

NAB AND MSTV OPPOSE PROPOSED CHANGES TO LOJACK

On September 22 2006, NAB together with MSTV filed comments on a Notice of Proposed Rulemaking (NPRM) which proposes to modify Section 90.20(e)(6) of the Commission's Rules pertaining to Stolen Vehicle Recovery Systems (SVRS). SVRS operates at 173.075 MHz, which is adjacent to TV Channel 7.

The NPRM was issued in response to a Petition for Rulemaking filed by the LoJack Corporation (LoJack) on October 25, 2004. Currently, LoJack is the only SVRS operator in the United States. The NPRM asked for comment on LoJack's request to revise Section 90.20(e)(6) to permit increased mobile output power, to permit digital emissions in addition to the analog emissions currently authorized by the Rules, and to relax the limitations on the duty cycle. The NPRM also asks about the merits of broadening the scope of Section 90.20(e)(6) to permit uses other than SVRS operations. LoJack filed the petition, in part, because of an FCC requirement that they narrow their operating bandwidth from 20 kHz to 12.5 kHz.

Section 90.20(e)(6) contains rules designed to minimize SVRS' interference to TV channel 7 reception. Currently, SVRS systems may be operated only to recover stolen vehicles and not for any other purpose. The rule limits mobile transmitters installed in the vehicles (VLUs) to 2.5 watts power output, and base station transmitters to 300 watts ERP. Base station transmissions are limited to a total of one second every minute. Mobile units are routinely limited to 200 milliseconds every ten seconds and to 200 milliseconds every second while a vehicle is actively being tracked. In 2002, the Commission revised Section 90.20(e)(6) to permit an alternative duty cycle for VLUs of 1800 milliseconds every 300 seconds with a maximum of six messages in any thirty-minute period. The Rules also require that LoJack perform an interference study each time it seeks to license a new base station.

Because of changes in other FCC rules, LoJack is required to migrate its operations from 20 kHz bandwidth to 12.5 kHz by 2019. In order to accommodate this, LoJack's petition asks the Commission to allow them to:

- increase maximum base station ERP from 300 watts to 500 watts, and VLU output power from 2.5 watts to 5 watts, to compensate for the reduced range of narrowband channels;
- permit use of digital modulation in addition to the FM modulation currently specified in the Commission's Rules;
- eliminate limitations on duty cycles to enable parallel wideband and narrowband operations and to facilitate additional public safety and security services; and
- eliminate the requirement of Channel 7 interference studies.

In our comments NAB and MSTV opposed the proposed changes because we believe that they may result in interference to channel 7 reception. We told the Commission that LoJack has not adequately justified the requested power increase. LoJack argued that they need the increased power in order to compensate for the reduced system performance caused as a result of being required to narrow the transmission bandwidth from 20 kHz to 12.5 kHz. But, they do not provide any technical data to explain why a 2 dB decrease in bandwidth requires a 2.2 dB increase in base station power and a 3 dB increase in VLU power.

In addition, NAB and MSTV pointed out that LoJack has provided no detailed engineering study that shows how the proposed changes would impact TV Channel 7. When the Commission initially authorized SVRS, it relied, in part, on an interference analysis by Micrologic, Inc. (Micrologic study) filed on LoJack's behalf that derived the signal ratios need to ensure that SVRS systems would not interfere with TV channel 7. We told the FCC that the Micrologic study, which evaluated LoJack's 20kHz FM modulated signal's impact on NTSC signals, cannot be used to evaluate the impact of LoJack's

proposed digital modulation (or analog, for that matter) on the reception of Channel 7 DTV signals. Finally, we explained that removing or relaxing the duty cycle restrictions and allowing LoJack to use their system for additional services would increase the amount of their transmission and would likely result in interference to TV Channel 7. Our comments include a detailed engineering analysis of LoJack's proposals performed by Hammett & Edison, Inc. Consulting Engineers.

A copy of the NAB/MSTV comments, the NPRM and LoJack's 2004 Petition are available online through the Commission's Electronic Comment Filing System (ECFS). Go to http://gulfoss2.fcc.gov/prod/ecfs/comsrch_v2.cgi and enter "06-142" (no quotes) in the first box (marked "Proceeding") then click on the "Retrieve Document List" button.

Several Standards Actions Recently Completed by ATSC

ATSC Document	Status
A/53E Amendment	Approved 9/13/2006, Published 9/18/2006
A/55	Withdrawn 9/8/2006
A/70A	Approved 9/11/2006, Published 9/14/2006
A/76A	Approved 9/18/2006
A/102	Approved 9/12/2006, Published 9/14/2006
Transport Stream verification RP	Approved 9/20/2006

The Amendment to A/53E Annex A brings the document into alignment with the AFD and bar data work being undertaken concurrently by SMPTE and CEA. One new constraint is added, and that is that only one pair of bar data may be sent. Also, an implied constraint has been made explicit; this is that AFD must be sent in extension_and_user_data (2); that is, at the picture level—but it is not required to be in each picture, rather when sent, it can be sent just once per video sequence, with the meaning lasting until the next video sequence.

A/70A establishes that DVB is the registrar for CA_system_id.

A/76A adds support for ACAP announcement data by including it in the PMCP schema 3.0, which was also modified to better conform with SMPTE work while retaining backwards compatibility.

A/102 is a new standard that defines how to announce the presence of ACAP components as an enhancement to an event or as a stand-alone service.

The Recommended Practice on Transport Stream verification establishes various classifications of potential error with severity impact assessment for each error.

NAB Rolls Out New Web Site



MyNAB Is a Dynamic Tool that Provides Users a Customized Experience

NAB last week launched the new NAB.org, which not only has a new look but is searchable and designed to maximize users' experience and minimize time spent looking for information on the site.

Information is organized according to industries, resources and events, and those who create a MyNAB page will be able to customize a step further by specifying exactly what kind of information to receive from NAB by email. Member companies have been emailed a member ID number. Using that number, you can log on and create your personal profile. From this point forward, your email address and password are all that are needed to access the member-only

content. [Log on and set up your MyNAB account now](#)



ATSC VSB Combo Seminar

**Wednesday & Thursday, November 8-9, 2006
Birmingham, AL**

The VSB Combo Seminar to be offered in November in Birmingham, Alabama includes both the Fundamentals and Measurements Seminars. The Fundamentals seminar covers the ATSC's Digital Television (DTV) VSB transmission system while the Measurement Seminar focuses on the types of VSB measurements that are desired in the laboratory, at transmitter sites and at remote field sites. The seminars will be presented by Gary Sgrignoli of Meintel, Sgrignoli & Wallace from 1:00 - 5:30 pm on November 8 and from 8:30 am-5:45 pm on November 9. For more information contact Gary Sgrignoli at (847) 259-3352, gary.sgrignoli@ieee.org or check out the Meintel, Sgrignoli and Wallace Web site at www.mswdtv.com.