reactions abroad were uniformly enthusiastic," the Administrator said. "I would characterize them as very encouraging from our perspective. We found high political and technical interest everywhere, and there was hardly a blink of an eve when we mentioned the scope of the potential investments we hope to see."

### Abe bids farewell to JSC

### Lichtenberg, Lampton chosen

#### TO THE PEOPLE OF JSC

As I leave NASA, I wanted to express my gratitude to all of you -- our civil servants, our support contractors and the other fine members of the JSC contractor team.

Its been the high point of my career to have been part of your wonderful organization. I have learned from all of you and realize how fortunate I've been to have the opportunity to work with you. But there is much more....

Never forget that all Americans stand taller because of you. Your dreams and your ability to make them come true bring hope and confidence to all mankind. Most importantly your achievements do not come from some magical technology...they come from your humanity, your caring, your dedication, and your boldness. Its been my privilege to see that in you.

Thank you for your support and your friendship, I treasure them both!



JAMES A. ABRAHAMSON Lieutenant General, USAF Associate Administrator for Space Flight



Dr. Byron Lichtenberg and Dr. Michael Lampton have been selected to fly as payload specialists on the first Spacelab Earth Observation Mission next year.

Lichtenberg flew aboard Spacelab 1 in November of last year. Lampton was an alternate payload specialist for that mission.

EOM-1, for which other crew members will be named later, will be the first in a series of Spacelab flights primarily dedicated to measuring the makeup of the Earth's middle and upper atmosphere. The flight will also be devoted to a study of variations in the Sun's output during the elevenyear solar cycles. Several of the instruments originally flown on Spacelab 1 will be reflown for the mission.

The mission will carry nine experiments in three major areas of research: space plasma physics, astronomy and solar physics and atmospheric physics and Earth observations.

Experiments aboard EOM-1 will be sponsored by NASA, the European Space Agency, Belgium, France, Japan and West Germany. Lampton, a research physicist at the Space Sciences Laboratory, University of California at Berkeley, has been in training for flights aboard Spacelab since 1978. He holds a bachelor of science degree in physics from the California Institute of Technology and a Ph.D from UC-Berkeley.

Lichtenberg, a biomedical engineer on the research staff at the Massachusetts Institute of Technology, became the first American outside of NASA's career astronaut corps to fly in space during Spacelab 1. He holds a bachelor of science degree in aerospace engineering from Brown University and an SC.D. in biomedical engineering from MIT.

### Space News Roundup

### Space News Briefs

### MLR beads to be available commercially

Microscopic latex particles produced aboard the Space Shuttle will soon become the first space product to be offered commercially. The Commerce Department's National Bureau of Standards has proposed using the particles, produced in the Monodisperse Latex Reactor experiments aboard the Shuttle, as standard reference materials for a variety of scientific and medical applications. Because of their uniformity, the particles can be used in industry and medical research for calibrating sensitive scientific instruments and have potential in glaucoma and cancer research. Particles have already undergone extensive testing as a reference material by the Bureau for the 10-micron diameter range. Such a precise spheres cannot be produced in identical quantities on Earth because of the influences of gravity during the manufacturing process

### Final passenger rule appears in Register

The final rule regarding civilian passengers aboard the Space Shuttle appeared in the Federal Register April 26, establishing a general framework under which private citizens may soon be qualified to fly in space. The next step in the process, an Announcement of Opportunity, will come late this spring or in the early summer. Under that process, NASA's ground rules for accepting civilian passengers, now formally known as "Space Flight Participants," will be made public and applications will be accepted.

### Tethered Satellite proposals sought

NASA and Italy's space agency are eliciting proposals worldwide for experiments to be performed using the U.S./Italian Tethered Satellite System. Under an Announcement of Opportunity issued in April, scientists have until May 21 to submit proposals, and until July 20 to submit detailed plans. NASA and the Italian National Research Council will evaluate the ideas and decide which will fly. The first Tethered Satellite mission is scheduled for 1987.

### Ames dedicates human factors facility

A new facility dedicated to the study of aviation human factors was dedicated at the Ames Research Center May 8. The Man-Vehicle Systems Research Facility, housing two simulators and a mock air traffic control station, will study such factors as pilot fatigue and stress, the interaction of flight crews, and air traffic control situations involving as many as 37 aircraft. This is the first time advanced simulators have been used for human factors research.

### **Bulletin Board**

### VAX users group to meet

The JSC Decus VAX local users group now being formed for VAX/VMS users in the NASA/JSC area will hold meetings at 5:30 p.m. on the first Wednesday following the 16th of each month. Meetings will be held in Bldg. 37, Conference Room 1. For more information, call Jafar, 488-9005.

### **IBM PC meeting set**

The next monthly meeting of the local IBM PC Users Group will be held at 7:30 p.m. May 15 at the Holiday Inn. The program will include a discussion of proper and improper diskette handling and hardware setup of the IBM PC. For more information, call Earl Rubenstein at x3501 or 334-2354

### Clear Lake Symphony concert planned

The Clear Lake Symphony will appear in concert at 8 p.m. May 19 in the main auditorium at the University of Houston-Clear Lake. Music of the Romantic Period will be featured. Selections will include Rachmaninoff's "Piano Concerto No. 2 in C Minor," Liszt's "Tasso," and Beethoven's "Leonore Overture No. 3." Tickets are \$4 for general admission and \$2 for students and senior citizens. For more information, call W. F. Meek at x5381.



Amateur radio — This class will focus on the introductory operation of amateur radios. Topics will include international Morse code, rules and regulations, primary electronic theory and operating practices. The class will run for eight weeks beginning May 17 and costs \$25 per person

Aerobic dance --- Sessions begin May 15 and will run for eight weeks at a cost of \$30 per person. Call the Rec Center for times.

Home maintenance - Find out what makes a house tick in this class designed for the do-it-yourselfer. Topics include carpentry, drywall and plaster patch, tilework and cabinet installation. The eight-week class



Jeroline Smith and Edward Chambers were recognized recently as JSC's Small Business Buyers of the Year for FY 1983 during the Center's observance of Small Business Week. During the past fiscal year, JSC placed more than \$57 million in contracts with small business firms. One of JSC's small business contractors, Taft Broadcasting Corp., has also been selected as the 1984 Small Business Prime Contractor for Region VI. Pictured with the two buyers are Director of Procurement James Neal (left) and Small Business Specialist Bob Duppstadt (right).

### Federal Women's Week set

The Seventh Annual Federal Women's Week observance at JSC will begin May 21 with a film at 9 a.m. and a luncheon at 11:30 a.m. featuring Dr. Martha Williams, Chairperson of the Governor's Commission for Women, as the keynote speaker.

Other events will take place May 21 through 23 in the Bldg. 2 Auditorium, the Bldg. 30 Auditorium and at the Gilruth Recreation Center.

The May 21 film, "Remember the Ladies," will be shown at 9 a.m. in the Bidg. 30 Auditorium. The film

will be preceded by a welcome at at 1:30 p.m. with "Dressing for 8:45 a.m.

The luncheon May 21 begins at 11:30 a.m. at the Gilruth Center. Dr. Williams, who is also the Dean of the School of Social Work at the University of Texas at Austin, will deliver her speech at 12:30 p.m.

The program May 22 will feature three presentations, all to be held at the Gilruth Center. The first will be "The Formula For Success" at 8:40 a.m., to be followed at 10:15 a.m. by "Myths of a Superwoman - Wife, Mother, Executive." The day's presentations will conclude Excellence.'

The May 23 sessions, to be held in the Bldg. 2 Olin Teague Auditorium, include "Overcoming Blocks to Productivity" with Rita Whillock at 8:40 a.m.; "Office Automation" with Vincent J. Walker at 10:30 a.m.; and "Woman to Woman" with Katherine Blissard at 1:45 p.m.

Reservations are required only for the opening day luncheon, and tickets are now on sale for \$6.75 from any Federal Women's Program Committee member. For more information on the luncheon and the Federal Women's Week observance, call Shirley Price at x4831.

### Blood pressure screenings planned

Blood pressure screenings will be conducted by the JSC Clinic May 21 through May 25 at various buildings on-site in conjunction with National High Blood Pressure Month.

Hypertension, commonly known as high blood pressure, is a disease of altered body regulation, according to Charles P. Bergtholdt, JSC Occupational Health Officer. The disease affects both the peripheral resistance of blood vessels and the heart's capacity to pump blood throughout the body, he said, resulting in increased pressure in the arteries. Hypertension can also increase heart rates and myocardial (heart muscle) contractions.

The following screening schedule shows the location, dates, times and buildings served:

May 21 from 8:30 a.m. to noon: Screening in Bldg. 1 serving personnel from Bldgs. 1, 2, 3 and 100. May 21 from 1 to 3 p.m.: Screening in Bldg. 7A serving personnel from Bldgs. 4, 5, 7, 7A, 29 and 35. May 22 from 8:30 a.m. to noon: Screening in Bldg. 30 serving personnel from Bldgs. 12 and 30. May 22 from 1 to 3 p.m.: Screening in Bldg. 16 serving personnel from Bidgs. 13, 14, 15, 16, 17 and 18. May 23 from 8:30 to 10 a.m.: Screening in Bidg. 32 serving personnel from Bldgs. 24, 25, 32, 32A, 33, 36, 41 and 49. May 23 from 10:30 a.m. to noon: Screening in Bldg. 37 serving personnel from Bldgs. 9, 31 and 37.

Screening in Bldg. 419 serving personnel from Bldgs. 353, 354, 356, 416, 417, 419, 420, 422, 423, 424, 321, 323, 325, 326, 327, 328, 329, 350, 351 and 352.

Screenings will also be held at Ellington AFB Bldg. 276 for all

employees there from 1 to 3 p.m. May 23, and at the Bldg. 8 Clinic May 21 to 25 from 10 a.m. to noon and from 2 to 4 p.m. for employees of Bldgs. 8, 10 and 11. The clinics listed above will be located in the lobby of each building.

### Election rules stated

The following memorandum from Mr. Fred Fielding, Counsel to the President, was received by NASA Administrator James M. Beggs with a request that the contents be disseminated to all NASA employees—Editor.

Section 603 of title 18 makes it a felony for any officer or employee of the United States to give a political contribution to any other officer or employee of the United States who is the "employer or employing authority" of the contributor.\* Although the issue is not free from doubt, this provision may prohibit any Federal employee from contributing to the authorized campaign

will run from 7 to 9 p.m. beginning May 16. The cost is \$40 per person.

Guitar - Beginning and intermediate classes start May 16 and will run for six weeks. Beginners meet from 7 to 8 p.m. and intermediates meet from 8 to 9 p.m. The cost is \$25 per person.

Softball registration - Sign up for league play at the Rec Center beginning May 14. Registration will run through May 30. The fee structure and nights of play are identical to last year.

Scuba -- The latest NAUI-certified basic scuba course begins June 25. Classes during the eight-week course meet Mondays from 6:30 to 9:30 p.m., with pool sessions Wednesdays at 7:30 p.m. The cost is \$45 per person.



Roundup test.

May 24 from 8:30 a.m. to noon: Screening in Bldg. 45 serving personnel from Bldgs. 45 and 48.

May 24 from 1 to 2 p.m.: Screening in Bldg. 44 serving personnel from Bldg. 44.

May 24 from 2:30 to 3:30 p.m.: Screening in Bldg. 227 serving personnel from Bldgs. 221, 222, 225, 226, 227, 261, 262, 265 and 266

May 25 from 8:30 to 11 a.m.:

committee of the President (Reagan-Bush '84).

Although such interpretation\*\* would raise grave constitutional concerns, prudence requires that any ambiguity in the language of this statute be resolved against placing any Presidential appointee or other Federal employee in the position of inadvertantly violating Federal law. Hence, in the absence of any judicial interpretation of this provision or any legislative clarification of it, all Federal employees should be advised that this statute may preclude them from contributing to Reagan-Bush '84, the authorized campaign committee of the President.

I regret that such advice may inhibit Federal employees from the full exercise of their First Amendment rights; nevertheless, in the interest of maintaining strict compliance with all Federal statutes, every Federal employee should be made aware of the language and potential restrictions of this statutory provision.

"The terms "contribution" and "authorized committee" are used as they are defined in the Federal Election Campaign Act of 1971, as amended, 2 U.S.C. ¼¼ 431(8) and 432(e) (1).

\*\*This interpretation would be personal to the employee only, and would not apply to his or her spouse or family, and would be applicable only to contributions to Reagan-Bush '84.

Space News Roundup

### Interview

## **Dr. Carolyn Huntoon**

### Perspectives from the Ninth Floor's newest occupant

Dr. Carolyn Huntoon, former Chief of the Biomedical Laboratories Branch, was recently detailed to the position of Special Assistant to JSC Director Gerald D. Griffin. In that role, she will perform many of the duties previously assigned to Associate Director Henry E. Clements, who is on temporary duty as JSC liaison at the Air Force Space Command. Huntoon came to JSC in 1970 after having completed a two-year National Research Council Postdoctoral Fellow assignment here. The Roundup caught up with her a few days after she moved into her new position.

Roundup: Your appointment to this position marks the first time there has been a woman at this level at JSC before. What observations would you make about that?

Huntoon: I think when you talk about this being the first time there has been a woman in this suite of offices, you ought to mention that, at least since I've been here at the Johnson Space Center, there have always been women up here on the Ninth Floor that I at times have suspected were as important to this Center as the men working in the offices. I'm talking about the secretaries and the administrative support and that type of thing. So it's not like I'm entering a complete new world up here. I'm also not sure it makes a statement about women. I'm well aware that I probably am the first women in this kind of position at JSC. I've never worried too much about being the first woman doing anything. I've worried about being good at what I'm doing. It is 1984, and people capable of doing jobs are being selected for them, and maybe that's a statement of the times. You have to be a little bit aware too that this Center has really taken a lead within the government of giving women the opportunity to show what they can do in jobs not traditionally given to women. You've seen that of course in the astronaut area, but also in Mission Control. This is just one more area you are seeing it in. In many areas this Center has made a conscious effort to consider all applicants for a job, and that makes you feel good also. So I anticipated the question would get asked. Well, I am a woman and have certainly never denied that. I also have grown up here at the Space Center as far as my technical background and interests and feel competent to handle the job. Roundup: You were a big help to the women who have come into the astronaut corps over the past few years, in the roll of advisor. Does it strike you as ironic that you are now being asked the same questions that were asked of Sally Ride back during STS-7? Huntoon: No, because before Sally got those questions, I got them years ago in the life sciences area. Mainly it was because I came here at the beginning of the Apollo Program, and that was a time before the big EEO push. But there was a lot of work to be done, and consequently I was able to establish a laboratory program here. Through the years, being the only woman involved in that area, I was asked quite often about being the first woman in that sort of position at NASA. I recall an interview Sally had where someone was asking her about the-role of women and that kind of thing. Sally was quite direct about the fact, as I hope I'm



being, that she thought she was well qualified, and the fact that she was a woman was a fact but not the factor of her selection. I feel the same way here. When she went into the management debriefing for STS-7 with all of NASA management there, she said she looked around the room and realized then how true it was that women had not moved up to that level. So it has been slow in coming. But I think that has to do with the education and background and training of women. We saw that in selecting women astronauts. We have literally thousands of male applicants who are gualified and hundreds of women applicants who are qualified. That has to do with engineering and science backgrounds. Our educational system is moving in the right direction, but it will take some time.

Roundup: It's hard not to feel somewhat guilty about asking these questions. In so doing, we find ourselves encumbered with the fact of your gender, perhaps overshadowing the accomplishments which led you to this job. What does that say about society in general? Have we really come that far if we have to make a big deal about gender?

Huntoon: I don't know. I read an article, it may have been by Erma Bombeck, on how far we've come and then it went into a satirical interview with someone asking a man how his wife feels about his job. It had the same type of questions being asked of a man that women sometimes get asked in interviews: 'That's a nice looking suit. Where did you get it?' I think about that sometimes when I am asked questions which would not be asked of a man. You would come in and ask about his technical work and the things he planned to do for the center. And I understand that. One of the first interviews I had here when I was just a postdoc and had been selected to have a flight experiment on Skylab included a question about what my husband thought of my job. And that was in 1970. So things in that arena haven't changed that much. But it doesn't really bother me. I'm not offended by that. Because I think in some aspects the more attention that can be drawn to that can make people stop and think that there are other women out there who are just as capable. There are a

lot of women at this Center who are now being brought up into the structure of things. Now, Sally Ride was the first. We knew when we selected women astronauts for the first time that it would be hard on them from the aspect of coverage, and how it feels to be a woman astronaut and those types of questions. We also knew that the first woman selected to fly would have a lot to deal with, that her flight would probably not be the hardest part to get through, but that it was going to be all the emphasis on being a woman astronaut. And Sally handled it extremely well. She could not have been coached or rehearsed for it any better. It was just her nature and she did it well. She is a very competent person who feels that women have a role and she was certainly one of the ones that showed that. I'm hoping now, and I think the women astronauts are hoping, that having gotten through this there will be less emphasis put each time we fly a woman and that we can get back to the technical aspects of their work. Roundup: Were you surprised at some of the questions that were asked of her?

Huntoon: I was surprised that people had the nerve to ask some of them. But I guess after you get to be a certain age you really are not surprised about too much. Roundup: Some have been taken to task within NASA for slipping, and calling the women astronauts "ladies" instead of "women." Huntoon: Well, we've gone through this, and it is a slow process. certainly have seen a lot of movement in my career span here and others just starting out will see a lot of steady and progressive movement in this area during their careers. But I am also sympathetic to men that I have grown up with and men who are older than I am who were raised in a different generation. "Ladies" to them was certainly a nice thing to call people. And there's nothing wrong with calling a woman a lady, if she is one. All I said, when asked to comment about it, was that if you are going to say gentlemen, you can say ladies. If you are some certain bodily system reacts going to call them men, and then ladies, that is in a different context. You can call the women gals. It and scientifically you cannot really doesn't offend me as long as you hypothesize what differences there are calling the men guys. But could be. don't call them men and gals. Roundup: It is sometimes reported

there is something wrong when this kind of terminology is used should stop and think about it. These are not people who are trying to put down women. It's just a matter of their sensitivities and upbringing. What would be wrong is if we didn't hire women, and we didn't promote women, and we didn't fly women in space.

Roundup: Do you think we will get away from the emphasis on gender this year with all the women scheduled to fly in space in the next few months?

Huntoon: No, quite the contrary. I would hope that as we get the women flying, there can be more emphasis put on the missions and the technical aspects of the flights, but I know that they will always draw some attention, and rightfully so. We are still, although statistically there are more women in this country than men, we are still in the minority in technical fields. But you know, these women have trained just as hard as the men, and some areas they know better than the men because they trade off who becomes prime in what technical aspect. And the press could do a lot for this too, if they would just stop and think about some of the questions they are asking.

Roundup: Is there any medical evidence to suggest that women may indeed be better space travelers than men?

stress of different kinds with more of an even keel than men. Is any of that based on fact?

Huntoon: Well, there is a lot of anecdotal information. Some studies have been done. But I'm very sensitive to that because of my background and the work I have done in biochemistry that you have to be very careful. To relate any of it to sending women into space is very difficult, because in our selection and training we bring in literally some of the top people in the country. We train them over a period of several years to operate these systems and subsystems as a team. Each is extremely capable, but they are not allowed to do it alone, they are integrated into a team. They have a team structure. So when we launch them, they have been trained together and know each other so well that it is different than most situations from which such studies would be generated. So whenever I hear these facts alluded to, I wonder if they were true scientific investigations with control groups. And it may not necessarily apply to space flight. Roundup: There seems to be less stress on the psycological now. At one time NASA was doing quite a bit of work, for instance the Tektite Program, in which they had women living underwater, and they had psychologists who were actually sort of running that program. Are you tracking any psychological factors of crew selection and performance over the years?

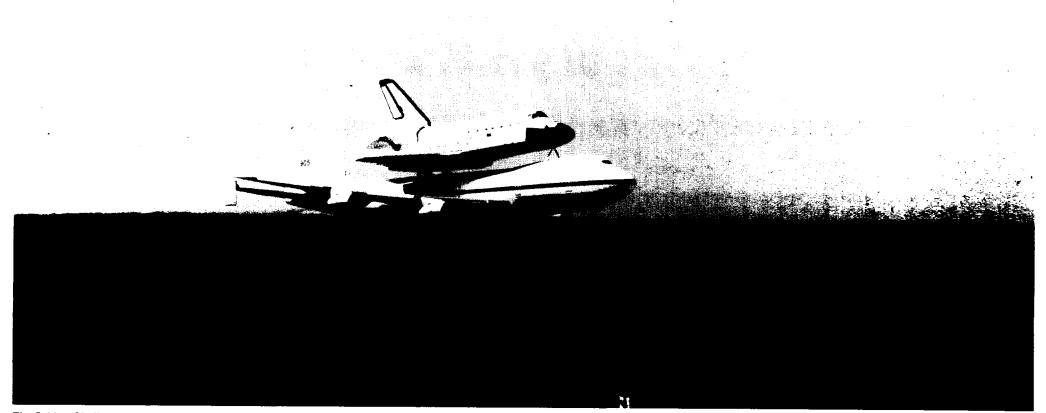
Huntoon: I think the psychological profiling work that was done with our early selections was important work. They were the kinds of studies that had to be done, as opposed to these anecdotal types of things. I'm aware of the Tektite program. I worked on it over in the biochemistry area. Since 1977, when I first became involved with astronaut selection and training. I know we made a decision that we wanted to be sure we were flying mentally healthy people. For that reason, we brought some psychiatrists on the staff to examine these people for health. And the whole medical exam is designed to make sure that we have the healthiest specimen we can. We weren't trying to profile it. And I think that was based on the experience we had, looking back. It wasn't really necessary to profile. You probably don't really want them all to have the same personalities. What goes into making one astronaut very special in his or her area isn't the makeup as another person So there has been no attempt in any of these last three selections to profile and fit someone into a certain mold. We need all different kinds of people to make up a team. That's not to say that the astronauts don't have some of the same characteristics. I like to think that their aggressiveness and their competence and those kinds of things are good characteristics. Roundup: Are you tracking any kinds of specific factors for long term study? Huntoon: Well, we made a conscious effort not to get into that aspect of it. What we wanted to make sure was that people we were interviewing didn't have any latent tendencies for depression or things like that which could show up under stress. The selection board gets a yes or a no. It's either that they are healthy or they are not healthy.

Huntoon: I wish I could say "Oh yes," but there is no evidence to suggest that they are better or worse. You have to understand now that Sally was the third woman to fly in space. I have not seen any information on the first Soviet woman who flew, but in some exchanges of information on the second Soviet woman we noticed some information which said the medical changes were about the same as for the men. And in Sally's case it was exactly the same thing. We always measure certain physiological changes after space flight. There were no more and no less than anyone else. That is not to say to you that after we fly 25 women or 100 women, that statistical looks at data might show differently, or what have you. But that is sort of hard to imagine,

And really, people who act as if or said that women can handle

Roundup: Where does this put us in being ready to put people on a

(Continued on page 4)



The Orbiter Challenger arrives back at KSC atop the 747 Shuttle Carrier Aircraft after the 41-C landing at Edwards Air Force Base.

### Perspectives from the Ninth Floor's newest occupant

### (Continued from page 3)

space station for an extended period. Are there other things we still need to do?

specifically because I really don't know all of the things we might need to do. Where it puts us is that, have the potential to be serious. flying as long as we have, with men But in general, it is just remarkable

smart on how to treat people. We know how to get good work from them, and we know about overworking them. We also know that the human body has tremendous Huntoon: I can't answer that adaptability. From launch to orbit to landing, there are some very interesting changes and a few that

and now women, we are pretty that the body goes through all of that and in just a few days the crews are right back where they were before the flight.

> Roundup: What sort of challenges do you look forward to with this new assignment?

Huntoon: Mostly everyday it's just getting up here. I get calls from people who ask if they can come

over to see me and do they need to bring an oxygen mask with them. I think the air is a little bit thinner at the top or something. I've been a little bit light headed since I've been up here. But as far as the work goes, I have worked with Pete Clements in the past and that was a broadening experience. One of the most exciting things is the opportunity to see this center and

the agency from a much broader perspective. I'd also like to stress that the door is open up here. I'm not Pete Clements and I'm not going to try to be. But I will continue some of the practices he had that I thought were very good. Through the years, I always felt I could call him and if he didn't know the answer he'd help me find it. And I would like to continue in that role.

## Roundup Swap Shop

### **Property & Rentals**

For rent: Ideal family vacation in New Braunfels, lovely 2-2-2 above Landa Park, early bird prices, 3, 4 or 7 days, May 1 - Sept. 1, \$200-350. Call 482-2810. For rent: Galveston-by-the-Sea condo, 2 BR, furnished, for rent by day (2 minimum), week or month. Call Clements, Jr., 474-2622.

For lease: El Dorado Trace condo, 2 BR, 2 full baths, W/D, fireplace, available immediately, \$425 plus deposit. Call John Lo, x4107 or 482-8457.

For rent: Galveston Gulf front condo, treat yourself to a relaxing 2-day to 1month vacation in this completely furnished condo, low rates. Call Nussman, 488-7762.

For lease: 3-2-2 Clear Lake area, fireplace, dining, cathedral ceiling, ceiling fan, mini-blinds, 5 yrs. old, \$575 plus deposit. Call 480-6516 or 488-0500 after 5 p.m. or weekends.

For lease: Lakefront condo, 2 BR, 1 bath, on NASA Rd. 1, private tennis courts and marina, 24-hr. security, all appliances, \$415/month. Call 480-5583, 482-7156 or x2979.

For lease: 10 acres Alvin area, fenced, on paved road, horses, cattle. Call Damewood, 482-5572

For lease: Camino South 3 BR. 2 bath, Split BR plan avail. June 15, \$550 plus first, last & deposit, no pets. Call Don or Lynn Amann, 333-23 59 or x4

package, stereo, \$6,500 negotiable. Call Wayne Chapman, 488-9005 or 486-4028 evenings.

1980 Citation sedan, 4 cyl., AC/PB/PS, tilt wheel, 4-speed, yellow, excellent condition. \$1,850 or best offer. Call 480-8520 after 5 p.m.

1967 Porsche 912, 5-speed, alloys, looks good, runs great. Call Owen, x2451 or 474-7713.

1973 Superbeetle, excellent condition, best offer. Call Leon, 331-3369 or x6455. 1974 Ford Pinto station wagon, 4-

speed manual, AC, \$500 firm. Call 486-8512 after 4 p.m.

1976 Cadillac Sedan DeVille, light green w/dark green vinyl top, PS, PB (new), windows, locks, stereo, tape player, many extras, good tires, excellent condition, \$2,500 or best offer. Call Jackie, x4632 or 488-2046 after 6 p.m.

1967 Mustang V-8, std. transmission, runs good, good condition, \$1,950. Call John, x6171 or 488-2276.

1976 Chrysler Cordoba, excellent condition, regular gas, \$1,200. Call 485-2165 after 5 p.m. or x2055.

1977 Chevrolet Monte Carlo, 305 V8. PS/PB/AC/FM/AM, cruise, new tires, good condition, \$1,825 or best offer. Call 482-1535.

1976 Ford Pinto, AM radio, standard, no AC, runs good, one owner, 82K mi., \$650. Call 487-1883 after 5 p.m.

1977 Malibu Classic, V-8, cruise, 68K

1983 Fleetwood 28' x 52' doublewide, 3 BR, 2 bath, \$26,000 move and refinance. Call Crews, x5171.

### **Audiovisual & Computers**

Stereo system, Technics SL3350 auto turntable, Pioneer CTF800 cassette player, Marantz 2252B receiver, Advent A370764 speakers, cost \$1,500, sell for \$800. Call 488-5445.

Grundig TK 64, 7" reel-to-reel tape recorder w/microphones and cords, \$100. Call Keyes, x6208, or 333-2132. RCA 25" color TV console, wood, \$225; Panasonic cassette tape deck, auto stop, \$50. Call Diane, x5031, or 996-9481 after 5:30 p.m.

Mason jars, all sizes, \$.20 each. Call Judy, 486-6662.

### Household

Couch, \$50; small-size washer and dryer, \$150. Call Jerry, 482-0626.

Moving/garage sale: many household items, dehumidifier, color TV/stand,

furniture, jewelry, tools, clothes, curtains, etc. Call Jim, x3751 or 554-7677. G.E. 16' upright frostless freezer, \$300.

Call D. Long, 538-1816.

### Wanted

advantages, complete insurance coverage. Call Mark, x4436, 554-2538.

Baby sitter wanted for occasional evening and weekend care of toddler in Oakbrook West area, non-smokers please. Call Dale, x2341 or 488-7762.

Home purchaser of 2,000 sq. ft., 4-2-2 home; \$1,000 and free week vacation to anyone who buys or sells by referral my home. Call Jim, x3751 or 554-7677.

Responsible roommate needed to share 3 BR house in Countryside, M/F non-smoker preferred, \$210/mo. plus 1/3 utilities. Call Don Zwach, 280-7881 or 554-7706, home.

#### Miscellaneous

Tennis racket, head graphite edge, new condition, \$75. Call 488-9005, x215 or 488-2733 evenings.

Cash register, Victor electronic, digital readout, 5 compartment, like new, save \$350 off new price. Call 480-0202.

One new Uniroyal P205/75R/15 steel-belted radial whitewall mounted on rim, never used, \$40. Call Malcolm, x5879 or 471-3303.

20' sport shrimp net with boards, ropes, etc., excellent shape, \$100. Call Speier, 333-2263.

Weight bench and weights, \$35. Call 487-1883 after 5 p.m.

2 each Strollee car seats, like new, \$35 each. Call Nussman, x5523 or 488-7762.

IBM Correcting Selectric II typewriter, years old, excellent condition, \$650. Call 482-1535

1974 250 C.I.D. Chevy 6-cyl, engine w/350 turbo trans., asking \$150; 55-gal. aquarium, \$45. Call Les, x3522 or 925-8165

Guy Coheleach collector prints: Koala bear, raccoon family, \$75 each. Call 333-9234.

Stationary exercise bicycle, flywheel driven, excellent condition, \$50. Call 488-3966.

Air conditioner, 110 volt outlet, works good, \$100. Call Glenn, 943-1790 or 480-8800, x74.

#### Carpools

Scarsdale/Beamer - Bldg. 1, reserved close-in parking, 3, need 2 more, drive once/week. Call Art Reubens, x3441.

Carpool member wanted from W. University/Med. Ctr., area to JSC, nonsmoker, 7:50 a.m. to 4:20 p.m. Call Mike, x2688.

Want to join carpool from Spring Branch, vicinity I-10/Blalock to JSC. Call Brian, 468-5189 after 5 p.m., or Carolyn, 522-1111, x3538.

Ads must be under 20 words total per person, double spaced, and typed or printed. Deadline for

submitting or cancelling ads is 5 p.m. the first Wednesday after publication. Send ads to AP 3 Roundup, or deliver them to the Newsroom, Building 2 annex. No phone-in ads will be taken. Swap Shop is open to JSC federal and on-site contractor employees for non-commercial personal ads.

x5398

For lease/sale: Heritage Park near Baybrook, 3-2-2, fenced yard, very clean, fresh paint, \$550/month plus \$500 deposit. Call Quinn, x4326 or 481-0289.

For sale: 1 wooded lot, Trinity Cove, Lake Livingston, 2 blocks to water, \$6,500, will finance. Call Marion, x3365 or 481-2157.

For sale: 3 choice lots, Forest Park Cemetery, I-45 at Southpark, League City, \$1,000/lot. Call Nita, x5081 or 996-1429

For sale: Condo for sale by owner, 1,600 sq. ft., 2-3-2, loft, fireplace. Call Barbara or Jerry, 482-0626.

For sale: Alvin/Lakeside Village, 3-2-2, formal dining or 4th BR, large family room w/FP, ceiling fans, closed-in back porch, covered patio, large lot w/trees, fenced. Assume \$528 payments and 9.5% loan. Owner will finance part of equity, or new loan. Call 998-0031 after 6 p.m.

#### Cars & Trucks

1968 VW Bug, as is, auto-stick, blue, 120K mi., fair-good condition, fix up, \$800 neg. Call Fred, x3404.

1981 Jeep Scrambler, excellent condition, AC/AT/PS, cruise, sport

miles, AM/FM/8 track tape player, CB very good condition, \$2,100. Call 480-7200 after 5 p.m.

#### **Boats & Planes**

Shoreline galvanized, single axle, tilt, boat trailer, 13" wheels with spare, \$750; free 16' I/O boat with purchase, complete with manuals and spare parts. Call Ed, 332-2041.

Sunfish trailer, \$250. Call Crews. x5171.

Aircraft for rent: 1) Cherokee Lance 6-place, club seating, 160 knots true, \$75/hr. wet, 250 TT/25 RT and check ride; 2) Cherokee 140 4-place, 120 knots, private pilot, \$30/hr. wet; both hangared in Friendswood, will rent for less with commitment on hours. Call L. Damewood, 482-5572

#### **RVs and Mobile Homes**

Restorable dune buggy, engine runs, needs some light mechanical work, \$400. Call Pat Loftus, 482-5432.

1977 Dodge Surveyor Maxivan, selfcontained mini-motorhome, extras, sleeps 4, very clean, excellent condition. Call J. Kaltenbach, x6451, or 331-5751. 1983 Beaver Classic-35 Island Queen motor home, like new, fully loaded, \$98,600. Call 538-1816.

Roommate to share Middlebrook 3-2-2, master bedroom, \$290 plus half utilities. Call Jim, x5378 or 480-5129. Responsible roommate to share 3-BR house, Countryside, avail. May 1, M/F non-smoker preferred, \$210 mo. + utilities. Call 486-5526 or 280-7881.

Cash paid, collector wants old toys, robots, space, comic, and assorted types in good condition. Call Fred, x6226 or 484-5272.

Roommate, League City condo 2-2, pool, tennis, wash/dry, \$300 +1/2 E, share till July 31. Call Bob, 332-0178 evenings, or 488-9005, x216 days.

Roommate to share resort apartment, 2/2, fireplace, on lake and pool, 20 min. from NASA, \$320/mo. plus 1/2 utilities. Call Fred, x6226 or 484-5272.

Anyone interested in trading, selling or buying stamps. Call Jill, 488-5087 after 5 p.m.

Shock absorbing bumper for front end Celica or rear end Camaro. Call Dave, x4568

Singer/guitarist for R&R band, misc: Kinks, Doors, Cougar, Kihn, ZZ, Fog, etc. Call Galen, x3576; James, x3406; or Mark, x3803; or 332-8837 after 5 p.m. Want to buy electric trains. Call Don, x2449.

Want to lease Cessna-150, 152 or similar 2-seat VFR trainer; excellent tax



### Week of May 14-18, 1984

Monday: French Onion Soup; BBQ Sliced Beef, Parmesan Steak, Spare Rib w/Kraut, Chili & Macaroni (Special); Ranch Style Beans, English Peas. Mustard Greens. Standard Daily Items: Roast Beef, Baked Ham, Fried Chicken, Fried Fish, Chopped Sirloin. Selection of Salads, Sandwiches and Pies

Tuesday: Split Pea Soup; Meatballs & Spaghetti, Liver & Onions, Baked Ham w/Sauce, Corned Beef Hash (Special); Buttered Cabbage, Cream Style Corn, Whipped Potatoes.

Wednesday: Seafood Gumbo; Cheese Enchiladas, Roast Pork w/Dressing, BBQ Link (Special); Pinto Beans, Spanish Rice, Turnip Greens.

Thursday: Beef & Barley Soup; Roast Beef w/Dressing, Fried Perch, Chopped Sirloin, Chicken Fried Steak (Special); Whipped Potatoes, Peas & Carrots, Buttered Squash.

Friday: Seafood Gumbo; Fried Shrimp, Baked Fish, Beef Stroganoff, Fried Chicken (Special); Okra & Tomatoes, Buttered Broccoli, Carrots in Cream Sauce.

#### Week of May 21-25, 1984

Monday: Cream of Potato Soup; Franks & Sauerkraut, Stuffed Pork Chop, Potato Baked Chicken, Meat Sauce & Spaghetti (Special); French Beans, Buttered Squash, Buttered Beans. Standard Daily Items: Roast Beef, Baked Ham, Fried Chicken, Fried Fish, Chopped Sirloin. Selection of Salads, Sandwiches and Pies.

Tuesday: Navy Bean Soup; Beef Stew, Liver & Onions, Shrimp Creole, Smothered Steak w/Dressing (Special); Corn, Rice, Cabbage, Peas.

Wednesday: Seafood Gumbo; Roast Beef, Baked Perch, Chicken Pan Pie, Salmon Croquette (Special); Mustard Greens, Italian Green Beans, Sliced Beets.

Thursday; Beef & Barley Soup; Beef Tacos, Diced Ham w/Lima Beans, Stuffed Cabbage (Special); Ranch Style Beans, Brussel Sprouts, Cream Style Corn

Friday: Seafood Gumbo; Fried Shrimp, Deviled Crabs, Ham Steak, Salisbury Steak (Special); Buttered Carrots, Green Beans, June Peas.

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