

File Number: **DRAFT-SAT-LOA-20251230-00413**

Call Sign:

S1. Satellite Information

a. Space Station or Satellite Network Name	b. Orbit Type	c. Estimated Operational Lifetime of Space Station(s) From Date of Launch (yrs)	d. Will the space station(s) operate on a Common Carrier basis?	e. Application Description
Otter 24C	Non-Geostationary (NGSO) Small Satellites or Small Spacecraft	5	No	

S2. Operating Frequency Bands

a. Type of Service	b. If a. is Other, provide a service description	c. Satellite Frequency Band (MHz)	d. Satellite Frequency (Lower Band Edge) (MHz)	e. Satellite Frequency (Upper Band Edge) (MHz)	f. Direction of Transmission	g. Non Conforming Indicator
SRS		2025 - 2110	2025	2110	Earth-to-Space (Receive)	No
EES		8025 - 8400	8025	8400	Space-to-Earth (Transmit)	Yes
SRS		8450 - 8500	8450	8500	Space-to-Earth (Transmit)	No

S3. NGSO Orbital Information

a. Total Number of Simultaneously Operating Satellites in Constellation	b. Total Number of Satellites Deployed During the License Term	c. Orbit Epoch Date	d. Celestial Reference Body	e. If d. is "Other", provide the name of celestial body being referenced	f. Total Number of Orbital Planes
1	1	2026-10-01	Earth		1

g. Orbital Plane Information

(i) Orbital Plane No.	(ii) Number of Satellites in Plane	(iii) Inclination Angle (°)	(iv) Inclination Angle Tolerance (+/- °)	(v) Orbital Period (seconds)	(vi) Apogee (km)	(vii) Apogee Tolerance (+/- km)	(viii) Perigee (km)	(ix) Perigee Tolerance (+/- km)	(x) Argument of Perigee (°)	(xi) Right Ascension of Ascending Node (°)	(xii) Right Ascension of Ascending Node Tolerance (+/- °)	(xiii) Active Service Arc Begin Angle with Respect to Ascending Node (°)	(xiv) Active Service Arc End Angle with Respect to Ascending Node (°)	(xv) Is additional info on the active service arc provided in the application?	(xvi) Satellite Spacing	(xvii) Phase Angle Spacing (°)	(xviii) First Satellite Initial Phase Angle (°)	(xix) Maximum Orbital Eccentricity
1	1	100.0064	0.5	6,443	7,489.968	1	7,478.846	1	207.0806	267.699	0.5	0	0	No	Irregularly-Spaced			

h. Initial Phase Angle Information

(i) Orbital Plane No.	(i) Satellite No.	(ii) Initial Phase Angle (°)
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1	1	
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S4. Earth-to-Space (Receive) Beams

a. Beam ID:	SRXH	n. Beam Peak Flux Density at Command Threshold (dBW/m²):	-60.1			
b. Beam Frequency (Lower Band Edge) (MHz):	2025	o. Peak Isotropic Antenna Gain (dBi):				
c. Beam Frequency (Upper Band Edge) (MHz):	2110	p. Isotropic Antenna Gain at 3 dB Beamwidth (dBi):				
d. Polarization:	RHCP	q. Antenna Pointing Error (°):				
e. Can the space station vary the channel bandwidth with on-board processing?:	No	r. Antenna Rotational Error (°):				
f. Is this a command beam? (Check box if Yes):	Yes	s. Will a GIMS container file containing all antenna contour data be provided?:				
g. Is the beam shapeable? (Check box if Yes):	No	t. Under what rules will the associated antenna contours be submitted?:				
h. Is the beam steerable? (Check box if Yes):	Yes	u. Provide a list of each orbital plane in which this antenna beam is used.:				
i. Is the beam fed into transponders? (Check box if Yes):	No	v. Are all space stations in the NGSO constellation identical?:				
j. Maximum G/T (dB/K):	-24.6	w. What information will be provided with the predicted antenna gain contours?:				
k. Minimum G/T (dB/K):						
l. Maximum Saturation Flux Density (dBW/m²):						
m. Minimum Saturation Flux Density (dBW/m²):						
x. Receive Channels						
(i) Channel ID	(ii) Channel Bandwidth (MHz)	(iii) Center Frequency (MHz)	(iv) Channel Frequency (Lower Band Edge) (MHz)	(v) Channel Frequency (Upper Band Edge) (MHz)	(vi) Channel Type	(vii) Point of Communication
SRS1		2027			Service Link	
SRT1		2027			TT&C	
SRT3		2103			TT&C	
SRT5		2048.5			TT&C	
SRS3		2103			Service Link	
SRT2		2048.5			TT&C	
SRS2		2048.5			Service Link	
SRS5		2048.5			Service Link	
SRS6		2103			Service Link	
SRT4		2027			TT&C	
SRS4		2027			Service Link	
SRT6		2103			TT&C	

a. Beam ID:	SRXL	n. Beam Peak Flux Density at Command Threshold (dBW/m²):	-60.1
b. Beam Frequency (Lower Band Edge) (MHz):	2025	o. Peak Isotropic Antenna Gain (dBi):	
c. Beam Frequency (Upper Band Edge) (MHz):	2110	p. Isotropic Antenna Gain at 3 dB Beamwidth (dBi):	
d. Polarization:	RHCP	q. Antenna Pointing Error (°):	
e. Can the space station vary the channel bandwidth with on-board processing?:	No	r. Antenna Rotational Error (°):	
f. Is this a command beam? (Check box if Yes):	Yes	s. Will a GIMS container file containing all antenna contour data be provided?:	
g. Is the beam shapeable? (Check box if Yes):	No	t. Under what rules will the associated antenna contours be submitted?:	
h. Is the beam steerable? (Check box if Yes):	No	u. Provide a list of each orbital plane in which this antenna beam is used.:	
i. Is the beam fed into transponders? (Check box if Yes):	No	v. Are all space stations in the NGSO constellation identical?:	

j. Maximum G/T (dB/K):	-21.4	w. What information will be provided with the predicted antenna gain contours?:				
k. Minimum G/T (dB/K):						
l. Maximum Saturation Flux Density (dBW/m²):						
m. Minimum Saturation Flux Density (dBW/m²):						
x. Receive Channels						
(i) Channel ID	(ii) Channel Bandwidth (MHz)	(iii) Center Frequency (MHz)	(iv) Channel Frequency (Lower Band Edge) (MHz)	(v) Channel Frequency (Upper Band Edge) (MHz)	(vi) Channel Type	(vii) Point of Communication
SRS3		2103			Service Link	
SRT1		2027			TT&C	
SRS4		2027			Service Link	
SRS6		2103			Service Link	
SRS5		2048.5			Service Link	
SRT2		2048.5			TT&C	
SRT3		2103			TT&C	
SRT6		2103			TT&C	
SRS2		2048.5			Service Link	
SRT5		2048.5			TT&C	
SRS1		2027			Service Link	
SRT4		2027			TT&C	

S5. Space-to-Earth (Transmit) Beams

a. Beam ID:	XTXL	n. Beam Peak Flux Density at Command Threshold (dBW/m²):				
b. Beam Frequency (Lower Band Edge) (MHz):	8025	o. Peak Isotropic Antenna Gain (dBi):	7.6			
c. Beam Frequency (Upper Band Edge) (MHz):	8400	p. Isotropic Antenna Gain at 3 dB Beamwidth (dBi):				
d. Polarization:	RHCP	q. Antenna Pointing Error (°):	0.1			
e. Can the space station vary the channel bandwidth with on-board processing?:	No	r. Antenna Rotational Error (°):	0.1			
f. Is this a command beam? (Check box if Yes):	No	s. Will a GIMS container file containing all antenna contour data be provided?:	Yes			
g. Is the beam shapeable? (Check box if Yes):	No	t. Under what rules will the associated antenna contours be submitted?:				
h. Is the beam steerable? (Check box if Yes):	No	u. Provide a list of each orbital plane in which this antenna beam is used.:				
i. Is the beam fed into transponders? (Check box if Yes):	No	v. Are all space stations in the NGSO constellation identical?:				
j. Maximum Transmit EIRP Density (dBW/Ref BW):	-56.1	w. What information will be provided with the predicted antenna gain contours?:				
k. Maximum Transmit EIRP (dBW):	12.9					
x. Transmit Channels						
(i) Channel ID	(ii) Channel Bandwidth (MHz)	(iii) Center Frequency (MHz)	(iv) Channel Frequency (Lower Band Edge) (MHz)	(v) Channel Frequency (Upper Band Edge) (MHz)	(vi) Channel Type	(vii) Point of Communication
XS1	2	8200	8199	8201	Service Link	
XS2	0.2	8200	8199.9	8200.1	Service Link	
XT1	2	8200	8199	8201	TT&C	
XS3	0.03	8200	8199.985	8200.015	Service Link	
XS4	0.01	8200	8199.995	8200.005	Service Link	

XT3	0.03	8200	8199.985	8200.015	TT&C	
XT4	0.01	8200	8199.995	8200.005	TT&C	
XT2	0.2	8200	8199.9	8200.1	TT&C	

a. Beam ID:	XTXH	n. Beam Peak Flux Density at Command Threshold (dBW/m²):	
b. Beam Frequency (Lower Band Edge) (MHz):	8450	o. Peak Isotropic Antenna Gain (dBi):	7.6
c. Beam Frequency (Upper Band Edge) (MHz):	8500	p. Isotropic Antenna Gain at 3 dB Beamwidth (dBi):	
d. Polarization:	RHCP	q. Antenna Pointing Error (°):	0.1
e. Can the space station vary the channel bandwidth with on-board processing?:	No	r. Antenna Rotational Error (°):	0.1
f. Is this a command beam? (Check box if Yes):	No	s. Will a GIMS container file containing all antenna contour data be provided?:	Yes
g. Is the beam shapeable? (Check box if Yes):	No	t. Under what rules will the associated antenna contours be submitted?:	
h. Is the beam steerable? (Check box if Yes):	Yes	u. Provide a list of each orbital plane in which this antenna beam is used.:	
i. Is the beam fed into transponders? (Check box if Yes):	No	v. Are all space stations in the NGSO constellation identical?:	
j. Maximum Transmit EIRP Density (dBW/Ref BW):	-54	w. What information will be provided with the predicted antenna gain contours?:	
k. Maximum Transmit EIRP (dBW):	14.5		

x. Transmit Channels						
(i) Channel ID	(ii) Channel Bandwidth (MHz)	(iii) Center Frequency (MHz)	(iv) Channel Frequency (Lower Band Edge) (MHz)	(v) Channel Frequency (Upper Band Edge) (MHz)	(vi) Channel Type	(vii) Point of Communication
XS8	0.01	8490	8489.995	8490.005	Service Link	
XS5	2	8490	8489	8491	Service Link	
XS6	0.2	8490	8489.9	8490.1	Service Link	
XT5	2	8490	8489	8491	TT&C	
XT8	0.01	8490	8489.995	8490.005	TT&C	
XT6	0.2	8490	8489.9	8490.1	TT&C	
XS7	0.03	8490	8489.985	8490.015	Service Link	
XT7	0.03	8490	8489.985	8490.015	TT&C	

S6. Space-to-Space (Receive) Beams

S7. Space-to-Space (Transmit) Beams

S8. Attachments