SMPTE Report

Report on SAT EXPO '85

By Joseph Roizen

Nicholas Johnson, a prominent FCC commissioner of the Carter administration, was the keynote speaker at the direct broadcasting by satellite (DBS) conference held in Denver in mid-May. His topic was a serious one, "The First Amendment and the Communications Revolution," but he started his presentation on a tongue-in-cheek, humorous note.

The Exhibits

A modest equipment exhibition, with about 50 exhibitors, showed mostly hardware. It occupied the Sheraton Denver Technical Center's 10,000 ft^2 Exhibit Hall, a 3500 ft^2 software display area, and the outside parking lot where the preponderant C-band dishes were set up. It was in essence a regional show, with even the few well-known exhibitors, like M/A-Com or Channel Master, maintaining a low profile by sending non-headquarters representation.

A wide range of medium-size TV receive-only systems (TVROs) were on display, as were down converters, steering devices, low-noise amplifiers (LNAs), receiving systems, and DBS components. There was a good cross section of industry publications, including technical magazines, program guides, catalogs, and newsletters.

In general, while it was somewhat of a limited equipment exhibition, the gamut of available DBS gear was on display. Vendors at the booths were trying to reach large chain buyers for hotel or business applications, rather than the general public.

The Sessions

Attending a few of the opening sessions made one aspect of the DBS industry crystal clear — it is almost totally dependent on intricate federal, state, and regional legislation. Most of the discussions were about lobbying efforts at every governmental level to get favorable decisions supporting the aims of the DBS proponents. SPACE and other regional groups are spending considerable effort and money to "guide" lawmakers to the proper attitude about DBS, and in many cases these interests are diametrically opposed to those of cable companies and regular broadcasters.

Several pending bills before Congress were being circulated for both informational and support-gathering purposes. A good example of this was a reprint of HR1769, a bill to put a moratorium on encryption of satellite signals for at least two years, thus assuring free reception of programs to current TVRO owners. Obviously, the major program providers, like HBO, Disney, MCA, etc., want the scrambling, while the dish owners are opposed to it.

A variety of topics were covered in the sessions, including technical and programming aspects of DBS. One session, "What's on the Satellite," chaired by Robert Wold, with panel members from RCA Americom and Hughes, gave a very interesting glimpse of the future of DBS using Ku-band satellites.

Wold stated that most of the new capacity going up into geostationary orbit is Ku-band, and that by 1990 over 900 transponders will be available. He predicted that this capacity will be exhausted because the demand curve will rise, as many users will want to transmit data, voice, teleconferencing, ENG signals, and cable and network programs. Wold was convinced that even without DBS service to private homes, Ku-band demand will exceed the supply by the end of the decade. He pointed out that NBC already has options for network distribution, and others will follow.

The RCA speaker said that his company will put up two Ku-band satellites in November 1985 and January 1986, and will establish a large network at 12 GHz. RCA, he claimed, already carried the most satellite hours, and Satcom 3R now has 5500 cable systems pointed at it around the country. Both he and Wold disagreed with published trade press statements that there was a "transponder glut," or that satellites were weakening in power output. Many satellite customers demand protected services, where a spare transponder has to be used in a backup mode, and at a cost of $200 to $600 per hour for transponder time that may be the least expensive link in the chain.

The biggest problem seen for the future at these sessions was the rapid depletion of C-band, orbital slots, and proposals to go to closer spacing. The proposed 2° spacing increases the potential for interference from adjacent satellites, and imposes the need for better earth antennae with elliptical design. Another growing problem concerns countries in the Southern Hemisphere which want orbital slots for their satellites in the same positions as those already serving the Northern Hemisphere.

Conclusion

DBS on C-band will continue to proliferate at a substantial rate for the next few years, and even the threat of encryption does not seem to have slowed it down much. DBS on Ku-band will only be realized if major investments are made to provide attractive programming to current viewers at reasonable cost. Nevertheless, there are plenty of nonpublic service potentials on both C- and Ku-band which will keep this industry in an expansive state over the next five years. If future legislation does end up favoring the home viewer, as the VCR laws did, then even C-band DBS will expand greatly on existing program services.

Part of a contribution received from Joseph Roizen, president, Telegen, Palo Alto, Calif.