Date & Time Filed: May 22 2017 11:57:13:323AM File Number: SES-MOD-INTR2017-01364

FCC APPLICATION FOR SPACE AND EARTH STATION:MOD OR AMD – MAIN FORM
FCC Use Only
FCC 312 MAIN FORM FOR OFFICIAL USE ONLY

APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu:

Modification of Haleiwa, HI Earth Station License to Add an Identical, Co-located Antenna

1–8. Legal Name of Applicant

Name: O3b Limited **Phone Number:** 202–813–4026

DBA Fax Number:

Name:

Street: 900 17th Street, NW, #300 **E–Mail:** suzanne.malloy@o3bnetworks.

com

City: Washington State:

Country: USA Zipcode: -

Attention: Ms Suzanne Malloy

9–16. Name of Contact Representative

Name: Robert S. Koppel **Phone Number:** 703–584–8669

Company: Lukas LaFuria Gutierrez & Sachs, Fax Number: 703–584–8696

LLP

Street: 8300 Greensboro Drive E–Mail: bkoppel@fcclaw.com

Suite 1200

City: Tysons State: VA

Country: USA Zipcode: 22102–

Attention: Relationship: Legal Counsel

CLASSIFICATION OF FILING

17. Choose the button next to the classification that applies to this filing for both questions a. and b. Choose only one for 17a and only one for 17b.	(N/A) b1. Application for License of New Station (N/A) b2. Application for Registration of New Domestic Receive—Only Station b3. Amendment to a Pending Application
a1. Earth Station a2. Space Station	 b4. Modification of License or Registration b5. Assignment of License or Registration b6. Transfer of Control of License or Registration b7. Notification of Minor Modification (N/A) b8. Application for License of New Receive—Only Station Using Non—U.S. Licensed Satellite (N/A) b9. Letter of Intent to Use Non—U.S. Licensed Satellite to Provide Service in the United States (N/A) b10. Other (Please specify) (N/A) b11. Application for Earth Station to Access a Non—U.S.satellite Not Currently Authorized to Provide the Proposed Service in the Proposed Frequencies in the United States (N/A) b12. Application for Database Entry b13. Amendment to a Pending Database Entry Application b14. Modification of Database Entry
17c. Is a fee submitted with this application of the submitted with th	159. If No, indicate reason for fee exemption (see 47 C.F.R.Section 1.1114).
17d. Fee Classification CGX – Fixed Satellite T Station	Transmit/Receive Earth

18. If this filing is in reference to an existing station, enter:	19. If this filing is an amend modification please enter on		application enter both fields, if this filing	g is a
(a) Call sign of station:	(a) Date pending application	was filed:	(b) File number:	
E100088			SESMOD2014081400652	
			SESTIOD 2014001400032	
TYPE OF SERVICE				
20. NATURE OF SERVICE: This filing is	s for an authorization to provide	or use the followir	ng type(s) of service(s): Select all that ap	ply:
a. Fixed Satellite				
b. Mobile Satellite				
c. Radiodetermination Satellite				
d. Earth Exploration Satellite				
e. Direct to Home Fixed Satellite				
f. Digital Audio Radio Service				
g. Other (please specify)				
21. STATUS: Choose the button next to the	ne applicable status. Choose	22. If earth station	applicant, check all that apply.	
only one.		Using U.S. lice	ensed satellites	
Common Carrier Non–Commo	on Carrier	■ Using Non–U.	.S. licensed satellites	
23. If applicant is providing INTERNATION	ONAL COMMON CARRIER se	rvice, see instructi	ons regarding Sec. 214 filings. Choose o	ne. Are thes
facilities:	1 37			
Connected to a Public Switched Netw	ork Not connected to a F	ublic Switched Ne	etwork N/A	

24. FREQUENCY BAND(S): Place an	'X' in the box(es) next to all ar	oplicable frequency band(s)
1	Sand (12/14 GHz)	produce requesely sund(s).
c.Other (Please specify upper and lo		
Frequency Lower: 17800	Frequency Upper: 29100	(Please specify additional frequencies in an attachment)
11	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	
TYPE OF STATION		
25. CLASS OF STATION: Choose the bu	tton next to the class of station t	hat applies. Choose only one.
a. Fixed Earth Station		
b. Temporary–Fixed Earth Station		
c. 12/14 GHz VSAT Network		
d. Mobile Earth Station		
e. Geostationary Space Station		
f. Non-Geostationary Space Station		
g. Other (please specify)		
26. TYPE OF EARTH STATION FACIL	TV·	
Transmit/Receive Transmit—O		N/A
"For Space Station applications, select N/		

PURPOSE OF MODIFICATION

27. The purpose of this proposed modification is to: (Place an 'X' in the box(es) next to all that apply.)
a — authorization to add new emission designator and related service
b — authorization to change emission designator and related service
c — authorization to increase EIRP and EIRP density
d — authorization to replace antenna
e — authorization to add antenna
f — authorization to relocate fixed station
g — authorization to change frequency(ies)
h — authorization to add frequency
i — authorization to add Points of Communication (satellites & Double
j — authorization to change Points of Communication (satellites & Double of Communication)
k — authorization for facilities for which environmental assessment and
radiation hazard reporting is required
1 — authorization to change orbit location
m — authorization to perform fleet management
n — authorization to extend milestones
o — Other (Please specify)

ENVIRONMENTAL POLICY

impact as defined by 47 CFR 1.1307? If YES, submit the statement as required by Sections 1.1308 and 1.1311 of the Commission's rules, 47 C.F.R. 1.1308 and 1.1311, as an exhibit to this application. A Radiation Hazard Study must accompany all applications for new transmitting facilities, major modifications, or major amendments.	_		~			
ALIEN OWNERSHIP Earth station applicants not proposing to provide broadcast, common carrier, aeron aeronautical fixed radio station services are not required to respond to Items 30–34.	autic	al en	ı rou	ite or		
29. Is the applicant a foreign government or the representative of any foreign government?	0	Yes	•	No		
30. Is the applicant an alien or the representative of an alien?	0	Yes	0	No	•	N/A
31. Is the applicant a corporation organized under the laws of any foreign government?	0	Yes	0	No	•	N/A
32. Is the applicant a corporation of which more than one—fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	0	Yes	0	No	•	N/A

 $lackbox{ Yes } lackbox{ No}$

28. Would a Commission grant of any proposal in this application or amendment have a significant environmental

33. Is the applicant a corporation directly or indirectly controlled by any other corporation of which more than one–fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	0	Yes	0	No	1 🗨	N/A
34. If any answer to questions 29, 30, 31, 32 and/or 33 is Yes, attach as an exhibit an identification of the aliens or foreign entities, their nationality, their relationship to the applicant, and the percentage of stock they own or vote.						
BASIC QUALIFICATIONS						
35. Does the Applicant request any waivers or exemptions from any of the Commission's Rules? If Yes, attach as an exhibit, copies of the requests for waivers or exceptions with supporting documents.		•	Yes	() No	•
36. Has the applicant or any party to this application or amendment had any FCC station authorization or license revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission? If Yes, attach as an exhibit, an explination of circumstances.		0	Yes	•	No.)

37. Has the applicant, or any party to this application or amendment, or any party directly or indirectly controlling the applicant ever been convicted of a felony by any state or federal court? If Yes, attach as an exhibit, an explination of circumstances.	• Yes	⊚ No
38. Has any court finally adjudged the applicant, or any person directly or indirectly controlling the applicant, guilty of unlawfully monopolizing or attempting unlawfully to monopolize radio communication, directly or indirectly, through control of manufacture or sale of radio apparatus, exclusive traffic arrangement or any other means or unfair methods of competition? If Yes, attach as an exhibit, an explanation of circumstances	• Yes	No
39. Is the applicant, or any person directly or indirectly controlling the applicant, currently a party in any pending matter referred to in the preceding two items? If yes, attach as an exhinit, an explanation of the circumstances.	• Yes	⊘ No
40. If the applicant is a corporation and is applying for a space station license, attach as an exhibit the names, address, and citizenship of those stockholders owning a record and/or voting 10 percent or more of the Filer's voting stock and the percentages so held. In the case of fiduciary control, indicate the beneficiary(ies) or class of beneficiaries. Also list the names and addresses of the officers and directors of the Filer.		

41. 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. 42a. Does the applicant intend to use a non–U.S. licensed satellite to provide service in the United States? If Yes, answer 42b and attach an exhibit providing the information specified in 47 C.F.R. 25.137, as appropriate. If No, proceed to question 43.			
answer 42b and attach an exhibit providing the information specified in 47 C.F.R. 25.137, as appropriate. If No, proceed to question 43. 42b. What administration has licensed or is in the process of licensing the space station? If no license will be issued, what administration has	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	Yes	O No
	answer 42b and attach an exhibit providing the information specified in 47 C.F.R. 25.137, as appropriate. If No,	⊚ Yes	O No
	A	hat administr	ration has
43. Description. (Summarize the nature of the application and the services to be provided). (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)		on does not a	ppear in this
Application for modification of Haleiwa, HI gateway earth station to add an identical colocated antenna. Narrative Statement	located antenna.	identical	. CO-

43a. Geographic Service Rule Certification By selecting A, the undersigned certifies that the applicant is not subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25.	O A
By selecting B, the undersigned certifies that the applicant is subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25 and will comply with such requirements.	O _B
By selecting C, the undersigned certifies that the applicant is subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25 and will not comply with such requirements because it is not feasible as a technical matter to do so, or that, while technically feasible, such services would require so many compromises in satellite design and operation as to make it economically unreasonable. A narrative description and technical analysis demonstrating this claim are attached.	⊚ C

CERTIFICATION

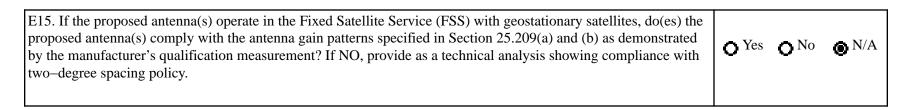
The Applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application. The applicant certifies that grant of this application would not cause the applicant to be in violation of the spectrum aggregation limit in 47 CFR Part 20. All statements made in exhibits are a material part hereof and are incorporated herein as if set out in full in this application. The undersigned, individually and for the applicant, hereby certifies that all statements made in this application and in all attached exhibits are true, complete and correct to the best of his or her knowledge and belief, and are made in good faith.

44. Applicant is a (an): (Choose the button next to ap	plicable response.)	
Individual		
Unincorporated Association		
Partnership		
Corporation		
Governmental Entity		
Other (please specify)		
-		
45. Name of Person Signing	46. Title of Person Signing	
Suzanne Malloy	Vice President, Regulatory Affairs	
>		
WILLFUL FALSE STATEMENTS MAD	DE ON THIS FORM ARE PUNISHABLE BY FINE AND / OR IMPRISO	ONMENT

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).

SATELLITE EARTH STATION AUTHORIZATIONS FCC Form 312 – Schedule B:(Technical and Operational Description) FOR OFFICIAL USE ONLY

Location of Earth St	tation Site				
E1: Site Identifier:	Hawaii Gateway	E5. Call Sign:	E100088		
E2: Contact Name	O3b Network Operations Center	E6. Phone Number:	703–366–1500		
E3. Street:	58–350 Kamehameha Hwy	E7. City:	Haleiwa		
		E8. County:	Honolulu		
E4. State	HI	E9. Zip Code	96712		
E10. Area of Opera	tion:	Fixed			
E11. Latitude:	21 °40 '17.8 "N				
E12. Longitude:	158 °1 '54.9 "W				
E13. Lat/Lon Coord	linates are:	O NAD-27	● NAD-83	O N/A	
E14. Site Elevation	(AMSL):	140.0 meters			



E16. If the proposed antenna(s) do not operate in the Fixed Satellite Set Satellite Service (FSS) with non–geostationary satellites, do(es) the progain patterns specified in Section 25.209(a2) and (b) as demonstrated by measurements?	posed antenna(s) comply with the antenna	⊚ Yes	O No	O N/A
E17. Is the facility operated by remote control? If YES, provide the loca point.	Yes	٥	No	
E18. Is frequency coordination required? If YES, attach a frequency coordination	ordination report as	Yes	•	No
E19. Is coordination with another country required? If YES, attach the coordination contours as	name of the country(ies) and plot of	o Yes	•	No
E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.1 have you attached a copy of a completed FCC Form 854 and/or the FAA the structure to aviation? FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL APPLICATION.	A's study regarding the potential hazard of	O Yes	•	No
POINTS OF COMMUNICATION		'		
Satellite Name: O3B-A (S2935) O3B-A Eq. NGSO If you selecte	d OTHER, please enter the following:		_	
E21. Common Name:	E22. ITU Name:			
E23. Orbit Location:	E24. Country:			
POINTS OF COMMUNICATION (Destination Points)	•			
E25. Site Identifier: Hawaii Gateway				

E26. Common Name:	E27. Country: USA
	1

ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size <meters></meters>	E41/42. Antenna Gain Transmint and/or Recieve (dBi atGHz)
Hawaii Gateway	Ant-4	1	ViaSat	ME07	7.3	63.1 dBi at 18.575
Hawaii Gateway	Ant-4	1	ViaSat	ME07	7.3	65.3 dBi at 28.371

Id	Diameter		, ,	Height Above Ground Level	Input Power at antenna flange	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
Ant-4	0.0/0.0	10.2	400.4	0.0	447.23	0.0	92.17

FREQUENCY

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode		Designator	EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
Ant-4	19296.2 19299.9	R	Left and Right Circular	300KG1D	0.0	0.0

E50. Modulation entirety.)	and Services (If the	ne complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its	
TT&C							
Ant–4	29087.8 29089.1	Т	Left Hand Circular	500KG2D	85.14	72.13	
E50. Modulation entirety.)	and Services (If the	ne complete description	on does not appear in	this box, please go t	o the end of the form	to view it in its	
Ant-4	28600	Т	Left and Right Circular	40M0G7D	87.29	47.29	
E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.) DVB-S2 (QPSK, 8APSK, 16APSK, 32 APSK); Digital Data Link							
Ant–4	17800 18600	R	Left and Right Circular	307KGD	0.0	0.0	

E50. Modulation entirety.)	and Services (If the	e complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its		
	SK, 8APSK, 16A	PSK, 32 APSK);	Digital Data	Link				
Ant-4	17800 18600	R	Left and Right Circular	216MG7D	0.0	0.0		
	entirety.) DVB-S2 (QPSK, 8APSK, 16APSK, 32 APSK); Digital Data Link							
Ant-4	18800 19300	R	Left and Right Circular	216MG7D	0.0	0.0		
E50. Modulation entirety.)	E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)							
DVB-S2 (QPSK, 8APSK, 16APSK, 32 APSK); Digital Data Link								
Ant-4	18800 19300	R	Left and Right Circular	307KG7D	0.0	0.0		

E50. Modulation entirety.)	and Services (If the	ne complete description	on does not appear in	this box, please go t	to the end of the form	to view it in its
1	PSK, 8APSK, 16A	PSK, 32 APSK);	Digital Data	Link		
Ant-4	18800 19300	R	Left and Right Circular	40M0G7D	0.0	0.0
E50. Modulation entirety.) DVB-S2 (QF	and Services (If the Services) (If the Services)				to the end of the form	to view it in its
Ant-4	27600 28400	Т	Left and Right Circular	216MG7D	87.29	39.97
E50. Modulation entirety.)	and Services (If the	ne complete description	on does not appear in	this box, please go t	to the end of the form	to view it in its
DVB-S2 (QF	PSK, 8APSK, 16A	PSK, 32 APSK);	Digital Data	Link		
Ant–4	27600 28400	Т	Left and Right Circular	307KG7D	52.29	33.44

E50. Modulation entirety.)	and Services (If the	ne complete descripti	on does not appear in	n this box, please go	o to the end of the	form to view it in its
DVB-S2 (QE	PSK, 8APSK, 16A	PSK, 32 APSK);	Digital Data	Link		
Ant–4	28600 29100	Т	Left and Right Circular	216MG7D	87.29	39.97
E50. Modulation entirety.)	and Services (If the	ne complete descripti	on does not appear in	n this box, please go	to the end of the	form to view it in its
DVB-S2 (QI	PSK, 8APSK, 16A	APSK, 32 APSK);	Digital Data	Link		
Ant-4	28600 29100	Т	Left and Right Circular	307KG7D	52.29	33.44
E50. Modulation entirety.)	and Services (If the	ne complete descripti	on does not appear in	n this box, please go	o to the end of the	form to view it in its
DVB-S2 (QE	PSK, 8APSK, 16A	APSK, 32 APSK);	Digital Data	Link		
Ant-4	28600 29100	Т	Left and Right Circular	40M0G7D	87.29	47.29

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DVB-S2 (QPSK, 8APSK, 16APSK, 32 APSK); Digital Data Link

FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	E54/55. Range of Satellite Arc Eastern/West ern Limit		E57. Antenna Elevation Angle Eastern Limit	E58. Earth Station Azimuth Angle Western Limit	E59. Antenna Elevation Angle Western Limit	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
Ant-4	Non- Geostationary	17800 18600	0.0/0.0	114.29	5.1	245.71	5.1	0.0
	Non– Geostationary	18800 19300	0.0/0.0	114.29	5.1	245.71	5.1	0.0
	Non– Geostationary	27600 28400	0.0/0.0	114.29	5.1	245.71	5.1	27.81
	Non- Geostationary	28600 29100	0.0/0.0	103.9	5.1	256.1	5.1	27.81

REMOTE CONTROL POINT LOCATION

E61. Call Sign N/A NOTE: Please enter the callsign of the contro callsign for which this application is being filed.	E66. Phone Number 703–366–1500			
E62. Street Address 12811 Randolph Ridge Lane				
E63. City Manassas	E68. County Prince William		E67/68. State/Country VA/ USA	E64. Zip Code 20109

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