

# UNITED STATES GENERAL ACCOUNTING OFFICE WASHINGTON, D.C. 20548

MISSION ANALYSIS AND SYSTEMS ACQUISITION DIVISION

B-207077

**APRIL 16, 1982** 

The Honorable Jake Garn
Chairman, Subcommittee on HUDIndependent Agencies
Committee on Appropriations
United States Senate



Dear Mr. Chairman:

Subject: Evaluation of NASA's Compliance With

Congressional Reprograming Requirements

(MASAD-82-31)

For several years the Senate Committee on Appropriations has been concerned with the National Aeronautics and Space Administration's (NASA's) reprograming procedures. Pursuant to your request of November 13, 1981, and subsequent discussions with your office, we reviewed

- -- reprograming requirements applicable to NASA,
- -- procedures established by NASA to control reprograming,
- -- changes NASA made to the fiscal year 1981 operating plan (see enc. I),
- --official notifications sent to the Senate Subcommittee on HUD-Independent Agencies as required under the guidelines in the 1981 appropriations act (Public Law 96-526) and the Senate Committee on Appropriations report (Senate Report 96-926), and
- --what might be done to improve the reprograming process.

We did not attempt to establish whether NASA's fund control procedures were adequate to ensure that funds were actually obligated and spent consistent with legal limitations or congressional direction.

We found that NASA had established procedures for complying with the reprograming requirements and had notified and requested approvals for all reprograming changes to the fiscal year 1981 operating plan. The results of our review follow.

Carry St. B. Carry Co.

#### CONGRESSIONAL CONTROLS OVER NASA EXPENDITURES

Over the years, NASA's authorization and appropriation committees have imposed various controls over NASA expenditures and have established various procedures for NASA to follow to assist the committees in exercising their oversight responsibility. NASA is required to notify and/or obtain approval from various committees, subcommittees, and officials of the Congress before reprograming funds from one budget item to another.

## Program ceilings established by appropriations committees

Prior to fiscal year 1980, the appropriations committees provided funds to NASA to conduct and support its aeronautical and space research and development activities without imposing any spending ceilings for individual programs. For fiscal year 1980, however, the committees imposed ceilings of \$116.1 million and \$18.3 million, respectively, on Galileo and the Space Transportation Systems Upper Stages.

In the 1981 appropriation act, the committees imposed spending restrictions on nine NASA programs, whereby the approval of the appropriations committees was required if the programs were to exceed (1) \$29 million for the Space Transportation Systems Upper Stages, (2) \$30.9 million for the Space Transportation Systems Operations—Upper Stages, (3) \$119.3 million for the Space Telescope, (4) \$39.6 million for the International Solar Polar Mission, (5) \$19.1 million for the Gamma Ray Observatory, (6) \$63.1 million for Project Galileo, (7) \$88.5 million for Landsat-D, (8) \$1.873 billion for the Space Shuttle, and (9) \$149.7 million for Spacelab.

NASA must wait until the appropriations committees approve any reprogramings to exceed the program ceilings. Approval does not automatically occur after a specific period of time.

# Reprograming procedures established by the appropriations committees

The Senate reports on Department of HUD-Independent Agencies appropriation bills for fiscal years 1977 through 1980 all included a section pertaining to reprograming and initiation of new programs. During this period, the reprograming requirements were identical for all the agencies funded through the bill. At that time all the agencies were to notify the chairman of the Senate HUD-Independent Agencies Subcommittee before reprograming funds in excess of \$250,000 or 10 percent, whichever is less, between programs or activities. NASA said that during this period, by agreement with the appropriations committee staff, the agency provided identical notification to the appropriations committees as that required by the annual authorization act.

The subcommittee also was to be notified of (1) reprograming actions which involve less than the above-mentioned amounts if such actions would have the effect of committing the agency to significant funding requirements in future years and (2) substantial reorganizations of offices, programs, or activities before the implementation of such reorganizations.

In fiscal year 1981, the Senate Committee on Appropriations established different reprograming procedures for NASA because of its concerns regarding the manner in which NASA reprogramed funds within and between budget items. The new procedures required NASA to develop and provide to the committee, after receiving its apportionment, an operating plan distributing the funds among about 66 budget items agreed to by the committee and NASA. (See enc. I.) NASA was directed not to exceed any of these amounts by more than \$1 million, cumulatively, before giving the committee 15 days advance notice of any proposed reprograming action.

Also, NASA was required to notify the committee in advance of any action which will substantially increase NASA's institutional capabilities, substantially change an ongoing research and development program, or result in a significant funding requirement in future years. The reprograming procedures applicable to other agencies covered by the Senate report remained the same as in previous years. These same reprograming procedures were continued in fiscal year 1982.

### Program ceilings established by authorization committees

In addition to the appropriations committees' restrictions, the NASA Authorization Act, 1981 (Public Law 96-316) also established ceilings for research and development for the following programs:

- -- Space Shuttle, \$1.873 billion.
- -- Space flight operations, \$779.5 million.
- -- Expendable launch vehicles, \$55.7 million.
- -- Physics and astronomy, \$352.7 million.
- --Planetary exploration, \$179.6 million.
- --Life sciences, \$45.2 million.
- -- Space applications, \$378.7 million.
- -- Technology Utilization, \$12.6 million.
- -- Aeronautical research and technology, \$290.8 million.

- -- Space research and technology, \$115.2 million.
- -- Energy technology, \$4 million.
- -- Tracking and data acquisition, \$349.75 million.

The act also stated that no amount appropriated pursuant to the act may be used for any program in excess of the amount actually authorized for that particular program unless a period of 30 days has passed after NASA notifies the Speaker of the House, the President of the Senate, and each of the authorization committees of the proposed action to be taken, or each committee advises the Administrator of NASA before the expiration of the 30-day period that neither committee has objection to the proposed action.

#### PROCEDURES ESTABLISHED BY NASA TO COMPLY WITH CONGRESSIONAL CONTROLS

The Administrator of NASA took a number of actions in October 1981 and after to improve NASA's compliance with reprograming and notification procedures. They included

- --meeting with the staffs of NASA's authorization and appropriation subcommittees to discuss their concerns related to reprograming,
- --emphasizing to top NASA officials NASA's policy of adhering to the requirements,
- --reorganizing the Legislative Affairs Office to place particular emphasis on budget execution as a key aspect of NASA's relations with the Congress, and
- --directing the NASA Comptroller to monitor the operating plan with particular emphasis on required notifications to the Congress.

The procedures that NASA follows during the course of a fiscal year to ensure compliance with reprograming requirements are as follows. After the operating plan is approved, the Comptroller notifies each Associate Administrator of the operating plan NASA has agreed to follow. The Associate Administrators cannot make any change between budget items in the operating plan without approval of the Comptroller.

Proposed changes to the operating plan generally funnel up from the various project offices at the NASA centers to one of the six program offices at Headquarters. Analysts in the program offices assess the impact of the requested funding changes on projects in other program offices. This information is then sent to the NASA Comptroller who reviews the information and recommends to the NASA Administrator what action should be taken.

If notification or request for committee approval is required, the Legislative Affairs Specialist, a position created as a focal point for reprogramings and congressional contacts, is responsible for preparing the cover letter transmitting the proposed funding changes to the committees for consideration. After funding changes or reprogramings are reviewed and/or approved by the Congress, the Office of the Comptroller notifies the program Associate Administrators. The program office, in turn, notifies the respective center directors of the changes in funding authority.

Over the past several years the Senate Appropriations Committee has expressed its concerns over actions taken by NASA concerning "judgemental"-type reprogramings. The committee feels that NASA has been remiss in notifying it of certain actions which (1) substantially increase NASA institutional capabilities, (2) substantially change an ongoing research and development program, or (3) result in a significant funding requirement in future years. The committee informed us of several actions taken by NASA before fiscal year 1981 where NASA either failed to notify the committee or where the notification was not timely, thereby limiting the actions available to the committee.

Early in fiscal year 1982, the Administrator of NASA took certain steps to minimize the occurrence of judgemental-type reprogramings not being reported to the committees in a timely manner. He emphasized to each of the program offices that agreements with the committees require advance notification when institutional capabilities are substantially increased, research and development programs substantially changed, or funding requirements are significantly affected in future years. The Administrator stressed that the committees be promptly notified of significant actions being taken by NASA, and if there is any doubt whether notification is required, notice should be given. The Administrator also emphasized that all significant changes in programs and budget must receive his approval.

#### NASA COMPLIED WITH REPROGRAMING REQUIREMENTS IN FISCAL YEAR 1981

The Subcommittee on HUD-Independent Agencies, Senate Committee on Appropriations, requested that we review NASA's compliance with the appropriations committee's reprograming procedures in fiscal year 1981. We found that NASA had complied with the reprograming procedures and notification requirements.

NASA's operating plan for fiscal year 1981 was submitted to the House and Senate Committees on Appropriations on January 14, 1981. (See enc. I.) During the remainder of the fiscal year, there were six reprograming actions requiring notification of or approval by the appropriations and/or authorization committees.

#### Reprogramings requiring notification and approval

Each year NASA's authorization committees establish ceilings for each of the 12 programs identified earlier. If the thresholds established for any of these programs will be exceeded, NASA must notify the Speaker of the House, the President of the Senate, and both authorization committees. Also, the House and Senate Committees on Appropriations also establish funding ceilings for several of NASA's programs which are not to be exceeded without their approval.

In March 1981 NASA found it necessary to notify and seek approval of the authorizations and appropriations committees to increase funding limits for two major programs. Requests were made to increase the funding limitation for the Space Transportation Systems Upper Stages from \$29 million to \$38.3 million and the Space Shuttle from \$1,943 million 1/ to \$2,003 million.

### Reprogramings requiring notification only

The congressional appropriations committees also required that they be notified 15 days in advance whenever NASA finds it necessary to exceed funding for a budget item as stated in the operating plan (see enc. I) by \$1 million or more. During June 1981 NASA notified the committees that three budget items required funding increases as follows: Solar Electric Propulsion System, \$3 million; Technology Utilization, \$2 million; and International Solar Polar Mission, \$3 million. In October 1981 NASA notified the committees that the Advanced Programs required an increase of \$3 million.

#### CONCLUSIONS

Based on our review of reprogramings during fiscal year 1981, the procedures which NASA has established to comply with the various program ceilings and the operating plan ceilings appear adequate to ensure compliance.

We were not able to determine whether NASA had complied with the judgemental-type reprogramings that would not have been triggered by one of the dollar ceilings. However, NASA officials said they believe NASA had complied with these requirements. They also said that the Administrator's recent emphasis on the

<sup>1/</sup>The ceilings imposed by the authorization act and the appropriation act for the Space Shuttle were increased from \$1,873 million to \$1,943 million at the time of NASA's submission of the fiscal year 1981 operating plan.

importance of complying with these judgemental requirements had resulted in additional notifications to the committees.

You also requested our suggestions for improving the reprograming process. We have no suggestions to offer concerning additional controls. It is too early to tell whether the Administrator's actions will prevent a recurrence of past problems, but they appear to have focused the attention of NASA officials on the importance of complying with them, and as a result, we would expect to see improvement in this area. However, if after an appropriate period of time has passed and the committee finds that NASA is not meeting the committee's desires with regard to compliance with the reprograming requirements, the committee may wish to consider revising the reprograming requirements to (1) reduce the judgemental leeway presently permitted and (2) impose additional reprograming requirements.

We did not request official comments on this report because of the need to issue the report in time for congressional consideration of the fiscal year 1983 budget request. We did, however, discuss a draft of the report with NASA officials. These officials generally agreed with the material presented in this report and their views are incorporated as appropriate.

As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of the report. At that time we will send copies to interested parties and make copies available to others upon request.

If we can be of further assistance, please let us know.

Sincerely yours,

W. H. Sheley, Jr.

Director

ENCLOSURE I ENCLOSURE I

# NATIONAL AERONAUTICS AND SPACE ADMINISTRATION OPERATING PLAN FOR RESEARCH AND DEVELOPMENT

#### FISCAL YEAR 1981

	Initial estimate
	(millions)
Space Shuttle:	
Design, development, test, and evaluation:	•
Orbiter	\$521.0
Main engine	134.0
External tank Solid rocket booster	54.5 44.5
Launch and landing	204.0
Production:	20110
Orbiter	727.5
Main engine	121.5
Launch and landing	34.0
Spares and equipment	102.0
Space flight operations:	
Space Transportation Systems operations	
capability development	81.0
Development, test, and mission support	183.5
Advanced Programs	8.8
Spacelab	139.7
Space Transportation Systems operation	270.7
Expendable launch vehicles:	,
Scout	.9
Centaur	5.6
Delta	47.9
Physics and astronomy:	
Space Telescope development	119.3
International Solar Polar Mission development	
Gamma Ray Observatory development	17.6
Shuttle/Spacelab payload development and	
mission management	27.4
Explorer development	33.0
Mission operations and data analysis Research and analysis	38.9 38.0
Suborbital program	30.9
Planetary exploration:	
Galileo development	63.1
Mission operations and data analysis	61.8
Research and analysis	50.7

ENCLOSURE I ENCLOSURE I

#### Initial estimate (millions) Life sciences: Life sciences flight experiments \$ 12.7 Research and analysis 29.5 Space applications: Resource observations: Landsat-D 88.5 Magnetic field satellite • 5 Shuttle/Spacelab payload development 2.0 Extended mission operations 2.7 23.4 Geodynamics Applied research and data analysis 12.8 31.4 AGRISTARS Environmental observations: Earth radiation budget experiment 20.3 Halogen occultation experiment 4.5 National Oceanic Satellite System 5.8 Shuttle/Spacelab payload development Applied research and data analysis 1.7 78.8 18.1 Applications systems Technology transfer 10.1 Materials processing in space: Shuttle/Spacelab payload development Applied research and data analysis 10.7 11.0 Space communications: Search and rescue mission 4.8 Applied research and data analysis 26.4 Technology Utilization 11.8 Aeronautical research and technology: Research and technology base 134.3 Systems technology programs: Materials and structures systems technology 4.9 Propulsion systems technology Avionics and flight control systems tech-Aeronautical systems studies 3.2 General aviation systems technology 1.1 Low-speed aircraft systems technology 24.3 16.7 High-speed aircraft systems technology Transport aircraft systems technology Advanced propulsion systems technology 33.1 47.8 Space research and technology: 101.1 Research and technology base 7.5 Systems technology Standards and practices 2.1 3.9 Energy technology

# Tracking and data acquisition: Operations Systems implementation Advanced systems Total Initial estimate (millions) \$ 267.1 62.7 11.3