Chapter 24
Madison, Wisconsin

Society of Broadcast Engineers November 1997

BROADBAND NETWORKS
PART 16 - LOOSE ENDS

By Neal McLain

This is Part 16 in a series of articles about coaxial broadband networks. In this article, we tie up a couple of loose ends left over from previous articles.

OFFSETS: A CORRECTED FREQUENCY CHART

In last month's article, we discussed FCC requirements applicable to NTSC visual carriers carried over cable television systems. This article contained a chart of the visual carrier frequency assignments required by three frequency plans: standard, IRC, and HRC. Unfortunately, this chart contained two errors.

A corrected chart is printed in Figure 1. Note that the following channels cannot be used for NTSC video signals:

•*Standard Frequency Plan*: Channel 1. For historic reasons, Channel 1 does not exist in the Standard Frequency Plan.

• *IRC Frequency Plan*: Channels 42, 98, and 99. These frequencies overlap the FAA's VOR and ILS bands; the FCC rules specify different offset requirements for these bands. It is not possible to apply these offsets without violating the incremental-offset plan; accordingly, these channels cannot be used for NTSC signals.

• *HRC Frequency Plan*: Channels 98 and 99. These frequencies overlap the FAA's VOR band; under the HRC frequency plan, these channels are offset less than 6 KHz from VOR frequencies. The FAA has not accepted these offsets as sufficient; accordingly, these channels

(continued on page 4)

Next Meeting:

**Tuesday,
November 18, 1997**

**Electronic Theatre
Controls Tour**

**3030 Laura Lane
Middleton**

**Light buffet dinner
provided
at 6:00pm**

**Meeting and Program
following dinner**

In This Issue:

LOCAL CHANNEL BLOCKAGE ON CABLE DURING EAS

By Leonard Charles

With the FCC release of the second EAS Report and Order, there is a renewed concerned by Television broadcasters over cable system blockage of their channel during EAS alerts and tests. Despite comments making a strong case against such blockage under any circumstances, the Commission now mandates it for systems with more than 5,000 subscribers.

The FCC did make provisions for agreements between broadcasters and cable systems to prevent such blockage. Television Broadcasters who wish to avoid such blockage of their channel are urged to begin those negotiations now so that cable system alterations to affect such non-blockage can be designed into the cable system's EAS conversion.

The FCC has also promised a Further Notice of Proposed Rulemaking focused on whether the Commission's rules are adequate to permit broadcasters to provide their audiences with important local emergency information without interruption by EAS messages provided by cable systems. They are particularly interested in comments addressing how best to encourage voluntary cable participation in the local emergency system without diminishing or adversely affecting emergency coverage by broadcast stations. They also will seek comment on issues such as the types of equipment that might selectively permit the carriage of broadcast emergency information, the cost of such selective override equipment and its installation, and the appropriateness of the broadcast information in specific circumstances, e.g., cable systems remote from the center of broadcast service areas.

CHAPTER 24 OFFICERS

CHAIR:
Fred Sperry (Wis. Public TV)
W - 264-9806 FAX - 264-9646
fsperry@mail.state.wi.us

VICE-CHAIR:
Kevin Ruppert (WISC-TV)
W - 271-4321
kruppert@wisctv.com

SECRETARY:
Neal McLain (CTI)
W - 831-4636
nmclain@compuserve.com

TREASURER:
Stan Scharch (WISC-TV)
W - 271-4321
sscharch@wisctv.com

COMMITTEE APPOINTEES

Program Committee:

Mark Croom	271-1025
Denise Maney	277-8001
Kerry Maki	833-0047
Steve Zimmerman	274-1234

Membership and Past-Chair:
Paul Stoffel

Sustaining Membership: Fred Sperry

Strategic Planning: Dennis Behr

Special Events: Kevin Ruppert

Certification and Education:
Jim Hermanson 836-8340
Tim Trendt (UW-Platteville)

Frequency Coordination:
Tom Smith W - 263-2174
smithtc@vilas.uwex.edu

SBE National Board Member & Chapter Liaison:
Leonard Charles
W - 271-4321 FAX - 271-1709
lcharles@wisctv.com

October Business Meeting Minutes

Chapter 24 of the Society of Broadcast Engineers met on Wednesday, October 22, 1997, at the Holiday Inn Madison - West. This meeting was held in conjunction with a larger gathering known as: "The New Broadcasters Clinic and Upper Midwest Regional Society of Broadcast Engineers Meeting ."

A total of 82 persons, representing eight SBE chapters, attended; of these, 58 were SBE members (26 certified) and 24 were guests.

Call to order: 7:36 pm by Chapter 24 Chair Fred Sperry.

National Liaison Report (reported by Leonard Charles, representing the SBE Board):

(1) The SBE Board met in Syracuse, New York in September 1997. Items discussed:

- Budget.
- Study Guide and Course for Certification Candidates.
- SBE Website.
- Ennes education committee.
- FCC Liaison Committee.
- A pending state challenge to SBE's use of the word "Engineer."
- Frequency Coordination.
- DTV standards.
- Sustaining Membership.
- IRS regulations affecting SBE and its individual chapters.
- SBE Bookstore.
- Membership.
- SBE Insurance Policy for Contract Engineers.
- New phone system at headquarters.
- Fall board meeting.

(2) The FCC has issued a Report and Order which clarifies a number of requirements applicable to cable television operators. During the proceeding, many comments were received from the hearing-impaired community; the new rules address these concerns.

Chapter 24 Business:

(1) Newsletter Editor's Report (reported by Newsletter Editor Mike Norton): The deadline for the November Newsletter is midnight 10/31/97; the folding party is 5:30 pm 11/5/97 at WKOW-TV.

(2) "Cookie bakeoff" Report (reported by Kevin Ruppert): The bakeoff is sponsored by Chapter 24; it is held annually during the Broadcasters Clinic. This year's winner is Paul Stoffel.

Chapter Awards report (reported by Leonard Charles, representing the SBE board):

(1) Chapter Newsletter.
(2) Frequency Coordination.
(3) Best Technical Article or Program.
(4) Best Technical Article or Program by a Student Member.

(continued on next page)

NEW COMMISSION TAKES OFFICE

By Tom Smith

The Senate took action and confirmed four new commissioners to the FCC, including a new chairman. On Tuesday, October 28th, the Senate voted to confirm Michael Powell, Harold Furchtgott-Roth and Gloria Tristani as members of the FCC. In a separate vote on Wednesday, October 29th, William Kennard was confirmed as chairman with a 99 to 1 vote. Susan Ness is the only remaining commissioner from the Chairman Reed Hundt Commission. It will also be the first time in over a year that there will be 5 sitting commissioners. There have been only 4 commissioners since Andrew Barrett left the FCC in June of 1996. This new Commission is also historic in that the majority of Commissioners come from minority groups. Kennard and Powell are African-Americans and Tristani is Hispanic.

From C-Span and TV TECHNOLOGY

October Minutes
(continued)

The business meeting was adjourned at 8:10 pm. The program featured:

• A report, "Planning for Digital Television (DTV) at WMVS/WMVT," presented by David Felland, Director of Engineering for Milwaukee Public Television and the State of Wisconsin Educational Communications Board.

• A panel discussion, "What stations are doing to plan for the transition to DTV," moderated by Felland.

Submitted by Neal McLain, Secretary

AMATEUR RADIO NEWS

By Tom Weeden, WJ9H

The World Radiocommunication Conference 97 (WRC-97) was scheduled to open October 27 in Geneva, Switzerland. Among items on the agenda of interest to amateur radio include the so-called "Little LEO" issue, as the Little Low-Earth-Orbiting industry's proposal to share amateur frequencies on VHF and UHF bands caused controversy last year. Also of interest to hams, WRC-97 will consider allocating some amateur UHF frequencies with Earth Exploration Satellites using synthetic aperture radars. WRC-97 will set the agenda for WRC-99, where the potential exists to establish a worldwide 40-meter allocation, shifting western hemisphere hams down 100 kHz and eastern hemisphere broadcasters up 100 kHz to avoid interference with each other as is the case currently.

The Amateur Satellite corporation (AMSAT) did not make the cut aboard the European Space Agency's Ariane 502 rocket in late September to launch its new Phase 3D satellite. ESA specified more rigorous mechanical standards for payloads in late July, and AMSAT was not able to make the upgrades to its satellite in time for the launch. Despite the scheduling setbacks, an international team of Phase 3D project workers continued final mechanical and electronic integration efforts on the satellite in August and September as AMSAT began angling with ESA for a new launch opportunity. AMSAT said the satellite would likely not go up this year. Phase 3D will be the the most versatile amateur radio satellite ever orbited, with operations on from 15 meters in the HF band through the microwave bands.

Consumers who are affected by radio interference may be helped by a new publication brought out jointly by the Consumer Electronics Manufacturers Association and the American Radio Relay League. According to an FCC release, the document is available on the world wide web. Go to www.fcc.gov/cib/Publications/tvibook.html for download.

(Excerpts from November 1997 "QST" Magazine and the October 24, 1997 "ARRL Letter")

Broadband Networks Part Sixteen (continued)

cannot be used for NTSC signals.

It is, of course, possible to use Channels 42, 98, and 99 for non-video services which can be operated below the +38.75-dB threshold.

ASTORIA, OREGON: THE FIRST CABLE TELEVISION SYSTEM

Astoria, Oregon, a city of about 10,000, lies at the mouth of the Columbia River. It boasts a rich history dating back to the late 1700s when the first European sailing vessels visited the area.

Two events in Astoria's history are particularly relevant to this month's Newsletter.

The most significant of these events took place in 1805, when Louis and Clark arrived in the area. As the recent PBS series noted, their arrival marked the western terminus of their famous expedition: they had reached the Pacific Ocean, and had established once and for all that the legendary "northwest passage" did not exist.

They established a fort, known as Fort Clatsop, near what is now Astoria. After spending the winter at the fort, they returned to their starting point, St. Louis, the following year. Their original fort has been reconstructed, and is now part of Fort Clatsop National Memorial.

Another event of significance to this Newsletter took place in Astoria in 1948. On Thanksgiving Day of that year, what is probably the world's first cable television system began operation, carrying one channel: KRSC-TV (now KING-TV), Channel 5, Seattle. The system had been constructed by Ed Parsons, a local TV dealer. Parsons figured he'd be able to sell more TV sets if his potential customers could receive TV signals.

Astoria's claim to having the world's first cable television system is a matter of considerable debate: other claims have been made for various cities in Pennsylvania, Wisconsin, and even England. Nevertheless, Astoria was certainly one of the first, even if its claim is in dispute.

My wife and I visited Astoria a few years ago. While there, we made the obligatory trip up Coxcomb Hill to visit another local landmark, the Astoria Column, a 125-foot observation tower. The Column offers a spectacular view of the surroundings: the Columbia River, the Pacific Ocean, and Mt. St. Helens in the distance.

Thinking this might be the site of Parsons' original headend, I looked around for some evidence of its presence. If there was ever a headend there, it's gone now. But I was delighted to discover a prominent granite monument near the entrance to the Column. The monument bears the following inscription:

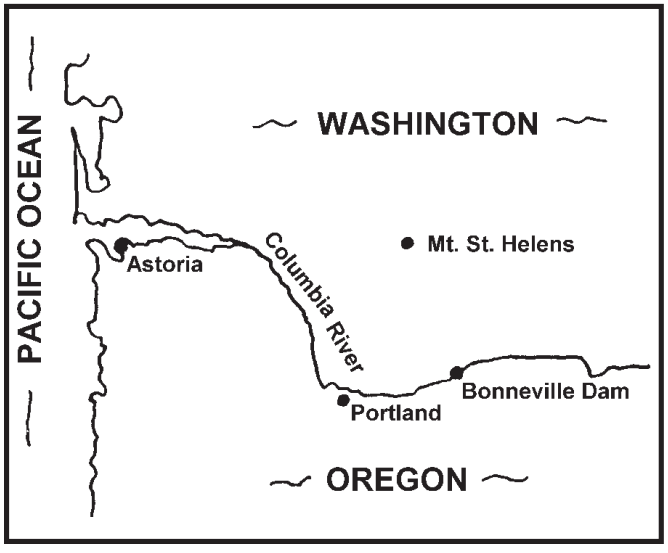
A bronze plaque on top:

SITE
OF THE FIRST COMMUNITY
ANTENNA
TELEVISION INSTALLATION
IN THE UNITED STATES
COMPLETED, FEBRUARY 1949
ASTORIA, OREGON

Engraved into the vertical front face:

CABLE TELEVISION
WAS INVENTED AND
DEVELOPED BY
L. E. 'ED' PARSONS
ON THANKSGIVING DAY
1948. THE SYSTEM
CARRIED THE FIRST TV
TRANSMISSION BY
KRSC-TV CHANNEL 5
SEATTLE. THIS MARKED
THE BEGINNING OF
CABLE TV

A more complete version of the history of the Astoria cable system can be found in the Fall 1996 issue of *American Heritage of Invention & Technology*. This issue contains an article titled "THE BIRTH OF CABLE TV" by George Mannes, a reporter for the *New York Daily News*.



Broadband Networks Part Sixteen (conclusion)

Band (in MHz)	Cable Channel	Standard Carrier Frequency	IRC Carrier Frequency	HRC Carrier Frequency	Master Oscillator Harmonic
54 - 60	2	55.2500	55.2625	54.0027	9
60 - 66	3	61.2500	61.2625	60.0030	10
66 - 72	4	67.2500	67.2625	66.0033	11
72 - 76	1	- -	73.2625	72.0036	12
76 - 82	5	77.2500	79.2625	78.0039	13
82 - 88	6	83.2500	85.2625	84.0042	14
90 - 96	95	91.2500	91.2625	90.0045	15
96 - 102	96	97.2500	97.2625	96.0048	16
102 - 108	97	103.2500	103.2625	102.0051	17
108 - 114	98	109.2750	- -	- -	18
114 - 120	99	115.2750	- -	- -	19
120 - 126	14	121.2625	121.2625	120.0060	20
126 - 132	15	127.2625	127.2625	126.0063	21
132 - 138	16	133.2625	133.2625	132.0066	22
138 - 144	17	139.2500	139.2625	138.0069	23
144 - 150	18	145.2500	145.2625	144.0072	24
150 - 156	19	151.2500	151.2625	150.0075	25
156 - 162	20	157.2500	157.2625	156.0078	26
162 - 168	21	163.2500	163.2625	162.0081	27
168 - 174	22	169.2500	169.2625	168.0084	28
174 - 180	7	175.2500	175.2625	174.0087	29
180 - 186	8	181.2500	181.2625	180.0090	30
186 - 192	9	187.2500	187.2625	186.0093	31
192 - 198	10	193.2500	193.2625	192.0096	32
198 - 204	11	199.2500	199.2625	198.0099	33
204 - 210	12	205.2500	205.2625	204.0102	34
210 - 216	13	211.2500	211.2625	210.0105	35
216 - 222	23	217.2500	217.2625	216.0108	36
222 - 228	24	223.2500	223.2625	222.0111	37
228 - 234	25	229.2625	229.2625	228.0114	38
234 - 240	26	235.2625	235.2625	234.0117	39
240 - 246	27	241.2625	241.2625	240.0120	40
246 - 252	28	247.2625	247.2625	246.0123	41
252 - 258	29	253.2625	253.2625	252.0126	42
258 - 264	30	259.2625	259.2625	258.0129	43
264 - 270	31	265.2625	265.2625	264.0132	44
270 - 276	32	271.2625	271.2625	270.0135	45
276 - 282	33	277.2625	277.2625	276.0138	46
282 - 288	34	283.2625	283.2625	282.0141	47
288 - 294	35	289.2625	289.2625	288.0144	48
294 - 300	36	295.2625	295.2625	294.0147	49
300 - 306	37	301.2625	301.2625	300.0150	50
306 - 312	38	307.2625	307.2625	306.0153	51
312 - 318	39	313.2625	313.2625	312.0156	52
318 - 324	40	319.2625	319.2625	318.0159	53
324 - 330	41	325.2625	325.2625	324.0162	54
330 - 336	42	331.2750	- -	330.0165	55
336 - 342	43	337.2625	337.2625	336.0168	56
342 - 348	44	343.2625	343.2625	342.0171	57
348 - 354	45	349.2625	349.2625	348.0174	58
354 - 360	46	355.2625	355.2625	354.0177	59
360 - 366	47	361.2625	361.2625	360.0180	60
366 - 372	48	367.2625	367.2625	366.0183	61
372 - 378	49	373.2625	373.2625	372.0186	62
378 - 384	50	379.2625	379.2625	378.0189	63
384 - 390	51	385.2625	385.2625	384.0192	64
390 - 396	52	391.2625	391.2625	390.0195	65
396 - 402	53	397.2625	397.2625	396.0198	66
402 - 408	54	403.2500	403.2625	402.0201	67
408 - 414	55	409.2500	409.2625	408.0204	68
414 - 420	56	415.2500	415.2625	414.0207	69
420 - 426	57	421.2500	421.2625	420.0210	70
426 - 432	58	427.2500	427.2625	426.0213	71
432 - 438	59	433.2500	433.2625	432.0216	72
438 - 444	60	439.2500	439.2625	438.0219	73
444 - 450	61	445.2500	445.2625	444.0222	74
450 - 456	62	451.2500	451.2625	450.0225	75
456 - 462	63	457.2500	457.2625	456.0228	76
462 - 468	64	463.2500	463.2625	462.0231	77
468 - 474	65	469.2500	469.2625	468.0234	78
474 - 480	66	475.2500	475.2625	474.0237	79
480 - 486	67	481.2500	481.2625	480.0240	80
486 - 492	68	487.2500	487.2625	486.0243	81
492 - 498	69	493.2500	493.2625	492.0246	82
498 - 504	70	499.2500	499.2625	498.0249	83
504 - 510	71	505.2500	505.2625	504.0252	84
510 - 516	72	511.2500	511.2625	510.0255	85
516 - 522	73	517.2500	517.2625	516.0258	86
522 - 528	74	523.2500	523.2625	522.0261	87
528 - 534	75	529.2500	529.2625	528.0264	88
534 - 540	76	535.2500	535.2625	534.0267	89
540 - 546	77	541.2500	541.2625	540.0270	90
546 - 552	78	547.2500	547.2625	546.0273	91
552 - 558	79	553.2500	553.2625	552.0276	92
558 - 564	80	559.2500	559.2625	558.0279	93
564 - 570	81	565.2500	565.2625	564.0282	94
570 - 576	82	571.2500	571.2625	570.0285	95
576 - 582	83	577.2500	577.2625	576.0288	96
582 - 588	84	583.2500	583.2625	582.0291	97
588 - 594	85	589.2500	589.2625	588.0294	98
594 - 600	86	595.2500	595.2625	594.0297	99
600 - 606	87	601.2500	601.2625	600.0300	100
606 - 612	88	607.2500	607.2625	606.0303	101
612 - 618	89	613.2500	613.2625	612.0306	102
618 - 624	90	619.2500	619.2625	618.0309	103
624 - 630	91	625.2500	625.2625	624.0312	104
630 - 636	92	631.2500	631.2625	630.0315	105
636 - 642	93	637.2500	637.2625	636.0318	106
642 - 648	94	643.2500	643.2625	642.0321	107
648 - 654	100	649.2500	649.2625	648.0324	108
654 - 660	101	655.2500	655.2625	654.0327	109
660 - 666	102	661.2500	661.2625	660.0330	110
666 - 672	103	667.2500	667.2625	666.0333	111
672 - 678	104	673.2500	673.2625	672.0336	112
678 - 684	105	679.2500	679.2625	678.0339	113
684 - 690	106	685.2500	685.2625	684.0342	114
690 - 696	107	691.2500	691.2625	690.0345	115
696 - 702	108	697.2500	697.2625	696.0348	116
702 - 708	109	703.2500	703.2625	702.0351	117
708 - 714	110	709.2500	709.2625	708.0354	118
714 - 720	111	715.2500	715.2625	714.0357	119
720 - 726	112	721.2500	721.2625	720.0360	120
726 - 732	113	727.2500	727.2625	726.0363	121
732 - 738	114	733.2500	733.2625	732.0366	122
738 - 744	115	739.2500	739.2625	738.0369	123
744 - 750	116	745.2500	745.2625	744.0372	124
750 - 756	117	751.2500	751.2625	750.0375	125
756 - 762	118	757.2500	757.2625	756.0378	126
762 - 768	119	763.2500	763.2625	762.0381	127
768 - 774	120	769.2500	769.2625	768.0384	128
774 - 780	121	775.2500	775.2625	774.0387	129
780 - 786	122	781.2500	781.2625	780.0390	130
786 - 792	123	787.2500	787.2625	786.0393	131
792 - 798	124	793.2500	793.2625	792.0396	132
798 - 804	125	799.2500	799.2625	798.0399	133

This chart specifies the three common cable television frequency plans used in the United States: standard, IRC, and HRC. Column headings are:

• **NOMINAL CHANNEL BOUNDARIES** - The channel boundaries, in MHz, of the "standard" channels. Many IRC and HRC channels use slightly different boundaries.

• **EIA CABLE CHANNEL** - The number assigned to this cable channel by EIA standard IS-132.

• **STANDARD CARRIER FREQUENCY** - The frequency of the visual carrier in the "standard" frequency plan.

• **IRC CARRIER FREQUENCY** - The frequency of the visual carrier in the IRC frequency plan.

• **HRC CARRIER FREQUENCY** - The frequency of the visual carrier in the HRC frequency plan.

• **HARMONIC** - The harmonic of the master oscillator used to generate the IRC and HRC frequencies.

In every case, the aural carrier is 4.5 MHz above the visual carrier.

Source: *EIA Interim Standard IS-132: Cable Television Channel Identification Plan.* Electronic Industries Association, Washington, DC, 1994. This standard is incorporated by reference into the FCC Rules at 47 CFR 76.605(a)(2).

Figure 1. United States Cable Television Channel Offset Frequencies

SBE NATIONAL BOARD MEETING REPORT

By Leonard Charles

Highlights of the Fall SBE Board meeting at the Central New York regional conference at Syracuse September 25, 1997, called to order at 6:04pm.

This 1997 TREASURER'S REPORT shows income ahead of budget and expenses lower than budget. As a result, the proposed budget for 1998 does not include a dues increase.

Reasons include:

- Strong bookstore sales
- Continued success of our certification program
- Increased membership
- Increased Sustaining Memberships
- Tight handle on SBE office expenses

The proposed budget also includes a Simple IRA program for national office employees.

The CERTIFICATION COMMITTEE reports strong new and renewed certifications. There is a very high number of TV Ops certifications. Since the discontinuation of the electronic certification guides, the committee continues to tweek the new paper guides and respond to membership input about them. The Certification committee sees the possibility of a certification preparation course for those members who are asking for more than study guides can provide. They are also considering a suggestion from the Board to include more questions on RF Radiation Standards and possibly specific certification to qualify an engineer to work in high RF environments governed by ANSI radiation standards.

The ELECTRONICS COMMUNICATIONS COMMITTEE expressed numbers showing that the SBE web site has become one of our strongest tools at servicing our membership. There have been over 74,000 viewers since its inception in 1995.

Now that the SBE National BBS computer has died and will not be replaced, the web site has become our only means of electronic contact and information dissemination. The Job Line Contact list is the most popular page of the site. Other popular pages on the site include:

- The Chapter Roster list, which is generating renewals as members realize they have been dropped from the list.
- EAS Committee page which took nearly 300 reads of its recently published FCC Petition in the first 10 days of availability.

The online bookstore will be the next addition coming soon to the web site.

The EAS COMMITTEE reported the details of its recently filed FCC Petition for EAS rules change. The submission was opened for comment immediately and was in its reply comment period at the time of the Board meeting. Two comment submissions were received; one from the NAB and the other from MTS, a manufacturer of EAS equipment. The Committee was in the process of working with SBE Counsel on replying to these comments.

The ENNES EDUCATION COMMITTEE reported that no scholarships were awarded this year as there were no applications of the many submitted that fit the criteria of the committee. In other words, their studies did not correlate closely enough to the broadcast engineering field. The committee is exploring ways to get more qualified potential recipients.

The FCC LIAISON COMMITTEE has been very busy this year. They are currently working on Comments concerning a Petition for Rulemaking submitted by Skybridge to allow sharing the 13 GHZ TV Broadcast Auxiliary Band by user terminal stations communicating with low Earth orbit satellites.

They are also preparing a Petition for Rule Making to make improvements to the Unattended Operation Rules.

Other submissions accomplished by the FCC liaison Committee in 1997 include:

- Petition for Rulemaking to change the EAS rules
- Opposition comments to the MSS takeover of the 2GHZ band

Following a suggestion by the Board, the FCC liaison committee listing of active and past filings is now available on the SBE web site.

SBE GENERAL COUNSEL Chris Imlay reports that the battle to restrict the use of the term "engineer" to those holding a state issued PE license is heating up again. The latest volley involves an attack on Novell for their use of the term Certified Netware Engineer. The Board passed a motion that instructs SBE Counsel to prepare a "friend of the Court brief" that will be filed in the Novell case.

Imlay also detailed the chronology of the government take away of 2GHZ BAS spectrum. The process instructs the FCC to try to find replacement spectrum for broadcasters. Chris suggested that the SBE try to locate spectrum and propose it to the FCC in an effort to be part of its allocation.

(continued on page 7)

SBE NATIONAL BOARD MEETING REPORT (continued)

Chris also reported on comments to be filed by the SBE in support of an NAB proposal to affect federal preemption of local ordinances concerning construction of antenna structures. The filing is in light of the time table put forth by the FCC on DTV and the large amount of new structures that will be necessary to meet the deadline.

Imlay also commented on the new volunteer protection legislation and how it applies to SBE chapter activities and those of our volunteer frequency coordinators.

The FREQUENCY COORDINATION COMMITTEE reported on the progress of a pilot program the SBE is working on for submitting Part 74 applications electronically to the FCC, with the SBE acting as the gathering and verifying agency. After spending months at this, it is becoming apparent that it could become a huge expense to the SBE with little benefit. Its fate is still undecided.

This discussion evolved into one on the requirement for frequency coordination when submitting application for a Part 74 license. An adhoc committee was formed to write comments for the FCC concerning this issue.

The SBE INDUSTRY RELATIONS COMMITTEE reported on the many committees working on the development of DTV and presented the writings of each of them to date. The committee chair also submitted a request to get more station personnel involved in this process, as there are few now. Some of the hot issues needing input include:

- Station identification methods
- Network program distribution
- Splice Point Transport protocol being written by SMPTE
- Local insertion

There are two 50 foot trucks now being constructed that will contain a fully functional DTV station. The solicitation of equipment and educational content is in progress now. The trucks will debut at NAB '98, and then will tour the top 30 markets.

The MEMBERSHIP COMMITTEE gave the results of this year's membership drive. They also announced the proposal to form a new level of membership aimed at High School Students with aspirations to the broadcast engineering field, specifically at schools that operate educational broadcast stations. That level of membership will be presented soon by the BY LAWS COMMITTEE.

The SUSTAINING MEMBERSHIP COMMITTEE reports a membership listing of 97 supporting companies.

The EXECUTIVE DIRECTOR'S REPORT included announcement of the 1998 Leadership Skills Seminar by Dick Kupka to be held in June following the success of the 1997 program.

John Poray also reported on the membership numbers which are the highest since 1991 and represent the 57th month of continuous growth measured November to November each year. There are still renewals trickling in.

Poray also reported that there were 1000 ballots returned for this year's national elections, the highest in recent years.

The carrier for our commercial liability insurance coverage has cancelled us due to low numbers of participants, but a new carrier has been located for about the same cost. Mims International will be the new carrier for this program aimed at members who make their living as contract engineers. The Board approved the move to the new carrier.

John also said the new phone system with voicemail has now been installed at the national office. The Executive Committee had given it's approval for the expenditure at the Summer meeting.

In OLD BUSINESS, an amendment to the By Laws was approved by the Board that will allow all Sustaining Members voting privileges in order to exempt the income generated by the Sustaining Membership program from taxable income. This was necessary in light of recent IRS rulings on income by non profit organizations.

Job descriptions of each officer and committee chair in the SBE were requested by the Executive Committee at its Summer meeting and were presented to the Board. They were approved as written.

In NEW BUSINESS, the Board accepted a new DTV RF book by Doug Garlinger which details the specifics of DTV from a broadcast engineer perspective. It will be published by the SBE and sold in the SBE bookstore.

The Board also decided the location of the 1998 Fall Board and national meetings and the Awards Banquet. They will be held in Seattle in conjunction with the SBE Chapter 16 Electronic Media Expo October 28th and 29th.

The meeting was adjourned at 11:53pm.

FCC Rulemakings

Compiled by Tom Smith

PROPOSED RULEMAKING

ET Docket No. 97-214; FCC 97-363 Proposal to Amend Part 2 of the Commissions Rules to Allocate the 455-456 Mhz and 459-460 Mhz Bands to The Mobile Satellite Service (Earth to Space) ("MSS Uplinks") on a Primary Basis for Non-Voice, Non-Geostationary Mobile Satellite Services ("NVNG-MSS")

The FCC is proposing to allow the sharing of the 455-456 mhz broadcast Auxiliary band and the 459-460 mhz band assigned to part 22, 80 and 90 of the rules with the MSS "Little Leo" satellite service. All of these services would use these frequencies on a co-primary basis. The little Leo satellite services would not be allowed to cause interference to the broadcast auxiliary service. The FCC is suggesting that because of the short transmissions from the Little Leo satellites (450 ms)and with the possibility of the satellite to be able to search for unused channels, the broadcast and other users would be protected from interference.

The FCC says there are 25,000 licensed transmitters in the 455-456 mhz band. This band makes up nearly 50% of the remote pick-up frequencies for broadcast radio.

The FCC adopted this notice on October 9, 1997 and released it on October 20th. Comments are due on December 1, 1997 and replies are due on December 15, 1997. This notice was published in the FEDERAL REGISTER on October 30, 1997 on pages 58,932-58,935. There are pointers to this notice on the WEB at www.broadcast.net and at www.transmitter.com on the *RF Currents* page.

FINAL RULE

ET Docket No. 95-177; FCC 97-379 Amendment of Part 15 of the Commissions Rules To Permit Operation of Biomedical Telemetry Devices on VHF TV Channels 7-13 and UHF Channels 14-46

The FCC has issued rules allowing users of biomedical telemetry devices to operate with increased power on the TV broadcast band under part 15 of the rules. Part 15 of the rules allows for unlicensed devices to operate on various RF bands with very low power. The FCC already allows for the use of biomedical telemetry equipment in the TV band, but this action will allow for the use of increased power with the restriction that this equipment be operated within a hospital or other similar facility. No mobile operation will be allowed. Users of these devices may not cause interference to TV broadcast, low-power and translator stations and to wireless microphones operating under part 74 of the broadcast auxiliary services.

These devices are restricted to a power of 200mv at 3 meters and must operate at a distance from a co-channel broadcast facility of 10.3 km beyond the grade "B" of a full power VHF station, 5.5km beyond the grade "B" of a full power UHF station, 5.1 km beyond the 68 µv contour of a low power VHF and 3.1 km beyond the 74 µv contour of a low power UHF station.

This action was adopted on October 9, 1997 and released on October 20, 1997. The rules become effective on December 1, 1997 and were published in the FEDERAL REGISTER on October 30, 1997 on pages 58,656-58659.

Compiled from the FEDERAL REGISTER (www.access.gpo.gov) and Doug Lung's RF Currents (www.transmitter.com) and the FCC web page (www.fcc.gov)

FCC LOCAL LEGALS

Compiled by Tom Smith

PROPOSED

New FM, Soldiers Grove, WI

Rural Radio Company (Lyle R. Evans) seeks to have the FCC allocate FM channel 290A (105.9 mhz) to Solders Grove as it's first FM station. There is a site restriction of 7.3 miles northeast of Soldiers Grove. Comments are due to the FCC by November 24, 1997 and replies are due on December 9, 1997.

From the FEDERAL REGISTER

Chapter 24
World Wide Web Site
http://www.sbe24.org

Leonard Charles is the editor for the Electronic Version of this Newsletter, uploaded monthly onto SBE Chapter 24's web page.

Emergency Alert System Firsthand

By Paul Stoffel

• I did an informal survey of nine Madison-area Radio Shack stores to find out how many of the new SAME ALERT WEATHER RADIOs have sold since they were introduced in early September. On average, 3 or 4 were sold at each store; two stores sold zero; East Towne Radio Shack sold seven. The Sun Prairie store has a unit plugged-in and operating. Of the managers I talked to, all knew how to program the radios with FIPS codes.

Gary Timm, Wisconsin State Emergency Communications Committee chair, said he mailed district managers the FIPS code map and programming information. In turn, the district managers have passed information along to the store managers. One store was also given FIPS information from some area ham operators. One store manager said sales will pick up again in Spring next year, especially after the year's first thunderstorm or tornado weather warning. (Of the radios sold so far, I wonder how many were bought by broadcasters or ham operators?)

• On display at this year's Broadcasters Clinic was ASi Industries' EMERGENCY ALERT SENTINEL. Not a weather radio, the Sentinel listens silently to a tuned AM or FM radio station until EAS data tones are heard and then the unit comes alive. "The Sentinel, as the brochure says, is designed for convenience." ASi Industries is located in Fairfax, Iowa.

• How many and how often do radio broadcast stations air severe weather announcements as actual EAS alerts? How many stations have their announcers read NWS scripts off the wire, without sending EAS tones?

• Are your EAS clocks set correctly after the time change?

• The National Weather Service issued a snow advisory on Sunday, October 26. Currently, there is no FCC-approved EAS Alert Code for a "snow advisory." Should it be issued as an SPS, Special Weather Statement?

Philosophical question:

If you're a DTV station transmitting all zeroes, *are you off the air*? ☺

- Tom Weeden, WJ9H

The Chapter 24 Newsletter is published monthly. Submissions of interest to the broadcast technical community are welcome. You can email your articles to:

Mike_Norton@wetn.pbs.org

or send them to:

SBE Chapter 24 Newsletter Editor

5174 Anton Dr. #15
Madison, WI 53719-4201

FCC UPDATE

A complete listing of all the FCC filings by SBE can now be found on the internet home page, www.sbe.org. Those of you who think SBE does not have an aggressive regulatory review program will be surprised at the depth and breadth of the topics listed.

CHAPTER 24 SUSTAINING MEMBERS

RECENT RENEWALS:

Panasonic Broadcast

THANKS TO ALL OUR SUSTAINING MEMBERS:

Alpha Video
BCS Wireless
CTI
Clark Wire and Cable
Comark Communications
Fuji Film
Harris Corporation
Hewlett-Packard
Louth Automation
maney-logic
Niall Enterprises
Norlight Telecommunications
Richardson Electronics
Roscor Wisconsin
Scharch Electronics
Skyline Communications
Sony Broadcast
Tektronix
Teleport Minnesota
Video Images
WISC-TV 3
WKOW-TV 27
WMSN-TV 47
WMTV-TV 15

SBE
SBE Chapter 24 Newsletter
5174 Anton Drive #15
Madison, WI 53719-4201

FIRST CLASS MAIL

Newsletter edited on Pagemaker 5.0 by: Mike Norton
Contributors this month: Leonard Charles, Neal McLain, Tom Smith, Paul Stoffel, and Tom Weeden.
Thanks to Chris Cain for his work on the Chapter 24 WWW page.