



File # SAT-STA-20210415-00051

Call Sign S3067 Grant Date 4.30.2021

(or other Identifier)

Approved by OMB
3060-0678

Turn Date

From 4.30.2021 To 60 Days

Approved

Jennifer W. [Signature]

Acting Chief Policy & Grant

*with conditions

Date & Time Filed: Apr 15 2021 6:46:30:156PM
File Number: SAT-STA-20210415-00051
Callsign:

FEDERAL COMMUNICATIONS COMMISSION
APPLICATION FOR SPACE STATION SPECIAL TEMPORARY AUTHORITY

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APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu:
STA for Corrected Telecommand Channel (April 2021)

I. Applicant


Name:	R2 Space, Inc.	Phone Number:	207-841-2170
DBA Name:		Fax Number:	
Street:	535 West William Suite 401	E-Mail:	ryan@r2space.com
City:	Ann Arbor	State:	MI
Country:	USA	Zipcode:	48103 -
Attention:	David S. Keir		

ATTACHMENT TO GRANT
R2 Space, Inc.
IBFS File No. SAT-STA-20210415-00051

IBFS File No(s):	SAT-STA-20210415-00051	<p>GRANTED – With Conditions</p>  <p>International Bureau Satellite Division</p>
Licensee/Grantee:	R2 Space, Inc. (R2 Space)	
Call Sign:	S3067	
Satellite Name:	XR-1	
Orbital Location: (required station-keeping tolerance)	Non-geostationary satellite orbit (NGSO), initial deployment to ~550 km altitude (± 50 km), 97.7 degrees (± 15 degrees) inclination, Local Time of Descending Node (LTDN) of 9:30 AM (± 60 min)	
Administration:	United States of America	
Nature of Service:	Earth Exploration Satellite Service (EESS)	
Scope of Grant:	Special temporary authority for a period of 60 days to conduct telemetry, tracking and command (TT&C) with the XR-1 space station using a telecommand uplink channel at 2086.836-2086.964 MHz. ¹	
Service Area(s):	Global, subject to limitations in specific frequency bands	
Frequencies:	8225-8375 MHz (space-to-Earth) 9500-9800 MHz (space-to-Earth) Synthetic Aperture Radar (SAR) TT&C frequencies: 2262.75-2264.25 MHz (space-to-Earth) (outside U.S. only) 2086.836-2086.964 MHz (Earth-to-space)	
<p>Operations under this grant must comport with the legal and technical specifications set forth by the applicant or petitioner and with the Federal Communications Commission's rules not waived herein. This grant is also subject to the following conditions:</p> <ol style="list-style-type: none"> Other than the use of the specified 2086.836-2086.964 MHz frequency band in lieu of the 2086.736-2086.864 MHz frequency band, operations of XR-1 must comport with the terms and conditions of the authorization for XR-1 granted in part and deferred in part on December 18, 2020. <i>See</i> IBFS File No. SAT-LOA-20200511-00042. All operations under this grant of special temporary authority must be on an unprotected and non-harmful interference basis, i.e., the XR-1 space station must not cause harmful interference to, and shall not claim protection from interference caused to it by, any other lawfully operating station. In the event of any harmful interference, R2 Space must cease operations immediately upon notification of such interference, and shall inform the Commission, in writing, immediately of such an event. This action is without prejudice to any enforcement action in connection with operations at variance from the terms and conditions specified in IBFS File No. SAT-LOA-20200511-00042 (granted-in-part/deferred-in-part Dec. 18, 2020). 		
<p>Licensee/grantee is afforded thirty (30) days from the date of release of this action to decline the grant as conditioned. Failure to respond within this period will constitute formal acceptance of the grant as conditioned.</p> <p>This action is taken pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 CFR § 0.261, and is effective upon release.</p> <p>Station licenses are subject to the conditions specified in Section 309(h) of the Communications Act of 1934, as amended, 47 U.S.C. § 309(h).</p>		

¹ See IBFS File No. SAT-LOA-20200511-00042 (granted-in-part/deferred-in-part Dec. 18, 2020).

ATTACHMENT TO GRANT
R2 Space, Inc.
IBFS File No. SAT-STA-20210415-00051

Action Date: April 30, 2021		
Term Dates	From: April 30, 2021	To: period of 60 days
Approved:  John W. Whaley Acting Chief, Satellite Policy Branch		

2. Contact	
Name: David S. Keir	Phone Number: 202-416-6742
Company: Lerman Senter PLLC	Fax Number:
Street: 2001 L Street, N.W. Suite 400	E-Mail: dkeir@lermansenter.com
City: Washington	State: DC
Country: USA	Zipcode: 20036 -
Attention:	Relationship: Legal Counsel
(If your application is related to an application filed with the Commission, enter either the file number or the IB Submission ID of the related application. Please enter only one.)	
3. Reference File Number or Submission ID IB2021001569	
4a. Is a fee submitted with this application?	
<input checked="" type="radio"/> If Yes, complete and attach FCC Form 159. If No, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114).	
<input type="radio"/> Governmental Entity <input type="radio"/> Noncommercial educational licensee	
<input type="radio"/> Other(please explain):	
4b. Fee Classification CXW - Space Station (Non-Geostationary)	
5. Type Request	
<input checked="" type="radio"/> Change Station Location	<input type="radio"/> Extend Expiration Date <input checked="" type="radio"/> Other
6. Temporary Orbit Location	7. Requested Extended Expiration Date

<p>8. 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.)</p> <div style="border: 1px solid black; padding: 5px;"> <p>Request for authority to operate using corrected telecommand uplink at 2086.836-2086.964 MHz (center frequency at 2086.9 MHz) prior to action on concurrently filed modification application.</p> </div>					
<p>9. 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.</p> <p style="text-align: right;"> <input checked="" type="radio"/> Yes <input type="radio"/> No </p>					
<p>10. Name of Person Signing Ryan Farris</p>	<p>11. Title of Person Signing CFO</p>				
<p>12. Please supply any need attachments.</p> <table border="1" style="width: 100%;"> <tr> <td style="width: 50%;">Attachment 1: Explanatory Stmt</td> <td style="width: 50%;">Attachment 2:</td> </tr> <tr> <td style="width: 50%;">Attachment 3:</td> <td style="width: 50%;">Attachment 3:</td> </tr> </table>		Attachment 1: Explanatory Stmt	Attachment 2:	Attachment 3:	Attachment 3:
Attachment 1: Explanatory Stmt	Attachment 2:				
Attachment 3:	Attachment 3:				
<p style="text-align: center;">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).</p>					

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THE FOREGOING NOTICE IS REQUIRED BY THE PAPERWORK REDUCTION ACT OF 1995, PUBLIC LAW 104-13, OCTOBER 1, 1995, 44 U.S.C. SECTION 3507.

EXPLANATORY STATEMENT

As explained in its concurrently filed modification application, R2 Space, Inc. (“R2 Space”) was granted authority on December 18, 2020 to launch XR-1, the initial satellite in its XR Earth-Exploration Satellite Service network. *See* FCC Public Notice, Satellite Policy Branch Information: Actions Taken, Report No. SAT-01518, DA No. 20-1502 (IB, rel. 12/18/2020), at 2 (grant issued in part/deferred in part in FCC File No. SAT-LOA-20200511-00042, Call Sign S3067). This partial grant of its application specified a telecommand uplink receive channel utilizing 128 kHz of bandwidth at 2086.736-2086.864 MHz (i.e., with the center frequency at 2086.8 MHz). Shortly thereafter, consistent with the condition on the license grant, R2 Space submitted to the FCC advance publication information for the XR-1 satellite specifying a slightly different 128 kHz channel at 2086.836-2086.964 MHz (center frequency at 2086.9 MHz). The information contained in the API is correct. Accordingly, R2 Space has submitted a modification application to correct the telecommand uplink receive channel specified in its license to instead reflect the correct 2086.836-2086.964 MHz included in the API. No other changes to the license are required in the modification.

Currently, the satellite is being operated during its in-orbit testing phase by ICEYE (ICEYE also holds an EESS license that is issued by the Finnish administration). Both parties are anxious for the XR-1 satellite to be transferred to R2 Space to commence operations under its U.S. license. Currently, the principal impediment to the handover is the discrepancy in the telecommand uplink. Accordingly, to allow this step to occur in the very near term and for U.S. operations to commence consistent with the API submitted to the ITU, R2 Space requests special temporary authority (“STA”) effective Tuesday, April 20, 2021 to receive telecommand transmissions at 2086.836-2086.964 MHz.

Under Section 25.120(b)(1) of the FCC’s Rules, the International Bureau may grant an STA when the public interest supports the relief requested, and/or delay in the institution of temporary operations would be contrary to the public interest. *See* 47 C.F.R. § 25.120(b)(1). Such authority may be granted for a period not to exceed 60 days where the applicant has filed a request for permanent authority for the parameters and facilities requested. *See* 47 C.F.R. § 25.120(b)(3). This is the case here, where R2 Space has filed an application to modify its license to specify the corrected telecommand uplink channel.

Grant of the requested STA will promote the public interest by permitting R2 Space to initiate its operations using a license that was granted four months ago and utilize a receive frequency consistent with the API that the FCC has already submitted to the ITU. The requested revision does not alter R2 Space's transmit authority, but merely adjusts the receive channel to be utilized for the telecommand uplink from Earth stations already authorized to transmit in this S-band frequency range. Accordingly, grant of the authority requested is consistent with Commission policy and will not adversely affect other authorized operations. R2 Space acknowledges that any action taken pursuant to a grant of the requested STA will be at its own risk, and respectfully requests that the FCC grant it authority commencing on or about Tuesday, April 20, 2021, for a period of sixty (60) days, to use the requested telecommand uplink channel.