

**AUDIT
REPORT**

RAPID ACTION

**RECORDING OF REVENUES GENERATED BY
THE COMMERCIAL USE OF NASA'S
TRACKING AND DATA RELAY SATELLITE
SYSTEM (TDRSS)**

KENNEDY SPACE CENTER

DECEMBER 17, 1996

WARNING: This document is a final report of audit issued by the NASA Office of Inspector General (OIG). Contractor information contained herein may be company confidential. The restriction of 18 USC 1905 should be considered before this data is released to the public. Any Freedom of Information Act request for this report should be directed to the NASA Inspector General for processing in accordance with Title 14 Code of Federal Regulations, Part 1206.504.



National Aeronautics and
Space Administration

OFFICE OF INSPECTOR GENERAL

ADDITIONAL COPIES

To obtain additional copies of this audit report, contact the Assistant Inspector General for Auditing at 202-358-1232.

SUGGESTIONS FOR FUTURE AUDITS

To suggest ideas for or to request future audits, contact the Assistant Inspector General for Auditing. Ideas and requests can also be mailed to:

Assistant Inspector General for Auditing
NASA Headquarters
Code W
300 E St., SW
Washington, DC 20546

NASA HOTLINE

To report fraud, waste, abuse, or mismanagement, contact the NASA OIG Hotline by calling 1-800-424-9183; 1-800-535-8134 (TDD); or by writing the NASA Inspector General, P.O. Box 23089, L'Enfant Plaza Station, Washington, DC 20026. The identity of each writer and caller can be kept confidential upon request to the extent permitted by law.

National Aeronautics and
Space Administration
Headquarters
Washington, DC 20546-0001



DEC 17 1996

Reply to Attn of:

W

TO: M-3/Acting Deputy Associate Administrator for Space Flight

FROM: W/Assistant Inspector General for Auditing

SUBJECT: Final Rapid Action Report
Recording of Revenues Generated by the Commercial Use of NASA's Tracking
and Data Relay Satellite System (TDRSS)
Assignment No. A-KE-96-003
Report No. IG-97-010

Enclosed is our final rapid action report addressing the recording of revenues generated by the NASA C-Band agreement. The overall audit objective was to determine whether TDRSS commercial agreements fulfill Agency goals in a manner consistent with NASA's policies and interests.

We found that NASA has deposited over \$14 million in C-Band revenues in a NASA deposit account rather than the U.S. Treasury general fund. The Agency recently authorized \$1.3 million of the C-Band revenues for the construction of the Guam Remote Ground Terminal. We believe such an action may represent an improper augmentation of Agency funds.

We received and evaluated your November 15, 1996, response to the subject report. Your response is summarized after the report recommendation and included in its entirety as Appendix 1. After careful consideration of the information you provided, we found that it did not alter our conclusions; consequently, we are reaffirming our position. We request that you reconsider your position based on additional information provided in our evaluation of management's response and respond to the audit recommendation within 30 days from the date of this memorandum.

If you have any questions, please contact Daniel J. Samoviski, Program Director for MTPE and Communications at (301) 286-0497; Robert J. Wesolowski, Director Audit Division-A, or me at (202) 358-1232.

Debra A. Guentzel
Debra A. Guentzel

Enclosure

cc:
JM/Chait
201/Clark, GSFC

INTRODUCTION

The Office of Inspector General is conducting an audit of the Commercial Use of NASA's Tracking and Data Relay Satellite System (TDRSS). We identified a condition related to the use of funds received under a revenue sharing agreement that NASA has with Columbia Communications Corporation (Columbia), Bethesda, Maryland. Because of the monetary significance and time sensitivity of this condition, we are providing this report for your immediate attention.

We issued a draft report on September 19, 1996, and received Management's response on November 15, 1996. Management's response is summarized following the report recommendation and included, in its entirety, as Appendix 1 to the report.

BACKGROUND

In 1990, NASA entered into an agreement with Columbia for the use of excess C-band capacity on two of NASA's tracking and data relay satellites (TDRS-4 and TDRS-5). Columbia would, in turn, lease the C-band to commercial customers for international telecommunications purposes. NASA entered into this agreement pursuant to provisions of the National Aeronautics and Space Act of 1958 (Space Act). NASA's objectives for entering into this agreement were to:

- Use existing excess capacity on the TDRSS satellites.
- Promote competition in the communications satellite industry by fostering an environment which would allow a small business to enter the market.
- Provide monetary return to taxpayers for their TDRSS investment.

This Page is Left Intentionally Blank

OBJECTIVES, SCOPE, AND METHODOLOGY

OBJECTIVES

The overall audit objective is to determine whether commercial agreements fulfill Agency goals in a manner consistent with NASA's policies and interests. Specific objectives were to determine whether:

- (1) The Columbia C-band agreement and its amendments are in NASA's best interest.
- (2) The revenues received under this agreement are used in compliance with applicable laws and regulations.
- (3) There are other internal or external uses for the TDRSS excess capacity which would be advantageous to NASA.

SCOPE AND METHODOLOGY

We performed the audit in accordance with generally accepted government auditing standards. Specifically, we reviewed available records and documents pertaining to the use of funds generated from the Columbia C-band agreement. In addition, we held interviews and discussions with representatives of the NASA Headquarters Office of Space Communications and the Office of General Counsel.

INTERNAL CONTROLS REVIEWED

We reviewed the following laws and regulations to determine whether NASA has authority to use the Columbia C-band revenues.

- The National Aeronautics and Space Act of 1958
- Title 15 of the U.S. Code, Section 5807, Use of Government Facilities
- Title 31 of the U.S. Code, Section 3302, Deposit of Monies
- Title 31 of the U.S. Code, Section 9701, User Charges
- Title 40 of the U.S. Code, Section 485, Proceeds from Transfer, Sale, etc. of Property
- NASA Financial Management Manual, Section 9090, Reimbursable Agreements
- Title 14, Code of Federal Regulations, Subpart 1215.1 - Use and Reimbursement Policy for Non-U.S. Government Users

AUDIT FIELD WORK

We conducted audit field work during the period of March to November 1996 at:

- NASA Headquarters, Washington, D.C.
- Goddard Space Flight Center, Greenbelt, Maryland
- Columbia Communications Corporation, Bethesda, Maryland

OBSERVATIONS AND RECOMMENDATIONS

INTERIM RESULTS OF AUDIT

The Office of Space Communications (OSC) has been placing payments received from Columbia, under a revenue sharing agreement, into a NASA deposit account in accordance with the provisions for reimbursable agreements. These payments, however, are based on revenues from commercial leases of excess C-band capacity on NASA's TDRSS rather than cost reimbursements for C-band service. Consequently, this agreement does not meet the criteria for a reimbursable agreement, and NASA should record these payments as miscellaneous receipts and deposit them into the U.S. Treasury general fund.

NASA IS IMPROPERLY RECORDING REVENUE PROCEEDS

The OSC has been improperly treating a revenue sharing agreement for the use of excess C-band capacity on two tracking and data relay satellites as a reimbursable agreement. The terms of this agreement do not meet the criteria for a reimbursable agreement because the OSC did not base the price of the C-band capacity on NASA's cost. Further, revenue sharing proceeds have not been used to offset C-band service costs because NASA has not included C-band revenues in the annual program operating plans. The treatment of this agreement has resulted in more than \$14 million in revenue proceeds being improperly placed in a NASA deposit account. The use of these funds for any Agency program without Congressional approval would be an improper augmentation of NASA's appropriation.

SPACE ACT AUTHORIZES AGREEMENT WITH COLUMBIA

Section 203(c)(5) of the Space Act authorizes NASA to enter into contracts, leases, agreements or other transactions necessary in the conduct of the Agency's work and on terms deemed appropriate. This authority allows NASA to enter into various types of agreements with other federal agencies and non-federal entities. NASA entered into an agreement for the lease of C-band transponders by a private entity, Columbia, pursuant to this section of the Act.

The Space Act does not address specific guidelines for the administration of Space Act Agreements. Since inception, NASA has treated the C-band agreement as a reimbursable agreement. NASA's Financial Management Manual (FMM) provides direction for the administration of reimbursable agreements.

COLUMBIA C-BAND AGREEMENT DOES NOT MEET FMM CRITERIA FOR A REIMBURSABLE AGREEMENT

Section 9090 of the FMM contains seven basic elements for the classification of reimbursable agreements. Two of the seven elements are:

- (1) Legal authority for performing the work and for crediting reimbursements to the NASA appropriation.
- (2) Estimated cost of the work or services.

The Columbia C-band agreement does not contain legal authority for crediting reimbursements to NASA's appropriation nor does it include estimated cost of the services to be performed. Consequently, the terms of this agreement are not consistent with those of a reimbursable agreement.

NASA MUST COMPLY WITH LAWS REGARDING RECEIPT OF NON-APPROPRIATED FUNDS

In the absence of authority to use funds generated from a revenue sharing agreement, the Agency must comply with laws regarding the receipt of non-appropriated funds. Title 31 of the U.S. Code, Section 3302, addresses custody of public funds. Specifically 3302(a) states that "unless otherwise provided by another law, officials or agents of the U.S. Government having custody or possession of public money shall keep the money safe without using it." This law was designed to prevent agencies from augmenting their budgets outside the normal appropriation process. Receipts of funds from any source are to be deposited in the U.S. Treasury.

PAYMENTS TO NASA BASED ON FACTORS OTHER THAN COST

The original C-band agreement, signed with Columbia in 1990, provided that Columbia would pay NASA the total price of \$61,386,576 through a series of progress payments. This price was based on Columbia's bid for the C-band capacity rather than NASA's estimated cost to provide C-band service.

COLUMBIA UNABLE TO MEET ORIGINAL AGREEMENT TERMS

Due to insufficient sales during the second year of the six-year lease, Columbia was unable to meet the December 31, 1992, progress payment. Rather than terminating the agreement, Columbia proposed an amendment which would provide for a revenue sharing arrangement in lieu of a series of annual progress payments. In 1993, OSC amended the agreement to allow Columbia to pay NASA certain percentages of gross revenue from leasing TDRSS C-band capacity.

In 1995, NASA extended the period of TDRSS C-band services from 6 to 10 years and Columbia agreed to pay NASA approximately \$40 million through the year 2000 as follows:

December 31, 1994	\$6 million
December 31, 1995	\$14 million
December 31, 1996	\$23 million
December 31, 1997	\$28.8 million
December 31, 1998	\$33.2 million
December 31, 1999	\$37.6 million
December 31, 2000	\$40.4 million
December 31, 2001	no milestone

***OVER \$25 MILLION
RECEIVED FROM
AGREEMENT
INCEPTION TO DATE***

Since entering the original agreement, NASA has received over \$25 million--\$10.5 million under the terms of the original agreement and \$14.8 million under the revenue sharing arrangement. Total payments received from agreement inception to date are as follows:

Satellite Tests	\$25,000
Interest and Late Fees	\$290,887
FY 1992 Lease Payment	\$10,231,096
FY 94, 95, and 96 Revenues	\$14,750,129
Total as of July 1, 1996	\$25,297,112

Of the total received, NASA has expended about \$11 million for costs incurred at NASA Headquarters and the Goddard Space Flight Center. Currently, more than \$14 million remains available in an NASA deposit account with the U.S. Treasury.

***BUDGET OFFICIALS
COULD NOT RELY ON
FUNDS***

NASA did not include anticipated C-band revenues in the fiscal year 1994 or 1995 program operating plans. Resource officials from OSC stated that they had not provided reimbursable authority against the \$14 million because NASA could not be sure that Columbia would, in fact, meet their milestones each year. Because of Columbia's past financial problems, the OSC did not want to risk an appropriation shortfall should Columbia fail to meet one of its annual milestones.

CONCLUSION

While we recognize the OSC reason for not budgeting for, and authorizing, the use of the C-band revenues, the result of this action is

that the Agency received appropriated funds to support an agreement which reimbursable payments would have normally funded. Since the Agency was receiving both appropriated funds and revenues to cover the cost of C-band service, they must return the revenues to the general fund. The use of the \$14 million in revenues for any purpose without Congressional authority would be considered an improper augmentation of appropriated funds.

RECOMMENDATION

NASA should (1) ensure that Congress is fully aware of the revenue sharing arrangement with Columbia and seek authority to use these funds for other than C-band support expenditures or (2) record the funds as miscellaneous receipts and deposit them into the U.S. Treasury general fund.

**Summary of
Management's Response**

NASA is already in compliance with the first recommendation. The enclosed NASA Administrator's letter dated July 3, 1996, specifically identified reimbursable funds available greater than originally anticipated and provided notification of the requirement to allocate those funds within the Space Network program. Further use of the revenues generated by the TDRSS C-band Agreement has been consistent with applicable laws, regulations and long-standing budget practice. There has been no illegal augmentation of the Agency's appropriation. Moreover, Congress has been regularly informed of NASA's plans for, and use of funds generated by TDRSS and other services, as the Administrator's letter clearly demonstrates.

In brief, The Space Act provides ample, recognized and long-standing authority for the C-band agreement. The Agency's use of revenues received under this agreement has been consistent with that authority, as well as other legislation and regulations, and federal budgetary practices. Congress has been consistently informed of Agency activities in these areas, including prompt notification in operating plans when the Agency allocates and reallocates funds received.

**Evaluation of
Management's Response**

We are not taking exception to NASA's statutory authority to enter into the C-Band lease agreement with Columbia. The Space Act, Section 203(c)(5), does permit such an arrangement. However, we are taking exception with NASA's treatment of the C-band revenues as reimbursable funds. The Agency is treating the Columbia agreement as a reimbursable agreement when, in fact, it does not meet the definition of a reimbursable agreement as defined in NASA's FMM Section 9090. The agreement is a revenue sharing agreement.

Our review disclosed that the Agency did not have the authority to use the funds generated from a revenue sharing agreement. In our

opinion, the Agency must comply with the laws regarding the receipt of non-appropriated funds. USC Title 31, Section 3302 states that "unless otherwise provided by another law, officials or agents of the US Government having custody or possession of public money shall keep the money safe without using it." The law was designed to prohibit agencies from augmenting their budgets outside the normal appropriation process.

In addition, The GAO Principles of Federal Appropriations Law, dated December 1992, Chapter 6, "Availability of Appropriations as to Amount," Part E, "Augmentation of Appropriations," states:

As a general proposition, an agency may not augment its appropriations from outside sources without specific statutory authority. The prohibition against augmentation is a corollary of the separation of powers doctrine. When Congress makes an appropriation, it is also establishing an authorized program level. In other words, it is telling the Agency that it cannot operate beyond the level that it can finance under its appropriation. . . . The objective of the rule against augmentation of appropriations is to prevent a government agency from undercutting the congressional power of the purse by circuitously exceeding the amount the Congress has appropriated for that activity.

There is no statute which, in those precise terms, prohibits the augmentation of appropriated funds. The concept does, nevertheless, have an adequate statutory basis although it must be derived from several separate enactments. Specifically:

- 31 USC 3302(b), the Miscellaneous Receipts Statute.
- 31 USC 1301(a), restricting the use of appropriated funds to their intended purposes.
- 18 USC 209, which prohibits the payment of, contribution to, or supplementation of the salary of a government officer or employee as

compensation for his or her official duties from any source other than the government of the United States.

We also have a November 27, 1981, memo from a former Goddard Space Flight Center Deputy Chief Counsel which states, in part, "In conclusion, NASA has the necessary authority to lease the C-Band services, in my opinion. The services should be provided at fair market value and the receipts deposited to the Treasury as miscellaneous receipts." It appears that Counsel advised the Agency on the proper treatment of this arrangement as early as 1981. We have no documentation changing this opinion.

The OSC stated that the Administrator specifically identified reimbursable funds greater than originally anticipated in his July 3, 1996, letter. Although the letter indicated that the funds came from reimbursable agreements, it did not specifically disclose revenues from the C-band lease, which we have demonstrated was not a reimbursable agreement, but a revenue sharing agreement. We do not believe that this action represents full disclosure to the Congress.

Since issuing the report, we learned that NASA authorized \$1,306,500 of the C-band revenues for constructing the Guam Remote Ground Terminal. Such an action may represent an improper augmentation of the Agency's appropriation. We have asked our counsel to review this matter and we will address it separately.

If NASA believes that Congress would approve the use of the C-band revenues for Agency use, the Administrator should submit another letter to the Congress fully disclosing his intention of using \$1.3 million of C-band revenues to build the Guam Remote Ground Terminal. Full disclosure to the Congress would also eliminate any concerns regarding the use of the remaining \$12.7 million of C-band revenues.

National Aeronautics and
Space Administration

Headquarters

Washington, DC 20546-0001



NOV 15 1996

Reply to Attn of

M-3

TO: W/ Assistant Inspector General for Auditing

FROM: M-3/ Acting Deputy Associate Administrator for Space Flight
(Space Communications)

SUBJECT: Draft Rapid Action Report on Recording of Revenues Generated by the
Commercial Use of NASA's Tracking and Data Relay Satellite System
(TDRSS), Assignment Number A-KE-96-003

The subject report has been reviewed by the Offices of Space Communications, the Chief Financial Officer and the General Counsel.

The draft report concludes that NASA use of revenues generated by the TDRSS C-band Agreement with Columbia Communications Corporation rather than deposit of such revenues in the Treasury general fund is an illegal augmentation of NASA's appropriation. The report recommends that NASA (1) ensure that Congress is fully aware of the revenue sharing arrangement with Columbia and seek authority to use these funds for other than C-band support expenditures, or (2) record the funds as miscellaneous receipts and deposit them into the U.S. Treasury general fund.

NASA is already in compliance with the first recommendation. The enclosed NASA Administrator's letter dated July 3, 1996, specifically identified reimbursable funds available greater than originally anticipated and provided notification of the requirement to allocate those funds within the Space Communications Services Space Network Program. Further, use of the revenues generated by the TDRSS C-band Agreement has been consistent with applicable laws, regulations and long-standing budget practice. There has been no illegal augmentation of the Agency's appropriation. Moreover, Congress has been regularly informed of NASA's plans for and use of funds generated by TDRSS and other services, as the Administrator's letter clearly demonstrates.

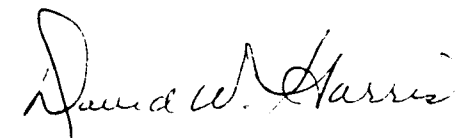
As noted in the report, Section 203(c)(5) of the Space Act authorizes NASA to enter into contracts, leases, cooperative agreements or other transactions as may be necessary in the conduct of its work, and under such terms as it deems appropriate, with other federal agencies and non-federal entities. The agreement with Columbia Communications Corporation was entered into pursuant to this statutory authority. NASA has consistently and openly utilized

Space Act authority for more than two decades in engaging in similar transactions, including establishing Shuttle pricing policies and TDRSS pricing arrangements for both Government and non-Government users. Further, NASA has consistently used this same statutory authority to apply revenues received under such agreements to the particular program involved. This approach has been recognized and concurred in by the Comptroller General as early as 1970. The Agency has also regularly reported such activities to the Congress.

Pricing arrangements under the C-band Agreement, as well as under similar Agency agreements, are related to costs to the Agency; however, the Space Act, the User Charges Act, OMB regulations and NASA regulations issued pursuant to those authorities permit the Agency to consider factors other than strict cost recovery, (including goals in the conduct of the nation's space program, market prices, and values to the customers) in engaging in and pricing such agreements.

The President includes NASA funds planned to be used under agreements for Shuttle, TDRSS and other services provided in his annual budget request to Congress. Revenues from customers under these agreements are offset against programs as broadly approved by Congress in appropriations acts. The budget regularly includes plans for such revenues. The inclusion annually of the Agency's space communications services in the budget, and passage of these budgets, provides authority for NASA to engage in such services. Once appropriations are enacted, the Agency uses its annual operating plan to notify Congress of specific utilization of appropriated funds and revenues generated by Space Act agreements. This process also provides notice and identification of changes in funds allocation. Most importantly, the Agency notifies Congress of changes in its plans through phone calls, letters, briefings to staff, and most recently, in a formal submission by the Administrator this past July. (All money received under the C-band Agreement has been kept within the amounts of disclosed program offsets, and has been treated consistently with revenues received under other like NASA agreements.)

In brief, then, the Space Act provides ample, recognized and long-standing authority for the C-band Agreement. The Agency's use of revenues received under this agreement has been consistent with that authority, as well as other legislation and regulations, and federal budgetary practices. Congress has been consistently informed of Agency activities in these areas, including prompt notification in operating plans when the Agency allocates and reallocates funds received.



David W. Harris

Enclosure



JUL 3 1996

The Honorable Robert S. Walker
Chairman
Committee on Science
House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

This is to update NASA's FY 1995 Operating Plan, last revised by letter dated July 3, 1995. As the enclosure indicates, total funding for NASA is \$13,996.4 million, a net reduction of \$443.3 million. This reduction reflects implementation of statutory direction and lapse of certain unobligated FY 1995 funds, as follows:

- a reduction of \$365.0 million in the FY 1995 National Aeronautical Facilities appropriation, to reflect the deferral of availability of such funds until FY 1997 as stipulated in the FY 1995 Defense Emergency Supplemental Appropriations and Rescissions Act (P.L. 104-6) and the proposed further deferral included in the President's FY 1997 budget request;
- rescission of \$92.0 million as directed in the FY 1995 Disaster Relief Emergency Supplemental Appropriations and Rescissions Act (P.L. 104-19);
- an increase of \$15.0 million to the Mission to Planet Earth/Landsat program, reflecting the transfer of funds from the Department of Defense as directed in the FY 1995 Defense Appropriations Act (P.L. 103-335); and,
- the lapse of \$1.1 million of FY 1995 unobligated funds in the Mission Support appropriation and \$0.2 million of FY 1995 unobligated funds in the Inspector General appropriation; and,

It also reflects the following proposed adjustments, including:

- the proposed reallocation of \$6.0 million within Space Science, from Physics and Astronomy/Payload and Instrument Development to Physics and Astronomy/Research and Analysis and Planetary Exploration/Research and Analysis; and,
- the proposed application of \$21.4 million within Mission Support/Space Communications Services for establishment of a remote ground terminal located at Guam to provide automated multimission capability which will eliminate interference problems in Deep Space Network operations, provide more flexible service to NASA users, and increase overall network efficiency

NASA incorporated the adjustments to meet statutory direction and the lapsing of FY 1995 unobligated funds in the FY 1995 column included in the Agency's FY 1997 budget justifications submitted to the Committee on March 18, 1996; those adjustments have been implemented. The proposed reallocations within Space Science and Mission Support/Space Communications Services have not yet been implemented.

The reduction to the National Aeronautical Facilities appropriations reflects the decision by the Administration not to pursue development of the National Wind Tunnel Complex at this time, given the significant budget constraints for the foreseeable future. As reported to the Committee on June 5, 1996, in NASA's FY 1996 Operating Plan, we intend to apply the residual \$35.0 million appropriated for National Aeronautical Facilities in P.L. 104-6 for improving productivity of existing wind tunnel facilities and advancing the state of the art in aeronautics test and data acquisition technology.

As indicated in the enclosure, within the Space Science program, funding for Physics and Astronomy/Payload and Instrument Development is reduced \$6.0 million and is reallocated to Physics and Astronomy/Research and Analysis (\$2.9 million) and Planetary Exploration/Research and Analysis (\$3.1 million). This funding is available due to unrealized contingency requirements in the flight programs. The increase in Physics and Astronomy/Research and Analysis will augment funding already planned to support studies of a Space Interferometry Mission and of an Exploration of Neighboring Planetary Systems mission. These missions will ultimately enable the discovery of Earth-like planets around nearby stars. The increase in Planetary Exploration/Research and Analysis will augment planned funding for studies of the Pluto Express and Champollion missions. This augmentation will provide adequate advanced technology funding for these missions.

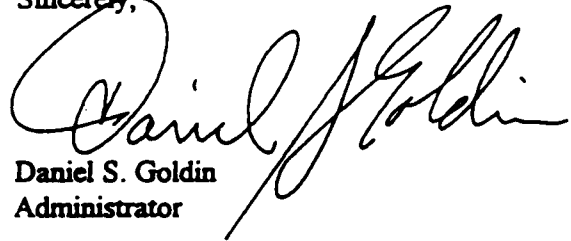
Within Mission Support, funding for Space Communications Services remains unchanged. However, funding has been reallocated within the Space Network Program elements. Funding is included to establish a remote ground terminal located at Guam which will provide an automated multimission capability versus the limited capability currently resident in Australia. The terminal in Australia can serve the Compton Gamma Ray Observatory (GRO) and Shuttle at only limited data rates, and cannot provide tracking services. Establishing a terminal at Guam will eliminate interference problems with the Deep Space Network operations, provide more flexible service to NASA users, and increase the overall network efficiency. This new terminal will utilize equipment from the existing six strings of communications equipment at the White Sands Test Facility, New Mexico. This equipment will be taken from the White Sands site and reinstalled in Guam. The Guam terminal is automated and will provide full services. Operations and control of the Guam site will remain at White Sands.

The total investment for this terminal is \$21.4 million. Of this amount, approximately \$2.3 million is required to complete actual construction activities required to modify an existing Navy facility needed to accommodate the ground terminal equipment. The remaining funds are required to procure new equipment, such as antennas and control software, to move existing equipment, and to support installation and checkout of the entire facility. Within FY 1995 funds for Space Network, \$9.0 million has been identified for this activity as the result of completion of the projects within the Space Network funding availability. We have recently completed the Tracking and Data Relay Satellite (TDRS)-7 project and the Second TDRS System Ground Terminal programs. In this plan, the remaining \$1.0 million from the TDRS-7 project and

\$8.0 million from the STGT have been reallocated to Space Network Services. The remaining \$12.4 million required for this activity are available within Space Network program funds as a result of receiving reimbursable funds greater than originally anticipated. This proposal for completion of this facility has not heretofore been presented in a NASA budget to Congress. As a result, NASA hereby stipulates this proposal as an item to be considered by the House Committee on Science and the Senate Committee on Commerce, Science and Transportation under traditional reprogramming authorities included in NASA authorizing legislation.

We would be pleased to discuss these matters with you in greater detail, if you wish.

Sincerely,



Daniel S. Goldin
Administrator

Enclosure

cc:

The Honorable George E. Brown, Jr.

This Page is Left Intentionally Blank

NATIONAL AERONAUTICS & SPACE ADMINISTRATION
FY 1995 OPERATING PLAN
(MILLIONS OF DOLLARS)

	JULY 1995 OP PLAN	STATUTORY DIRECTION	OTHER	FY 1995 COL OF FY 1997 BUDGET
HUMAN SPACE FLIGHT	5,514.9			5,514.9
<u>SPACE STATION</u>	<u>1,889.6</u>			<u>1,889.6</u>
Development	1,729.2			1,729.2
Construction of Facilities	20.2			20.2
Utilization Support	31.3			31.3
Operations	108.9			108.9
<u>JS/RUSSIAN COOPERATION</u>	<u>150.1</u>			<u>150.1</u>
<u>SPACE SHUTTLE</u>	<u>3,155.1</u>			<u>3,155.1</u>
<u>Shuttle Operations</u>	<u>2,444.3</u>			<u>2,444.3</u>
Orbiter & Integration	528.2			528.2
Propulsion	1,007.0			1,007.0
Mission & Launch Operations	909.1			909.1
<u>& Performance Upgrades</u>	<u>710.8</u>			<u>710.8</u>
Orbiter Improvements	194.8			194.8
Propulsion Upgrades	399.2			399.2
Flight Operations & Launch Site Equipment Upgrades	104.5			104.5
Construction of Facilities	12.3			12.3
<u>PAYLOAD & UTILIZATION OPERATIONS</u>	<u>320.1</u>			<u>320.1</u>
Spacelab	90.9			90.9
Tethered Reflight	7.4			7.4
Payload Operations	44.0			44.0
Advanced Projects	12.2			12.2
Engineering & Technical Base	165.6			165.6

	JULY 1995 OP PLAN	STATUTORY DIRECTION	OTHER	FY 1995 COL OF FY 1997 BUDGET
SCIENCE, AERONAUTICS & TECHNOLOGY	5,936.2	-37.7		5,898.5
<u>SPACE SCIENCE</u>	<u>1,782.0</u>	<u>-5.0</u>	<u>0.0</u>	<u>1,777.0</u>
<u>Physics & Astronomy</u>	<u>1,099.7</u>	<u>-5.0</u>	<u>-3.1</u>	<u>1,091.6</u>
AXAF	224.3			224.3
Global Geospace Science	40.0			40.0
Relativity Mission Development	50.0			50.0
Payload & Instrument Development	63.9		-6.0	57.9
Explorer Development	120.4			120.4
Mission Operations & Data Analysis	432.4	-5.0		427.4
Research & Analysis	75.4		2.9	78.3
Suborbital Program	67.2			67.2
Information Systems	26.1			26.1
<u>Planetary Exploration</u>	<u>682.3</u>		<u>3.1</u>	<u>685.4</u>
Cassini	255.0			255.0
Mars Instruments	2.1			2.1
Mars Surveyor Program	59.4			59.4
Discovery	129.7			129.7
Mission Operations & Data Analysis	117.2			117.2
Research & Analysis	118.9		3.1	122.0
<u>LIFE & MICROGRAVITY SCIENCES & APPLICATIONS</u>	<u>483.1</u>	<u>-15.7</u>		<u>467.4</u>
<u>Life Sciences</u>	<u>140.7</u>	<u>-0.2</u>		<u>140.5</u>
Research & Analysis	50.7			50.7
Flight Experiments	90.0	-0.2		89.8
<u>Microgravity Research</u>	<u>131.9</u>	<u>-4.4</u>		<u>127.5</u>
Research & Analysis	30.4			30.4
Flight Experiments	101.5	-4.4		97.1
<u>Aerospace Medicine</u>	<u>7.0</u>	<u>-0.4</u>		<u>6.6</u>
Shuttle/Spacelab Payload Mission				
<u>Management & Integration</u>	<u>113.0</u>	<u>-10.7</u>		<u>102.3</u>
<u>Space Station Payload Facilities</u>	<u>90.5</u>			<u>90.5</u>

	JULY 1995 OP PLAN	STATUTORY DIRECTION	OTHER	FY 1995 COL OF FY 1997 BUDGET
<u>MISSION TO PLANET EARTH</u>	<u>1,266.4</u>	<u>-5.0</u>		<u>1,261.4</u>
Earth Observing System	566.1	8.0		574.1
Landsat	(62.4)	(15.0)		(77.4)
EOS Data Information System	230.6	-10.0		220.6
Earth Probes	81.6			81.6
ACTS	2.3			2.3
GLOBE	5.0			5.0
Payload & Instrument Development	19.5			19.5
Construction of Facilities	17.0			17.0
Applied Research & Data Analysis	344.3	-3.0		341.3
<u>SPACE ACCESS & TECHNOLOGY</u>	<u>605.4</u>			<u>605.4</u>
Advanced Space Transportation	162.1			162.1
Industry Technology Program	[18.9]			[18.9]
Spacecraft & Remote Sensing	125.5			125.5
Advanced Smallsat Technology	61.9			61.9
Space Communications	18.8			18.8
Space Processing	18.3			18.3
Flight Programs	49.1			49.1
Technology Transfer	45.8			45.8
	123.9			123.9
<u>AERONAUTICAL RESEARCH & TECHNOLOGY</u>	<u>882.0</u>	<u>-12.0</u>		<u>870.0</u>
<u>Research & Technology Base</u>	<u>334.3</u>			<u>334.3</u>
<u>Systems Technology Programs</u>	<u>547.7</u>	<u>-12.0</u>		<u>535.7</u>
High Performance Computing & Communications	76.1			76.1
Materials & Structure Systems Technology	24.3			24.3
Numerical Aerodynamic Simulation	46.2			46.2
High Speed Research	221.3			221.3
Advanced Subsonic Technology	125.8			125.8
Hypersonic Technology	32.0	-12.0		20.0
Construction of Facilities	22.0			22.0
<u>LAUNCH SERVICES</u>	<u>333.9</u>			<u>333.9</u>
<u>MISSION COMMUNICATION SERVICES</u>	<u>481.2</u>			<u>481.2</u>
Ground Network	273.4			273.4
Mission Control & Data Systems	175.8			175.8
Space Network Customer Services	32.0			32.0
<u>EMIC PROGRAMS</u>	<u>102.2</u>			<u>102.2</u>

	JULY 1995 OP PLAN	STATUTORY DIRECTION	OTHER	FY 1995 COL OF FY 1997 BUDGET
MISSION SUPPORT	2,572.6	-39.3	-1.1	2,532.2
<u>SAFETY, RELIABILITY & QUALITY ASSURANCE</u>	<u>38.7</u>			<u>38.7</u>
<u>SPACE COMMUNICATION SERVICES</u>	<u>208.9</u>		<u>0.0</u>	<u>208.9</u>
Space Network	94.0		-2.3	91.7
Telecommunications	114.9			114.9
Construction of Facilities			2.3	2.3
<u>RESEARCH & PROGRAM MANAGEMENT</u>	<u>2,190.0</u>	<u>-39.3</u>	<u>-1.1</u>	<u>2,149.6</u>
Personnel & Related Cost	1,654.5	-24.5	-1.1	1,628.9
Travel	48.7	-3.8		44.9
Research Operations Support	486.8	-11.0		475.8
<u>CONSTRUCTION OF FACILITIES</u>	<u>135.0</u>			<u>135.0</u>
INSPECTOR GENERAL	16.0		-0.2	15.8
NATIONAL AERONAUTICAL FACILITIES	400.0		-365.0	35.0
TOTAL	14,439.7	-77.0	-366.3	13,996.4

Report Distribution

National Aeronautics and Space Administration (NASA) Officials-In-Charge

Code B/Chief Financial Officer (CFO)/Comptroller
Code G/General Counsel
Code J/Associate Administrator for Management Systems & Facilities
Code JM/Management Assessment Division (10 copies)
Code L/Associate Administrator for Legislative Affairs

NASA Offices of Inspector General

Ames Research Center
Goddard Space Flight Research Center
Jet Propulsion Laboratory
Johnson Space Center
Kennedy Space Flight Center
Langley Research Center
Lewis Research Center
Marshall Space Flight Center
Stennis Space Center

Non-NASA Federal Organizations and Individuals

Assistant to the President for Science and Technology Policy
Deputy Associate Director, Energy and Science Division, Office of Management and Budget
Budget Examiner, Energy Science Division, Office of Management and Budget
Associate Director, National Security and International Affairs Division, General Accounting Office
Special Counsel, Subcommittee on National Security, International Affairs, and Criminal Justice

Chairman and ranking minority member of each of the following congressional committees and subcommittees:

Senate Committee on Appropriations
Senate Subcommittee on VA-HUD-Independent Agencies
Senate Committee on Commerce, Science and Transportation
Senate Subcommittee on Science, Technology and Space
Senate Committee on Governmental Affairs
House Committee on Appropriations
House Subcommittee on VA-HUD-Independent Agencies, Committee on Appropriations
House Committee on Government Reform and Oversight

Appendix 2

House Subcommittee on Space and Aeronautics, Committee on Science
House Committee on Science