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

In the Matter of	)
Amendment of Application of Harris	)
CapRock Communications, Inc. for	)
Modification of License to Add an Earth	)
Stations Onboard Vessel ("ESV") Terminal	ý
in the 14.0-14.5 GHz (Transmit), 5.925-	ý
6.425 GHz (Transmit), 11.7-12.2 GHz	ý
(Receive) and 3.700-4.200 GHz (Receive)	ý
Frequency Bands	Ś

File No: SES-MOD-20150915-00599

Call Sign: E060157

## **Amendment of Application for License Modification**

Harris CapRock Communications, Inc. ("Harris CapRock") hereby amends its pending application to modify its existing earth station onboard vessel ("ESV") license, Call Sign E060157, by updating certain information set forth in the original modification application.<sup>1</sup> In particular, Harris CapRock updates technical information provided in the FCC Form 312 and Schedule B, and submits new declarations of conformity and radiation hazard studies for both C-band and Ku-band.

The ST5000-2.4 terminal will enhance Harris CapRock's authorized ESV network and provide a wide array of essential satellite communications services to vessels in motion, stationary oil drilling platforms and movable rigs where alternative communications services are not available. In order to maximize the utility of its ESV network, Harris CapRock respectfully requests that the Commission grant the above-referenced application, as amended, at the earliest practicable time.

Harris CapRock does not seek to alter the authorized satellite points of communication in its ESV license or to change the network control and hub earth station facilities associated with its licensed ESV operations. Although the ST5000-2.4 terminal will only communicate with currently authorized points of communication (which are all Permitted List satellites), Harris CapRock clarifies in the Schedule B that it is requesting

<sup>&</sup>lt;sup>1</sup> See File No. SES-MOD-20150915-00599 (Call Sign E060157).

ALSAT designation to communicate with all satellites on the Commission's Permitted Space Station List.

Harris CapRock also updates information in the Schedule B relating to the ST5000-2.4's operational parameters in both C-band and Ku-band, specifically: (i) to clarify the antenna transmit gain (Items E41/42); (ii) to increase total input power at antenna flange (Item E38); (iii) to increase total EIRP for all carriers value (Item E40); (iv) to modify the maximum EIRP per carrier values (Item E48) and; (v) to modify the maximum EIRP Density per Carrier values (Item E49).<sup>2</sup>

Finally, in the attached Appendix, Harris CapRock provides new Sections 25.221 and 25.222 declarations of conformity for the ST5000-2.4, citing to the most recent version of FCC Rules. As noted on the declarations, the ST50000-2.4 meets the off-axis EIRP spectral density requirements where the number of simultaneously transmitting ESV terminals (N) equals 1 because Harris CapRock uses a transmission scheme where N always equals 1. Harris CapRock also provides new C-band and Ku-band radiation hazard studies to reflect the adjusted power values.

Harris CapRock respectfully requests that the Commission grant the pending application to modify its existing ESV license (Call Sign E060157) by adding the ST5000-2.4 terminal, including the information provided in this amendment application.

<sup>&</sup>lt;sup>2</sup> Harris CapRock notes that it has calculated off-axis EIRP spectral density for each proposed carrier to be compliant with the level set forth in Section 25.221 and 25.222 of the Commission's rules. Thus, narrow carriers have a lower input power spectral density than wider carriers.