Date & Time Filed: Aug 4 2004 1:30:37:050PM File Number: SES–LIC–INTR2004–01531 Callsign/Satellite ID:

A	PPLICATION FOR EARTH STAT	ION AUTHORIZATIONS	FCC Use Only
	FCC 312 MAIN FORM FOR C	OFFICIAL USE ONLY	
-	RMATION of this application to identify it of u-band Transmit/Receive Earth		
1–8. Legal Name of A	applicant		
Name:	ARTEL, Inc.	Phone Number:	703–620–1700 x8202
DBA Name:		Fax Number:	703–620–4262
Street:	1893 Preston White Drive	E-Mail:	ayazdani@artelinc.com
	Suite 220		

Street:	1893 Preston White Drive	E-Mail:	ayazdani@artelinc.co
	Suite 220		
City:	Reston	State:	VA
Country:	USA	Zipcode:	20191 –
Attention:	ABBAS YAZDANI		

lame:	Ed Spitler	Phone Number:	703-620-1700
ompany:	ARTEL, Inc.	Fax Number:	703-620-4264
street:	1893 Preston White Drive	E–Mail:	espitler@artelinc.com
	Suite 220		
City:	Reston	State:	VA
Country:	USA	Zipcode:	20191-
Contact Fitle:	Director, Satellite Services Department	Relationship:	Engineer

CLASSIFICATION OF FILING

 a. a. (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 Satellite (N/A) b9. Letter of Intent to Use Non–U.S. Licensed Satellite to Provide Service in the Unit States 	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.	 b. b1. Application for License of New Station b2. Application for Registration of New Domestic Receive–Only Station
	a. al. Earth Station	 (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 Satellite (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

 17c. Is a fee submitted with this applicat If Yes, complete and attach FCC Form Governmental Entity Other(please explain): 	159. If No, indicate reason for fee exemption (s	ee 47 C.F.R.Section 1.1114).
17d. Fee Classification BAX – Fixed Satellite T	Fransmit/Receive Earth	
Station	1	
18. If this filing is in reference to an existing station, enter:	19. If this filing is an amendment to a pending a(a) Date pending application was filed:	pplication enter: (b) File number of pending application:
(a) Call sign of station: Not Applicable	Not Applicable	Not Applicable

TYPE OF SERVICE

$\mathbf{F}_{\mathbf{r}}$ = $\mathbf{F}_{\mathbf{r}}$ = $1 \mathbf{G}_{\mathbf{r}}$ = $1 \mathbf{G}_{\mathbf{r}}$
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 applicable status. Choose	22. If earth station applicant, check all that apply.
only one.	Using U.S. licensed satellites
○ Common Carrier	Using Non–U.S. licensed satellites
23. If applicant is providing INTERNATIONAL COMMON CARRIER s facilities:	ervice, see instructions regarding Sec. 214 filings. Choose one. Are these
• 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 a	pplicable frequency band(s).
a. C–Band (4/6 GHz) b. Ku–Band (12/14 GHz)	
c.Other (Please specify upper and lower frequencies in MHz.)	
Frequency Lower: Frequency Upper:	

TYPE OF STATION

25. CLASS OF STATION: Choose the button next to the class of station that applies. Choose only one.
a. Fixed Earth Station
b. Temporary–Fixed Earth Station
c. 12/14 GHz VSAT Network
d. Mobile Earth Station
(N/A) e. Geostationary Space Station
(N/A) f. Non–Geostationary Space Station
g. Other (please specify)

26. TYPE OF EARTH STATION FACILITY: Choose only one.

Transmit/Receive
Transmit–Only
Receive–Only
N/A

PURPOSE OF MODIFICATION

27. The purpose of this proposed modification is to: (Place an 'X' in the box(es) next to all that apply.)

Not Applicable

ENVIRONMENTAL POLICY

28. Would a Commission grant of any proposal in this application or amendment have a significant environmental 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, aeronautical en route or aeronautical fixed radio station services are not required to respond to Items 30–34.

29. Is the applicant a foreign government or the representative of any foreign government?	O Yes ⊗ No O N/A
30. Is the applicant an alien or the representative of an alien?	O Yes ⊗ No O N/A

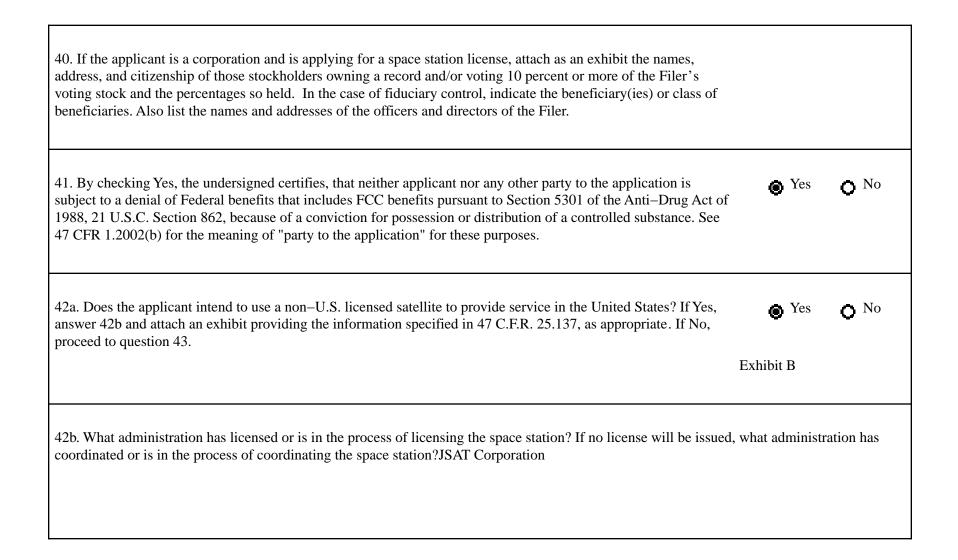
No No

31. Is the applicant a corporation organized under the laws of any foreign government?	O Yes	● 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	● ^{No}	O 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	No No	O 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	● 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	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	O 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.	O Yes	lo No



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.)

Artel, Inc., desires to license a domestic ku-band transmit/receive earth station on Hickam AFB. The earth station will transmit and receive digital voice and data traffic in support of US forces.

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 applicable response.)

Individual

O Unincorporated Association

- Partnership
- Corporation
- Governmental Entity
- Other (please specify)

45. Name of Person Signing Christina Beebe		46. Title of Person Signing Principal Associate, Access Partnership	
7. Please supply any need attachments.			
Attachment 1:	Attachment 2:	Attachment 3:	
(U.S. Code, Title	e 18, Section 1001), AND/OF	ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT VOCATION OF ANY STATION AUTHORIZATION ORFEITURE (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:	Hickam	E5. Call Sign:			
E2: Contact Name	Sid Whitson	E6. Phone Number:	808-448-3075		
E3. Street:	C Street, Building 1042	E7. City:	Honolulu		
	Hickam AFB	E8. County:	Honolulu		
E4. State	HI	E9. Zip Code	96853		
E10. Area of Opera	tion:	Honolulu Area			
E11. Latitude:	21 °20 '0.0 "N				
E12. Longitude:	157 °57 '0.0 "W				
E13. Lat/Lon Coordinates are:		O NAD-27	O NAD-83	O ^{N/A}	
E14. Site Elevation (AMSL):		1.83 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	O ^{No}	O ^{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?	O Yes	O ^{No}	● ^{N/A}
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	O Yes	۲	No

E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as Yes		
	۲	No
E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.113(c)) Where FAA notification is required, have you attached a copy of a completed FCC Form 854 and or the FAA's study regarding the potential hazard of the structure to aviation? FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL RESULT IN THE RETURN OF THIS APPLICATION.	۲	No

Satellite Name: OTHER If you selected OTHER, please enter the following:

E21. Common Name: JCSAT-1B	E22. ITU Name:				
E23. Orbit Location: 210.0 WL	E24. Country: Japan				
POINTS OF COMMUNICATION (Destination Points)					
E25. Site Identifier:					
E26. Common Name:	E27. Country:				

ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	Size <meters></meters>	E41/42. Antenna GainTransmint and/or Recieve (dBi at GHz)
Hickam	1	1	Harris Corporation	AN/TSC-152A	2.4	47.6 dBi at 11.950
						49.2 dBi at 14.250

Id	E33/34. Diameter Minor/Major (meters)			Height Above Ground	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers (dBW)
1	0.0/0.0	3.0	4.83	0.0	5.0	0.0	56.2

FREQUENCY

E28. Antenna Id	E43/44. Frequency Bands	E45. T/R Mode		E48. Maximum EIRP per Carrier	E49. Maximum ERIP Density per
	(MHz)		L,R)	(dBW)	Carrier
					(dBW/4kHz)

1	11700.0 12200.0	R	Linear and Circular	520KG7W	0.0	0.0		
E50. Modulation entirety.)	and Services (If th	ne complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its		
Digital Vo	ice and Data							
1	14000.0 14500.0	Т	Linear and Circular	520KG7W	51.2	30.1		
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.)							
Digital Voice and Data								

FREQUENCY COORDINATION

	E51. Satellite Orbit Type	Frequency Limits(MHz)	Range of Satellite Arc E/W Limit	Station Azimuth Angle	Antenna Elevation Angle Eastern Limit	Station Azimuth Angle Western	Antenna Elevation Angle	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
1	Geostationary	11700.0 12200.0	100.0/ 220.0	102.8	21.5	259.1	17.6	0.0

	Geostationary	14000.0 14500.0	100.0/ 220.0	102.8		21.5	259.1	17.6	-18.25
REMOTE CO	NTROL POIN	T LOCATION	1	1		•			
E61. Call Sign E65. Phone Number									
NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed. E62. Street Address									
E63. City E67. County							E64/68. State/Countr /	у	E66. Zip Code

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