

EXPERIMENTAL LICENSE RENEWAL APPLICATION PUBLIC INTEREST STATEMENT

Raysat Antenna Systems, LLC (“RAS”), by its attorneys, hereby files this experimental license application for renewed authority to operate up to 100 Land Mobile-Satellite Service (“LMSS”) earth stations (previously designated “T5,” now the “StealthRay 100TM antenna”) in the 14.0-14.5 GHz and 11.7-12.2 GHz frequency bands (collectively, the “Ku-band”).¹ RAS currently holds an experimental license to operate these terminals (*see* Call Sign WE2XTW, File No. 0204-EX-PL-2008), including authority for limited market studies and provision of service under government contract. As discussed below, renewal of experimental license authority would strongly serve the public interest by permitting already authorized LMSS operations to continue under circumstances that are not covered by standard commercial operating authority under a blanket earth station license granted by the International Bureau.

I. INTRODUCTION AND BACKGROUND

RAS currently holds an experimental license to operate up to 100 StealthRay 100TM LMSS remote terminals that expires on September 10, 2010 (*see* Call Sign WE2XTW, File No. 0204-EX-PL-2008). This license includes authority for limited market studies and provision of service pursuant to government contract, as well as a number of special conditions governing the experimental operations. The current RAS experimental authority followed a previous special temporary authorization (“STA”) for the same terminals that expired on May 28, 2008 (*see* Call Sign WD9XCQ, File No. 0530-EX-ST-2007). RAS fully accepts all conditions included in the STA and the existing experimental license and anticipates that all of these conditions would be

¹ Although Section 5.59(c) of the Commission’s Rules requires the filing of renewal applications at least 60 days prior to the expiration date of the license to be renewed, the instant renewal application is filed pursuant to FCC staff instruction.

included in any renewal of experimental license authority.² Moreover, RAS will operate the previously authorized StealthRay 100TM antennas in the same manner described in its prior application associated with this experimental call sign, and seeks no additional authority in the context of the instant application. Accordingly, RAS hereby incorporates by reference the technical and public interest information submitted in its prior experimental application to operate the StealthRay 100TM antenna.³

On February 15, 2008, the International Bureau granted blanket earth station licenses that provide "regularized" authority for certain operations of a separate RAS LMSS remote terminal - the StealthRayTM antenna -- that also operates under experimental authority.⁴ RAS anticipated that it would modify these licenses to add the StealthRay 100TM antenna, which would obviate the need for further experimental authority to permit its ongoing LMSS demonstrations and testing, and permit implementation of RAS's future commercial operations. However, the manner in which the StealthRayTM Licenses were granted preclude important operations in support of U.S. Government initiatives, including military demonstrations and testing of StealthRayTM capabilities.

² See Call Sign WD9XCQ, File No. 0530-EX-ST-2007 and Call Sign WE2XTW, File No. 0204-EX-PL-2008.

³ Only supplemental information is provided in this renewal application. To the extent the Commission requires additional information to renew an experimental license that includes authority previously granted in the current license (*e.g.*, limited market studies), RAS respectfully requests that it be permitted to supplement the record.

⁴ See *Application of Raysat Antenna System, LLC for Authority to Operate 400 Land Mobile-Satellite Service ("LMSS") Earth Stations in the 14.0-14.5 GHz and 11.7-12.2 GHz Frequency Bands*, Order and Authorization, File Nos. SES-LIC-20060629-01083, et seq., DA 08-401 (Int'l Bur. And OET, Feb. 15, 2008) ("RAS Order"). See also Call Signs E060101, E060447, E060448, E060449, E060450 and E060451 (the "StealthRayTM Licenses") (modified on Feb. 10, 2009 in File Nos. SES-MOD-20081221-01677, SES-MOD-20081221-01672, SES-MOD-20081221-01673, SES-MOD-20081221-01674, SES-MOD-20081221-01675 and SES-MOD-20081221-01676.; Call Sign WC9XZA, File No. 0027-EX-ST-2008.

Specifically, the International Bureau issued six LMSS network licenses that associate StealthRay™ antenna operations with six specific hub earth stations.⁵ However, in support of U.S. military Satcom-on-the-Move (“SOTM”) demonstrations, equipment evaluations and related initiatives, both the StealthRay™ and StealthRay 100™ antennas must sometimes communicate with hub earth stations operating under other FCC authority (*e.g.*, with a prime contractor’s hub) or hubs operated by the U.S. government (*e.g.*, transportable hubs used for short-term field tests). Such operations would not be covered by the StealthRay™ Licenses and are critical to maintaining and expanding the U.S. military’s satellite communications capabilities in the U.S. homeland and around the world.

As the Commission is aware, RAS has been engaged with the U.S. Government and Department of Defense on numerous contracts, including a DARPA project for integration and testing to demonstrate the performance of a new networking protocol in the LMSS context (Contract No. N66001-07-C-0076) and a subcontract with General Dynamics (Contract No. 200398C04) to evaluate the supply of mapping information and other data to emergency response vehicles via LMSS equipment. Moreover, RAS continues to be involved with tests and demonstrations with several U.S. military units. RAS will require ongoing experimental authority to support further testing and evaluation contracts with the U.S. government.

The direct and substantial public benefits of the services provided under RAS’s experimental authority are profound. Ongoing authority will afford U.S. government agencies and the U.S. military the ability to further evaluate RAS’s broadband LMSS systems and services, and to utilize these advanced communications services in the context of homeland security, public safety, military training and other critical U.S. government applications. The

^{5/} See generally StealthRay™ Licenses.

need for U.S. government access to such advanced land-mobile communications services has never been clearer, particularly at this critical juncture in homeland security preparedness, disaster recovery and ongoing military operations overseas. Thus, authorizing RAS's continued experimental operations to provide critical communications services plainly would serve the public interest.

II. CONCLUSION

In view of the foregoing, renewal of the experimental license to operate the StealthRay 100TM antennas would strongly serve the public interest. Specifically, renewal of the experimental authority would permit RAS to continue already authorized LMSS operations and expand the range of mobile broadband services available to U.S. government users, without increasing the potential for interference to other users of Ku-band spectrum.