

# UNITED STATES OF AMERICA FEDERAL COMMUNICATIONS COMMISSION

# **RADIO STATION AUTHORIZATION**

Name: SpeedCast Communications Inc Call Sign: E030159

Authorization Type: Modification of License File Number: SES-MOD-20170427-00474

Non Common Carrier Grant date: 06/14/2017 Expiration Date: 01/13/2019

Nature of Service: Fixed Satellite Service

Class of Station: Fixed Earth Stations

### A) Site Location(s)

| # Site ID           | Address                   | Latitude     | Longitude    | Elevation<br>(Meters) | Special Provisions<br>NAD (Refer to Section H) |  |  |
|---------------------|---------------------------|--------------|--------------|-----------------------|--|--|--|
| 1) Gunnison<br>Spar | GULF OF MEXICO            | 27°18'19.0"N | 93°32'20.0"W | 20.1                  | 83   |  |  |
|                     | GULF OF MEXICO, GULF OF I | MEXICO,      |              |                       |  |  |  |

Subject to the provisions of the Communications Act of 1934, The Communications Satellite Act of 1962, subsequent acts and treaties, and all present and future regulations made by this Commission, and further subject to the conditions and requirements set forth in this license, the grantee is authorized to construct, use and operate the radio facilities described below for radio communications for the term beginning January 13, 2004 (3 AM Eastern Standard Time) and ending January 13, 2019 (3 AM Eastern Standard Time). The required date of completion of construction and commencement of operation is June 14, 2018 (3 AM Eastern Standard Time). Grantee must file with the Commission a certification upon completion of construction and commencement of operation.

#### **B) Particulars of Operations**

The General Provision 1010 applies to all receiving frequency bands.

The General Provision 1900 applies to all transmitting frequency bands.

For the text of these provisions, refer to Section H.

| #    | Frequency<br>(MHz) | Polarization<br>Code | n<br>Emission | Tx/Rx<br>Mode | Max<br>EIRP<br>/Carrier<br>(dBW) | Max EIRP<br>Density<br>/Carrier<br>(dBW/4kHz) | Associated<br>Antenna | Provisions<br>(Refer to<br>Section H) | Modulation/<br>Services |       |     |
|------|--------------------|----------------------|---------------|---------------|----------------------------------|---|-----------------------|---------------------------------------|-------------------------|-------|-----|
| 1) 5 | 925.0000-6425.0000 | H,V,L,R              | 4M47G7W       | Tx            | 50.05                            | 19.56   | Seatel9797            |                                       | DIGITAL                 |       |     |
| 2) 5 | 925.0000-6425.0000 | H,V                  | 640KG7W       | Tx            | 39.92                            | 17.88   | Seatel9797            |                                       | DIGITAL                 |       |     |
| 3) 5 | 925.0000-6425.0000 | H,V,L,R              | 1M00G1W       | Tx            | 48.97                            | 25.00   | Seatel9797            |                                       | Digital Data, QPS       | SK    |     |
| 4) 5 | 925.0000-6425.0000 | H, V                 | 9M38G7W       | Tx            | 59.50                            | 25.80   | Seatel9797            |                                       | Digital video, a        | audio | and |
| 5)3  | 700.0000-4200.0000 | H,V,L,R              | 4M47G7W       | Rx            |                                  |   | Seatel9797            |                                       | DIGITAL                 |       |     |
| 6) 3 | 700.0000-4200.0000 | H,V                  | 640KG7W       | Rx            |                                  |   | Seatel9797            |                                       | DIGITAL                 |       |     |
| 7) 3 | 700.0000-4200.0000 | H,V,L,R              | 1M00G1W       | Rx            |                                  |   | Seatel9797            |                                       | Digital Data, QPS       | SK    |     |
| 8) 3 | 700.0000-4200.0000 | H, V                 | 9M38G7W       | Rx            |                                  |   | Seatel9797            |                                       | Digital video, a        | audio | and |

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### **C) Frequency Coordination Limits**

| #  | Frequency Limits (MHz) | Satellite Arc<br>(Deg. Long.)<br>East West<br>Limit Limit | Elevation<br>(Degrees)<br>East West<br>Limit Limit | Azimuth (Degrees) East West Limit Limit | Max EIRP<br>Density toward<br>Horizon<br>(dBW/4kHz) | Associated<br>Antenna(s) |
|----|------------------------|---|--|---|---|--------------------------|
| 1) | 5925.0000-6425.0000    | 74.0W-139.0W  | 51.5-31.1  | 142.3-245.7                             | -4.4  | Seate19797               |
| 2) | 3700.0000-4200.0000    | 74.0W-139.0W  | 51.5-31.1  | 142.3-245.7                             |   | Seate19797               |
| 3) | 5925.0000-6425.0000    | 60.0W-143.0W  | 41.3-27.6  | 124.7-248.6                             | -20.73  | Seate19797               |
| 4) | 3700.0000-4200.0000    | 60.0W-143.0W  | 41.3-27.6  | 124.7-248.6                             |   | Seate19797               |

### **D) Points of Communications**

The following stations located in the Satellite orbits consistent with Sections B and C of this Entry:

- 1) Gunnison Spar to AMC-9 (S2434) @ 85 degrees W.L. (U.S.-Licensed)
- 2) Gunnison Spar to Permitted Space Station List
- 3) Gunnison Spar to Eutelsat 113WA (S2695) @ 113 degrees W.L. (formerly SATMEX 6) (Mexico-licensed)

### E) Antenna Facilities

| Site<br>ID  | Antenna<br>ID   | Units  | Diameter<br>(meters) | Manufacturer      | Model numb   | Site<br>Elevation<br>er (Meters) | Max<br>Antenna Height<br>(Meters) | Provisions<br>(Refer to<br>Section H) |
|-------------|-----------------|--------|----------------------|-------------------|--------------|----------------------------------|-----------------------------------|---------------------------------------|
| Gunnison Sp | oa Seatel9797   | 1      | 2.4                  | Seatel            | 9797         | 20.1                             | 27.1 AGL/ 27.1 AMS                | <br>L                                 |
| Max         | Gains(s):       | 41.7   | dBi @                | 6.1750 GHz        | 38.5 dBi @ 4 | .0000 GHz                        |                                   |                                       |
| Maxi        | mum total input | power  | at anteni            | na flange (Watts) | = 60.00      | )                                |                                   |                                       |
| Maxi        | mum aggregate d | output | EIRP for a           | all carriers (dBW | 59.50        | )                                |                                   |                                       |

### **F) Remote Control Point:**

Gunnison Spar 4400 S. SAM HOUSTON Call Sign:

HOUSTON, Harris, TX 77048

832-668-2300

## G) Antenna Structure marking and lighting requirements:

None unless otherwise specified under Special and General Provisions

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## H) Special and General Provisions

A) This RADIO STATION AUTHORIZATION is granted subject to the following special provisions and general conditions:

- 4 --- Licensee must ensure that a current listing of the name, title, mailing address, email address, and telephone number of the responsible point of contact are on file at the FCC. Any changes must be filed electronically in the International Bureau Filing System (IBFS) in the "Other Filings" tab within 10 days of the change.
- 5 --- Licensee must notify the Commission when this earth station is no longer operational or when it has not been used to provide any service during any 6-month operation.
- 6 --- Licensee must comply with the license modification and notification requirements of 47 CFR § 25.118 to change the coordinates of its authorized earth station.
- 2300 --- Authority is granted to operate this station by remote control provided that: (1)the parameters of the transmissions of this station monitored at the remote control point, and the operational functions sufficient to ensure that the operations of this station are in full compliance with the station authorization at all times; (2) upon detection by the grantee, or upon notification from the Commission, of a deviation of the operation of this station, transmissions shall be immediately suspended until the deviation is corrected, except that transmissions concerning the immediate safety of life or property may be conducted for the duration of such emergency; and (3) the grantee shall have available, at all times, the technical personnel necessary to perform the technical servicing and maintenance of this station expeditiously. See also Public Notice "The International Bureau Provides Guidance Concerning the Relocation of Earth Station Remote Control Points", DA 06-978 (rel. May 4, 2006).
- 90398 --- Changes to previously authorized transmitting facilities, operations and devices regulated by the Commission that may have significant environmental impact, and are not excluded by §1.1306, require the preparation of an Environmental Assessment (EA) by the licensee. (See 47 C.F.R. §§1.1307, 1.1308 and 1.1311)
- 90399 --- The licensee shall, at all times, take all necessary measures to ensure that operation of this (these) authorized earth station(s) does not create potential exposure of humans to radiofrequency radiation in excess of the FCC exposure limits defined in 47 CFR §§ 1.1307(b) and 1.1310. Physical measures must be taken to ensure compliance with limits for both occupational/controlled exposure and for general population/uncontrolled exposure, as defined in these rule sections. Compliance can be accomplished in most cases by appropriate restrictions, such as fencing. Requirements for restrictions can be determined by predictions based on calculations, modeling, or by field measurements. The FCC's OET Bulletin 65 (available on-line at www.fcc.gov/oet/rfsafety) provides information on predicting exposure levels and on methods for ensuring compliance, including the use of warning and alerting signs and protective equipment for workers.
- 90422 --- The licensee certifies that the Sea Tel model 9797 antenna authorized by this license complies with 47 C.F.R. Section 25.209 of the Rules and Regulations of the Federal Communications Commission and that the input power spectral density into the antenna will not exceed -2.7 dBW/4kHz for digital carriers complies with 47 C.F.R. Section 25.212(d) of the Rules and Regulations of the Federal Communications Commission.

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A) This RADIO STATION AUTHORIZATION is granted subject to the following special provisions and general conditions:

900407 --- The Permitted Space Station List (Permitted List) is a list of all geostationary space stations providing fixed-satellite service pursuant to a Commission license or grant of U.S. market access. The Permitted List currently includes the following frequency bands per §25.103 and §25.115(k)(1):

3600-4200 MHz (space-to-Earth)

5850-6725 MHz (Earth-to-space)

10.95-11.2 GHz (space-to-Earth)

11.45-12.2 GHz (space-to-Earth)

13.75-14.5 GHz (Earth-to-space)

18.3-18.8 GHz (space-to-Earth)

19.7-20.2 GHz (space-to-Earth)

24.75-25.25 GHz (Earth-to-space)

28.35-28.6 GHz (Earth-to-space)

29.25-30.0 GHz (Earth-to-space).

Earth stations with "Permitted List" designated as a point of communication may access any space station on the Permitted List, provided the operations comply with the applicable "routine" uplink and downlink limits, are within the specific frequency bands authorized in the earth station license, have completed coordination with terrestrial stations pursuant to §25.203, and otherwise comply with all terms and conditions of both the earth station license and the space station grant.

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#### B) This RADIO STATION AUTHORIZATION is granted subject to the additional conditions specified below:

This authorization is issued on the grantee's representation that the statements contained in the application are true and that the undertakings described will be carried out in good faith.

This authorization shall not be construed in any manner as a finding by the Commission on the question of marking or lighting of the antenna system should future conditions require. The grantee expressly agrees to install such marking or lighting as the Commission may require under the provisions of Section 303(q) of the Communications Act. 47 U.S.C. § 303(q).

Neither this authorization nor the right granted by this authorization shall be assigned or otherwise transferred to any person, firm, company or corporation without the written consent of the Commission. This authorization is subject to the right of use or control by the government of the United States conferred by Section 706 of the Communications Act. 47 U.S.C. § 706. Operation of this station is governed by Part 25 of the Commission's Rules. 47 C.F.R. Part 25.

This authorization shall not vest in the licensee any right to operate this station nor any right in the use of the designated frequencies beyond the term of this license, nor in any other manner than authorized herein.

This authorization is issued on the grantee's representation that the station is in compliance with environmental requirements set forth in Section 1.1307 of the Commission's Rules. 47 C.F.R. § 1.1307.

This authorization is issued on the grantee's representation that the station is in compliance with the Federal Aviation Administration (FAA) requirements as set forth in Section 17.4 of the Commission's Rules. 47 C.F.R.§ 17.4.

The following condition applies when this authorization permits construction of or modifies the construction permit of a radio station.

This authorization shall be automatically forfeited if the station is not ready for operation by the required date of completion of construction unless an application for modification of authorization to request additional time to complete construction is filed by that date, together with a showing that failure to complete construction by the required date was due to factors not under control of the grantee.

Licensees are required to pay annual regulatory fees related to this authorization. The requirement to collect annual regulatory fees from regulates is contained in Public Law 103-66, "The Omnibus Budget Reconciliation Act of 1993." These regulatory fees, which are likely to change each fiscal year, are used to offset costs associated with the Commission's enforcement, public service, international and policy and rulemaking activities. The Commission issues a Report and Order each year, setting the new regulatory fee rates. Receive only earth stations are exempt from payment of regulatory fees.

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