## **Emergency STA Conditions of Grant**

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TacSat Networks Inc. request for Special Temporary Authority (STA) to operate four "Fly 75-V made by C-Com in Ottawa, Canada" satellite earth stations on the island of Puerto Rico is GRANTED WITH CONDITIONS beginning 9/14/2018 and ending 7 days after Hurricane Issac passes Puerto Rico

- 1. All operations under this STA are on an unprotected and non-harmful interference basis.
- 2. Operations are limited to the following frequency bands

Earth-to-Space Frequency (E-S Transmit)	Space-to-Earth Frequency (E-S Receive)
27.5-29.1 GHz (E-s)	17.7-19.3 GHz (s-E)
29.5-30 GHz (E-s)	19.7-20.2 GHz (s-E)

- 3. Maximum input power density is limited to 3.5 dBW/1 MHz.
- 4. Maximum Off-Axis EIRP density is limited to:
  - a. Co-polarized transmissions in the plane tangent to the GSO arc
    - i.  $32.5-25\log(\theta) \text{ dBW/MHz}$  for  $2.0^{\circ} \le \theta \le 7^{\circ}$
    - ii. 11.5 dBW/MHz for  $7^{\circ} \le \vartheta \le 9.2^{\circ}$
    - iii.  $35.5-25log(\vartheta)$  dBW/MHz for  $9.2^{\circ} \le \vartheta \le 19.1^{\circ}$
    - iv. 3.5 dBW/MHz for  $19.1^{\circ} < \theta \le 180^{\circ}$

where  $\theta$  is the angle in degrees from the line from the earth station to the assigned orbital location of the target satellite.

- b. Co-polarized transmissions in the plane perpendicular to the GSO arc
  - i.  $35.5-25\log(\theta)$  dBW/MHz for  $3.5^{\circ} \le \theta \le 7^{\circ}$
  - ii. 14.4 dBW/MHz for  $7^{\circ} < \theta \le 9.2^{\circ}$
  - iii.  $38.5-25\log(\theta)$  dBW/MHz for  $9.2^{\circ} < \theta \le 19.1^{\circ}$
  - iv. 6.5 dBW/MHz for  $19.1^{\circ} < \theta \le 180^{\circ}$

where  $\theta$  is the angle in degrees from the line from the earth station to the assigned orbital location of the target satellite.

- c. Cross-polarized transmissions in the plane tangent to the GSO arc and in the plane perpendicular to the GSO arc
  - i.  $22.5-25\log(\theta)$  dBW/MHz For  $2.0^{\circ} < \theta \le 7.0^{\circ}$

where  $\theta$  is the angle in degrees from the line from the earth station to the assigned orbital location of the target satellite..

- 5. Points of Communication are limited to U.S. licensed satellites or Non-U.S. Licensed Satellites on the Permitted List.
- 6. TacSat Networks Inc. is not authorized to transmit on the earth station while in motion.

- 7. TacSat Networks Inc shall cease operations immediately upon notification of such interference and inform the Commission in writing immediately of such an event.
- 8. TacSat Networks Inc. must take all reasonable and customary measures to ensure that the earth station(s) do(es) not create a potential for harmful non-ionizing radiation to persons who may be in the vicinity of the earth station when it is in operation. At a minimum, permanent warning labels shall be fixed to the earth station and its housing warning of the radiation hazard and including a diagram showing the regions around the earth station where radiation levels could exceed 1.0mW/cm². The earth station operator shall be responsible for assuring that individuals do not stray into the regions around the earth station where there is a potential for exceeding the maximum permissible exposure limits required by 47 C.F.R. § 1.1310.
- 9. Any action taken or expense incurred as a result of operations pursuant to this special authority is solely at TacSat Networks Inc. own risk.
- 10. The grant of the verbal STA request was issued in accordance with emergency procedures put in place to provide communications in areas affected by Hurricane ISSAC. To ensure that the Commission has a complete record of the request and action taken, TacSat Networks Inc.] is directed to file an electronic version of its STA request submitted through IBFS as soon as possible. Go to <a href="http://licensing.fcc.gov/myibfs/">http://licensing.fcc.gov/myibfs/</a> to file the STA and request an extension of this STA.
- 11. This STA may be terminated at the International Bureau's discretion, without a hearing, if conditions warrant. Under no circumstances may the facility(ies) authorized violate the terms of an international agreement or treaty. If an application for permanent authority is on file with the Commission, this action is taken without prejudice to that application. The applicant is required to post and/or retain a copy of this authorization as required by the Commission's Rules.
- 12. This grant is issued pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective immediately.

/s/ Paul Blais Chief Systems Analysis Branch.

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