Date & Time Filed: Feb 1 2018 3:00:51:330PM File Number: SES-MOD-INTR2018-00304

FCC APPLICATION FOR SPACE AND EARTH STATION:MOD OR AMD – MA	AIN 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 to Add New ESV Terminal

1–8. Legal Name of A <sub>1</sub>	pplicant		
Name:	SpeedCast Communications Inc	Phone Number:	832–668–2753
DBA Name:		Fax Number:	832–668–2780
Street:	4400 S. Sam Houston Parkway Ea	E-Mail:	leanne.young@speedcast.com
City:	Houston	State:	TX
Country:	USA	Zipcode:	77048 –
Attention:	Ms. Leanne Young		

9–16. Name of Contact Representative

Name: Carlos Nalda Phone Number: 5713325626

**Company:** LMI Advisors **Fax Number:** 

Street: 2550 M Street NW E-Mail: cnalda@lmiadvisors.com

Suite 345

City: Washington State: DC

Country: USA Zipcode: 20037–

**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

a2. Space Station

(N/A) b1. Application for License of New Station

(N/A) b2. Application for Registration of New Domestic Receive-Only Station

**o** b3. Amendment to a Pending Application

**b**4. Modification of License or Registration

b5. Assignment of License or Registration

b6. Transfer of Control of License or Registration

**b**7. 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 applicati a If Yes, complete and attach FCC Form	on? 159. If No, indicate reason for fee exemption (s	ee 47 C.F.R.Section 1.1114).
Governmental Entity Noncomme		
Other(please explain):		
17d.		
Fee Classification CGB – Mobile Satellite	Earth Stations	
18. If this filing is in reference to an existing station, enter:	19. If this filing is an amendment to a pending a modification please enter only the file number:	pplication enter both fields, if this filing is a
(a) Call sign of station: E060157	(a) Date pending application was filed:	(b) File number:
E000137		SESMFS2016100600829

# 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
c. Radiodetermination Satellite
d. Earth Exploration Satellite
e. Direct to Home Fixed Satellite
f. Digital Audio Radio Service
g. Other (please specify) ESV
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 Wing 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</b> Ku–Band (12/14 GHz)
c.Other (Please specify upper and lower frequencies in MHz.)
Frequency Lower: Frequency Upper: (Please specify additional frequencies in an attachment)

## 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>b.</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) ESV
26. TYPE OF EARTH STATION FACILITY:
Transmit/Receive Transmit-Only Receive-Only N/A
"For Space Station applications, select 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.)
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?	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.	<b>o</b> 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.	• Yes	<b>⊚</b> 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	<b>⊘</b> 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.	<b>⊚</b> 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.	<b>⊘</b> Yes	O No
42b. What administration has licensed or is in the process of licensing the space station? If no license will be issued, what coordinated or is in the process of coordinating the space station? Permitted List	t administr	ation has
43. Description. (Summarize the nature of the application and the services to be provided). (If the complete description box, please go to the end of the form to view it in its entirety.)	does not a	ppear in this
SpeedCast seeks to modify its existing ESV blanket license by adding authority a new ESV terminal type.  Narrative	, to ope	rate:

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.	<b>●</b> 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.	<b>o</b> c

#### **CERTIFICATION**

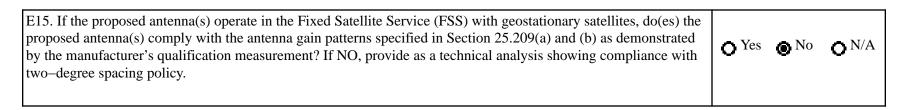
The Applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application. The 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		
O Unincorporated Association		
Partnership		
Corporation		
Governmental Entity		
Other (please specify)		
_		
45. Name of Person Signing	46. Title of Person Signing	
Leanne Young	Global Contracts, Legal	
>	<u> </u>	

(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:	KYWAY-1	E5. Call Sign:			
E2: Contact Name	NOC	E6. Phone Number:	832-668-2753		
E3. Street:	4400 S. Sam Houston Parkway East	E7. City:	Houston		
		E8. County:	Harris		
E4. State	TX	E9. Zip Code	77048		
E10. Area of Opera	tion:	U.S. and international waterways			
E11. Latitude:	0 °0 '0.0 "				
E12. Longitude:	0 °0 '0.0 "				
E13. Lat/Lon Coord	dinates are:	○ NAD-27	O NAD-83	N/A	
E14. Site Elevation (AMSL):		0.0 meters			



E16. If the proposed antenna(s) do not operate in the Fixed Satellite Scatellite Service (FSS) with non–geostationary satellites, do(es) the pregain patterns specified in Section 25.209(a2) and (b) as demonstrated by measurements?	oposed antenna(s) comply with the antenna	O Yes	O No	<b>⊚</b> N/A
E17. Is the facility operated by remote control? If YES, provide the loc point.	cation and telephone number of the control	Yes	٥	No
E18. Is frequency coordination required? If YES, attach a frequency co	pordination report as	O Yes	•	No
E19. Is coordination with another country required? If YES, attach the coordination contours as	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 FA the structure to aviation?  FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL APPLICATION.	O Yes	•	No	
POINTS OF COMMUNICATION				
Satellite Name: PERMITTED LIST   If you selected OTHER, plo	ease enter the following:			
E21. Common Name:	E22. ITU Name:			
E23. Orbit Location:	E24. Country:			
POINTS OF COMMUNICATION (Destination Points)				
E25. Site Identifier: KYWAY–1				

E26. Common Name:	E27. Country: USA
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# 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)
KYWAY-1	KYWAY-1	1000	Kymeta Corporation	Type 1	0.7	32.3 dBi at 11.450
KYWAY-1	KYWAY-1	1000	Kymeta Corporation	Type 1	0.7	32.8 dBi at 12.200
KYWAY-1	KYWAY-1	1000	Kymeta Corporation	Type 1	0.7	32.9 dBi at 14.000
KYWAY-1	KYWAY-1	1000	Kymeta Corporation	Type 1	0.7	33.0 dBi at 14.500

Id	Diameter		, ,	Height Above Ground Level	Input Power at antenna flange	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
KYWAY-1	0.0/0.0	0.0	0.0	0.0	8.0	0.0	43.0

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)
KYWAY-1	10950 11200	R	Horizontal and Vertical	1M50G1D	0.0	0.0
E50. Modulation entirety.)	n and Services (If the	ne complete descrip	otion does not appear in	this box, please go	to the end of the form	to view it in its
KYWAY-1	10950 11200	R	Horizontal and Vertical	36M0G1D	0.0	0.0
E50. Modulation entirety.)  Data	n and Services (If the	ne complete descrip	otion does not appear in	this box, please go	to the end of the form	to view it in its
KYWAY-1	11450 11700	R	Horizontal and Vertical	1M50G1D	0.0	0.0

E50. Modulati entirety.)	ion and Services (If	the complete descri	ption does not appear	in this box, please	go to the end of	the form to view it in its
Data						
KYWAY-1	11450 11700	R	Horizontal and Vertical	36M0G1D	0.0	0.0
E50. Modulati entirety.)	ion and Services (If	the complete descri	ption does not appear	in this box, please	go to the end of	the form to view it in its
Data						
KYWAY-1	11700 12200	R	Horizontal and Vertical	1M50G1D	0.0	0.0
E50. Modulati entirety.)	ion and Services (If	the complete descri	ption does not appear	in this box, please	go to the end of	the form to view it in its
Data						
KYWAY-1	11700 12200	R	Horizontal and Vertical	36M0G1D	0.0	0.0

E50. Modulati entirety.)	on and Services (If	the complete descripti	ion does not appear in	n this box, please go t	o the end of the form	to view it in its
Data						
KYWAY-1	14000 14500	Т	Horizontal and Vertical	1M50G1D	43.0	17.24
E50. Modulati entirety.)	on and Services (If	the complete descripti	ion does not appear in	n this box, please go t	o the end of the form	to view it in its
Data						
KYWAY-1	14000 14500	Т	Horizontal and Vertical	3M00G1D	43.0	14.23
E50. Modulati entirety.)	on and Services (If	the complete description	ion does not appear in	n this box, please go t	o the end of the form	to view it in its
Data						
KYWAY-1	14000 14500	Т	Horizontal and Vertical	5M00G1D	43.0	12.02

E50. Modula entirety.)	tion and Services	(If the complete d	escription does not appear	in this box, please	go to the end of t	he form to view it in its
Data						
KYWAY-1	14000 14500	Т	Horizontal and Vertical	611KG1D	43.0	21.14
Data						
KYWAY-1	14000 14500	Т	Horizontal and Vertical	6M96G1D	43.0	10.58
E50. Modula entirety.)	tion and Services	(If the complete d	escription does not appear	in this box, please	go to the end of t	he form to view it in its

FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	E54/55. Range of Satellite Arc Eastern/West ern Limit	E56. Earth Station Azimuth Angle Eastern 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)
KYWAY-1	Geostationary	10950 11200	15.0/180.0	0.0	15.0	360.0	15.0	0.0
	Geostationary	11450 11700	15.0/180.0	0.0	15.0	360.0	15.0	0.0
	Geostationary	11700 12200	15.0/180.0	0.0	15.0	360.0	15.0	0.0
	Geostationary	14000 14500	15.0/180.0	0.0	15.0	360.0	15.0	-16.86

# REMOTE CONTROL POINT LOCATION

E61. Call Sign  NOTE: Please enter the callsign of the contro callsign for which this application is being filed.	E66. Phone Number 832–668–2753			
E62. Street Address 4400 S. Sam Houston Parkway Ea				
E63. City Houston	E68. County Harris		E67/68. State/Country TX/ USA	E64. Zip Code 77048

#### FCC NOTICE REQUIRED BY THE PAPERWORK REDUCTION ACT

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