

EXPERIMENTAL LICENSE APPLICATION PUBLIC INTEREST STATEMENT

Raysat Antenna Systems, LLC (“RAS”), by its attorneys, hereby files this experimental license application for 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”). RAS current holds an experimental special temporary authorization (“STA”) to operate these terminals (*see* Call Sign WD9XCQ, File No. 0530-EX-ST-2007), including authority for limited market studies and provision of service under government contract. As discussed below, however, grant of experimental license authority would strongly serve the public interest by permitting already authorized LMSS operations to continue under circumstances that would not be 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 STA to operate up to 100 StealthRay 100TM LMSS remote terminals that expires on May 28, 2008 (*see* Call Sign WD9XCQ, File No. 0530-EX-ST-2007). This STA 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. RAS fully accepts all conditions included in the STA and anticipates that all of these conditions would be included in any grant of experimental license authority.¹ 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

¹ See Call Sign WD9XCQ, File No. 0530-EX-ST-2007.

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.²

The International Bureau recently granted blanket earth station licenses that will provide "regularized" authority for certain operations of a separate RAS LMSS remote terminal -- the StealthRayTM antenna -- that also operates under experimental authority.^{3/} 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.

Specifically, the International Bureau issued six LMSS network licenses that associate StealthRayTM antenna operations with six specific hub earth stations.^{4/} However, in support of U.S. military Satcom-on-the-Move ("SOTM") demonstrations, equipment evaluations and related initiatives, both the StealthRayTM and StealthRay 100TM antennas must sometimes communicate with hub earth stations operating under other FCC authority (*e.g.*, with a prime

² Only supplemental information is provided in this experimental application. To the extent the Commission requires additional information to grant RAS an experimental license that includes authority previously granted in the current STA (*e.g.*, limited market studies), RAS respectfully requests that it be permitted to supplement the record.

^{3/} 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"); Call Sign WC9XZA, File No. 0027-EX-ST-2008.

^{4/} See generally StealthRayTM Licenses.

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 military units such as the 10th Mountain Division of the U.S. Army that is preparing to deploy. RAS will require ongoing experimental authority to support further testing and evaluation contracts with the U.S. government. In addition, Fox News is operating two vehicles with the Stealthray™ antenna in critical news gathering operations.

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 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, grant of the requested experimental license to operate the StealthRay 100TM antenna would strongly serve the public interest. Specifically, grant of the requested 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.