

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

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Federal Communications Commission
Office of Secretary

In the Matter of)

MSS Systems at 1.6/2.4 GHz)

IB Docket 02-364

DOCKET FILE COPY ORIGINAL) Informal Objection to the Globalstar
Application for MSS ATC,
E970381)

To: The Commission

Informal Objection of the Society of Broadcast Engineers, Inc.

The Society of Broadcast Engineers, Incorporated (SBE), the national association of broadcast engineers and technical communications professionals, with more than 5,000 members world wide, hereby respectfully submits its Informal Objection to the March 1, 2005, application of Globalstar USA, LLC (Globalstar) for Mobile Satellite Service (MSS) Ancillary Terrestrial Component (ATC) stations, E970381.

I. MSS ATC Is Mutually Exclusive with TV BAS Channel A10 Operations

1. In IB Dockets 01-185 and 02-364, the Commission assigned 2,487.5–2,493 MHz to MSS for ATC, to supplement coverage problems that MSS handsets have in "urban canyons" and high rise buildings. However, these frequencies are co-channel with grandfathered TV Broadcast Auxiliary Services (BAS) Channel A10 (2,483.5–2,500 MHz).¹ Because of this obvious allocation

¹ All TV BAS licensees with Channel A10 authority as of July 25, 1985, were granted indefinite "grandfather" rights on a co-equal basis, by the July 25, 1985, General Docket 84-689 R&O. These grandfather rights were re-affirmed in the July 16, 2004, ET Docket 00-258 Fourth R&O, and is further documented in non-government footnote 147, as follows:

NON-FEDERAL GOVERNMENT (NG) FOOTNOTES

NG147 In the band 2483.5-2500 MHz, stations in the fixed and mobile services that are licensed under Part 74 (Television Broadcast Auxiliary Stations), Part 90 (Private Land Mobile Radio Services), or Part 101 (Fixed Microwave Services) of the Commission's Rules, which were licensed as of July 25, 1985, and those whose initial applications were filed on or before July 25, 1985, may continue to operate on a primary basis with the mobile-satellite and radiodetermination satellite services, and in the segment 2495-2500 MHz, these grandfathered stations may also continue to operate on a primary basis with stations in the fixed and mobile except aeronautical mobile services that are licensed under Part 27 (Miscellaneous Wireless Communication Services) of the Commission's Rules.

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conflict, on September 8, 2004, SBE filed its Petition for Reconsideration of the IB Docket 02-364 Report and Order (R&O), pointing out the mutually exclusive nature of MSS ATC and TV BAS Channel A10 operations. That SBE filing proposed re-farming the three 2.5-GHz TV BAS Channels, A8 (2,450–2,467 MHz), A9 (2,467–2,483.5 MHz) and A10 to 12-MHz wide digital channels, occupying 2,450–2,486 MHz, and thus eliminating the spectrum overlap with MSS ATC. See the attached Figure 1, from the SBE Petition for Reconsideration.

2. The SBE 2.5 GHz TV BAS band plan was subsequently refined, in a November 19, 2004, IB Docket 02-364 *ex parte* filing, to address concerns by Nextel Corporation that the SBE proposal not delay the re-farming of the 2 GHz TV BAS band, a necessary component of solving the public safety interference problem in the 800 MHz Specialized Mobile Radio (SMR) band (WT Docket 02-55). See the attached Figure 2, from the SBE *ex parte* filing.

3. In ET Docket 95-18 (MSS), the Commission concluded that TV BAS operations and MSS operations were mutually exclusive uses of the same spectrum. In ET Docket 00-258 (Advanced Wireless Services (AWS), aka Third Generation (3G) Wireless Services), the Commission similarly concluded that TV BAS operations and high-density cellular commercial mobile radio services (CMRS) operations were also mutually exclusive uses of the same spectrum. It is for these reasons that the 2 GHz TV BAS band is in the process of being re-farmed, from 1,990–2,110 MHz, to 2,025–2,110 MHz, representing a loss of 35 MHz of 2 GHz TV BAS spectrum (presently TV BAS Channels A1 (1,990–2,008 MHz) and A2 (2,008–2,025 MHz)).

4. Thus, the proposed construction of MSS ATC in the ten largest U.S. cities, and Washington, D.C., is simply premature and mutually exclusive with the existing, indefinitely grandfathered, co-equal use of that spectrum by TV BAS Channel A10 licensees. See the attached Figure 3. The Universal Licensing System (ULS) additionally shows Channel A10 TVPU stations in:

- Baton Rouge, LA
- Biloxi, MS
- Charlotte, NC
- Corpus Christi, TX
- Fort Myers, FL
- Fort Wayne, IN
- Hartford, CT
- Honolulu, HI
- Jacksonville, FL
- Las Vegas, NV
- Lawton, OK
- Louisville, KY
- Moline, IL
- Nashville, TN
- Miami, FL

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Minneapolis, MN
Phoenix/Mesa, AZ
Salt Lake City, UT
San Diego, CA
Stockton, CA
Visalia, CA
West Palm Beach, FL.

However, Figure 3, and the above list, still understate the nature of the problem, since each TVPU license can authorize multiple mobile/itinerant transmitters.

5. Further, because of the policy established in ET Docket 98-142 (7 GHz MSS downlinks, sharing the 7 GHz TV BAS band), and re-affirmed in ET Docket 03-254 (Frequency Coordination Rules for 7 GHz MSS uplinks and downlinks, and 13 GHz MSS Gateway Uplinks, and Terrestrial 7 & 13 GHz TV BAS, CARS and POFS), namely that between co-equal users the first-in-time user must be protected by the newcomer user, it is clear that MSS ATC would be required to protect Channel A10 TV BAS operations. But, the primary TV Channel A10 use in the major metropolitan areas is by mobile/itinerant TV Pickup (TVPU) stations, whose location continuously varies. Although some of this grandfathered Channel A10 use is for known-in-advance, scheduled events, such as car races, golf tournaments, marathons, and large sporting events, Channel A10 also includes the coverage of un-scheduled news events. Because it would be impractical for Globalstar to simply shut down its later-in-time ATC operation when an earlier-in-time grandfathered TVPU station needed to operate in the same area, it is clear that for at least seven of the ten largest U.S. cities, the Globalstar ATC application is grossly premature, and must not be granted until such time as grandfathered Channel A10 TV BAS operations have been moved out of 2,483.5–2,500 MHz.

II. Globalstar Application Does Not Even Acknowledge the Existence of Channel A10 TV BAS Stations!

6. Although the Globalstar application addresses how its proposed ATC would protect the Radio Astronomy Service (Exhibits B and B-5); the Radio-Navigation-Satellite/Aeronautical Radio-Navigation Services (Exhibits B and B-6); the Table Mountain Radio Receiving Zone at Boulder County, Colorado (Exhibit B); the National Radio Astronomy Observatories at Green Bank, WV and Sugar Grove, WV (Exhibit B); and all FCC Monitoring Stations (Exhibit B), no where in the application does Globalstar mention the existence of co-channel TV BAS Channel A10 operations, with their co-equal priority, and earlier-in-time status. Perhaps this is because Globalstar realized that TV BAS Channel A10 operations and MSS ATC are mutually exclusive, and that there can be no successful frequency coordination between fundamentally incompatible uses of the same spectrum. In any event, this failure to address a co-equal and earlier-in-time user of the spectrum

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makes the Globalstar application fundamentally flawed and un-grantable until TV BAS operations have first been cleared from 2,483.5–2,500 MHz. Of course, under the ET Docket 92-9 "Emerging Technologies" policy, Globalstar is obligated to re-imburse TV BAS Channel A10, A8 and A9 licenses for their relocation costs (all three channels must be converted in order to maintain the present three-channel capability for 2.5-GHz TV BAS). Additionally, there may be Part 101 Private Operational Fixed Service (POFS) and Part 21 Local Television Transmission Service (LTTS) that will also have to be converted.

III. Summary

7. The Globalstar application for MSS ATC authority in the top-ten U.S. cities is grossly premature and must not be granted until grandfathered operations on TV BAS Channel A10 have first been cleared from 2,483.5–2,500 MHz, by converting the three 2.5 GHz TV BAS channels to 12-MHz wide digital channels, and re-packing those channels to 2,450–2,486 MHz, as shown in Figure 2. This work must be properly coordinated with the 2 GHz transition being done by Nextel, Inc. and with POFS and LTTS licensees sharing the 2,450–2,483.5 MHz band. Until that work is completed, MSS ATC cannot operate in at least seven of the ten largest U.S. cities, and would further have to restrict any temporary deployment of MSS ATC to areas not near the other twenty-two cities listed in Paragraph 4 of these comments.

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List of Figures

8. The following figures or exhibits have been prepared as a part of this SBE Informal Objection to the Globalstar E970381 application for MSS ATC:

1. 2.5 GHz TV BAS band plan from the September 8, 2004, SBE IB Docket 02-364 Petition for Reconsideration
2. Revised SBE 2.5 GHz TV BAS band plan, from the November 19, 2005, SBE *ex parte* filing to IB Docket 02-364
3. Channel A10 TV Pickup stations in the ten largest U.S. cities.

Respectfully submitted,

Society of Broadcast Engineers, Inc.

/s/ Ray Benedict, CPBE
SBE President

/s/ Dane E. Ericksen, P.E., CSRTE
Chairman, SBE FCC Liaison Committee

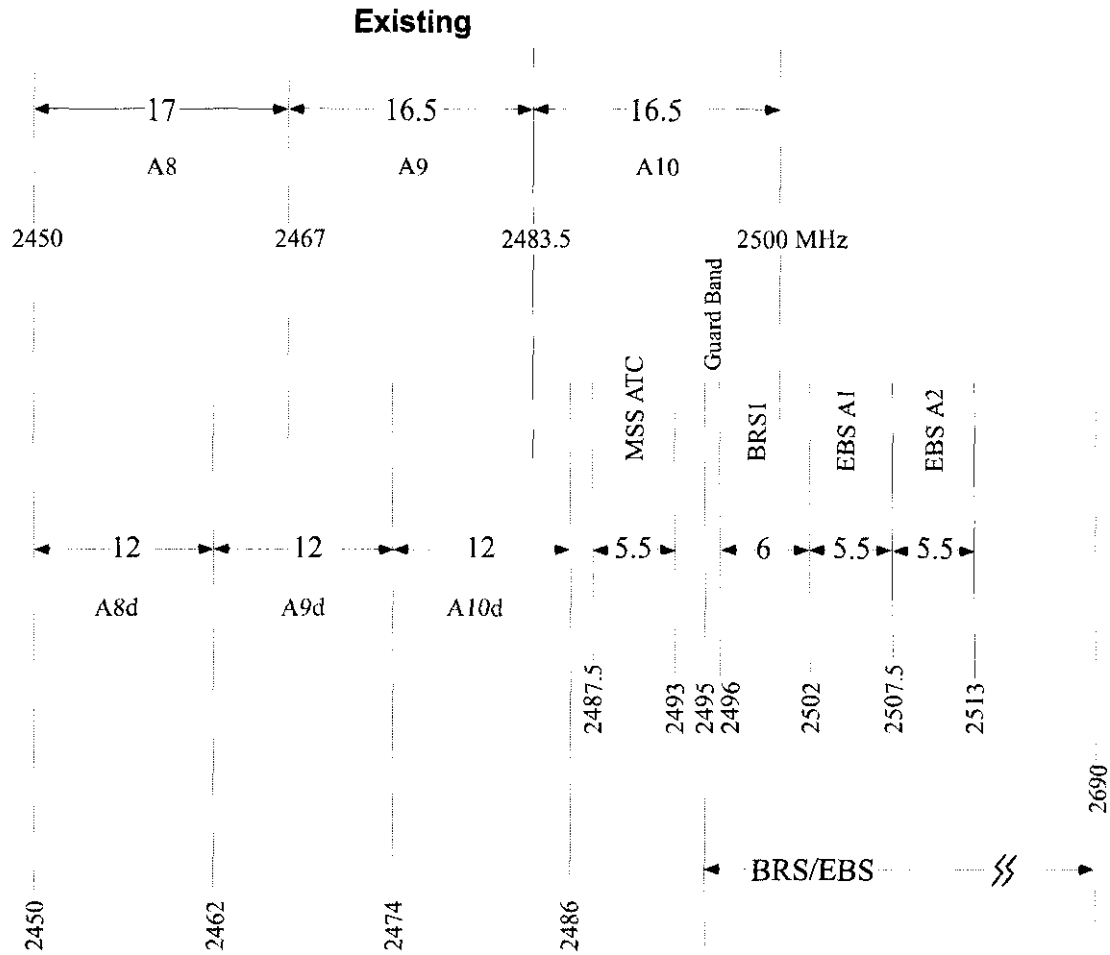
/s/ Christopher D. Imlay, Esq.
General Counsel

May 16, 2005

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14356 Cape May Road
Silver Spring, Maryland 20904
301/384-5525

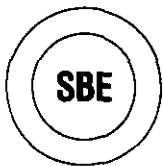
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**Originally Proposed SBE 2.5 GHz TV BAS Band Plan
(From the September 8, 2004, SBE IB 02-364 Petition for Reconsideration)**



**Proposed New 2.5 GHz
TV Band Plan**

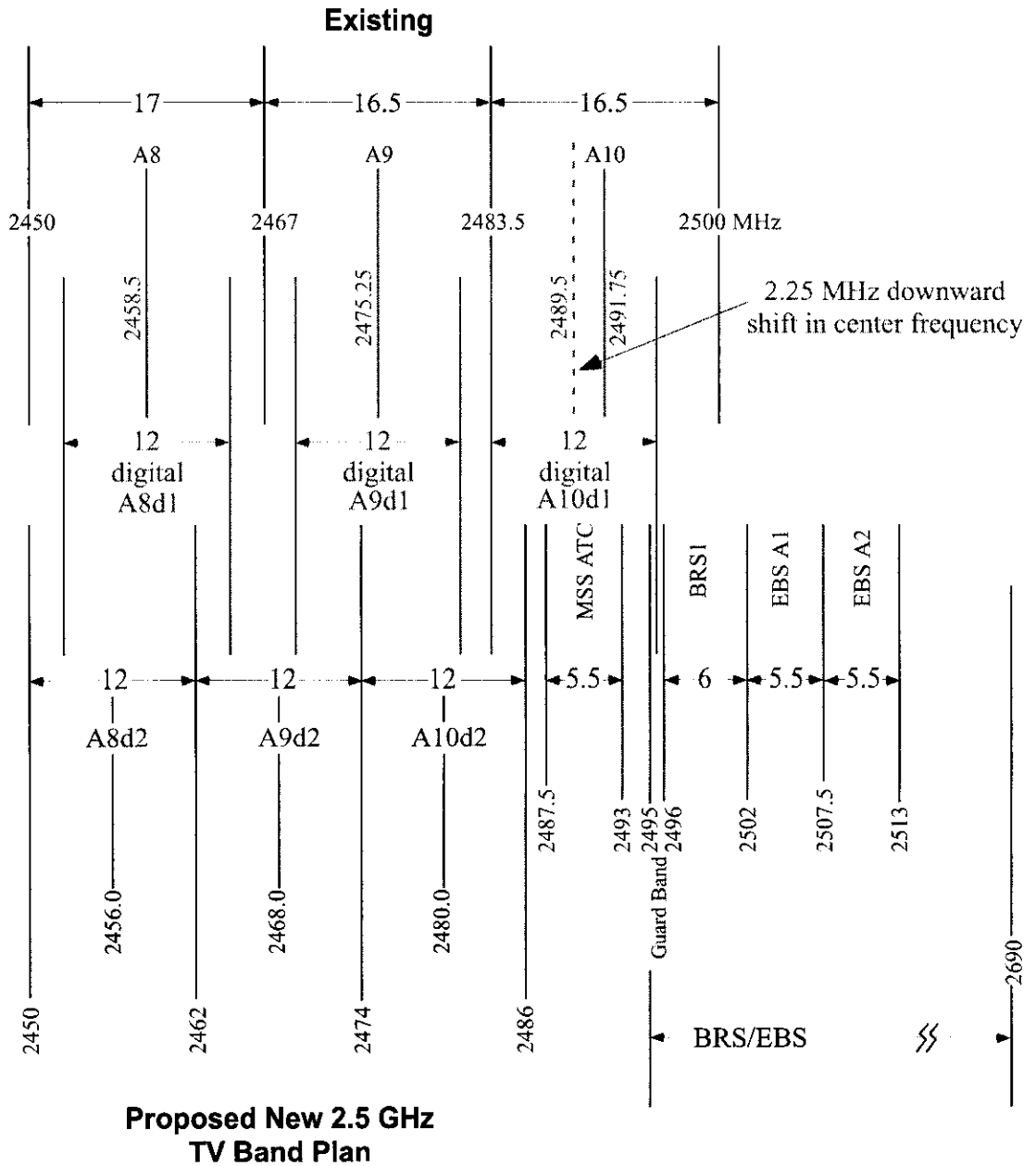
All frequencies and bandwidths are in MHz.



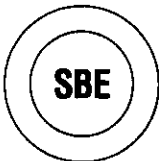
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Indianapolis, Indiana

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Revised Proposed SBE 2.5 GHz TV BAS Band Plan
 (From the November 19, 2004, SBE IB 02-364 ex parte Filing)



All frequencies and bandwidths are in MHz.



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TV BAS Channel A10 TV Pickup Stations in the Top-Ten U.S. Cities

Top-ten U.S. Cities*

1. New York, NY
 - KA-41459, American Broadcasting Companies, Inc.
 - KA-41481, American Broadcasting Companies, Inc.
 - KB-55010, CBS Broadcasting, Inc.
 - KK-4431, American Broadcasting Companies, Inc.
 - KK-5793, American Broadcasting Companies, Inc.
2. Los Angeles, CA
 - KA-88698, NBC Telemundo License Co.
 - KA-88699, NBC Telemundo License Co.
 - KA-88722, NBC Telemundo License Co.
 - KA-88729, NBC Telemundo License Co.
 - KA-88724, NBC Telemundo License Co.
 - KA-88725, NBC Telemundo License Co.
 - KA-88726, NBC Telemundo License Co.
 - KA-88887, Fox Television Stations, Inc.
 - KA-88952, CBS Broadcasting Inc.
 - KA-88959, KTLA Inc.
 - KB-97260, Viacom Television Stations Group of Los Angeles
 - KB-55380, KTLA Inc.
 - KB-55953, NBC Telemundo License Co.
3. Chicago, IL
 - KB-55038, CBS Broadcasting, Inc.
 - KQ-8499, WGN Continental Broadcasting Company
4. Washington, DC/Baltimore, MD
 - KK-7854, Viacom Inc.
5. San Francisco/Oakland/San Jose, CA
 - KA-35181, CBS Broadcasting Inc.
 - KA-74712, CBS Broadcasting Inc.
 - KR-9941, CBS Broadcasting Inc.
 - KR-9943, CBS Broadcasting Inc.
 - KV-8015, CBS Broadcasting Inc.
 - KV-8016, CBS Broadcasting Inc.

* Source: <http://www.govspot.com/lists/largestcities00.htm>.



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TV BAS Channel A10 TV Pickup Stations in the Top-Ten U.S. Cities

6. Philadelphia, PA
KB-55025, CBS Broadcasting, Inc.
7. Boston, MA
8. Detroit, MI
KA-34502, Post-Newsweek Stations, Michigan, Inc.
KA-34503, Post-Newsweek Stations, Michigan, Inc.
KA-74900, Post-Newsweek Stations, Michigan, Inc.
KE-5967, Post-Newsweek Stations, Michigan, Inc.
KE-5968, Post-Newsweek Stations, Michigan, Inc.
KZ-2672, Post-Newsweek Stations, Michigan, Inc.
9. Dallas/Fort Worth, TX
10. Houston, TX

