

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Application of Harris CapRock)	
Communications, Inc. for Modification of)	File No:
License to Add an Earth Stations Onboard)	
Vessel (“ESV”) Terminal in the 14.0-14.5)	Call Sign: E090176
GHz (Earth-to-space), 5.925-6.425 GHz)	
(Earth-to-space), 11.7-12.2 GHz (space-to-)	
Earth) and 3.700-4.200 GHz (space-to-)	
Earth) Frequency Bands)	

Application for License Modification

By this application, Harris CapRock Communications, Inc. (“Harris CapRock”) seeks Commission authority to modify its existing earth station onboard vessel (“ESV”) license, Call Sign E090176. Specifically, Harris CapRock seeks to add 100 Intellian Model v240M dual-band ESV terminals (“v240M”) to the license for operations in the 5.925-6.425 GHz (Earth-to-space) and 3.7-4.2 GHz (space-to-Earth) bands (collectively, the “C-band”), and the 14.0-14.5 GHz (Earth-to-space) and 11.7-12.2 GHz (space-to-Earth) bands (collectively, the “Ku-band”). The v240M terminal will enhance Harris CapRock’s authorized ESV network, providing a wide array of essential satellite communications services to vessels in motion, stationary oil drilling platforms and mobile rigs, where alternative communications services are not available.

I. BACKGROUND

The v240M terminal is comprised of a 2.4m circular reflector antenna and provides auto-switching between C-band and Ku-band within seconds. The Commission has previously authorized the v240M terminal in the C-band for use in a commercial ESV network¹ and Harris CapRock’s proposed operations will be of a similar nature. Furthermore, Harris CapRock certifies that its proposed Ku-band operations will fully

¹ See File No. SES-MFS-20130504-00363 (Call Sign KA313).

comply with the terms and conditions in its existing Ku-band ESV blanket license.² As further detailed below and in the Technical Appendix, the v240M terminal is designed to meet the Commission's requirements for ESV operations in the C-band and Ku-band, including: (i) maintaining off-axis EIRP within the levels set forth in the applicable FCC mask; (ii) maintaining a pointing accuracy of 0.2° or better; (iii) automatic cessation of emissions within 100 ms if pointing offset exceeds 0.5°; and (iv) not resuming transmissions until pointing accuracy is within 0.2°.³

Grant of the requested authority will allow Harris CapRock to improve its commercial ESV network and enable more efficient provision of critical communications services to government users and commercial customers in the maritime, oil and gas, and other industries using innovative new terminal technologies. Consistent with Section 25.117 of the Commission's rules, Harris CapRock provides the attached Form 312, Schedule B, Technical Appendix and associated exhibits for relevant information relating to the v240M's operational characteristics, including the information required under Sections 25.221 and 25.222 of the Commission's rules.

II. DISCUSSION

Harris CapRock is filing this modification application to include the v240M terminal in its commercial ESV license Call Sign E090176.⁴ Harris CapRock seeks authority to operate the v240M terminal in accordance with the geographic limitations and coordination provisions in the Commission's rules designed to protect other users of the spectrum. For C-band operations in particular, consistent with Commission policy, Harris CapRock intends to file coordination information for routes within 200 km from the baseline of the United States, or within 200 km from a U.S.-licensed fixed service

² See File No. SES-MOD-20141104-00845 (Call Sign E060157).

³ See 47 C.F.R. §§ 25.221 & 25.222.

⁴ Based on consultations with Commission staff, adding the dual-band v240M terminal to Harris CapRock's existing C-band ESV blanket license to obtain C-band and Ku-band operating authority would further the interests of administrative convenience by facilitating a more efficient license modification and review process.

offshore installation, in a separate submission.⁵ In the meantime, however, the Commission can add the v240M terminal to Harris CapRock's existing ESV license consistent with past precedent.⁶

Harris CapRock does not seek to alter the authorized C-band satellite points of communication currently in its ESV license. Furthermore, for Ku-band operations, Harris CapRock only seeks authority to operate the v240M terminal with any U.S. licensed satellite and non-U.S. licensed satellite on the Commission's Permitted Space Station List. Harris CapRock does not request any changes to its network control and hub earth station facilities associated with its licensed ESV operations. As further discussed in the Technical Appendix, Harris CapRock will ensure that its proposed operations will avoid interference to other co-frequency systems and services, and will otherwise comply with Commission policies embodied in its C-band and Ku-band ESV rules.⁷

Grant of the requested ESV operating authority will strongly serve the public interest. As described in the application materials, the new v240M terminal complies fully with the FCC's rules and policies governing C-band and Ku-band ESV operations. In addition, adding the v240M to Harris CapRock's license will allow Harris CapRock to provide more robust broadband satellite communications services to a wide array of users, including vessels in motion, marine barges and remote oil platforms that may be unable to obtain communications services through alternative facilities. Users will be able to utilize high-speed Internet access, corporate VPN, e-mail, voice and other services, including emergency communications to support employees in remote locations, throughout international and U.S. waterways. Finally, the v240M dual-band terminal will facilitate operational flexibility and service optimization based on spectrum availability and customer needs.

⁵ See 47 C.F.R. § 25.221(a)(12). Harris CapRock is in the process of coordinating certain C-band ESV routes with potentially affected fixed service licensees and anticipates filing separate coordination information for these routes in the near term.

⁶ See *id.* The Commission routinely grants authority to operate C-band ESVs separate from the route coordination process.

⁷ See, e.g., 47 C.F.R. §§ 25.221 & 25.222.

III. CONCLUSION

In view of the foregoing, Harris CapRock respectfully requests that the Commission grant its application to modify its existing ESV license (Call Sign E090176) by adding authority to operate the v240M terminal in C-band and Ku-band frequencies at the earliest practicable time.