

Nimesh Sangani

From: Scott E Palo <scott.palo@colorado.edu>
Sent: Monday, April 19, 2021 5:52 PM
To: Nimesh Sangani
Subject: RE: FLN 0086-EX-CN-2021 Additional Information Request

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Nimesh,

The pdf CR and API documents have been completed and uploaded.

View Attachment	Category	Description	Date Submitted to FCC	Display Type
	Text Documents	Additional data for API	04/19/2021	pdf
	Text Documents	Project Description v2a	04/19/2021	pdf
	Text Documents	Additional data for CR	04/15/2021	pdf
	Microsoft Access Database	Updated SpaceCap file	04/05/2021	native
	Microsoft Access Database	GIMS Antenna Patterns	04/05/2021	native
	Microsoft Access Database	ITU SpaceCap File	03/25/2021	native
	Text Documents	Project Description v2	02/22/2021	pdf
	Text Documents	ITU Cost Recovery Letter V2	02/22/2021	pdf
	Text Documents	NTIA Space Record Data Form v3	02/22/2021	pdf
	Text Documents	FAA Approval Letter - UPDATED	02/17/2021	pdf
	Text Documents	FAA Concurrence TRK 190974 - UPDATED	02/17/2021	pdf
	Text Documents	NTIA Space Record Data Form	02/10/2021	pdf
	Microsoft Access Database	SpaceCap File V9	01/27/2021	native
	Text Documents	ODAR	01/27/2021	pdf
	Text Documents	C-band Rx Antenna	01/27/2021	pdf
	Text Documents	X-band TX Antenna	01/27/2021	pdf
	Text Documents	NOAA License Waiver	01/27/2021	pdf
	Text Documents	Planetary Protection	01/27/2021	pdf
	Text Documents	ITU API Cover Letter	01/27/2021	pdf
	Text Documents	FAA Concurrence TRK 190974	01/27/2021	pdf
	Text Documents	JPL Deep Space Frequency Coordination Letter	01/27/2021	pdf

It is my understanding that a that because we have selected 4.4 in the API a CR is not required.

The location of the earth station is

48 08 51 N
119 41 48 W

I have confirmed this is consistent in the SpaceCap file, form 442, our project description and the NTIA document.

	City	State	Latitude	Longitude	Mobile
0	Brewster	Washington	North 48 8 51	West 119 41 48	

Datum: NAD 83

Is directional antenna (other than radar) used? Yes

SpaceCap

Notice Id:	1	Adm:	USA	Satellite Network:	CU-E3	Beam Id:	UPLINK R	Group Id:	1
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C10b2. Type of Station ☐ Typical ☒ Specific		C10b1. Associated Earth Station Name USEI		of the station ☐ Add ☐ Mod ☐ Sup	
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C10d1. Cls Stn	C10d2. Nat Srv	C10c2. Country USA	C10c1. Geographical Coordinates							
TC	CV		Longitude				Latitude			
			Degrees	E/W	Min	Sec	Degrees	N/S	Min	Sec
			119	W	41	48	48	N	8	51

C10d. Antenna Characteristics		Antenna Radiation Pattern	
3. Maximum Isotropic Gain	4. Beamwidth	C10d5a1. Co-polar Radiation Pattern Id:	621
50.3 +/- dBi	0.4 Degrees	REC-465-6-E ==> APEREC025V01	
		C10d5a2. Diagram attached. See Attachment no.:	
		or diagram no in Gims database	

Project description V2a (submitted 4/19)

Ground Station #1:

Brewster, WA

48° 08' 51"N, 119° 41' 48"W

Altitude above MSL [m]: 383

Antenna height above ground [m] : 12

Elevation: 5-90° Azimuth: 0-360°

NTIA Space Record V3

Part B: Ground Stations, Earth to Space link data:

Earth Station Transmitter Data (Brewster, WA)

Transmit Frequency: 5182MHz	
State (XSC)	XSC = Washington
City Name (XAL)	XAL = Brewster
Latitude (DDMMSS)	Lat = 480851N
Longitude (DDDMMSS)	Lon = 1194148W

I think I have closed out all of the open actions on this license request. Please let me know if there are any outstanding items.

sep

[Scott Palo](#)

Chair, AIAA Small Satellite Technical Committee

Charles Victor Schelke Endowed Professor

[Ann and H.J. Smead Department of Aerospace Engineering Sciences](#)

[University of Colorado Boulder](#)

Boulder, CO 80309

From: Nimesh Sangani <Nimesh.Sangani@fcc.gov>

Sent: Monday, April 12, 2021 6:32 AM

To: Scott E Palo <scott.palo@colorado.edu>

Subject: FLN 0086-EX-CN-2021 Additional Information Request

Importance: High

Please address the following questions/concerns:

- 1) The applicant will need to fill out and return the two attached pdf files.
- 2) The applicant will need to complete a CR for the 5182 MHz uplink frequency and remove the entry from the API, or provide an explanation.
- 3) The location of the earth station provided in the downlink does not match the location in the Form 442 or NTIA document. The applicant will need to correct the location in the spacecap.

V/r,

Nimesh Sangani

Federal Communication Commission

Office of Engineering & Technology

O: (202) 418-2480