Date & Time Filed: File Number: ---Callsign/Satellite ID:

APPLICATION FOR EARTH STATION AUTHORIZATIONS

FCC 312 MAIN FORM FOR OFFICIAL USE ONLY

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APPLICANT INFORMATION

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

DRAFT FORM FOR 60-DAY STA

1-8. Legal Name of Applicant

Name: Astronics AeroSat Corporation

Phone Number: 603-879-0205

DBA

Name:

Fax Number:

Street: 62 State Route 101A E-Mail: Frank.Blanda@astronics.com

City: Amherst State: NH

Country: USA Zipcode: 03031 -2281

Attention: Frank J Blanda

9-16. Name of Contact Representative

Name: Carlos Nalda Phone Number: 5713325626

Company: LMI Advisors Fax Number:

Street: 8601 James Creek Drive E-Mail: cnalda@lmiadvisors.com

City: Springfield State: VA

Country: USA Zipcode: 22152-

Attention: Mr. Carlos Nalda Relationship: Other

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.

a1. Earth Station

(N/A) a2. Space Station

b1. Application for License of New Station

o b2. Application for Registration of New Domestic Receive-Only Station

(N/A) b3. Amendment to a Pending Application

(N/A) b4. Modification of License or Registration

(N/A) b5. Assignment of License or Registration

(N/A) b6. Transfer of Control of License or Registration

(N/A) b7. Notification of Minor Modification

(N/A) b8. Application for License of New Receive-Only Station Using Non-U.S. Licensed

(N/A) b9. Letter of Intent to Use Non-U.S. Licensed Satellite to Provide Service in the United States

● b10. Other (Please specify)

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.

17c. Is a fee submitted with this application?

• If Yes, complete and attach FCC Form 159.

O Governmental Entity Noncommercial educational licensee								
Other(please explain): DRAFT FORM								
17d.								
Fee Classification								
18. If this filing is in reference to an								
existing station, enter:	(a) But pending appreciation was med.							
(a) Call sign of station:								
Not Applicable Not Applicable Not Applicable								
TYPE OF SERVICE								
20. NATURE OF SERVICE: This filing is for an authorization to provide or use the following type(s) of service(s): Select all that apply:								
a. Fixed Satellite								
b. Mobile Satellite								
a c. Radiodetermination Satellite								
d. Earth Exploration Satellite								
e. Direct to Home Fixed Satellite								
f. Digital Audio Radio Service								
g. Other (please specify)								
ESAA								
21. STATUS: Choose the button next to the applicable status. 22. If earth station applicant, check all that apply.								
Choose only one. Using U.S. licensed satellites								
Common Carrier Non-Common Carrier Using Non-U.S. licensed satellites								
23. If applicant is providing INTERNATIONAL COMMON CARRIER service, see instructions regarding Sec. 214 filings. Choose one. Are these facilities:								
Connected to a Public Switched Network Not connected to a Public Switched Network N/A								
24. FREQUENCY BAND(S): Place an "X" in the box(es) next to all applicable frequency band(s).								
a. C-Band (4/6 GHz) B b. Ku-Band			•					
C.Other (Please specify upper and lov	ver frequencies in MHz.)							
Frequency Lower: Frequency Upper:								
		STATION						
25. CLASS OF STATION: Choose the bu	utton next to the class of sta	tion that applies.	Choose only one.					
a. Fixed Earth Station								
b. Temporary-Fixed Earth Station								
o c. 12/14 GHz VSAT Network								
d. Mobile Earth Station (N/A) e. Geostationary Space Station								
(N/A) f. Non-Geostationary Space Station	าท							
g. Other (please specify)ESAA	···							
26. TYPE OF EARTH STATION FACIL	ITY: Choose only one.							
Transmit/Receive Transmit-Only								
	PURPOSE OF N	MODIFICATION OF THE PROPERTY O	ON					
27. The purpose of this proposed modifie	cation is to: (Place an 'X' in	the box(es) next	to all that apply.)					
Not Applicable								
	ENVIRONME	NTAL POLIC	Y					
28. Would a Commission grant of any prenvironmental impact as defined by 47 (1.1308 and 1.1311 of the Commission's	CFR 1.1307? If YES, submi	t the statement as	required by Sections O Yes O No					

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, aeronautical en route or aeronautical fixed radio station services are not required to respond to Items 30-34.

1	
29. Is the applicant a foreign government or the representative of any foreign government?	O Yes O No
30. Is the applicant an alien or the representative of an alien?	O Yes O No O N/A
31. Is the applicant a corporation organized under the laws of any foreign government?	O Yes O No O 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?	O Yes O No ● N/A
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?	O Yes O No ● 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.	O 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.	O Yes O 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.	O Yes O No
38. Has any court finally adjudged the applicant, or any person directly or indirectly controlling the applicant, guilty of unlawfully monopolizing or attemptiing 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.	● Yes O No
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.	● Yes O No
42b. What administration has licensed or is in the process of licensing the space station? If no license will be	e issued, what

administration has coordinated or is in the process of coordi	nating the space station?Permitted List						
43. Description. (Summarize the nature of the application an REQUEST.	d the services to be provided). DRAFT FORM FOR 60DAY STA						
43a. Geographic Service Rule Certification By selecting A, the undersigned certifies that the applicant is geographic coverage requirements specified in 47 C.F.R. Pa							
By selecting B, the undersigned certifies that the applicant is coverage requirements specified in 47 C.F.R. Part 25 and wi							
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.							
CF	ERTIFICATION						
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 applicable	e response.)						
 Individual Unincorporated Association Partnership Corporation Governmental Entity Other (please specify) 							
45. Name of Person Signing Frank Blanda	46. Title of Person Signing CTO						
47. Please supply any need attachments.							
Attachment 1: Attachment 2:	Attachment 3:						
(U.S. Code, Title 18, Section 1001), AND/OR	FORM ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT R REVOCATION OF ANY STATION AUTHORIZATION ND/OR FORFEITURE (U.S. Code, Title 47, Section 503).						
SATELLITE EARTH STATION AUTHORIZATIONS FCC Form 312 - Schedule B:(Technical and Operational Description)							
FOR OF	FFICIAL USE ONLY						
Location of Earth Station Site E1: Site Identifier: AES1	E5. Call Sign: E140087						

E2: Cont	tact Name	Netwo	rk Op	erations C	enter	E6. I	Phone	Number:	160387	90205	
E3. Stree	et:	62 Stat	te Ro	ute 101A		E7. C	City:		Amhers	st	
		Suite 2	2B			E8. 0	County	y:			
E4. State	e	NH				E9. 2	Zip Co	ode (03031		
E10. Are	ea of Operation	on:				CO	NUS				
E11. Lat	itude:	0°0'0	" 0.0								
E12. Lor	ngitude:	0°0'0	" 0.0								
E13. Lat	/Lon Coordin	nates are:				\circ_{N}	IAD-	27	$\circ_{ ext{NAL}}$) -83	● N/A
E14. Site Elevation (AMSL): 0.0 meters											
E15. If the proposed antenna(s) operate in the Fixed Satellite Service (FSS) with geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a) and (b) as demonstrated by the manufacturer's qualification measurement? If NO, provide as a technical analysis showing compliance with two-degree spacing policy.										●Yes On	No N/A
E16. If the proposed antenna(s) do not operate in the Fixed Satellite Service (FSS), or if they operate in the Fixed Satellite Service (FSS) with non-geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a2) and (b) as demonstrated by the manufacturer's qualification measurements?									with	o _{Yes} o ₁	No N/A
E17. Is the	• •	erated by rem	note co	ntrol? If YES	S, provide the	ne location ar	nd tele	phone number of	the	• Yes	o _{No}
E18. Is frequency coordination required? If YES, attach a frequency coordination report as								eport	o _{Yes}	● No	
E19. Is coordination with another country required? If YES, attach the name of the								o _{Yes}	● No		
country(ies) and plot of coordination contours as E20. FAA Notification - (See 47 CFR Part 17 and 47 CFR part 25.113(c)) Where											
854 and aviation FAILU THE R	d or the FA n? IRE TO C RETURN (AA's study OMPLY V OF THIS A	y rega WITH APPI	arding the	potentia PARTS 1	l hazard o	of the	e structure to		o _{Yes}	● No
	OF COMM										
Satellite	e Name:PE	ERMITTE	D LIS	ST If you	selected			e enter the foll	owing:		
E21. Co	ommon Na	me:					E22.	ITU Name:			
E23. O	rbit Locati	on:					E24.	Country:			
POINTS	OF COMM	UNICATION	N (Des	tination Poi	nts)						
E25. Si	te Identifie	r: AES1									
E26. Co	ommon Na	me:					E27	. Country:US	4		
ANTENN		7	1		1	1					
Site ID	E28. Antenna Id	E29. Quantity	II .	E30. ufacturer	E31. Model	E32. Antenna Size	1	E41/42. Anten Recieve(_		nTransmii atC	
AES1	AES1	50	II.	onics Sat	HR6400	0.24	29	0.0 dBi at 14.47	7		
E28. Antenna Id E35. Above Ground Level Minor/Major(meters) E36. Above Ground Level Minor/Major(meters) E37. Building Height Above Ground Level Minor/Major(meters) E38. Total Input Power at antenna flange (Watts) R E39.							Maximum ntenna ht Above ooftop neters)	E40. Total EIRP for al carriers			

										(===)
AES1	0.0/0.0		0.0	0.0	0.0		35.0	0.0		45.16
FREQUENCY										
E28.	E43/44.	E45.	E46	Antenna		E47.	E48. Maxi	mum	E49. Maxin	num ERIP
Antenna	Frequency	T/R	1	tion(H,V,		Emission	EIRP per		Density per	
Id	Bands(MHz)	Mode	Folariza	11011(11, 1,	L, K)	Designator	Carrier(d	BW)	Carrier(dI	3W/4kHz)
AES1	10950 11200	R	Horizonta	al and Ver	tical	48M6G7D	0.0		0.0	
E50. Modulation and Services Digital Data Services										
AES1	10950 11200	R	Horizonta	al and Ver	tical	54M0G7D	0.0		0.0	
E50. Mod	lulation and Serv	vices Di	gital Data	Services						
AES1	11450 12200	R	Horizonta	al and Ver	tical	48M6G7D	0.0		0.0	
E50. Mod	lulation and Serv	vices Di	gital Data	Services						
AES1	11450 12200	R	Horizonta	al and Ver	tical	54M0G7D	0.0		0.0	
E50. Mod	lulation and Serv	vices Di	gital Data	Services						
AES1	14000 14500	Т	Horizonta	al and Ver	tical	8M00G7D	45.16		12.94	

(dBW)

FREQUENCY COORDINATION

E50. Modulation and Services Digital Data Services

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)		E56. Earth Station Azimuth Angle Eastern Limit	E57. Antenna Elevation Angle Eastern Limit	E58. Earth Station Azimuth Angle Western Limit	Angle	E60. Maximum EIRP Density toward the Horizon(dBW/4kHz)
AES1	Geostationary	10950 11200	8.0/ 177.0	0.0	5.0	360.0	5.0	0.0
	Geostationary	11450 12200	8.0/ 177.0	0.0	5.0	360.0	5.0	0.0
	Geostationary	14000 14500	8.0/ 177.0	0.0	5.0	360.0	5.0	6.54

REMOTE CONTROL POINT LOCATION

REMOTE CONTROL POINT LOCAL	ION								
E61. Call Sign			none Number						
E030279	16038	790205							
NOTE: Please enter the callsign of the co	NOTE: Please enter the callsign of the controlling station, not the callsign for which this								
application is being filed.									
E62. Street Address									
NOC									
E63. City	E67. County		E64/68.	E66. Zip					
Amherst	Hillsborough		State/Country	Code					

SATELLITE EARTH STATION AUTHORIZATIONS FCC Form 312 - Schedule B:(Technical and Operational Description)

NH/ USA

03031

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_ocatio	n of Earth Stat	ion Site						
E1: Site	e Identifier:	AES2			E5. Ca	all Sign:	E14008	87
E2: Cor	ntact Name	Netwo	rk Operations C	enter	E6. Ph	one Number:	160387	790205
E3. Stre	eet:	62 Stat	e Route 101A		E7. Ci	ty:	Amher	st
		Suite 2	B		E8. Co	ounty:		
E4. Stat	te	NH			E9. Zi	p Code	03031	
E10. Area of Operation: CONUS								
E11. La	atitude:	0°0'0	" O.C					
E12. Lc	ongitude:	0°0'0	0.0 "					
E13. La	at/Lon Coordir	nates are:			\circ_{NA}	AD-27	\circ_{NAI}	O-83 ● N/A
E14. Si	te Elevation (A	AMSL):			0.0 m	eters		
E15. If the proposed antenna(s) operate in the Fixed Satellite Service (FSS) with geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a) and (b) as demonstrated by the manufacturer's qualification measurement? If NO, provide as technical analysis showing compliance with two-degree spacing policy. E16. If the proposed antenna(s) do not operate in the Fixed Satellite Service (FSS), or if they operate in the Fixed Satellite Service (FSS) with non-geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a2) and (b) as demonstrated by the manufacturer's qualification measurements?								
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.								
E18. Is frequency coordination required? If YES, attach a frequency coordination repor								o Yes o No
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as								o Yes ● No
FAA n 854 an aviatio FAILU	notification and or the FA on? URE TO C	is require AA's study OMPLY V	ee 47 CFR Part d, have you atta y regarding the VITH 47 CFR l	ached a potentia PARTS	copy of a co al hazard of	mpleted FC0 the structur	C Form e to	o Yes ● No
			APPLICATION	1.				
	S OF COMM				.1			
		•	ed OTHER, ple	ase enter				
E21. C	Common Na	me:			E	22. ITU Nam	e:	
E23. Orbit Location: E24. Country:								
E23. C	S OF COMMI	UNICATION	N (Destination Poir					
	, or equality		· (2 050111001311 2 011	ıts)				
OINTS	ite Identifie			ıts)				
OINTS E25. S		r:	(2 00000000 1 000	nts)		E27. Coun	ıtry:	
OINTS E25. S E26. C	ite Identifie Common Na	r:	(2 000000000000000000000000000000000000	nts)		E27. Coun	itry:	
OINTS E25. S E26. C	ite Identifie Common Na	me: E29.	E30. Manufacturer	E31.	E32. Antenna Size	E41/42. Aı	ıtenna Gai	nTransmint and/o
OINTS E25. S E26. C NTEN Site ID	ite Identifie Common Na NA E28. Antenna	me: E29.	E30.	E31.	Antenna Size	E41/42. Aı	ntenna Gai ve(dBi	nTransmint and/o i atGHz)

E28. Antenna Id	E33/34. Diameter Minor/Major(meters)		Sea Level	Height Above Ground Level (meters)	Input Power at antenna flange (Watts)	Antenna Height Above Rooftop (meters)	EIRP for al carriers (dBW)
AES2	0.0/0.0	0.0	0.0	0.0	11.75	0.0	41.9

FREQUENCY

E28. Antenna Id	E43/44. Frequency Bands(MHz)	E45. T/R Mode	E46. Antenna Polarization(H,V,L,R)	E47. Emission Designator	E48. Maximum EIRP per Carrier(dBW)	E49. Maximum ERIP Density per Carrier(dBW/4kHz)	
AES2	10950 11200	R	Horizontal and Vertical	2M94G7D	0.0	0.0	
E50. Modulation and Services Digital Data Services							
AES2	10950 11200	R	Horizontal and Vertical	48M6G7D	0.0	0.0	
E50. Mod	ulation and Serv	vices Di	gital Data Services				
AES2	10950 11200	R	Horizontal and Vertical	54M0G7D	0.0	0.0	
E50. Mod	ulation and Serv	vices Di	gital Data Services				
AES2	11450 12200	R	Horizontal and Vertical	2M94G7D	0.0	0.0	
E50. Mod	ulation and Serv	vices Di	gital Data Services				
AES2	11450 12200	R	Horizontal and Vertical	48M6G7D	0.0	0.0	
E50. Mod	ulation and Serv	vices Di	gital Data Services				
AES2	11450 12200	R	Horizontal and Vertical	54M0G7D	0.0	0.0	
E50. Mod	ulation and Serv	vices Di	gital Data Services				
AES2	14000 14500	T	Horizontal and Vertical	4M92G7D	36.81	6.71	
E50. Mod	ulation and Serv	vices Di	gital Data Services				
AES2	14000 14500	T	Horizontal and Vertical	8M00G7D	41.57	9.35	
E50. Mod	ulation and Serv	vices Di	gital Data Services				

FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	1	E56. Earth Station Azimuth Angle Eastern Limit	E57. Antenna Elevation Angle Eastern Limit	E58. Earth Station Azimuth Angle Western Limit	Angle	E60. Maximum EIRP Density toward the Horizon(dBW/4kHz)
AES2	Geostationary	10950 11200	8.0/ 177.0	0.0	5.0	360.0	5.0	0.0
	Geostationary	11450 12200	8.0/ 177.0	0.0	5.0	360.0	5.0	0.0
	Geostationary	14000 14500	8.0/ 177.0	0.0	5.0	360.0	5.0	-1.96

REMOTE CONTROL POINT LOCATION REMOTE CONTROL POINT LOCATION

E61. Call Sign	E65. Phone Number
E030279	16038790205
NOTE: Please enter the callsign of the controlling station, not the callsign for which this	
application is being filed.	
	1

NOC Reference Address			
E63. City	E67. County	E64/68.	E66. Zip
Amherst	Hillsborough	State/Country	Code
		NH/ USA	03031

FCC NOTICE REQUIRED BY THE PAPERWORK REDUCTION ACT

The public reporting for this collection of information is estimated to average 0.25 - 24 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the required data, and completing and reviewing the collection of information. If you have any comments on this burden estimate, or how we can improve the collection and reduce the burden it causes you, please write to the Federal Communications Commission, AMD-PERM, Paperwork Reduction Project (3060-0678), Washington, DC 20554. We will also accept your comments regarding the Paperwork Reduction Act aspects of this collection via the Internet if you send them to PRA@fcc.gov. PLEASE DO NOT SEND COMPLETED FORMS TO THIS ADDRESS.

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