

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

In the Matter of)
)
Flexibility for Delivery of) IB Docket 01-185
Communications by)
Mobile-Satellite Service Providers)
in the 2 GHz Band, the L-Band, and)
the 1.6/2.4 GHz Bands)

To: The Commission

Reply to Opposition to Petition for Reconsideration

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 reply to the March 3, 2004, filing of Globalstar ("Opposition") opposing the April 4, 2003, SBE Petition for Reconsideration of the February 10, 2003, IB Docket 01-185 Report and Order (R&O).

**I. "Grandfathered" TV BAS Channel A10 Stations Do Indeed Exist,
and MSS Should Be Required to Convert All TV BAS Licensees
on Channels A8, A9 and A10 to Digital Operation**

1. In its Opposition, Globalstar concedes that grandfathered TV BAS Channel A10 (2,483.5–2,500 MHz) stations, "if they exist," and terrestrial MSS base stations could not operate co-channel in the same area. As was documented in the SBE Petition for Reconsideration of the IB Docket 01-185 R&O, such grandfathered TV BAS stations do indeed exist. SBE notes that the Globalstar Opposition states that if the number of "grandfathered" TV BAS stations on former TV BAS Channel A10 (2,483.5–2,500 MHz) are "few" then relocation would be an acceptable solution. SBE submits that the number of grandfathered Channel A10 stations is irrelevant; MSS operators such as Globalstar have an obligation to relocate these stations, regardless of their numbers. SBE also disagrees with the Globalstar proposal that only the Channel A10 TV BAS licensees should be entitled to compensation for their relocation expenses, and not the adjacent Channel A8 (2,450–2,467 MHz) and Channel A9 (2,467–2,483.5 MHz) TV BAS licensees, for reasons that will be explained in this filing.

IB Docket 01-185 • ATC for MSS
Reply to Opposition to Petition for Reconsideration

2. As was documented in the SBE Petition for Reconsideration, Channel A10 plays a vital "safety valve" role. Without it, licensees might not be able to cover events in other TV markets. Golf tournaments, car races, yacht regattas, marathons, and political conventions are all good examples of scheduled-in-advance, frequency-coordinated events that will not work without the currently available third 2.5 GHz TV BAS "overflow" channel. The most common users are broadcast network entities (BNEs) and cable network entities (CNEs). Thus, to maintain the *de facto* "three channel" plan for 2.5 GHz TV BAS that Globalstar claims does not exist, not only must the Channel A10 "grandfathered" operations be converted from 16.5 MHz wide FM analog video operation to digital operation, so must all TV BAS stations on Channels A8 and A9. In other words, if broadcasters are now confronted with losing 16.5 MHz of vital "grandfathered" TV BAS spectrum at 2.5 GHz, in addition to the 35 MHz of TV BAS spectrum they have already lost at 2 GHz, the only means of maintaining this *de facto* three-channel capability in a reduced spectrum of just 33.5 MHz is to convert all 2.5 GHz TV BAS stations to digital.

3. Such an approach would mirror the decision reached by the Commission in the ET Docket 95-18 rulemaking, where broadcasters are converting their 17-MHz wide analog channels to 12-MHz wide digital channels. It would also likely trigger conversions for the most congested TV markets to 6-MHz wide "split channel" digital operation, with the downside of a reduced bit rate. Thus, rather than being "unreasonable" to create a "daisy-chain of conversion for other BAS facilities," this is exactly what fairness and equity to broadcasters requires. It is also what the "emerging technologies" principle adopted by the Commission in ET Docket 92-9 requires.

4. Further, it should be remembered that in the ET Docket 95-18 rulemaking, the Commission put great reliance on the availability of the 2.5 GHz TV BAS channels to accommodate itinerant, or "visiting," TV BAS users.¹ But if broadcasters are now to lose their existing and vital "grandfather" rights to Channel A10, this important part of the Commission's calculus for the 2 GHz TV BAS band would have to be revisited. In other words, not only is there "daisy chain" linkage between Channel A10 and Channels A8 and A9, there is also linkage to TV BAS Channels A1 through A7.

5. An additional issue is the interference caused to TV BAS operations on Channels A8 and A9 by Part 15 devices operating at 2,400–2,483.5 MHz, pursuant to Section 15.247 of the FCC Rules. These Part 15 devices, also known as 802.11(b) spread spectrum devices, are allowed equivalent isotropic radiated powers (EIRPs) of up to 36 dBm. Although in theory Part 15 spread spectrum devices have a reduced interference potential compared to discrete frequency

¹ Specifically, at Paragraph 37 of the July 3, 2000, ET 95-18 *Second R&O and Second Memorandum, Opinion & Order*.

IB Docket 01-185 • ATC for MSS
Reply to Opposition to Petition for Reconsideration

transmitters, and even though Part 15 devices are prohibited from causing interference to licensed services (*e.g.*, co-channel TV BAS operations on Channels A8 and A9), SBE and broadcasters are all too aware of cases of actual interference. Grandfathered TV BAS operations on Channel A10 do not have to worry about this Part 15 "pollution," and thus the loss of Channel A10 would be all the more devastating. Conversion of the 2.5 GHz TV BAS band to all digital operation, as a fix to maintaining the present three-channel capability for 2.5 GHz TV BAS operations, would reduce the susceptibility of re-farmed digital 2.5 GHz TV BAS receivers to interference from Part 15 devices.

6. Yet another reality is that the vast majority of 2.5 GHz TV Pickup transmitters are frequency agile; indeed, many TV Pickup transmitters are frequency agile for *both* the 2.5 GHz and 2 GHz TV BAS bands; that is, Channels A1 through A10. Although there are some special purpose single-channel 2 or 2.5 GHz TV BAS TV Pickup transmitters, such as "race car cams" or "toboggan cams," where the size, weight and power draw of the camera/TV Pickup transmitter are critical, such TV Pickup transmitters are a small minority.

7. SBE agrees that, as in the case for 2 GHz TV BAS, Channel A8, A9 or A10 TV BAS licenses should be required to negotiate conversion. This conversion needs to be all 2.5 GHz TV BAS licensees, and not just 2.5 GHz TV BAS licensees in an area where an MSS entity proposes to build a 2,483.52,500 MHz ATC, because of the itinerant nature of TV Pickup operations, especially those operated by BNEs and CNEs, where the operation can be an East coast golf tournament one week and a West coast car race the next week. SBE also agrees that if the MSS licensee makes a good faith attempt to negotiate conversion, and the TV BAS licensee chooses not to negotiate conversion, the BAS Channel A10 license should be terminated or deemed secondary to MSS-ATC (Ancillary Terrestrial Component). Because of such draconian outcomes to grandfathered TV BAS Channel A10 licensees, SBE anticipates that few, if any, Channel A10 TV BAS licensees will "choose not to negotiate."

8. SBE also agrees that MSS licensees should not be required to pay more than the costs of replacement equipment and other costs reasonably related to conversion, consistent with the Commission's rules for conversion of 2 GHz TV BAS stations. However, MSS licensees need to understand that it would be pointless to convert just Channel A10 licensees to digital operation. It is clear to SBE that all Channel A8 and Channel A9 TV BAS stations will also have to convert to narrower digital channels in order to preserve the existing, *de facto*, three-channel capability that now exists at 2.5 GHz for TV BAS. If MSS licensees are not willing to do so, and meet their "emerging technologies" obligations, then they should be required to forgo use of 2,483.5–2,500 MHz for their ATC.

IB Docket 01-185 • ATC for MSS
Reply to Opposition to Petition for Reconsideration

9. Finally, SBE agrees that Channel A10 TV BAS licensees should be required to demonstrate that their TV BAS license conforms to Footnote NG147²; that their license had not expired prior to February 10, 2003, the date of the release of the IB 01-185 R&O. However, since the Commission's Universal Licensing System (ULS) does not appear to have an NG147 notation for grandfathered TV BAS Channel A10 stations³, nor does the "history" portion of the ULS record for TV BAS stations always go back to 1985 (which pre-dates even the existence of the ULS for TV BAS purposes), SBE submits that the existence of a currently valid TV BAS license authorizing operation on Channel A10 should be considered as *prima facie* evidence of NG147 grandfather rights. While some TV BAS licensees might be able to provide copies of pre-July 25, 1985, TV BAS licenses showing authorization for Channel A10, SBE believes that some, if not many, BAS licensees would be hard pressed to do so.

10. SBE disagrees that grandfathered Channel A10 BAS licensees should show (or certify) that their Channel A10 facility or facilities was/were actually on the air on February 10, 2003. This should only be a requirement for fixed-link, grandfathered, Channel A10 stations. Grandfathered Channel A10 TV Pickup stations should only be required to demonstrate or certify that Channel A10 operations have occurred with the 12-month period preceding February 10, 2003.

² Non-government footnote NG147 to Section 2.106 of the FCC Rules reads as follows:

NG147--Stations in the broadcast auxiliary service and private radio services licensed as of July 25, 1985, or on a subsequent date following as a result of submitting an application for license on or before July 25, 1985, may continue to operate on a primary basis with the mobile-satellite service and the radio-determination satellite service.

³ For example, see ABC, Inc. TV Pickup licenses KA-41459, KA-41481, KK-4431 and KK-5793, all valid through June 1, 2007. All four TV Pickup licenses were initially granted prior to July 25, 1985, and all authorized (and continue to authorize) operation on TV BAS Channel A10. Yet nowhere in the ULS records for these stations is an annotation of NG147 grandfather rights, or the fact that the initial station authorization pre-dates the July 25, 1985, grandfather date.

**IB Docket 01-185 • ATC for MSS
Reply to Opposition to Petition for Reconsideration**

II. Summary

11. Globalstar is wrong when it suggests that only Channel A10 TV BAS licensees need to be converted to digital operation on Channels A8 or A9. To preserve the critical and important present *de facto* three-channel capability that now exists for 2.5 GHz TV BAS operations, all TV BAS stations on Channels A8, A9 and A10 must be converted to narrower digital operation, to maintain a three-channel capability in a reduced bandwidth of 33.5 MHz. SBE believes that MSS is obligated to do so under the well-established emerging technologies policy adopted by the Commission in the ET Docket 92-9 rulemaking.

Respectfully submitted,

Society of Broadcast Engineers, Inc.

/s/ Ray Benedict, CSRE
SBE President

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

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

March 30, 2004

Booth, Freret, Imlay & Tepper
14356 Cape May Road
Silver Spring, Maryland 20904
310/384-5525