SPACE CITY COVER SOCIETY

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SCCS

Space Log

Vol 9 No 2 November 1979

NASA LOCAL POST "EXTREMELY URGENT" MAIL

NASA Local Post issues have been around since February 20, 1967. Our first one was a sheet of nine 5¢ "stamps" for the fifth anniversary of John Glenn's Mercury flight. The locals were used on cover for that issue and many other issues have followed it. NASA Local Post has become known as what must be "the longest active local post for space events."

Even so, the local post covers had to have a U. S. stamp and U. S. postmark. The locals themselves were considered "cinderallas" material.

Now, that has changed.

Starting November 26, 1979, the U. S. Postal Service relaxed its first-class mail monopoly. It now allows delivery by private carriers of "extremely urgent" letters.

In the October 24, 1979 issue of The Federal Register, the text was given on the final ruling of this partial suspension of the Private Express Statues for "extremely urgent" mail. The ruling states, "The suspension is available only if the value or usefulness of the letter would be lost or greatly diminished if it is not delivered within these time limits:

(a) For letters dispatched within 50 miles of the intended destination, delivery of those dispatched by noon must be completed within six hours or by the close of the addressee's normal business hours that day, whichever is later, and delivery of those dispatched after noon and before midnight must be completed by 10 a.m. of the addressee's next business day.

(b) For other letters, delivery must be completed within 12 hours or by noon of the addressee's next business day.

If the U. S. Postal Service was going to lose any business by this relaxed ruling, then the service would have to be paid for at prices that would not appear cheap. However, if the needed service is available now through a private carrier, and a guarantee given for that service, then the fee in actuality would not be considered "high." The "cost factor" in the new ruling is:

"It will be conclusively presumed that a letter is extremely urgent and is covered by the suspension if the amount paid for private carriage of the letter is at least $3.00 or twice the applicable U. S. postage for first-class mail (including Priority Mail), whichever is greater."

Even though this new relaxation of the U. S. Postal Service's controlled mail handling monopoly is of importance, it is not the first time. In recent years we have three others; (1) allowing letters to a cargo shipment to accompany the parcel, (2) provisions for mail which is vital to certain data processing operations to be privately carried, and (3) private carriage of the mails during the recent postal strike.

It has been concluded that this latest ruling will have an impact on mail service, but it will have to be on a wait-and-see basis as to what extent. The U. S. Postal Service has noted that "caution was required to insure that any relaxation of the Statues did not jeopardize the universal system in the United States."

The USPS has also stressed that it will "protect the postal system against the inroads of 'cream skimming' by private carriers solely on the basis of their ability to undercut postal rates selectively."

HOW THIS AFFECTS NASA LOCAL POST

There is no ruling that a private carrier stamp for "extremely urgent" mail is required, but it seemed a natural for NASA Local Post to use such stamps to commemorate people and events connected with the space program. Since the minimum rate for a letter is $3.00, then each stamp would have to have at least that denomination. But there is no ruling that specifies that the stamp would have to be sold to collectors at that price. And NASA Local Post does not intend to. We will continue to make these available at only a few cents each. This way there would never be a hardship on any collector that wanted to add the issues to his or her collection.

The U. S. Postal Service will require that "record-keeping be maintained to document actual delivery within a tight and defined time frame." This, NASA Local Post will comply with. Even though a $3.00 NASA Local Post Private Carrier stamp would be furnished to a collector at a nominal price, that stamp could not be used for service in the future unless the full fee were to be paid. In order to comply with the necessary record-keeping, NASA Local Post would require that if a stamp is wanted on a privately carried letter, then it would have to be purchased at the time NLP receives the letter. It would be applied to the face of the letter and immediately postmarked. The needed additional remarks would also be rubber-stamped on the face of the letter at that time.

SCCS PRIVATE EXPRESS MAIL NEW ISSUES

As far as practical, all NLP new issues will be printed in sheets of six to ten stamps, according to the size and event. These will be issued to collectors in a booklet style. There will be one booklet pane of the stamps included in each booklet; the outer covers will have background information printed on them that pertains to the event. The booklets will be sold to collectors at about 60¢ to 90¢ each, according to the issue. These prices will be adhered to as long as inflation allows it. The main idea will be to get a collectable item to interested collectors and at a reasonable cost. In this way the issues can be used publicizing the U. S. space program,. the past, present and the future events. Many "experts in science" today exhort the fact that our future may well depend on how well we develop and use outer space. We may truly be entering upon a new age...that of space and our dependence and utilization of it...and hopefully in a peacful way.

SCCS PRIVATE EXPRESS MAIL FIRST DAY COVERS

These will be made available to collectors and at a nominal cost of about 60¢ each. Since the duty will already have been performed and the stamps cancelled on the first day of issue, there will be no need to charge a higher price for them. Again, the goal is to get the covers to interested collectors in the most economical way for them. This will be one stamp-issuing entity that will always maintain the lowest possible price and not the highest possible one.

SPACE CITY COURIER SERVICE

Our identification by the "SCCS" mark, which has been used on our covers produced by the Space City Cover Society for some time now, will be retained. Since the private courier service has been set up under the name of "Space City Courier Service," those initials are still applicable. The Space City Courier Service has been registered at the Harris County (of Texas) Courthouse in Houston. And the Space City Courier Service has been designated as the only other authorized user of the NASA Local Post; the other being the Space City Cover Society.

ISSUE NUMBER ONE OF THE SCCS PRIVATE EXPRESS MAIL ISSUES

Private delivery of "extremely urgent" letters had its first day of service on November 26, 1979. For this new change in delivery of first-class mail, the NASA Local Post sheet of ten Apollo 11 "stamps" was surcharged by hand-stamp in red ink with the new value of $3.00. Since that sheet has two design varieties (se-tenant) in it, one of each was used on a cover as well as the se-tenant pair on one cover. These covers were postmarked with the NASA Local Post hand-cancel in black ink on November 26, 1979. This was not only the first day of service for this new type of mail delivery, but also the first day of the first issue of the SCCS new type of service stamps.

The special mark of SCCS is on each cover and this issue is designated as the "Cachet #1" in the SCCS Private Express mail. This is shown in the cachet. Additional rubber stamped markings appear on the covers. One is a two-line marking in green ink reading, "This letter delivered by NASA Local Post with minimum service fee of $3.00 charged." The other two line marking is in red ink and reads, "EXTREMELY URGENT Must be delivered by 5:00 p.m. of postmarked date."

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SPACE SHUTTLE FLIGHTS BOOKED THROUGH 1984

NASA has firm payload commitments for the first 37 operational Space Shuttle flights beginning in 1981. The Shuttle is thus almost completely booked through early 1984. The 47 payloads supported by these flights represent commitments by 14 government, commercial and foreign users, and range from the European Space Agency's Spacelab to weather, communication and navigation satellites.

NASA payloads are expected to account for 32% of these payloads, the Department of Defense about 15% and all other users about 53%. These payloads normally are assingned to flights on a first come first served basis. However, missions that involve national security will be given priority, as well as missions with significant scientific and technological objectives or time-critical launch windows. Flights for which NASA will be fully reimbursed also will be given preference over routine scientific and technological experiments.

A range of services are available to Shuttle users. Standard services, which are uniform for all non-government users, include a basic Shuttle launch for a one-day mission with a standard orbital altitude and inclination, three person crew and standard support services. Optional services are available at extra cost upon request. These services could include special hardware, analysis and testing, use of Kennedy Space Center facilities and services, and special orbital operations such as extra-vehicular activity and longer duration missions.

In addition to the 47 large payloads that will occupy much or all of the Shuttle's cargo bay, more than 200 organizations and individuals have reserved room for some 300 small self-contained payloads, called Getaway Specials. These universities, companies and researchers, for $3,000 to $10,000 will send their own 200-pound or less payload into orbit aboard Shuttle. These Getaway Specials must be of research and development nature.

The Shuttle's first payload, one of three preliminary payloads scheduled to fly before the Shuttle becomes operational, will ride the second orbital flight test scheduled for next year. Named OSTA-1 for NASA's Office of Space and Terrestial Applications, the payload will consist of six Earth-sensing experiments designed to enable scientists to pinpoint natural resources and to study air pollution, lighting and ways to locate and track surface features and clouds. The payload will include also a life sciences experiment designed as a prototype for an experiment to be flown aboard the Spacelab, a pressurized manned orbiting laboratory designed to fit in the payload bay.

It has been called the "Pathfinder to Saturn." As one scientist stated, "Another outpost in space...the planet Saturn with its rings...has fallen to the optics and sensors on one of a string of remarkably successful unmanned spacecraft. Pioneer 11's transit has already produced some good science, but the best of the imagery is yet to come from the computer enhancement process."

After a two-billion-mile journey across the solar system, NASA'sPioneer 11 reached the giant ringed planet Saturn on September 1, 1979. Previously, man's planetary reach had been Jupiter. With Pioneer 11's encounter with Saturn, that reach has been extended 400 million miles plus it has set the stage for a further advance. The next objective is Uranus, 895 million miles closer to the edge of the solar system.

The Saturn exploration produced some significant new information about the remote planetary system, such as:

(1) Discovery of a new ring and two additional gaps in the ring system, and nonvisual evidence of the existence of a rarely seen tenuous outer ring.

(2) Findings that Saturn's atmosphere is slightly warmer than was believed previously, and that the planet emits more heat than can be explained by a simple planetary cooling process.

(3) Sighting of a close-in moon that may have been previously undetected.

(4) Conclusive evidence of a strong magnetic field source, and intense charged particle fluxes that are completely eliminated inside the periphery of the ring system.

(5) Demonstration that there is matter outside the visible edge of the ring system, but that the ring plane can be crossed safely near the planet nevertheless.

With its closest approach to Saturn coming during the afternoon, it was a critical time early in the morning. NASA knew beforehand, that with Pioneer 11 passing through the plane of Saturn's rings at a very shallow angle (4.7 degrees) on its descent toward the planet, that planetary debris could be in the area. And it was. The spacecraft was struck at least five times during the encounter by particles large enough to be recorded by its meteorid detector experiment.

Pioneer Saturn's bounty of information about the ringed planet is essentially a bonus resulting from earlier luck in the Pioneer 10/11 program. Pioneer Saturn originally was Pioneer 11. NASA adopted a two-spacecraft approach for its Jupiter exploration program because of the great unknowns and presumed danger in crossing the asteroid belt and penetrating Jupiter's intense radiation. When Pioneer 10 survived both threats in 1973, NASA decided to retarget Pioneer 11 for a Saturn fly-by that would occur 4 years, nine months after its Jupiter encounter. The twin spacecraft were designed and built for NASA by the Defense and Space Systems Group of TRW, Inc.

Pioneer 10 demonstrated that spacecraft could approach close enough to use the planet's massive gravitational force as a slingshot to propel them to more distant reaches of space. Pioneer Saturn now has demonstrated that Saturn's gravity can be used in a similar fashion. Saturn is the second most massive planet in the solar system. The critical question at Jupiter was the lethality of the Jovian radiation. At Saturn, the question was the safety of crossing the ring plane.

The other edge of Saturn's rings is seen at a distance of 47,000 miles, from the planet's visible cloud tops, but scientists have found evidence of a very tenuous ring stretching far beyond this limit. This is the region that posed the threat to Pioneer Saturn's survival. The spacecraft crossed the ring plane in its inbound leg at a distance of 24,400 miles from the visible rings. It crossed the plane again outbound at a distance of 19,400 miles. Velocity relative to Saturn at the time of the crossings was 50,222 mph, inbound and 51,246 mph, outbound. The spacecraft reached its point of closest approach to the planet 12,560 miles from the cloud tops at a speed of 71,141 mph. The spacecraft made its closest approach to five of Saturn's moons (Phoebe, Iapetus, Hyperion, Dione and Mimas) prior to its encounter with the planet itself. It made its closest approach to Tethys, Enceladus, Rhea and Titan (Saturn's largest moon) after the planetary encounter.

Pioneer made its closest approach to Titan, seventh moon out from the planet, on September 2. This satellite, larger than the planet Mercury, and known to have an atmosphere, is an object of great scientific interest and was viewed by Pioneer in infrared, visible and ultraviolet light.

The Saturn encounter produced 15 to 20 images of Saturn with resolution better than the best ground-based photographs. Early findings in these images included the detection of a hitherto unnoticed ring, about 300 miles wide, outside the "A" ring and separated from it by a gap comparable to the well-known Cassini Division. The new feature is being called the "F" Ring informally, but formal designation must await action by the International Astronomical Union. The gap between the "A" and "F" rings tentatively was named the Pioneer gap. Another ring feature detected by Pioneer's imaging photopolarimeter is a division between the "B" and "C" rings, which previously had been thought to be contiguous.

The imaging instrument reinforced earth-based impressions that Saturn's cloud tops have a blander appearance than Jupiter's. The instrument, however, has revealed bluish coloration at the north pole, similar to that observed on Jupiter.

Except for the asteroid/meteoroid detector knocked out by Jovian radiation 4½ years ago, the Pioneer experiments appeared to function well throughout the Saturn encounter.

NASA TRACKING STATIONS

NASA plans to change its space tracking and data acquisition activities when the Space Shuttle and the Tracking and Data Relay Satellite System become operational in the 1980s. The plans are a result of a study of responsibilities at NASA's Goddard Space Flight Center, Greenbelt, MD., for tracking and data systems activities. The changes are intended to insure that tracking stations and network operations will be managed most efficiently and effectively using both government and contractor personnel and resources.

The Tracking and Data Relay Satellite System in 1982 will take over all of the tracking and data acquisition support of low Earth-orbiting spacecraft. At that time, the Spaceflight Tracking and Data Network, NASA's worldwide network of tracking stations, will be closed, with the following exceptions:

* The Alaska station will be retained until Landsat 3 becomes inoperative, anticipated in 1984.

* The Goddard station will be retained until the International Ultraviolet Explorer spacecraft becomes inoperative, anticipated in the mid-1980s.

* The Merritt Island, Fla., and Bermuda stations will be converted to launch support and range safety facilities.

* The Goldstone, Calif., Australian and Spanish stations will be retained for support of geosynchronous and highly elliptical orbit spacecraft.

The Rosman, N.C., facility expects to cease operations in January 1981. The facility had been supporting the Applications Technology Satellite-6, which is no longer operating, and the Orbiting Astronomical Observatory, which will complete its mission in November 1980. The Rosman station is operated for NASA by the Bendix Field Engineering Corp., which employs about 120 people at the site. The stations to be closed in 1982 include Hawaii; Guam; Quito, Ecuador; and Santiago, Chile. The station in Winkfield, England, will be closed in 1980.

The Spaceflight Tracking and Data Network capabilities of the Goldstone, Australian and Spanish stations are similar to those required for the Deep Space Network stations at the same locations. Combining the capabilities at each station will achieve more efficient use of the facilities, and save money. The facilities at Goldstone, Australia and Spain will be consolidated into a network under management of NASA's Jet Propulsion Laboratory, Pasadena, Calif., in 1983 thru 1985.

Ten years ago there were approximately 1,200 Civil Service employees in the development, implementation and operation of tracking and data systems at Goddard for support of both manned and unmanned spacecraft. Since then, many of the functions have become routine contractor operations so that now, approximately 650 Civil Service people are assigned to tracking and data systems work, including the management and coordination of some 30 operations contracts.

The Goddard study has shown that consolidation and restructuring of the contracts into approximately six contracts in the 1982-1983 period would result in a more effective and efficient blend of government and industry performance. The government work will focus on mission planning, technology development and systems engineering. Contractors will be responsible for operational tasks.

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SPACE SHUTTLE REPORT

The special staff of individual consultants that was asked last May to assess the adequacy of the NASA Space Shuttle management system has submitted its report to the NASA Deputy Administrator Dr. Alan M. Lovelace. This will give a review of just where we stand in regards to the Space Shuttle program and how we got there. Here are the highlights of that report.

(1) The original cost commitment for Shuttle development established an austere fiscal environment at the beginning of the program. This environment became more constraining under the annual budgets established in subsequent years.

(2) The overall Shuttle management system has achieved a commendable level of accomplishment.

(3) In the effort to live with funding limitations while still progressing acceptably toward completion, Shuttle management has generally set up work schedules that demanded more performance than could be delivered.

(4) There has been a lack of adequate long-range planning and timely status reporting. Emphasis has been on the current fiscal year, with only secondary attention to succeeding years and estimates to completion.

(5) The organization for the Shuttle Program appears to be functioning well from a technical standpoint, but is not functioning acceptably in the areas of schedule and budget. Strengthening of the organization at all levels is needed in these areas.

(6) Fixed Shuttle delivery schedules and initial operations require a new management approach.

(7) The operational phase of the Space Shuttle Program takes on added significance and importance as the Design, Development, Test and Engineering phase comes to an end. Top NASA management should address the overall organization, external interfaces, institutional, and other management aspects of the operational phase. In particular, the NASA/Department of Defense interface needs immediate clarification to avoid misunderstandings which could have long term consequences.