

Cobham SATCOM

Marine Systems, Sea Tel Products 4030 Nelson Ave., Concord California, 94520 USA

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## **R&TTE** Declaration of Conformity

Doc Number 130523 Revision C

**Sea Tel Inc.** declares under our sole responsibility that the products identified below are in compliance with the requirements of:

DIRECTIVE 1999/5/EC of the European Parliament and of the Council of 9 March 1999 on Radio equipment and Telecommunication Terminal Equipment and the mutual recognition of their conformity.

Product Names:

USAT24 Ku Band Tx/Rx Maritime Satellite Earth Stations. USAT30 Ku Band Tx/Rx Maritime Satellite Earth Stations.

These products have been assessed to Conformity Procedures, Annex IV, of the above Directive by application of the following standards:

## EMC:

EMC standard for Radio Equipment (Maritime) ETSI EN 301 843-1 V1.4.1 (2004-06)

EMC standard for Radio Equipment (Common) ETSI EN 301 489-1 V1.4.1 (2002-08)

EMC standard for Radio Equipment (General) ETSI EN 300 339 (1998-03)

Marine Navigational and Radio Communication

Equipment and Systems – General Requirements: IEC EN 60945:1997

Satellite Earth Stations and System (SES):

Harmonized EN for Very Small Aperture

Terminals (VSAT): ETSI EN 301 428-1 V1.3.1 (2006-02)
Harmonized EN for satellite Earth Stations

on board Vessels (ESVs) ETSI EN 302 340 V1.1.1 (2006-04)

Safety:

Safety of Information Technology Equipment: IEC EN 60950-1:2001 (1st Edition)

Certificates of Assessment were completed by and are on file at BACL Labs, Santa Clara, CA.

Sea Tel, Inc Concord, CA

Peter Blaney, Chief Engineer

Date

1/24/2012



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## **FCC Declaration of Conformity**

- 1. Sea Tel, Inc. designs, develops, manufactures and services marine stabilized antenna systems for satellite communication at sea. These products are in turn used by our customers as part of their Kuband Earth Station on Vessels (ESV) networks.
- 2. FCC regulation 47 C.F.R. § 25.222 defines the provisions for blanket licensing of ESV antennas operating in the Ku Band. This declaration covers the requirements for meeting § 25.222 (a)(1) by the demonstrations outlined in paragraphs (b)(1)(i) and (b)(1)(iii). The requirements for meeting § 25.222 (a)(3)-(a)(7) are left to the applicant. The paragraph numbers in this declaration refer to the 2009 version of FCC 47 C.F.R. § 25.222.
- 3. Sea Tel hereby declares that the antennas listed below will meet the off-axis EIRP spectral density requirements of § 25.222 (a)(1)(i) with an N value of 1, when the following Input Power spectral density limitations are met:

*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
1.0 Meter Ku Band, Models 4003/4006/4009/4010 are limited to	-16.3 dBW/4kHz
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. Sea Tel hereby declares that the antennas referenced in paragraph 3 above, will maintain a stabilization pointing accuracy of better than 0.2 degrees under specified ship motion conditions, thus meeting the requirements of § 25.222 (a)(1)(ii)(A). Those antennas marked with \* will maintain a stabilization pointing accuracy of better than 0.3 degrees. The Input Power spectral density limits for these antenna have been adjusted to meet the requirements of § 25.222 (a)(1)(ii)(B).
- 5. Sea Tel hereby declares that the antennas referenced in paragraph 3 above, will automatically cease transmission within 100 milliseconds if the pointing error should exceed 0.5 degrees and will not resume transmission until the error drops below 0.2 degrees, thus meeting the requirements of § 25.222 (a)(1)(iii).
- 6. Sea Tel maintains all relevant test data, which is available upon request, to verify these declarations.

Peter Blaney, Chief Engineer

Sea Tel, Inc Concord, CA