

### RADIO STATION AUTHORIZATION

Name: Telenor Maritime, Inc.

Call Sign: E160157

Authorization Type: License

File Number: SES-LIC-20160927-00811

Non Common Carrier

Grant date: 12/15/2016

**Expiration Date:** 

12/15/2031

Nature of Service: Earth Stations on-board Vessels

Nature of Service: Fixed Satellite Service Class of Station: Blanket Earth Stations

#### A) Site Location(s)

# Site ID Address Latitude Longitude Elevation Special Provisions (Meters) NAD (Refer to Section H)

1) ESV

1000 South Pine Island Road Plantation, FL 33324

NA

Licensee certifies antenna(s) comply with gain patterns specified in Section 25.209

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 December 15, 2016 (3 AM Eastern Standard Time) and ending December 15, 2031 (3 AM Eastern Standard Time). The required date of completion of construction and commencement of operation is December 15, 2017 (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 (MHz)	Polarization Code	n Emission	Tx/Rx Mode	Max EIRP /Carrier (dBW)	Max EIRP Density /Carrier (dBW/4kHz)	Associated Antenna	Special Provisions (Refer to Section H)	Modul Serv	_	
1) 5925.	0000-6425.0000	H,V	6M30G7W	Tx	57.70	25.73	ESV1		QPSK,	Data	
2) 3700.	.0000-4200.0000	H,V	6M30G7W	Rx	0.00	0.00	ESV1		QPSK,	Data	
3) 14000	0.0000-14500.0000	H, V	6M30G7W	Tx	60.74	31.78	ESV2		QPSK,	Data	
4) 11700	0.0000-12200.0000	H, V	6M30G7W	Rx	0.00	0.00	ESV2		QPSK,	Data	
5) 11450	0.0000-11700.0000	H,V	6M30G7W	Rx	0.00	0.00	ESV2		QPSK,	Data	
6) 10950	0.0000-11200.0000	H,V	6M30G7W	Rx	0.00	0.00	ESV2		QPSK,	Data	
7) 14000	0.0000-14500.0000	H,V	6M30G7W	Tx	58.09	29.13	ESV3		QPSK,	Data	
8) 11700	0.0000-12200.0000	H,V	6M30G7W	Rx	0.00	0.00	ESV3		QPSK,	Data	
9) 11450	0.0000-11700.0000	H,V	6M30G7W	Rx	0.00	0.00	ESV3		QPSK,	Data	

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#### **B) Particulars of Operations**

The General Provision 1010 applies to all receiving frequency bands.

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For #	Frequency (MHz)	Polarization  Code		Tx/Rx Mode	Max EIRP /Carrier (dBW)		Associated Antenna	Special Provisions (Refer to Section H)	Modulation/ Services	
		Code	EIIIISSIUL	Mode	(42.17)	(up \\\\\\\\\	Antenna		Services	
10)	10950 0000-11200 0000	H, V	6M30G7W	Rx	0.00	0.00	ESV3	(	OPSK, Data	

#### C) Frequency Coordination Limits

	Frequency Limits	Satellite Arc (Deg. Long.) East West	Elevation (Degrees) East West	Azimuth (Degrees) East West	Max EIRP Density toward Horizon	Associated
#	(MHz)	Limit Limit	Limit Limit	Limit Limit	(dBW/4kHz)	Antenna(s)
1)	5925.0000-6425.0000	12.5W-177.0W	05.0-05.0	090.0-260.0	14.2	ESV1
2)	3700.0000-4200.0000	12.5W-177.0W	05.0-05.0	090.0-260.0		ESV1
3)	14000.0000-14500.0000	12.5W-177.0W	05.0-05.0	090.0-260.0	20.25	ESV2
4}	11700.0000-12200.0000	12.5W-177.0W	05.0-05.0	090.0-260.0		ESV2
5)	10950.0000-11200.0000	12.5W-177.0W	05.0-05.0	090.0-260.0		ESV2
6)	11450.0000-11700.0000	12.5W-177.0W	05.0-05.0	090.0-260.0		ESV2
7)	10950.0000-11200.0000	12.5W-177.0W	05.0-05.0	090.0-260.0	0	ESV3
8)	14000.0000-14500.0000	12.5W-177.0W	05.0-05.0	090.0-260.0	17.6	ESV3
9)	11700.0000-12200.0000	12.5W-177:0W	05.0-05.0	090.0-260.0		ESV3
10)	11450.0000-11700.0000	12.5W-177.0W	05.0-05.0	090.0-260.0		ESV3

#### D) Points of Communications

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

- 1) ESV to SES-4 (S2828) @ 22 degrees W.L. (Netherlands-licensed)
- 2) ESV to Permitted Space Station List



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#### E) Antenna Facilities

Sin		Units	Diameter (meters)	Manufacturer	Model number	Site Elevation (Meters)	Max Antenna Height (Meters)	Provisions (Refer to Section H)
ESV	ESV1	25	2.4	Sea Tel	9711		0 AGL/ 0 AMSL	
	Max Gains(s):	38.5	dBi 0	3.9500 GHz	41.7 dBi @ 6.180	O GHz		
	Maximum total input	power	at antenn	a flange (Watts)	= 100.00			
	Maximum aggregate o	output E	IRP for a	ll carriers (dBW)	57.70			
ESV	ESV2	25	2.4	Sea Tel	9711		0 AGL/ 0 AMSL	
	Max Gains(s):	47.8	dBi 0	11.8500 GHz	48.5 dBi @ 14.250	0 GHz		
	Maximum total input	power	at antenn	a flange (Watts)	= 50.00			
	Maximum aggregate o	output E	IRP for a	ll carriers (dBW)	60.74			
ESV	ESV3	25	1.5	Sea Tel	6012		0 AGL/ 0 AMSL	
	Max Gains(s):	44.0	dBi 0	12.5000 GHz	45.1 dBi @ 14.250	0 GHz		
	Maximum total input	power	at antenn	a flange (Watts)	= 50.00			
	Maximum aggregate o	-		-				

#### F) Remote Control Point:

ESV 8000 Gainsford Court Call Sign: E000696

Bristow, Prince William, VA 20136
7033677300

ESV 8000 Gainsford Court Call Sign: E130012

Bristow, Prince William, VA 20136
7033677300

### G) Antenna Structure marking and lighting requirements:

None unless otherwise specified under Special and General Provisions



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#### H) Special and General Provisions

- A) This RADIO STATION AUTHORIZATION is granted subject to the following special provisions and general conditions:
  - 1010 --- Applicable to all receiving frequency bands. Emission designator indicates the maximum bandwidth of received signal at associated station(s). Maximum EIRP and maximum EIRP density are not applicable to receive operations.
  - 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.
  - 2300 Authority is granted to operate this station by remote control provided that: (1)the parameters of the transmissions of this station monitored at the remote control point, and the operational functions sufficient to ensure that the operations of this station are in full compliance with the station authorization at all times; (2) upon detection by the grantee, or upon notification from the Commission, of a deviation of the operation of this station, transmissions shall be immediately suspended until the deviation is corrected, except that transmissions concerning the immediate safety of life or property may be conducted for the duration of such emergency; and (3) the grantee shall have available, at all times, the technical personnel necessary to perform the technical servicing and maintenance of this station expeditiously. See also Public Notice "The International Bureau Provides Guidance Concerning the Relocation of Earth Station Remote Control Points", DA 06-978 (rel. May 4, 2006).
  - 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: (1) name of the licensee, (2) file number of the application, (3) call sign of the antenna, (4) date of the license, (5) certification that the facility as authorized has been completed, (6) certification that each antenna facility has been tested and is within 2 dB of the pattern specified in Section 25.209, and (7) certification 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).



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#### H) Special and General Provisions

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

- 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.
- 900399 --- Pursuant to 47 C.F.R. § 25.221(a)(12), ESVs operating within 200 km from the baseline of the United States, or within 200 km from a U.S.-licensed fixed service offshore installation, shall complete coordination with potentially affected U.S.-licensed fixed service operators prior to operation. The coordination method and the interference criteria objective shall be determined by the frequency coordinator. The details of the coordination shall be maintained and available at the frequency coordinator, and shall be filed with the Commission electronically via the International Bureau Filing System (http://licensing.fcc.gov/myibfs/) to be placed on public notice. The coordination notifications must be filed in the form of a statement referencing the relevant call signs and file numbers. Operation of each individual ESV may commence immediately after the public notice is released that identifies the notification sent to the Commission. Continuance of operation of that ESV for the duration of the coordination term shall be dependent upon successful completion of the normal public notice process. If, prior to the end of the 30-day comment period of the public notice, any objections are received from U.S.-licensed Fixed Service operators that have been excluded from coordination, the ESV licensee must immediately cease operation of that particular station on frequencies used by the affected U.S.-licensed Fixed Service station until the coordination dispute is resolved and the ESV licensee informs the Commission of the resolution. As used in this section, "baseline" means the line from which maritime zones are measured. The baseline is a combination of the low-water line and closing lines across the mouths of inland water bodies and is defined by a series of baseline points that include islands and "low-water elevations," as determined by the U.S. Department of State's Baseline Committee.
- 900400 --- Although the Commission does not license transmissions on non-U.S. registered vessels, nevertheless the licensee is required to comply with the Commission's interference regulations to the extent its signals are received within the United States. The use of the radiocommunication frequencies in the United States must be in accordance with the Table of Frequency Allocations contained in Section 2.106 of the Commission's rules.

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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 regulatees 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.

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