

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 (the “StealthRayTM antenna”) in the 14.0-14.5 GHz and 11.7-12.2 GHz frequency bands (collectively, the “Ku-band”). RAS currently holds an experimental special temporary authorization (“STA”) to operate these terminals (*see* Call Sign WC9XZA, File No. 0027-EX-ST-2008), including authority for limited market studies and provision of service under government contract. RAS also holds blanket earth station authorizations from the International Bureau covering certain commercial operations of the StealthRayTM antenna (the “StealthRayTM Licenses”).¹ As discussed below, however, grant of experimental license authority would strongly serve the public interest by permitting already authorized experimental LMSS operations to continue under circumstances that are not covered by the StealthRayTM Licenses.

I. DISCUSSION

RAS currently holds an experimental STA to operate up to 100 LMSS remote terminals that expires on May 28, 2008 (*see* Call Sign WC9XZA, File No. 0027-EX-ST-2008). 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

¹ *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”).

be included in any grant of experimental license authority.² Moreover, RAS will operate the previously authorized earth stations in the same manner described in prior applications associated with this and predecessor experimental call signs, 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 applications to operate the StealthRayTM antenna.³

The International Bureau recently granted blanket earth station licenses that will provide "regularized" authority for certain StealthRayTM operations.^{4/} RAS anticipated that these licenses 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.^{5/} However, in support of U.S. military Satcom-on-the-Move ("SOTM") demonstrations, equipment evaluations and related initiatives, the StealthRayTM antenna must sometimes communicate with hub earth stations operating under other FCC authority (*e.g.*, with a prime contractor's hub) or hubs

² See Call Sign WC9XZA, File No. 0027-EX-ST-2008.

³ 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.

^{4/} See *supra*, n.1.

^{5/} See *generally* StealthRayTM Licenses.

operated by the U.S. government (*e.g.*, transportable hubs used for short-term field tests). Such operations would not be covered by the StealthRayTM 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 StealthrayTM 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 StealthRayTM 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.