# EXHIBIT WITH ASTRIUM DECLARATIONS ON COMPLIANCE WITH 25.221(A)(1)(i) and 25.222(A)(1)(i) OF THE COMMISSION'S RULES FOR EARTH STATIONS ON VESSELS

# **DECLARATIONS ADDRESS -**

# Sea Tel:

Model 9707/9797/9711 C-band Antennas;
C-band side of the Model 9711QOR Antennas;
Model 4003 Ku-band Antennas;
Model 4006/4009/4010 Ku-band Antennas;
Model 4996T Ku-band antennas;
Model 5009/5010 Ku-band Antennas;
Ku-band side of the Model 9711 QOR Antennas;
Model 6006/6009 Ku-band Antennas;
Model 9797/9711 Ku-band Antennas;
Model USAT-30/3011 Ku-band Antennas;
Model 3612 Ku-band Antennas; and
Model 4012 Ku-band Antennas.

# Thrane & Thrane:

Model TT-7090A Sailor 900 Ku-band Antennas.

# Intellian:

Model v240 2.4 Meter C-band Antennas; Model v60G Ku-band Antennas; Model v80G Ku-band Antennas; and Model v110 Ku-band Antennas.

I, Alain Bertrand, hereby declare as follows:

- 1. I am employed by Astrium Services, the company within the Astrium Group ("Astrium") responsible for Satellite Services to ESVs. My title is Head of Maritime Engineering. In that capacity, I am responsible for all Earth Station on Vessel (ESV) operations through Astrium's earth stations, including those in Southbury, CT and Santa Paula, CA, as well as Astrium ESV operations that are uplinked via the Intelsat Mountainside teleport near Hagerstown, MD pursuant to a telehousing arrangement.
- 2. I have read the Sea Tel FCC Declaration of Conformity
- 3. I am aware that, in order to meet the off-axis EIRP spectral density limits defined in Section 25.221(a)(1)-(4) of the FCC's ESV Rules, the input power to the antenna system must be limited as follows:
  - 2.4 meter C Band, Models 9797, 9707 and 9711 are limited to -7 dBW/4kHz
- 4. Astrium will take all necessary steps to ensure that the input power to the Sea Tel antennas is limited as stated above. Astrium will ensure that the specified power spectral densities are not exceeded by using the appropriate coding. For C-band, 3/4 QPSK will typically meet the requirements. Astrium will also monitor absolute power levels, either directly through its hub earth stations or by working with the satellite operators.

I, Alain Bertrand declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Executed on May 2<sup>nd</sup>, 2013.

ON GEHALF OF Alain Bertran

- I, Alain Bertrand, hereby declare as follows:
- 1. I am employed by Astrium Services, the company within the Astrium Group ("Astrium") responsible for Satellite Services to ESVs. My title is Head of Maritime Engineering. In that capacity, I am responsible for all Earth Station on Vessel (ESV) operations through Astrium's earth stations, including those in Southbury, CT and Santa Paula, CA, as well as Astrium ESV operations that are uplinked via the Intelsat Mountainside teleport near Hagerstown, MD pursuant to a telehousing arrangement.
- 2. I have read the attached Declaration of Cobham SATCOM Marine Systems, Sea Tel Products (Sea Tel), and have worked closely with Sea Tel to ensure that Astrium's ESV operations will be in compliance with the FCC's ESV rules.
- 3. I am aware that, in order to meet the off-axis EIRP spectral density limits defined in Section 25.222 (a)(1)(i) of the FCC's ESV Rules, the input power to the SeaTel Ku-band ESV antennas must be limited as follows:

0.6 Meter Ku Band, Models 2406 and USAT-24 are limited to	-21.6 dBW/4kHz
0.75 Meter Ku Band, Models 3011 and USAT-30 are limited to	-21.6 dBW/4kHz -20.3 dBW/4kHz
0.9 Meter Ku Band, Model 3612 is limited to	-16.3 dBW/4kHz
1.0 Meter Ku Band, Models 4003/4006/4009/4010 are limited to 1.0 Meter Ku Band Model 4012 is limited to	-16.6 dBW/4kHz
1.2 Meter Ku Band, Models 4996/5009/5010 are limited to	-14.0 dBW/4kHz
1.5 Meter Ku Band, Models 6006/6009 are limited to	-14.0 dBW/4kHz
2.4 Meter Ku Band, Models 9797 and 9711QOR are limited to	-14.0 dBW/4kHz

- 4. Astrium will take all necessary steps to ensure that the input power to the various Sea Tel antennas is limited in the manner described above. Astrium will ensure that the specified power spectral densities are not exceeded by using the appropriate coding. For Ku-band, 3/4 QPSK will typically meet the requirements. Astrium will also monitor absolute power levels, either directly through its hub earth stations or by working with the satellite operators.
- I, Alain Bertrand, declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Executed on: 3/5-13

ON DEHALP OF

Alain Bertrano

- I, Alain Bertrand, hereby declare as follows:
  - 1. I am employed by Astrium Services, the company within the Astrium Group ("Astrium") responsible for Satellite Services to ESVs. My title is Head of Maritime Engineering. In that capacity, I am responsible for all Earth Station on Vessel (ESV) operations through Astrium's earth stations, including those in Southbury, CT and Santa Paula, CA, as well as Astrium ESV operations that are uplinked via the Intelsat Mountainside teleport near Hagerstown, MD pursuant to a telehousing arrangement.
  - 2. I have read the Thrane & Thrane FCC Declaration of Conformity.
  - 3. I am aware that, in order to meet the off-axis EIRP spectral density limits defined in Section 25.222 (a)(1)(i) of the FCC's ESV Rules, the input power to the Sailor 900 Ku-band ESV antenna must be limited to -15.8 dBW/4kHz.
  - 4. Astrium will take all necessary steps to ensure that the input power to the Sailor 900 antenna is limited as stated above. Astrium will ensure that the specified power spectral densities are not exceeded by using the appropriate coding. For Ku-band, 3/4 QPSK will typically meet the requirements. Astrium will also monitor absolute power levels, either directly through its hub earth stations or by working with the satellite operators.

I, Alain Bertrand declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Executed on:  $\frac{3/5-15}{}$ 

ON BEHALF OF

Alain Bertrand

- I, Alain Bertrand, hereby declare as follows:
  - 1. I am employed by Astrium Services, the company within the Astrium Group ("Astrium") responsible for Satellite Services to ESVs. My title is Head of Maritime Engineering. In that capacity, I am responsible for all Earth Station on Vessel (ESV) operations through Astrium's earth stations, including those in Southbury, CT and Santa Paula, CA, as well as Astrium ESV operations that are uplinked via the Intelsat Mountainside teleport near Hagerstown, MD pursuant to a telehousing arrangement.
  - 2. I have read the Intellian FCC Declaration of Conformity.
  - 3. I am aware that, in order to meet the off-axis EIRP spectral density limits defined in Section 25.221(a)(1)-(4) of the FCC's ESV Rules, the input power to the antenna system must be limited as follows:

Intellian v240C, 2.4m C-band maritime system -8.37 dBW/4kHz

- 4. Astrium will take all necessary steps to ensure that the input power to the Intellian antenna is limited in the manner described above. Astrium will ensure that the specified power spectral densities are not exceeded by using the appropriate coding. Astrium will also monitor absolute power levels, either directly through its hub earth stations or by working with the satellite operators.
- I, Alain Bertrand, declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Executed on: _	3/5-13		1
		, 1	11/4
		Ander	
	ON BEHALF OF	Alain Bertrand	<del>V</del>

- I, Alain Bertrand, hereby declare as follows:
  - 1. I am employed by Astrium Services, the company within the Astrium Group ("Astrium") responsible for Satellite Services to ESVs. My title is Head of Maritime Engineering. In that capacity, I am responsible for all Earth Station on Vessel (ESV) operations through Astrium's earth stations, including those in Southbury, CT and Santa Paula, CA, as well as Astrium ESV operations that are uplinked via the Intelsat Mountainside teleport near Hagerstown, MD pursuant to a telehousing arrangement.
  - 2. I have read the Intellian FCC Declaration of Conformity.
  - 3. I am aware that, in order to meet the off-axis EIRP spectral density limits defined in Section 25.222 (a)(1)(i) of the FCC's ESV Rules, the input power to the Intellian Kuband ESV antennas must be limited as follows:

For the V60G antenna	-22.3 dBW/4kHz.
For the V80G antenna	-20.13 dBW/4kHz
For the V100GX antenna	-16.66 dBW/4kHz
For the V110 antenna	-16,2 dBW/4kHz.
For the V130 antenna	-14,0 dBW/4kHz.

4. Astrium will take all necessary steps to ensure that the input power to the Intellian antenna is limited in the manner described above. Astrium will ensure that the specified power spectral densities are not exceeded by using the appropriate coding. Astrium will also monitor absolute power levels, either directly through its hub earth stations or by working with the satellite operators.

I, Alain Bertrand, declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Executed on: 3/5-13

ON BEHALP OF Alain Bertrand