

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of )  
 )  
Amendment to the National Table of )  
Frequency Allocations to Provide )  
Allocation Status for Federal Earth )  
Stations Communicating with )  
Non-Federal Satellites )

**PETITION FOR RULEMAKING  
OF THE  
NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION**

John M.R. Kneuer  
Acting Assistant Secretary for  
Communications and Information

Kathy Smith  
Chief Counsel

Fredrick R. Wentland  
Associate Administrator  
Office of Spectrum Management

Edward M. Davison  
Deputy Associate Administrator  
for International Spectrum Management  
Office of Spectrum Management

National Telecommunications and  
Information Administration  
U.S. Department of Commerce  
1401 Constitution Avenue, N.W.  
Room 4713  
Washington, DC 20230  
(202) 482-1816

August 4, 2006

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**PETITION FOR RULEMAKING  
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NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION**

The National Telecommunications and Information Administration (NTIA) hereby submits this petition for rulemaking to amend the national table of frequency allocations to provide an allocation status for U.S. Government (Federal) earth stations communicating with non-federal satellites.<sup>1</sup> Since 1996, the Federal Communications Commission (Commission) and the NTIA have been in discussions about the appropriate allocation status of Federal earth stations communicating with non-federal satellites.<sup>2</sup> NTIA now requests that the Commission initiate a

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<sup>1</sup> NTIA, an Executive Branch agency within the Department of Commerce, is the President's principal adviser on domestic and international telecommunications policy, including policies relating to the Nation's economic and technological advancement in telecommunications, homeland security, and public safety. Accordingly, NTIA makes recommendations regarding telecommunications policies and presents Executive Branch views on telecommunications matters to the Congress, the Commission, and the public. NTIA also manages and authorizes the U.S. Government's use of the radio spectrum and, as such, examines how Commission rulings affect the federal agencies' use of the spectrum and related technology. *See* 47 U.S.C. § 902(b)(2)(A); *see also* 47 U.S.C. § 305.

<sup>2</sup> *See* Letter to Mr. Richard Smith, Chief, Office of Engineering and Technology, Federal Communications Commission, from Richard D. Parlow, Associate Administrator, Office of Spectrum Management, NTIA (Nov. 20, 1996) (attached at Appendix A).

rulemaking, pursuant to section 1.401 of its Rules, to amend the National Table of Frequency Allocations to allow Federal earth stations to operate with non-federal satellites on a primary basis consistent with the regulatory status afforded commercial operations and with the allocation status of the satellite service.<sup>3</sup> An amendment to allow Federal earth stations to operate in such a manner is consistent with the President’s spectrum policy goal of promoting “more efficient and beneficial use of spectrum while protecting national and homeland security, critical infrastructure, and Government services.”<sup>4</sup>

In the current regulatory environment, Federal earth stations operating with non-federal satellites are operated on a non-interference basis with few exceptions. As a result, a Federal earth station is subject to immediate shut-down if it causes interference to a non-federal satellite, earth, or terrestrial station. Moreover, a federal agency with an existing earth station must resolve any interference concerns if a new non-federal terrestrial system or earth station enters the band. During coordination between domestic satellite providers, operation by Federal earth stations through non-federal satellites may not be afforded the same protection as non-federal earth stations. In essence, Federal earth stations using non-federal satellites operate on a non-interference basis. This inequity forms the basis of NTIA’s request for regulatory parity between Federal and non-federal earth station operations. To be clear, the Federal agencies are not seeking any rights that are not afforded to similarly situated non-federal entities. The agencies

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<sup>3</sup> 47 C.F.R. § 1.401 (2003).

<sup>4</sup> Presidential Memorandum on Spectrum Policy, Weekly Comp. Pres. Doc. 2876 (Nov. 30, 2004).

only seek the same rights and obligations that are afforded non-federal earth station licensees when they access commercial satellites.

To the maximum extent possible, federal agencies are required to use commercial communication satellite systems unless specific mission requirements cannot be met.<sup>5</sup> A number of federal agencies have expressed increasing concerns about their ability to meet their mission requirements in the absence of greater certainty about the protection afforded their use of commercial satellite services.<sup>6</sup> Based on the federal agencies' current investment in and continued reliance on communications through non-federal satellites, the Commission should initiate a rulemaking to amend the National Table of Frequency Allocations to permit all Federal earth stations to have primary status with other services when using non-federal satellites in the following frequency bands: 3600-4200, 5850-6725, 10700-12200, 12700-13250, 13750-14500, 18300-19300, 19700-20200, 27500-30000, 37500-39500, and 47200-50200 MHz. This allocation should be patterned after US319 of the National Table, which allows mobile-satellite service communications

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<sup>5</sup> See *e.g.*, NTIA Manual of Regulations and Procedures for Federal Radio Frequency Management, § 2.3.3 (providing “[t]he Government shall establish separate communication satellite systems only when they are required to meet unique governmental needs, or are otherwise required in the national interest.”).

<sup>6</sup> See Letter to Mr. Michael D. Gallagher, Assistant Secretary for Communications and Information, NTIA, from Mr. Lee Holcomb, Chief Technology Officer, Department of Homeland Security (Oct. 4, 2004); Letter to Mr. Ed Thomas, Chief, Office of Engineering and Technology, Federal Communications Commission, from Linton Wells II, Acting Assistant Secretary of Defense (Sept. 9, 2004); Letter to Mr. Michael D. Gallagher, Assistant Secretary for Communications and Information, NTIA, from Mr. Vance E. Hitch, Chief Information Officer, Department of Justice (Oct. 13, 2004); Letter to Mr. Michael D. Gallagher, Administrator, NTIA, from Mr. Steve Zaidman, Vice President, Technical Operations Services, Federal Aviation Administration (Oct. 21, 2004); Letter to Mr. Fredrick Wentland, Associate Administrator, Office of Spectrum Management, NTIA, from Mr. John McNulty, Jr., Director, Office of Operational Systems, National Oceanic and Atmospheric Administration (Oct. 20, 2004) (attached at Appendix B).

between Federal earth stations and non-federal space stations.<sup>7</sup> Examples of such allocation language appear in Appendix A.

In conclusion, NTIA strongly urges the Commission to expeditiously initiate the requested allocation rulemaking. NTIA looks forward to working with the Commission and the satellite industry to develop appropriate allocation language to permit the continued growth of Federal investment and use of commercial satellite services.

Respectfully submitted,

John M.R. Kneuer  
Acting Assistant Secretary for  
Communications and Information

Kathy Smith  
Chief Counsel

Fredrick R. Wentland  
Associate Administrator  
Office of Spectrum Management

Edward M. Davison  
Deputy Associate Administrator  
for International Spectrum Management  
Office of Spectrum Management

National Telecommunications and  
Information Administration  
U.S. Department of Commerce  
1401 Constitution Avenue, N.W., Room 4713  
Washington, DC 20230  
(202) 482-1816

August 4, 2006

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<sup>7</sup> See NTIA Manual of Regulations and Procedures for Federal Radio Frequency Management, § 4.1.3 U.S. Government Table of Frequency Allocations, US319 (“In the bands 137-138 MHz, 148-149.9 MHz, 149.9-150.05 MHz, 399.9-400.05 MHz, 400.15-401 MHz, 1610-1626.5 MHz, and 2483.5-2500 MHz, Federal stations in the mobile-satellite service shall be limited to earth stations operating with non-Federal space stations.”).

## **APPENDIX A**



UNITED STATES DEPARTMENT OF COMMERCE  
National Telecommunications and  
Information Administration  
Washington, D.C. 20230

November 20, 1996

Mr. Richard Smith  
Chief, Office of Engineering and Technology  
Federal Communications Commission  
2000 M Street N.W.  
Washington, D.C. 20554

Dear Mr. Smith: *Dear*

The Federal Government agencies have a growing requirement for fixed-satellite and mobile-satellite service communications. These requirements, presently and in the future, will include the use of commercial satellite systems. The Congress, in the Communications Satellite Act of 1962, and the NTIA Manual, Section 2.3.3 Government Use of Commercial Telecommunication Service, both require the Government agencies to utilize commercial communication satellite systems unless specified conditions cannot be met (e.g., cost, unique governmental needs, in the national interest). Additionally, in the Fiscal Year 1992 Defense Appropriations Act, Congress directed DoD to study its long term communications needs and to determine to what degree and how the industry believes those needs could be met by commercial systems.

Currently, in the majority of the bands in which commercial satellite services are provided, Government earth stations operations are on an unprotected, non-interference basis. In these bands, NTIA requests that the National Table of Frequency Allocations be modified to allow the Government earth stations to operate on a primary basis.

Presently, the National Table of Frequency Allocations limits use of the fixed-satellite service (FSS) in the bands 3600-4200, 4500-4800, 5850-7075, 10700-13250, 13750-14500, 17300-17800, 27500-30000, and 38600-39500 MHz and of the mobile-satellite service (MSS) in the bands 14000-14500, 19700-20200, and 29500-30000 MHz to non-Government operations. It is noted that in the band 17800-20200 MHz, per footnote US334, Government space stations (for a Government geostationary satellite network to operate on a primary basis, the space station shall be located outside the arc measured from East to West, 70° W to 120° W) and associated earth stations in the fixed-satellite (space-to-Earth) service may be authorized on a primary basis. Operation of Government earth stations with non-Government satellites in the band 17.8-20.2 GHz does not conform to the National Allocation Table. Therefore, with the exception of US334 and stations in the national interest, Federal Government agencies' earth stations operate in these bands on an unprotected, non-interference basis. If there is an interference problem to or from a non-Government earth or terrestrial station from a Government earth station, the Government earth station is subject to immediate shut-down. Therefore, a Government agency could have an earth station which has been in operation for many

years, and if a new non-Government terrestrial system is put into operation in such a way that there was interference to or from the Government earth station, the requirement for solving any interference problems would be the responsibility of the operators of the Government station.

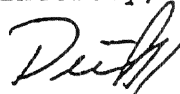
Due to this national allocation situation, Government agencies have been discouraged from using commercial satellite services, despite mandates from Congress and NTIA to use such services to satisfy their communications requirements. Allowing Government earth stations access to these bands on an equal basis with the non-Government users would be advantageous to the Federal agencies as well as the commercial satellite service providers.

In the allocations to the mobile-satellite service for the little and big LEOs as a result of WARC-92, NTIA and FCC agreed to co-equal Government/non-Government earth station use of commercial satellite systems (footnote US319).

To allow Government earth station operations in the FSS and MSS, as appropriate, in bands not currently allocated for Government use, the Federal Government agencies, through the Interdepartment Radio Advisory Committee (IRAC), have requested that the National Table of Frequency Allocations be amended by adding US footnotes similar to US319. The specific bands will need to be determined. Examples of these proposed amendments to the National Table are contained in the Enclosure. Government earth station applicants would be required to comply with appropriate technical and coordination requirements of the FCC rules. These proposed footnotes would not allow operation of Government satellites in these bands.

With a view to determining the best way to proceed on these proposed modifications to the Allocation Table, request our staffs begin discussions. Edward M. Davison will be the NTIA contact point (phone (202)-482-1164; fax (202)-482-2830; email edavison@ntia.doc.gov). Please have the member of your staff who will be the FCC contact point on this issue contact Mr. Davison to begin discussions.

Sincerely,



Richard D. Parlow  
Associate Administrator  
Office of Spectrum Management

ENCLOSURE

cc: FCC

D. Gips, International Bureau  
M. Farquhar, Wireless Telecommunications Bureau  
NTIA  
W. Gamble  
E. Davison  
W. Hatch



ENCLOSURE

EXAMPLES OF POSSIBLE AMENDMENTS TO THE ALLOCATION TABLE<sup>1</sup>

ADD appropriate service to Government portion of the Table of Frequency Allocations with proper footnote:

ADD USXXX- In the bands [3600-4200, 4500-4800, 5850-7075, 10700-13250, 13750-14500, 17300-17800, 27500-30000, and 38600-39500] MHz, Government stations operating in the fixed-satellite service shall be limited to earth stations operating with non-Government satellites.

ADD USZZZ- In the band [17800-20200] MHz, with the exception of stations authorized in accordance with US334, Government stations operating in the fixed-satellite service shall be limited to earth stations operating with non-Government satellites.

ADD USYYY- In the bands [19700-20200 and 29500-30000] MHz, Government stations operating in the mobile-satellite service shall be limited to earth stations operating with non-Government satellites.

No change to the Table:

MOD US287--The band [14-14.5] GHz is also allocated to the ~~non-Government~~ land mobile-satellite service (Earth-to-space) on a secondary basis. Authorization of Government stations shall be limited to earth stations operating with non-Government satellites.

<sup>1</sup> specific bands to be determined

## **APPENDIX B**



# Homeland Security

October 04, 2004

Mr. Michael D. Gallagher  
Assistant Secretary for Communications and Information  
National Telecommunications and Information Administration  
Herbert C. Hoover Building / U.S. Department of Commerce  
1401 Constitution Avenue, NW  
Washington, DC 20230

Dear Mr. Gallagher:

I'm writing to you on a regulatory issue concerning Fixed-Satellite Service (FSS) earth stations utilized by DHS that currently have minimal domestic regulatory status. I'd like to work with you on changing that policy and regulatory status to reflect the critical domestic infrastructure capabilities these FSS terminals provide.

Specifically, DHS uses, through the Federal Emergency Management Agency, two large government-owned satellite earth stations as well as a significant number of smaller vehicle mounted and portable FSS earth stations that operate in the Ku-band (11.7-12.2 / 14.0-14.5 GHz) on commercial FSS space networks. These FSS terminals are crucial in meeting real-time telecommunications requirements during both natural and man-made disasters. Government-owned and operated, these earth stations fully comply with statutes\* detailing their utilization, yet they do not have any protection 'status' within their operational radio frequency spectrum.

We've followed these statutes and invested significantly, both monetarily and operationally, in these earth stations and plan to continue with our investment. However, we urgently need to upgrade their regulatory status to ensure protection from harmful radio frequency interference. I need your valuable assistance in securing parity with non-Government allocated services so Government earth stations are treated on an equitable 'co-primary' basis. NTIA has already, in a letter to the FCC, suggested the necessary modifications to the domestic Table of Frequency Allocations. The regulatory status has not changed.

I request your expeditious consideration of our request; my point-of-contact is Mr. Ralph Robles of the Wireless Management Office, 703-502-5582 or [Ralph.Robles@dhs.gov](mailto:Ralph.Robles@dhs.gov).

Sincerely,

A handwritten signature in black ink that reads "Lee Holcomb".

Lee Holcomb  
Chief Technology Officer

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\* See Communications Satellite Act of 1962 and the NTIA Manual, Section 2.3.3 'Government Use of Commercial Telecommunication Service'



ASSISTANT SECRETARY OF DEFENSE  
6000 DEFENSE PENTAGON  
WASHINGTON, DC 20301-6000

NETWORKS AND INFORMATION  
INTEGRATION

9 Sep 2004

Mr. Ed Thomas  
Chief, Office of Engineering and Technology  
Federal Communications Commission  
445 Twelfth Street, S.W.  
Washington, DC 20554

Dear Ed:

Per our past discussion, the Department of Defense (DoD) requests your consideration on granting regulatory status for DoD owned terminals to access commercial satellite systems. DoD requires continued access to non-Government satellite capacity using DoD owned and/or operated earth terminals for training at United States and possessions (US&P) installations. These operations support overseas deployments, reach back capacity for communications, sensor data, and homeland security. Our current operations employ primarily the Fixed-Satellite Service (FSS) and Mobile Satellite Service (MSS) frequency bands (3700-4200 MHz, 5925-6425 MHz, 11.7-12.2 GHz, 14.0-14.5 GHz, and as capacity becomes available in the bands 17.7-20.2 GHz, 27.5-30 GHz, and above 30 GHz).

DoD is not seeking any preemption capability over non-Government terrestrial or satellite operations but is only seeking equal regulatory status with non-Government operations in the bands mentioned in the paragraph above. In addition to the necessary regulatory modifications to support the above, the Department would welcome establishing a Memorandum of Agreement (MOA) between the DoD and the Federal Communication Commission (FCC) that will facilitate DoD use of commercial satellite capacity in the US&P, and will provide needed assurances to protect commercial users from DoD operations.

I look forward to working with you and your staff to resolve this issue and appreciate the personal interest you have shown in addressing our needs. My point of contact on this issue is Mr. Badri Younes, (703) 607-0715, [badri.younes@osd.mil](mailto:badri.younes@osd.mil)

Sincerely,

Linton Wells II  
Acting

cc:  
Mr. Mike Gallagher, DoC





U.S. Department of Justice  
Justice Management Division

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Washington, D.C. 20530

OCT 13 2004

The Honorable Michael Gallagher  
Assistant Secretary for Communications  
and Information  
U.S. Department of Commerce  
Washington, D.C. 20230

Dear Mr. Gallagher:

I request your assistance to address current regulatory constraints affecting Department of Justice use of Fixed-Satellite Services (FSS) in support of federal law enforcement activities. Specifically, the Department seeks regulatory parity with non-Government FSS earth station licensees so that the Department's FSS earth station frequency assignments are treated on a "co-primary" basis for interference purposes.

For example, the Department has made a substantial investment in the Federal Bureau of Investigation's (FBI's) Trilogy project, a recently-deployed nationwide data telecommunications network. This network connects 56 field offices using Government-owned FSS earth stations linking to commercial FSS space networks. The FBI determined that Government purchase of the earth stations, rather than lease from commercial service providers licensed by the Federal Communications Commission (FCC), was necessary to maintain control and access to the network, as well as to achieve significant cost savings. Through Trilogy, the FBI has the capability to rapidly and securely transfer information nationwide to support its diverse and expanding law enforcement responsibilities.

By arrangement with the FCC and NTIA, the Department applies to NTIA for the use of FSS frequencies and those frequency assignments are entered into the Government Master File. Because FSS operate in a commercial band licensed by the FCC, NTIA makes the assignments subject to the Department's non-interference to primary commercial users. The Department's FSS assignments have no regulatory status to protect them from interference from FCC licensees. In other words, an earlier FSS assignment to the Department that supports critical law enforcement and national security needs must yield to later commercial assignments. Although Trilogy is the Department's primary use of FSS earth stations it owns, there may be other needs in the future. I understand that other civilian and military agencies that own, rather than lease, FSS earth stations are similarly situated.

The Department would like your assistance to secure regulatory parity for its FSS earth station assignments so that they are treated on a "co-primary" basis with other primary users of the band.

I request your consideration of this request at your earliest convenience. My point of contact on this issue is Ms. Merri Jo Gamble, Wireless Management Office, 703-322-1666 or [merri.jo.gamble@usdoj.gov](mailto:merri.jo.gamble@usdoj.gov).

Sincerely,

A handwritten signature in cursive script that reads "Vance E. Hitch".

Vance E. Hitch  
Chief Information Officer



U.S. Department  
of Transportation

**Federal Aviation  
Administration**

800 Independence Ave., S.W.  
Washington, D.C. 20591

OCT 21 2004

Mr. Michael Gallagher  
Administrator, National Telecommunications and  
Information Administration  
1401 Constitution Avenue, NW  
Washington, DC 20230

Dear Mr. Gallagher:

We want to request, through the National Telecommunications and Information Administration (NTIA), spectrum usage protection, and on-going licensing support, from the Federal Communications Commission (FCC) for the Federal Aviation Administration (FAA) Alaskan National Airspace Interfacility Communications System (ANICS) earth station operations.

The FAA leases service from satellite service provider, Arrowhead Global Solutions, to support ANICS. We utilize commercial satellite service in Alaska to satisfy critical safety of flight communication service requirements there. Specifically, in 1994 we purchased and licensed 39 earth stations for operation within the ANICS system. Subsequently, we purchased and placed in operation an additional 13 stations, which have been registered through the NTIA. The Alaskan Region has voiced a requirement for an additional 12 stations. All stations have been properly coordinated, including the completion of site surveys, path analysis, and other general coordination.

At the 1560th IRAC meeting, September 27, 1994, the FCC IRAC representative stated that the FCC Common Carrier Bureau would grant and issue a waiver to protect the operations of FAA ANICS earth stations in Alaska. This public notice was never issued. The FAA subsequently communicated this need to the FCC in the 1997 and 1998 time periods to no avail. We need this spectrum usage protection for the services provided by these stations. A critical point in time is now approaching: all 39 original licenses will expire in 2006, and we have an on-going requirement for the service provided by these earth stations. The FAA already has a significant investment in earth stations. To go through a private vendor to gain continued access to the communication services through a leased service agreement would place a large financial burden on the FAA.

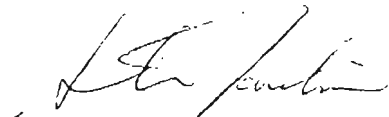
We believe that the FAA usage of non-Government spectrum, as stated above, is wholly consistent with the Telecommunications Policy of the NTIA, as set forth in Section 2.3.3 of the NTIA Manual, which states in part: "The Federal Government places heavy reliance on the private sector in providing telecommunication services for its own use.

This means that all functions normally associated with providing the service shall be performed by the private sector." It further states "The Government shall establish separate communication satellite systems only when they are required to meet unique government needs, or are otherwise required in the national interest."

It is not unprecedented that spectrum allocated for the exclusive use by the Federal Government or the non-Federal Government is made available for the others use. For example, LoJack, a non-Federal stolen vehicle recovery system, operates in exclusive Federal Government spectrum. Our requirements for access to a limited amount of spectrum, in one geographic area, and for a single satellite system can be accommodated on a case-by-case basis.

Please contact Mr. George K. Sakai, Director, ATC Spectrum Engineering Services, at (202) 267-9710 if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Steve Zaidman", written over a horizontal line.

Steve Zaidman  
Vice President, Technical Operations Services





**U.S. DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
NATIONAL WEATHER SERVICE  
1325 East-West Highway  
Silver Spring, Maryland 20910-3283

OCT 20 2004

Mr. Fredrick Wentland  
Associate Administrator  
National Telecommunications and Information Administration  
1401 Constitution Avenue, N.W.  
Washington, D.C. 20230

Dear Mr. Wentland:

I am writing to support proposals, currently under discussion between National Telecommunications and Information Administration (NTIA) and the Federal Communications Commission allowing the Government to operate earth terminals accessing commercial satellite systems on a primary, protected basis in commercial bands. Commercial satellite usage policy from the Manual of Regulations and Procedures for Federal Radio Frequency Management specifically states, "The Government shall establish separate communication satellite systems only when they are required to meet unique government needs, or are otherwise required in the National interest." However, commercial communication satellites typically operate in bands not allocated to Government satellite systems, and government earth terminals are forced to operate on a non-interference basis even when using commercial satellites in accordance with NTIA policy. The goal of avoiding competition with industry is often frustrated by agencies' need for operational control of their own links, or may be rendered more expensive by the need to engage contractors to license and operate terminals were the existing Federal operating procedure and protection from interference not an issue.

National Oceanographic and Atmospheric Administration's (NOAA) National Weather Service (NWS) has used commercial satellite services for many years to meet operational requirements for data dissemination. At least two major programs – the International Satellite Communications System and the NOAA Weather Wire Service – rely on commercial satellites. Other programs are exploring use of communication satellite systems as the most cost-effective and reliable solution for data dissemination, including an alerting network in support of the Tsunami Warning Center, the National Dissemination Network, and the NOAA All Hazard Weather Radio. With these data dissemination networks providing hazard warnings in support of homeland security, a highly reliable and re-configurable data feed to NWS local transmitters is necessary. NWS licensed its earth stations commercially to gain the protection from interference and meet our operational mission. However, this solution may not be the most cost effective solution and may not provide full Government control/access of systems required by the Department of Homeland Security.

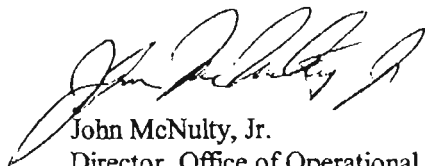


Printed on Recycled Paper



NOAA's NWS would greatly appreciate your efforts in facilitating cost-effective and efficient use of commercial satellite networks by the Government. If you have any questions, please contact David Franc, Radio Spectrum Manager, at 301-713-1841 x130.

Sincerely,

A handwritten signature in black ink, appearing to read "John McNulty, Jr.", written in a cursive style.

John McNulty, Jr.  
Director, Office of Operational Systems