Approved by OMB 3060-0678

## APPLICATION FOR EARTH STATION SPECIAL TEMPORARY AUTHORITY

APPLICANT INFORMATIONEnter a description of this application to identify it on the main menu: STA 11–2011 Yellow Jacket

1. Applicant

Name:

Tachyon Networks Incorporated.

**Phone Number:** 

858-882-8114

**DBA Name:** 

Fax Number:

858-882-8122

Street:

9339 Carroll Park Drive

E-Mail:

dan.negroni@tachyon.com

Suite 150

City:

San Diego

State:

CA

Country:

**USA** 

Zipcode:

92121

Attention:

Mr Daniel Negroni



SES STA 20110926-011 to 2011 Sign (or other identifier)

From 10-9-17

From 10-9-17

Appn ...

cause harmful interference to a fixed satellite service network monitor and automatically cease transmission on detecting an operational fault that could station to determine if it is malfunctioning, and each aircraft earth station must selfcontrol center. The network control center must monitor operation of each aircraft earth

- authorization. Operation in the 11.7-12.2 GHz band shall be in accordance with the space station
- Stations authorized herein shall not be used to provide air traffic control
- by the International Telecommunication Union (ITU) to protect other services allocated Licensee's AMSS system shall operate in compliance with any limits established
- request to an FSS system operator or the Commission within 24 hours after receiving the pointing error exceeds 0.2 degrees. The licensee shall make this data available upon angle is greater than 10 degrees. The licensee shall also record instances when AES than two minutes while an AES is transmitting and every 30 seconds when aircraft roll data rate; EIRP; and target satellite. This data shall be recorded at intervals of no more altitude); aircraft attitude (pitch, yaw, roll); transmit frequency and occupied bandwidth; records of the following data for each operating AES: location (latitude, longitude, other Ku-band geostationary satellites within six angular degrees of specified satellites. coordination agreements between the operator of specified satellites and operators of Tachyon's coordination agreements with NASA and NSF and with the terms of For a period of one year from the release of this order, the licensee shall maintain Operation pursuant to this authorization shall conform to the requirements of
- exposure limits in Section 1.1310 of the Commission's rules, 47 C.F.R. § 1.1310. The potential for exposure to high levels of radiofrequency energy. exterior surface of the antenna shall be prominently marked with a warning of the exposure to harmful non-ionizing radiation exceeding the maximum permissible Tachyon shall take all reasonable and customary measures to prevent human



Tachyon Networks Incorporated E070139 SES-STA-20110926-01142

## Conditions of Grant of Extension request SES-STA-20110926-01142

20110427-00518 and SES-STA-20110901-01019) upon the following conditions: 2011 through November 8, 2011, as an extension of its previous STAs (SES-STA-Grant authorized of Special Temporary Authority (STA) for 30 days, from October 9,

- Aeronautical Mobile Satellite Service (AMSS). This is not an authorization of an Aeronautical Earth Station (AES) or
- 2 Transmissions may only occur while the earth station is in not in motion.
- warning of the potential for exposure to high levels of radiofrequency energy. exposed. The exterior surface of the antenna shall be prominently marked with a sign excess of the maximum permissible limits specified in 47 C.F.R. § 1.1310 are not terminal to ensure that persons having access to areas where radiofrequency energy in Appropriate safety protocols must be in place prior to the operation of the VSAT
- granted only for the period of this authorization. Transmission to and reception from Intelsat Horizons 2 satellite at 74.05 W. L. is
- emission and power limits. Uplink to Intelsat Horizons 2 within the band 14.2-14.47 GHz within coordinated
- 9 Downlink from Intelsat Horizons 2 within the band 11.7-12.2 GHz
- 7 Operations shall be on an unprotected and not to interfere basis
- immediately and shall inform the Commission, in writing, immediately of such an event. In the event of any harmful interference, Tachyon shall cease operations
- 9. This authorization is not one relating to an "activity of a continuing nature" purposes of 47 C.F.R. § 1.62 and 5 U.S.C. § 558(c).
- to performance aircraft integration static testing on U.S. Government aircraft. Grant of authority requested will serve the public interest by permitting Tachyon

- under FCC experimental license under the following conditions: Future authorizations that begin to test AES/AMSS operation must be authorized
- GHz frequency bands, consistent with the specifications in compliance with the territorial waters, linking with the specified satellites in the 11.7-12.2 GHz and 14.0-14.4 Commission's rules, except insofar as waived herein, and subject to the following Authorization will be granted only for the continental United States and over its
- subsequently adopted by the Commission. The stations authorized herein must operate in compliance with any rules
- conformance with the U.S. Table of Frequency Allocations. agreement, with lawful operation of any radio system in the 11.7-12.2 GHz band in operation is causing harmful interference, not permitted under the terms of a coordination C.F.R. § 2.106, and shall immediately terminate operation upon notification that such 11.7-12.2 GHz band in accordance with the U.S. Table of Frequency Allocations, 47 The licensee must accept interference from lawful operation of any station in the
- interference to the new co-frequency satellite. operator or Panasonic has demonstrated that its AMSS operation will not cause harmful its AMSS system unless its AMSS operation has been coordinated with the new satellite's a location within six degrees of the specified satellites, Tachyon shall cease operation of In the event that another co-frequency GSO FSS satellite commences operation at
- will not cause harmful interference to the NGSO system. the operator of the NGSO system or Tachyon has demonstrated that its AMSS operation Tachyon shall cease AMSS operation unless such operation has been coordinated with In the event that a co-frequency NGSO satellite system commences operation,
- radio system in the 14.0-14.5 GHz band authorized on a primary basis in conformance 14-14.2 GHz, or (3) radio astronomy observations in the 14.47-14.5 GHz band. the effective date of this order, or (2) operation of any TDRSS earth station in the band with the U.S. Table of Frequency Allocations or authorized on a secondary basis prior to permitted under the terms of coordination agreements, with (1) lawful operation of any terminate upon notification that such operation is causing harmful interference, not Operation of an aircraft earth station authorized herein shall immediately
- days per week, with the authority and ability to terminate operations authorized herein, number of the point of contact prior to commencing operation. and shall submit a letter to be included in its license file with the name and telephone for discussing interference concerns with other licensees and U.S. Government agencies, The licensee shall maintain a point of contact available 24 hours per day, seven
- capable of inhibiting its own transmission in the event it detects unintended satellite resistant to capturing and tracking adjacent satellite signals, and each station must be Aircraft earth stations authorized herein must employ a tracking algorithm that is
- change" command until receiving an "enable transmission" command from the network control center and must cease transmission immediately after receiving any "parameter receive "enable transmission" and "disable transmission" commands from the network ground-based network control and monitoring center. Such stations must be able to Aircraft earth stations authorized herein must be monitored and controlled by a

2. Cont	act				,	
	Name:	Jeremy Guralnick	Phone Number:	858-882-8114		
	Company:	Tachyon Networks Inc.	Fax Number:	858-882-8122		
	Street:	9339 Carroll Park Drive	E-Mail:	jeremy.guralnick@tachyon.com		
		suite 150				
	City:	San Diego	State:	CA		
	Country:	USA	Zipcode:	92121 -3278		
	Attention:	Jeremy Guralnick	Relationship:	Same		
applicati	ion. Please enter			e file number or the IB Submission ID of the related		
		I with this application? I attach FCC Form 159. If No,	indicate reason for fee exemptio	n (see 47 C.F.R.Section 1.1114).		
<ul> <li>If Yes, complete and attach FCC Form 159. If No, indicate reason for fee exemption (see 47 C.F.R.Section 1.1114).</li> <li>Governmental Entity</li> <li>Noncommercial educational licensee</li> </ul>						
	er(please explain	·· <b>·</b>				
4b. Fee (	Classification	CGX - Fixed Satellite Transmit	Receive Earth Station			
5. Type	Request					
O Use	Use Prior to Grant Change Station		ange Station Location	Other		
6. Reque	ested Use Prior I	Date				

7. CityMiddletown	8. Latitude (dd mm ss.s h) 39 31 15.72 N						
9. State DE	10. Longitude (dd mm ss.s h) 75 43 4.71 W						
11. Please supply any need attachments.							
Attachment 1: cover letter Attachment 2:	Attachment 3:						
12. Description. (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)							
Tachyon Networks, Inc. requests a renewal of the STA previously granted from October 9, 2011 to November 8, 2011 to test a new 18 inch remote terminal communicating with an Intelsat-owned, U.S. licensed hub - call sign E070139 in Hagerstown, Maryland - in frequency bands 11.7012.2 GHz and 14.0-14.5 GHz.							
13. By checking Yes, the undersigned certifies that neither applicant nor any other party to the application is subject to a denial of Federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti–Drug Act of 1988, 21 U.S.C. Section 862, because of a conviction for possession or distribution of a controlled substance. See 47 CFR 1.2002(b) for the meaning of " party to the application" for these purposes.							
14. Name of Person Signing Jeremy Guralnick	15. Title of Person Signing Vice President						
WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT (U.S. Code, Title 18, Section 1001), AND/OR REVOCATION OF ANY STATION AUTHORIZATION (U.S. Code, Title 47, Section 312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, Section 503).							

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September 26, 2011

Ms. Marlene H. Dortch Secretary Federal Communications Commission 445 12<sup>th</sup> Street, S.W. Washington, D.C. 20554

SES-STA-20110901-01019 Granted on September 6, 2011 Request for Renewal of STA Granted to Test Remote Terminal FCC Form 601

Dear Ms. Dortch

licensed hub in the frequency bands 11.7-12.2 GHz and 14.0-14.5 GHz on September 6, 2011, File No. SES-STA-20110901-01019 ("STA"). The STA was granted for the period September 10, 2011 through October 9, 2011. Tachyon desires to renew the STA. Authority to Test a new 18" remote terminal communicating with an Intelsat-owned, U.S. Tachyon Networks Incorporated ("Tachyon") was granted a Special Temporary

submitted on September 1, 2011, File No. SES-STA 20110901-01019 ("September on May 19, 2011, File No. SES-STA-20110427-00518 ("May STA") and This is the same application that Tachyon previously submitted and which was granted

occurs, Tachyon will take all reasonable steps to eliminate the interference the May STA and the September STA. In the unlikely event that harmful interference by this reference. Tachyon accepts conditions substantially similar to those conditions of All technical information in the May STA and the September STA is incorporated herein

complete the stationary testing within this timeframe. Tachyon requests a renewal of the September STA for one (1) month commencing on October 9, 2011 and continuing to November 8, 2011. Tachyon is optimistic that it can Due to scheduling delays, Tachyon has not conducted its stationary testing as planned.

appreciated. Please direct any questions regarding this STA request to the undersigned at (619) 252-4158 or by email at jeremy guralnick@tachyon.com. Your assistance with this matter is

Respectfully submitted,

Jeremy Guralnick

VP Business Development

cc: Paul Blais Frank Peace