Flight teams gearing up

Simulation covers 30 hours of flight

With the first flight of Columbia now months away, flight controllers and astronauts at JSC are gearing up for the long awaited mission. As of Roundup press time Mission Control Center was scheduled to have come alive Thursday, January 24, with a 30-hour mock flight of the first Shuttle mission.

The "flight" began at 8 a.m. CST with a run through a series of simulated situations, and continued through the early evening. There were no scheduled breaks, and the flight ended at 11:30 p.m. CST.

During the mock mission, flight directors and their teams of flight controllers monitored all orbiter systems health. They performed navigation and targeting tasks, and supported crew performance of the mission timeline.

Approximately 500 people were involved in the "flight," including John Young and Bob Crippen, the prime crew for Columbia's first flight; and Joe Engle and Dick Truly, back-up crew. Flight Directors for the three flight control teams will be Neil Hutchinson, Launch team; Chuck Lewis, Orbiter team; and Don Puddy, Deorbit/landing team.

Purpose of the simulation is to evaluate all operations and procedures over an extended period of time. All previous simulations have been of relatively short duration, time intervals, such as launch, deorbit and entry, and initial systems activation. Additional 30-hour practice flights will be run every six weeks to two months to prepare for the real flight, scheduled for later this year.

Passengers, no Shuttle reservations

Contrary to recently published reports, NASA is not accepting reservations for potential passengers to ride on Space Shuttle missions.

The implication is that the agency is accepting reservations for R&D tasks that have been made in recent articles about NASA's program to carry small experimental payloads on the Space Shuttle on a space-available basis. These payloads are limited to sizes up to 0.14 cubic meters and weights up to 91 kilograms, and $500 earnest money is required to reserve space for a payload.

NASA has no plans to offer seats on Shuttle flights to paying passengers along with two-and-a-half days of on-orbit operations and two descent and landing runs were performed. Everything from operating the cargo bay doors to testing the on-board food warmer and vacuum cleaner was carried out by crew members while they exercised systems during the on-orbit phase.

NASA administrator Dr. Robert Frosch described the test completion as a major milestone in the Shuttle schedule. He told members of the press that the first Shuttle launch will probably take place in the September/October period.

Meanwhile at the NASA facility at Bay St. Louis, Mississippi, technicians were preparing for the second full duration firing of the three main engines. This test calls for the cluster of three engines to fire for 650 seconds. It is now scheduled for Wednesday, January 30.

R&D can lead to economic spinoffs

Fourth in a Series

On Space Industrialization

by Kay Ebeling

Satellites started circling the globe in the 1960s. Sputnik went up, the U.S. followed with Pioneers I and II. Round and round the world they went, and people all over had the same question: What are they for good? What is their practical application?

The same questions come up daily in the Space Shuttle program, but a look at today's vast global communications industry shows a precedent where research and development for the sake of advancing technology has paid off by advancing the American economy as well.

The Fifties moved into the Sixties, and satellites became more streamlined, more versatile. Then Bell Telephone put Telstar into low-Earth orbit and tested it for long distance communications. Further NASA research proved that Bell could use geosynchronous orbit and decrease costs. The stationary earth orbit made possible today's small cable receivers instead of the phone company's large tracking stations.

So began NASA's unique relationship with the private sector. After aerospace research and development proved, the technology is turned over to American industry.

Only in this case it was necessary to create a new entity, as no existing corporation was operating in space.

Congress set a precedent in the creation of COMSAT. It was the first time the U.S. government had created a corporation in response to a newly created technology.

Congress created the COMSAT Corporation with the Communications
There's always one in a crowd

The Hatch Act is still there

With the Presidential elections already underway, JSC Federal employees may need this reminder of their restrictions and protections under the Hatch Act.

Basically, the Hatch Act, passed in 1939, protects the Federal employee against political influence that might damage his job tenure. The act places certain restrictions on the political activities of Federal employees.

Generally, an employee may not use his official authority or influence to interfere with or affect the result of an election, and he may not take an active part in political management or in political campaigns of a partisan nature. The following activities are permissible under the Hatch Act:

- You have the right to register and vote as you choose in any election.
- You may write letters or express your opinions privately and publicly on all political subjects and candidates as long as you do not do so in such a manner as to take an active part in political management or political campaigns of a partisan nature.
- You may make a voluntary campaign contribution to a political party or organization.
- You may accept appointment to a public office provided service in the office will not conflict or interfere with the efficient discharge of your Federal duties.
- You may participate in a non-partisan election either as a candidate or in support of (or in opposition to) a candidate, and you may, if elected, serve in the office if such service will not conflict or interfere with the efficient discharge of your Federal duties.
- You may serve as an election clerk or judge, or in a similar position, to perform non-partisan duties as prescribed by state or local law.
- You may be politically active on an issue which is not identified with a political party or a political campaign but you may not take an active part in conducting or managing such gatherings.
- You may sign petitions, including nominating petitions, but may not initiate them or canvas for the signatures of others if they are nominating petitions for candidates in partisan elections.
- You may petition Congress or a member of Congress, such as by writing to your Congressman to tell him how you think he should vote on a particular issue.

"Where are the launch pads?" or "Are there the anti-gravity chambers?" are those rocks around the Ll, really lunar samples?" is "It's the Shuttle launched from the back of a 747?"

Bland honors

William Bland recently received the Exceptional Service Award from the President's Commission on the Accident at Three Mile Island for his performance as a member of the Technical Assessment Task Force. Mr. Bland retired from NASA before effective December 16, 1979, as Deputy Director of Safety, Reliability, and Quality Assurance at JSC.

"It is proper that there should ever be a fluke for Feds"

Three of those Fridays, by virtue of NASA's schedule, will be paydays. A February with five Fridays only occurs about three times in a century.

A check at JPL's almost perpetual calendar (from 1776 to 2000) shows that in that period five-February Februaries occurred in 1788, 1828, 1866, 1884, 1924, and now in 1980. It will not happen again in this century.

CU has 3 positions open; Nominations due Feb. 15

The JSC Federal Credit Union will hold its annual meeting March 7 at the Gilruth Center at 7 p.m. Voting for positions on the Board of Directors and Credit Committee will occur on this day.

Members interested in running for office should send their names and brief resume to the Nominating Committee.

The deadline for submitting names to the Nominating Committee is February 15.

There are three positions open this year on the Board of Directors, each for three-year terms. Two positions are open on the Credit Committee, one three-year term and one two-year term. As provided by the by-laws, no names for candidacy will be accepted from the floor at the annual meeting.

A list of names selected by the Nominating Committee may have his or her name added to the roster by presenting the Nominating Committee with a petition signed by 200 members stating their desire to have that name added.

Voting machines will be at the credit union on March 7 from 9 a.m. to 3 p.m. Machines will then be moved to the Gilruth Center from 4 p.m. to 7:30 p.m.

Candidates must be 18 years or older and be a member of the JSC Federal Credit Union. To vote, members must be 16 years or older.

Billie Deason Outstanding Secretary

Billie Deason's initiative and foresight are qualifications the Secretary of the Month award was established to acknowledge. Her co-workers say she has excellent rapport with fellow workers, and she shows excellent judgment in setting priorities and searching for methods to perform unusual tasks.

Ms. Deason is the Biomedical Branch Secretary. While keeping up with a heavy secretarial workload, Ms. Deason is never too busy to assist the European visitors who come to the lab to work on SpaceLab One and adapt to life in the States. She helps them phone calls, make plane reservations and take care of other tasks.

Ms. Deason is always looking for new responsibilities as well as ways to lighten the load of routine tasks for technical personnel in the Branch. At the same time, she is attending San Jacinto Junior College taking courses in writing.

In all, Ms. Deason's enthusiasm for her work, ambition to make more of her job, and initiative to get the training she needs to increase her qualifications have earned her the Outstanding Secretary Award for December 1979.

Get Your Swing Into Shape, and Win

The JSC Golf Association opens its 1980 season with a team tournament on February 18, and is now accepting applications for membership. The JSCGA season runs from February to November with eight medal tournaments, three fun tournaments, a 36-hole championship tournament, a four-ball tournament, and two special events to be announced later. Dues are $34 per season, of which $22.50 is devoted to prizemoney for the medal and fun tournaments. Contact Mike Gremillion, X3573, for details and application forms. Deadline for joining in time for the opening tournament is February 13. Applications will be accepted up until March 1.

The Basics Of a Small Business

The Active Corps of Executives and the Small Business Administration will sponsor a workshop on the "BASICS OF RUNNING A SMALL BUSINESS" at the University of Houston Continuing Education Center, 4800 Calhoun, Entrance no. 4, Houston, Texas, on January 30 & 31 in the evening. For further information, call 226-4945.

Armstrong to Narrate Series on Darwin

The Voyage of Charles Darwin series, narrated by Neil Armstrong, will air Sunday nights on PBS Channel 8. It is a seven-part story of the man who revolutionized Man’s view of the world. The series will premiere February 18, and reair February 25, is 3 and 4, in the evening. For more information, call 226-4945.

Vacancies still exist in the CIP Training course and the Women’s Exercise Class at Gilruth Center. Contact x3594 for more information.

On Sale at the JSC Exchange Store

(Store Hours 10 am to 5 pm)

Dean Goss Tickets - $10 Single $20 Couple (Reg. $14-50)

ABC Theatre Tickets - $2 each

General Cinema Theatre Tickets - $2-40 each

Magic Kingdom Cards - Free

Entertainment 80’ Coupon Book - $15

Woods United Methodist Church

February 3, from 2 to 5 p.m. at the Spring Branch United Methodist, Church, 1711 W. FM 1960. Come prepared to sing one selection of your choice. An accompanist will be provided, but singers may bring their own. The Bey Hanson Chorale is a professional quality chorus that will perform in Houston and surrounding counties from a base in Northwest Houston. For evening auditions, or for other information, call 444-3545.

Auditions Open

For Skilled Singers

Auditions for the Bey Hanson Chorale, a select mixed concert choir of 30 to 40 members, will be held Sunday, February 3, from 2 to 5 p.m. at the Spring Woods United Methodist, Church, 1711 W. FM 1960. Come prepared to sing one selection of your choice. An accompanist will be provided, but singers may bring their own. The Bey Hanson Chorale is a professional quality chorus that will perform in Houston and surrounding counties from a base in Northwest Houston. For evening auditions, or for other information, call 444-3545.

Luncheon Honors

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### Roundup Swap Shop

#### Property & Rentals
Sail 2 waterfront lots on Lake Houston, Northshore subdivision, $15,000. Owner will fr. 487-8633.

Lease: 3-2-2 Friendwood, formal DR, firepl., large fenced yard, school close, no flooding, $475/mo + deposit, 482-1127.

Rental: Spacious Rancher, pine floor, 100% natural Bayou. No flood waters, tennis courts, swim, 3-2-2 233-2209.

Sail: 3-3 houseboat, close to NASA, no flooding, $320 mo + full, price total $50,000. Owner x7272.

#### Cars & Trucks

77 travel trailer, A/C, recliner, sleeps 4, $1200. 333-4374 or 332-4886.

77 Dodge van, 200, automatic, air, power AM/FM stereo, uses reg gas, $3600. Don x4265.

79 GMC 3/4 ton Sierra, VB, air, auto, P.S., brakes, radio, HD suspension, hitch, 7000 miles, exc cond, $6150. 486-9005.

78 Chevy Bonanza: 1 3/4 ton pickup, 14,000 miles, good cond, asking $5150. 486-8798 after 6.

77 Dodge Santana: van camper, low mileage, deluxe interior, many extras, 400 mile range, must sacrifice. C. Bowser 486-4854 after 6.

78 Trans-Am, white/red vinyl, 400 cid, auto, stereo, mag 5000 miles, nice, new $6000. Blucker, x3533 or 488-4180.

Sears: 2 ton pickup, landau roof, AM/FM stereo, cruise control, tilt steering wheel, rally sport wheels, Niki x473-5221 after 5.

77 Chevy truck, custom 10, VB, 8 spd, shift on the fly, 13,744 miles.


73 Chevy truck pickup, AC-PR-PS automatic 471-0778 after 5.

#### Cars & Trucks
76 Chevy Monte Carlo, loaded, power, everything, cruise control, steel belted AM/FM tape, vinyl roof (3395 miles), $4950. 471-0778 after 5.

Sandpiper trailer for 1 1/2 pickup, fiberglass, $275, 471-0778 after 5.

67 VW for parts, $50, Olds 8800, 4545 miles, $8500. Scott, x3278 or 546-1648.

Ford F 250 camper special, XL, 460 cu in, all accessories, a very strong truck in exc cond. 471-0778.

Ford F150 SuperCab, PS/PR, air, dual fuel, auto, six cyl, 44,000, new tires, $3500. Terrell x2437 or 461-1808.

#### Household Articles
Maple dining room set, table with leaf extra and 6 chairs (2 captain chairs), $125, Living room or den chair with removable cushions. $40, all nice 488-5884.

Herucci burnt orange and beige striped couch and love seat, $250 or best offer. Two almost new large lamp shades, $70. Debbie x4213 or 486-0562 after 5.

Walnut wood tables 19 x 34 in x 14, $100. 486-5073.

Western house washer 10 lb (dry) and 220 (wash) match set, gold, never used, $400. 440-1023.

Sears metal office desk and swivel chair. $120 or top $50, EXC. 471-0778.

Early American furniture, sofa, rockers, coffee table, stand table, etc, nice. Home x4741.

Sears dishwasher with ice maker, $290. Garage, door opener, $50. New D-14 7-85 tire with ring, $50. Wood, panels 13 x 1, $5 pc, 482-6609 after 5.

#### Week of January 28 - February 1

**Monday:** Chicken & Rice Soup; Texas Hots & Beans. BBQ Ham Steak, Fried Potatoes, Green Beans. Semi. 487-8633.

**Tuesday:** Tomato Soup; Potato Baked Chicken, BBQ Spare Ribs, Mexican Dinner (Exotics). 974-1156. Randy Green, x4265.

**Wednesday:** Clam Chowder; Baked Tur-key: Liver & Onions, BBQ Ham Steak, Baked Meatloaf with Credio Sauce (Special), Beets, Grilled Salmon. 482-6853.

**Thursday:** Beef & Barley Soup; Chicken & Dumplings. Corned Beef w/Cabbage, Smeatheder Steak w/Cambriai Dressing (Special), Spinach, Cabbage. 471-0778.

**Friday:** Seafood Gumbo; Pork Chop w/Yam Rosettes; Creole Baked Cod; Tuna & Salmon Croquette (Special), Brussels Sprouts, Green Beans; Battered Corn. Whipped Potatoes.

**Saturday:** Chicken & Rice Soup; Texas Hots & Beans. BBQ Ham Steak, Fried Potatoes, Green Beans. Semi. 487-8633.

**Sunday:** Corned Beef & Cabbage, Cabbage, Red Kidney Beans. 487-8633.

**Monday:** Chicken & Rice Soup; Texas Hots & Beans. BBQ Ham Steak, Fried Potatoes, Green Beans. Semi. 487-8633.
TRAFFIC GUARDS

Every day, as the sun rises, as the sun sets, cars filter in and out of JSC's parking lots. There's hardly ever a stack up or congestion. The reason: the deft movements, quick judgment, and dependability of JSC's traffic guards some of whom are featured here, keeping the traffic flowing.

PHOTOS BY SUSAN MCCOWN

ECONOMIC SPINOFFS

"In other countries where communications satellites are run by government it still takes hours to place a long distance phone call."

COMSAT profits are financially strong, and the stock is public. Operating revenues (money back from investment) reached $184,570,000 in 1978, up $16,383,000 from 1977. This increase came from growth in communication traffic, in spite of reduced rates required by the Federal Communications Commission in 1978.

And COMSAT is not a monopoly. At hearings before the FCC in 1972, two options were debated: to have the government run the communications satellite services, or to "open the skies," allowing anyone who wanted to fly a satellite to fly a satellite, with NASA monitoring, of course.

The second option won, and the industry now has Western Union, RCA, and Satellite Business Systems competing with COMSAT for ideas as well as air space.

All this came about because rocket teams wanted to go a little farther into space, to see if they could send an object around the globe and then put it to use—just to see what would develop.

The Space Shuttle is an engineering marvel. It is complex, diverse, it "goes where no man has ever gone before." Some critics ask, "Why?" and some Shuttle workers are hard put to answer.

There are vague replies: "We can only speculate on the benefits to come from it. Mankind needs new horizons. Once we get there, whole new worlds will open up."

Above and at right, 1978 theme art of communications satellites of the future

It's a spaceship, for heaven's sake, use your imagination.

The taxpayer may raise an eyebrow.

But who would have thought in 1960 that the first Pioneer would grow into the multi-million dollar industry it is today?

"History is the story of the defiance of the unknown and of what happens when man tries to extend his reach."

—Norman Cousins

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