Before the FEDERAL COMMUNICATIONS COMMISSION Washington, DC 20554

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Application of Speedcast Communications) Call Sign: E090176
Inc., as debtor in possession, to Modify its)
Existing Earth Station Onboard Vessel) File No. SES-MOD
("ESV") Blanket License)

APPLICATION TO MODIFY ESV BLANKET LICENSE

By this application, Speedcast Communications Inc., as debtor in possession, ("Speedcast") respectfully seeks to modify its existing earth station onboard vessel ("ESV") blanket license, Call Sign E090176,¹ by adding authority to operate five (5) additional ESV terminals. As discussed below, these terminals will operate in (i) conventional C-band frequencies from 3700-4200 MHz (space-to-Earth) and 5925-6425 MHz (Earth-to-space); (ii) conventional Ku-band frequencies from 11.7-12.2 GHz (space-to-Earth) and 14.0-14.5 GHz (Earth-to-space); and (iii) conventional Ka-band frequencies from 18.3-18.8 GHz (space-to-Earth), 19.7-20.2 GHz (space-to-Earth), 28.35-28.6 GHz (Earth-to-space) and 29.25-30.0 GHz (Earth-to-space). The proposed operations will comply with the Commission's earth station in motion ("ESIM") rules² and grant of this modification will serve the public interest by facilitating the deployment of Speedcast's next-generation maritime services to the benefit of commercial and government users.

Speedcast seeks to add the following ESV terminals to the *Speedcast ESV License* for operation in the bands noted below:

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¹ See Speedcast Communications Inc., as a debtor-in-possession, File No. SES-MOD-2015210-00928, Call Sign E090176 ("Speedcast ESV License").

² See 47 C.F.R. § 25.218.

ESV Terminal	Frequency Band
Intellian v240	Conventional C-band
Intellian v240MT	Conventional C/Ku/Ka-band
Orbit Ocean TRx7	Conventional C/Ku/Ka-band ³
Cobham Sailor 900	Conventional Ku-band
SeaTel 9711	Conventional Ku-band

The Commission has previously authorized each of these ESV terminals.⁴ The proposed operational parameters of each ESV terminal are set forth in the accompanying FCC Form 312 Schedule B, which are consistent with the relevant EIRP spectral density masks in Section 25.218(f) Commission's rules. Therefore, this modification application should be eligible for routine processing.

Speedcast notes that the Commission has evaluated and approved the antenna performance characteristics, as well as radiation hazard considerations, associated with the subject ESV terminals.⁵ In the interest of administrative convenience and because radiation hazard considerations for each ESV terminal type operating at compliant power levels are independent of the terminal operator, Speedcast hereby incorporates by reference these prior grants and underlying materials. Out of an abundance of caution and to ensure that the

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³ Speedcast notes that although the Orbit Ocean TRx7 is capable of operating in the C-band, Ku-band and Ka-band, a single terminal can only be configured to operate in two of the three bands.

⁴ See, e.g., Comsat Inc., File No. SES-MOD-20151009-00704, Call Sign KA313 (authorizing the v240 terminal for C-band operations); Speedcast Communications Inc., as a debtor-in-possession, File No. SES-STA-20200422-00440, Call Sign E090176 (authorizing the V240MT terminal for Ku-band and Kaband operations); Marlink, Inc., File No. SES-MOD-20160630-00625, Call Sign WB36 (authorizing the v240MT for C-band operations and the OceanTrx7 for Ku-band and C-band operations); Rignet Satcom, Inc., File No. SES-LIC-20160107-00027, Call Sign E160005 (authorizing the OceanTRx7 terminal, also referred to as the Orbit 2.2, in the Ka-band); and ITC Global, File No. SES-MFS-20180829-02321, Call Sign E070239 (authorizing the Sailor 900 and the SeaTel 9711 terminals for Ku-band operations).

⁵ Speedcast provides the following links in IBFS to radiation hazard reports for each ESV terminal: Intellian v240 C-band Radiation Hazard Report; V240MT C-band Radiation Hazard Report; V240MT Ka-band and Ku-band Radiation Hazard Reports; OceanTrx7 Ka-band Radiation Hazard Report; OceanTrx7 Ku-band and C-band Radiation Hazard Reports; Sailor 900 Ku-band Radiation Hazard Report; SeaTel 9711 Ku-band Radiation Hazard Report.

operational parameters included in the radiation hazard assessments match those proposed for the terminals, Speedcast also submits new assessments for the Intellian v240MT (2.4m Ku-band) and Orbit Ocean TRx7 (2.2m Ka-band) terminals.⁶

Of course, radiation hazard issues associated with each ESV terminal type must be considered in the context of installation onboard individual vessels. In this connection, Speedcast acknowledges Section 25.228(d)⁷ and Speedcast will ensure that each ESV installation complies with the requirements of this provision.

Other than adding ESV terminals that have been previously authorized to operate by the Commission, no other information associated with the *Speedcast ESV License* will change in the context of the proposed modification. Thus, Speedcast will continue to comply with the Commission's ESIM and ESV-specific rules.

Based on the information set forth in this application, including the compliant operational parameters set forth in FCC Form 312 Schedule B, Speedcast respectfully requests that the Commission modify the *Speedcast ESV License*, Call Sign E090176, by adding authority to operate the subject ESV terminals in conventional C-band, Ku-band, and Ka-band frequencies as described herein.

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⁶ See Technical Appendix (attached). Speedcast respectfully reserves the right to clarify or supplement the materials incorporated by reference and submitted herewith should it be deemed necessary or appropriate by the Commission.

⁷ Section 25.228(d) provides that "ESIM licensees must ensure installation of ESIM terminals on vehicles by qualified installers who have an understanding of the antenna's radiation environment and the measures best suited to maximize protection of the general public and persons operating the vehicle and equipment. An ESIM terminal exhibiting radiation exposure levels exceeding 1.0 mW/cm2 in accessible areas, such as at the exterior surface of the radome, must have a label attached to the surface of the terminal warning about the radiation hazard and must include thereon a diagram showing the regions around the terminal where the radiation levels could exceed the maximum radiation exposure limit specified in 47 CFR 1.1310 Table 1" 47 C.F.R. § 25.228(d).