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Concerning the small diameter antenna exhibit for non routine antennas, pursuant to the *Part 25 Earth Station Fifth Report and Order*, the International Bureau (Bureau) provides the List of Approved Non-Routine Earth Station Antennas.

Earth station applicants proposing to use an antenna on this list will no longer need to attach antenna radiation plots as an exhibit to their applications, as required by Section 25.132 (b)(3) of the Commission's rules, 47 C.F.R. § 25.132 (b)(3). Rather, they need only to provide an attachment to their applications citing the particular non-routine earth station antenna they plan to use, and an application file number and call sign of a license in which that type of non-routine antenna has been approved, and an application file number and call sign of a license in which that type of non-routine antenna has been approved. Barring any countervailing considerations, the Bureau will consider grant of the application for the non-routine antenna, providing that the applicant proposes the same kinds of services as the operator of the previously authorized antenna, under the same or substantially similar operating conditions, and in some cases, plans to communicate with the same satellites.

The 2.4 meter antenna proposed in this application will operate with the same operational parameters as digital parameters filed for the earth station licensed under the following File Number and Call Sign. Based on this information the criteria in the above reference paragraph are satisfied.

File Number SES-LIC-20040714-00997 – Call Sign E040300



**UNITED STATES OF AMERICA
FEDERAL COMMUNICATIONS COMMISSION
RADIO STATION AUTHORIZATION**

*Current Authorization : FCC WEB Reproduction
Unofficial Copy*

Name: BFI LICENSES, LLC

Call Sign: E040300
File Number: SES-LIC-20040714-00997

Authorization Type: License
Non Common Carrier Grant Date: 08/30/2004 Expiration Date: 08/30/2019

Nature of Service: Domestic Fixed Satellite Service

Class of Station: Temporary Fixed Earth Station

A) Site Location(s)

# Site ID	Address	Latitude	Longitude	Elevation (Meters)	NAD	Special Provisions (Refer to Section H)
1) 1	Various Various, Various			0.0	NA	

Licensee certifies antenna(s) do not comply with Section 25.209. Please refer to Section E for special conditions placed upon antennas at this site.

Subject to the provisions of the Communications Act of 1934, The Communications Satellite Act of 1962, subsequent acts and treaties, and all present and future regulations made by this Commission, and further subject to the conditions and requirements set forth in this license, the grantee is authorized to construct, use and operate the radio facilities described below for radio communications for the term beginning Monday, August 30, 2004 (3 AM Eastern Standard Time) and ending Friday, August 30, 2019 (3 AM Eastern Standard Time). The required date of completion of construction and commencement of operation is Tuesday, August 30, 2005 (3 AM Eastern Standard Time). Grantee must file with the Commission a certification upon completion of construction and commencement of operation.

B) Particulars of Operations

The General Provision 1010 applies to all receiving frequency bands.
The General Provision 1900 applies to all transmitting frequency bands.
For the text of these provisions, refer to Section H.

#	Frequency	Polarization	Emission	Tx/Rx Mode	Max EIRP /Carrier	Max EIRP Density	Associated Antenna	Special Provisions (Refer to Section H)	Modulation/ Services
1)	14000.0000 - 14500.0000	H,V	36M0G1F	T	74.70	35.20	1		Compressed Digital Video.
2)	14000.0000 - 14500.0000	H,V	3M00G1F	T	64.00	35.20	1		Compressed Digital Video.
3)	14000.0000 - 14500.0000	H,V	36M0G7W	T	74.70	35.20	1		BPSK, QPSK, 8PSK, QAM, FEC Rates 1/2 - 7/8, Various Data Rates to 45 Mbps, Various Information.
4)	14000.0000 - 14500.0000	H,V	51K2G7W	T	46.30	35.20	1		BPSK, QPSK, 8PSK, QAM, FEC Rates 1/2 - 7/8, Various Data rates from 64 kbps, Various Information.
5)	14000.0000 - 14500.0000	H,V	36M0F3F	T	76.20	49.20	1		Standard Video with Associated Audio Subcarriers
6)	5925.0000 - 6425.0000	H,V	36M0G1F	T	68.10	28.60	1		Compressed Digital Video.
7)	5925.0000 - 6425.0000	H,V	3M00G1F	T	58.90	30.10	1		Compressed Digital Video.
8)	5925.0000 - 6425.0000	H,V	36M0G7W	T	68.10	28.60	1		BPSK, QPSK, 8PSK, QAM, FEC Rates 1/2-7/8, Various Data Rates to 45 Mbps, Various Information.
9)	5925.0000 - 6425.0000	H,V	51K2G7W	T	41.20	30.10	1		BPSK, QPSK, 8PSK, QAM, FEC Rates 1/2 - 7/8, Various Data Rates from 64 kbps, Various Information.



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C) Frequency Coordination

#	Frequency Limits(MHz)	Satellite Arc (Deg- Long)		Elevation (Degrees)		Azimuth (Degrees)		Max EIRP Density toward Horizon (dBW/4kHz)	Associated Antenna(s)
		East Limit	West Limit	East Limit	West Limit	East Limit	West Limit		
1)	14000.0000 - 14500.0000	58.0W	143.0W	5.0	5.0	0.0	0.0	12.6	1
2)	5925.0000 - 6425.0000	58.0W	143.0W	5.0	5.0	0.0	0.0	0.6	1

D) Point of Communications

The following stations located in the Satellite orbits consistent with Sections B and C of this Entry:

- 1) 1 to All authorized U.S. Domestic (ALSAT) Satellites.

E) Antenna Facilities

Site ID	Antenna ID	Units	Diameter (Meters)	Manufacturer	Model Number	Site Elevation	Max Antenna Height (Meters)	Special Provisions (Refer to Section H)
1	1	1	2.4	Prodelin	1246	0.0	3.7 AGL/ 0.0 AMSL	
Max Gains(s):49.2 dBi @ 14.0000 GHz 42.1 dBi @ 6.0000 GHz Maximum total input power at antenna flange (Watts) = 400.0 Maximum aggregate output EIRP for all carriers (dBW)68.1								
1	1	1	2.4	Prodelin	1246	0.0	3.7 AGL/ 0.0 AMSL	
Max Gains(s):49.2 dBi @ 14.0000 GHz 42.1 dBi @ 6.0000 GHz Maximum total input power at antenna flange (Watts) = 500.0 Maximum aggregate output EIRP for all carriers (dBW)76.2								

F) Remote Control

1 _____ Call Sign:

G) Antenna Structure marking and lighting requirements:

None unless otherwise specified under Special and General Provisions

H) Special and General Provisions

A) This RADIO STATION AUTHORIZATION is granted subject to the following special provisions and general conditions:

- 1900 Applicable to all transmitting frequency bands. Authority is granted to transmit any number of RF carriers with the specified parameters on any discrete frequencies within associated band in accordance with the other terms and conditions of this authorization, subject to any additional limitations that may be required to avoid unacceptable levels of inter-satellite interference.
- 2010 This authorization is issued pursuant to the Commission's Second Report and Order adopted June 16, 1972 (35 FCC 2d 844) and Memorandum, Opinion and Order adopted December 21, 1972 (38 FCC 2d 665) in Docket No. 16495 and is subject to the policies adopted in that proceeding.



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H) Special and General Provisions

- 2087 The use of these small diameter facilities is authorized pursuant to the Commission's Declaratory Order in Routine Licensing of earth stations in the 6 GHz and 14 GHz bands using antennas less than 9 meters and 5 meters in diameter, respectively, for both full transponder and narrowband transmissions (DA 87-391) released April 13, 1987.
- 2088 The EIRP and EIRP Density numbers are the maximum permissible under the Commission's Declaratory Order (DA87-391) noted in General Provision 2087.
- 2454 All satellite uplink transmissions carrying broadband video information shall comply with the Automatic Transmitter Identification System (ATIS) requirements of Section 25.281 of the Rules, as modified by FCC Report No. DS-1066, released on April 3, 1991.
- 2810 The grantee shall maintain on file with the Commission's current list or plan of the precise frequencies in actual use at this station, specifying for each such frequency: the r.f. center frequency, polarization, emission designator, EIRP (dBW), EIRP density (dBW/4kHz), and receiving earth station(s). This list or plan may be submitted either on a station-by-station basis or on a system-wide basis, and shall be updated within seven days of any changes in frequency usage at this station. Temporary usage of frequencies for periods of less than seven days need not be notified to the Commission if accurate station records are maintained of the times and particulars of such temporary frequency usage.
- 2916 Transmitter(s) must be turned off during antenna maintenance to ensure compliance with the FCC-specified safety guidelines for human exposure to radiofrequency radiation in the region between the antenna feed and the reflector. Appropriate measures must also be taken to restrict access to other regions in which the earth station's power flux density levels exceed the specified guidelines.
- 2938 Upon completion of construction, each licensee must file with the Commission a certification including the following information: name of the licensee, file number of the application, call sign of the antenna, date of the license and certification that the facility as authorized has been completed, that each antenna facility has been tested and is within 2 dB of the pattern specified in Section 25.209 and that the station is operational including the date of commencement of service and will remain operational during the license period unless the license is submitted for cancellation.
- 3219 All existing transmitting facilities, operations and devices regulated by the Commission must be in compliance with the Commission's radiofrequency (RF) exposure guidelines, pursuant to Section 1.1307(b)(1) through (b)(3) of the Commission's rules, or if not in compliance, file an Environmental Assessment (EA) as specified in Section 1.1311. See 47 CFR § 1.1307 (b) (5).
- 5208 The licensee shall take all necessary measures to ensure that the antenna does not create potential exposure of humans to radiofrequency radiation in excess of the FCC exposure limits defined in 47 CFR 1.1307(b) and 1.1310 wherever such exposures might occur. Measures must be taken to ensure compliance with limits for both occupational/controlled exposure and for general population/uncontrolled exposure, as defined in these rule sections. Compliance can be accomplished in most cases by appropriate restrictions such as fencing. Requirements for restrictions can be determined by predictions based on calculations, modeling or by field measurements. The FCC's OET Bulletin 65 (available on-line at www.fcc.gov/oet/rfsafety) provides information on predicting exposure levels and on methods for ensuring compliance, including the use of warning and alerting signs and protective equipment for workers.
- 5216 All operations shall be on a non-common carrier basis.



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H) Special and General Provisions

B) This RADIO STATION AUTHORIZATION is granted subject to the additional conditions specified below:

This authorization is issued on the grantee's representation that the statements contained in the application are true and that the undertakings described will be carried out in good faith.

This authorization shall not be construed in any manner as a finding by the Commission on the question of marking or lighting of the antenna system should future conditions require. The grantee expressly agrees to install such marking or lighting as the Commission may require under the provisions of Section 303(q) of the Communications Act. 47 U.S.C. § 303(q).

Neither this authorization nor the right granted by this authorization shall be assigned or otherwise transferred to any person, firm, company or corporation without the written consent of the Commission. This authorization is subject to the right of use or control by the government of the United States conferred by Section 706 of the Communications Act. 47 U.S.C. § 706. Operation of this station is governed by Part 25 of the Commission's Rules. 47 C.F.R. Part 25.

This authorization shall not vest in the licensee any right to operate this station nor any right in the use of the designated frequencies beyond the term of this license, nor in any other manner than authorized herein.

This authorization is issued on the grantee's representation that the station is in compliance with environmental requirements set forth in Section 1.1307 of the Commission's Rules. 47 C.F.R. § 1.1307.

This authorization is issued on the grantee's representation that the station is in compliance with the Federal Aviation Administration (FAA) requirements as set forth in Section 17.4 of the Commission's Rules. 47 C.F.R. § 17.4.

The following condition applies when this authorization permits construction of or modifies the construction permit of a radio station.

This authorization shall be automatically forfeited if the station does not meet each required construction deadline by the required date of completion unless, before such date(s), a specific application is timely filed to request an extension of the construction deadline(s), supported with good cause why that failure to construct by the required date was due to factors not under control of the grantee.

Licensees are required to pay annual regulatory fees related to this authorization. The requirement to collect annual regulatory fees from regulates is contained in Public Law 103-66, "The Omnibus Budget Reconciliation Act of 1993". These regulatory fees, which are likely to change each fiscal year, are used to offset costs associated with the Commission's enforcement, public service, international and policy and rulemaking activities. The Commission issues a Report and Order each year, setting the new regulatory fee rates. Receive only earth stations are exempt from payment of regulatory fees.