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Federal Communications Commission
Office of the Secretary

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

In the Matter of	)	
	)	
Amendment of Parts 2, 22 and	)	
25 of the Commission's Rules	)	RM-7927
for an Allocation of Frequencies	)	
and Other Rules for a New Nation-	)	
wide Hybrid Space/Ground Cellular	)	
Network for Personal/Mobile	)	
Communications Services	)	

To: The Commission

COMMENTS OF THE AMERICAN RADIO RELAY LEAGUE, INCORPORATED

The American Radio Relay League, Incorporated (the League), the national association of amateur radio operators in the United States, by counsel and pursuant to Section 1.405(a) of the Commission's Rules, hereby respectfully submits its comments in response to the "Petition for Rule Making" filed on or about February 6, 1992 by Celsat, Inc. (Celsat), a California Corporation. Celsat seeks to initiate a rule making[1] proceeding looking toward the allocation of spectrum for a nationwide hybrid geostationary satellite and ground-cellular network for (duplex) mobile communications services (HPCN). The proposal suggests either the 1610-1626.5 MHz and 2483-2500 MHz bands, or the 2110-2149 MHz and 2410-2428 MHz bands for this service. With reference to the choice of frequency bands proposed, the League states as follows:

[1] The petition was accompanied by a pioneer's preference request. The League has no concern with that pleading and takes no position thereon.

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1. The Celsat petition was filed prior to the World Administrative Radio Conference at Torremolinos, Spain in February and March of this year (WARC-92). As such, the proposal for frequency allocations contained in the petition is appropriately tentative, and several alternatives are proposed in the petition. It does not appear from the petition that Celsat deems the specific segment to be allocated a sensitive issue. For example, it suggests two alternatives, either 37 MHz in the S-Band, which was recommended for generic mobile satellite services (MSS) at WARC-92 (2110-2129 MHz and 2410-2428 MHz) (referred to in the petition as "Band A") or 32 MHz in the L/S Bands currently allocated for domestic RDSS services (1610-1625.5 MHz and 2483.5-2500 MHz) (referred to in the petition as "Band B"). By footnote, Celsat also notes that a HPCN system could also be operated in at least part of the 220 MHz recently recommended for reallocation for new services, such as PCN, at 1.85-2.2 GHz by the Notice of Proposed Rule Making in Docket 92-9.[2]

2. Band A, says Celsat, though recommended for generic mobile services at WARC-92, is no better suited for its purposes than is Band B, or a segment of the 220 MHz proposed for PCS in Docket 92-9. (Petition, at 32-33). However, it claims that whatever bands are allocated for its purpose, the use thereof "should be restricted to HPCN on a primary basis, with no secondary sharing with another

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[2] See, the Notice of Proposed Rule Making, FCC 92-20, 7 FCC Rcd. 1542 (1992).

HPCN, ground cellular or other satellite based service" (Id., at 32, emphasis supplied).

3. The League's concern is with the 2410-2428 MHz proposal of Band A, which is proposed by Celsat as an alternative for an uplink band (Petition, pp. B-2, D-1, Table E-2). It is noted in the petition (p. D-1) that the 2390-2450 MHz band is currently allocated to government radiolocation on a primary basis, and to the Amateur Radio Service on a secondary basis (The Amateur-Satellite Service is allocated 2400-2450 MHz on a secondary basis as well). There is, however, no interference analysis included in Appendix D of the petition relative to the Amateur and Amateur-Satellite secondary allocations. Celsat is apparently content with the secondary status of Amateur Radio, and is not concerned that its proposal would potentially disenfranchise existing Amateur operation there.

4. While indeed the proposal by Celsat to use the 2410-2428 MHz segment as an uplink band is consistent with what the United States proposed at WARC-92 (the allocation of 2390-2430 MHz to MSS, Earth-to-space), the results of WARC-92 do not include such an allocation for MSS. It would appear, therefore, that the Band A alternative contained in the Celsat petition is not workable, and should not be proposed by the Commission. Currently, the table of frequency allocations (47 C.F.R. Section 2.106) references the Amateur Service secondary allocation at 2390-2450 MHz. Footnote 664 states that in the 2400-2450 MHz band, among others, the Amateur-Satellite Service may operate, subject to not causing harmful

interference to other services operating in accordance with the table.

5. The Amateur, and Amateur-Satellite Services make significant use of the 2390-2450 MHz band (the Amateur Satellite Service at 2400-2450 MHz only, per the current rules), which uses would stand to be displaced by a primary allocation in the band such as that proposed by Celsat. Government radiolocation, the primary user of the band, and Amateur Radio have proven good sharing partners. That allocation scheme should continue. The secondary allocation to the Amateur, and Amateur-Satellite Services make the band inconsistent with the requirement that Celsat established for its own use thereof: Celsat seeks a primary allocation, with no sharing with another HPCN, ground cellular or other satellite-based service. Amateur use of the band is in the category of "other satellite-based service", and it would be impossible to reconcile that with Celsat's requirements.

6. The Amateur-Satellite Service currently uses the band significantly. OSCAR satellites (Orbiting Satellite Carrying Amateur Radio) 13, 16 and 17 all currently carry Mode S, 2400 MHz transmitters, and OSCAR 13 has a Mode S transponder. The League and AMSAT, the Amateur Radio Satellite Corporation, have in place plans for, and are in the development stage of satellites which will continue to further space communications technology, as has been done all along. Future amateur satellite systems will continue to be in two general classes: low Earth orbit for store-and-forward communication, and higher orbits for real-time communication. Work

has begun on geostationary satellite engineering. Future amateur satellites, both for low Earth orbit and those for real time communications will increase significantly the use of the 2400-2450 MHz band. A primary allocation of that band, or any portion of it, for uplink purposes as proposed by Celsat, would, due to incompatibility, result in a profound disruption of development of Amateur Satellite Service systems, the investment in which is significant.

Accordingly, the foregoing considered, the American Radio Relay League, Incorporated respectfully requests that any consideration of a spectrum allocation as proposed by Celsat exclude therefrom the 2390-2450 MHz band, and any portion thereof.

Respectfully submitted,

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April 8, 1992

CERTIFICATE OF SERVICE

I, Margaret A. Ford, Office Manager of the law firm of Booth, Freret & Imlay, do certify that copies of the foregoing document were mailed this 8th day of April, 1992, to the offices of the following:

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