By Steve Paugh

The Chapter 24 election ballots were certified and counted on April 28, 2003. There are 62 voting members in Chapter 24. We received 16 ballots and all ballots were certified as valid. Fifteen ballots were collected at the April 23, 2003 chapter meeting and 1 ballot was received prior to the ballot counting.

Congratulations to our newly elected officers.

Chairperson- Vicki Kipp
Vice Chair- Tom Smith
Secretary- Jim Magee
Treasurer- Stan Scharch

The nomination committee members were Steve Paugh, Jim Hermanson and Leonard Charles.

By Keith Katers

The Madison Chapter of Media Communications Association (MCA-I) is producing an HDTV seminar on Friday, May 9th in Madison. It will be held at American Family’s National Headquarters.

The seminar is designed as a learning experience to catch up on the world of HDTV for production, editing and distribution. We have two national speakers, and two groups of panelists—one of HD producers, and the other, HD engineers and technicians that will share their experiences with this technology. We will also have HD equipment on hand from Apple, AVID, Pinnacle, Panasonic and Sony.

Information regarding MCA-I, National—and our local chapter can be found at http://www.mca-i.org/ and http://www.mcai-madison.org/events.cfm.

By Leonard Charles

This year the WBA-SBE Summer Engineering Workshop (in conjunction with the WBA Summer Conference) will be held on Wednesday June 18th at the House On The Rock Resort in Spring Green, Wisconsin.

This year’s program will be an all day seminar titled: Broadcast RF Fundamentals. Terry Baun will be the presenter.

This day-long program is designed to present the fundamentals of RF systems design and maintenance to broadcast engineers and operators who may not normally deal with those issues on an everyday basis. Studio and operations personnel who may be controlling transmission plants as part of their assigned duties need to have an understanding of the RF system to permit them to ascertain proper system performance, control operation within legal limits, understand environmental effects, and possibly perform first level maintenance utilizing proper safety procedures. This seminar is designed to provide that level of information.

In addition, RF propagation issues for AM, VHF, and UHF will be discussed, as will basic tower construction and associated Federal requirements for tower marking, painting, and protection of the public from RF radiation. Also to be treated will be the upcoming ATSC DTV and IBOC conversions and their impact upon RF systems.

The seminar is designed for those who are currently employed in broadcast operations/engineering, but who are not necessary RF engineers. Consequently, a basic understanding of broadcast technology is assumed.

Handouts will be provided as will a Certificate of Completion for those who attend.

(continued on page 7)
Chapter 24 of the Society of Broadcast Engineers met on Wednesday, April 23, 2003 at Avid Technology’s offices in Madison, Wisconsin for the chapter’s monthly meeting. There were 19 members in attendance, 14 of whom were certified and 3 guests.

The meeting was called to order at 7:15 PM by Chapter Chair Tom Smith. Minutes of the previous meeting were approved as published in the March issue of the newsletter.

Newsletter editor Mike Norton announced the deadline for articles for the April issue will be midnight, Friday, May 2nd. The folding party will be held Wednesday, May 7th at 5:30 PM at WKOW-TV. There was no treasurer’s report.

New Program committee chair Steve Paugh thanked Denise Maney for serving as the previous Program committee chair. Denise was presented a special recognition award from the chapter. The May meeting will be held on May 22nd and will be a technical discussion of IOT application at ECB. The June meeting will be the chapter’s picnic on June 17th and will be held at the Badger Prairie State Park (Shelter 1). Entertainment will once again be provided by Kevin Peckham and Kevin Ruppert. The July meeting will be a Taste of NAB on July 15th at WISC’s Studio C. Food will be provided at all three meetings.

Sustaining Membership chair Fred Sperry reported a total of 24 sustaining members, with Alpha Video recently renewing. Special Events chair Lonnie Cooks reported that he has not received any comments about a possible tour of Norlight’s facilities and WTTW in Chicago.

Certification chair Jim Hermanson reported the next local exam will be June 6-16 and the deadline for applying is May 25th. He also received from Neal McLain a photograph taken in early 1977 of the first round of certified members of Chapter 24.

Frequency Coordinator Tom Smith reported that the FCC delayed the prior coordination procedures for Part 101 to allow for cleaning up database information for fixed links. Both transmitter and receiver locations need to be correct. Tom also reported that a number of penalties have been made for not building DTV stations. There is also a proposal for MMDS service in the 12GHz band. No date has been set for the proposed receiver standards.

The frequency coordinator for Milwaukee raised an issue at the National Frequency Coordination Meeting in Las Vegas about the lower 2 channels in the 2GHz band being shared between low orbit and PCS type phone systems, and that there is an increased demand in Milwaukee for ENG channels. It was also reported that Frequency Coordinator Howard Fine is not optimistic about stations getting paid for the frequency reallocation. There will be a meeting set up in Milwaukee to discussion the channel allocation plan. The Madison and Green Bay chapters are invited to the lunch meeting which is still being planned.
April Business Meeting Minutes (continued)

National Liaison Leonard Charles reported that the new edition of the Radio Operator’s Handbook is available from the national office. Although the April 1st renewal deadline has passed, there is a grace period in which to renew which ends the end of April. The deadline for applying for the Leadership Skill Seminar is May 1st. The seminar will be June 4-6 in Indianapolis. The deadline for the SBE Annual Awards nominations is May 31st.

In unfinished business, Election Chair Steve Paugh announced that a number of ballots have been cast for the chapter’s election. Steve also thanked Jim Hermanson for making the ballots.

The Wisconsin Broadcasters Association’s summer workshop will be held in Spring Green on June 18th and 19th. The WBA wanted to know if we wanted to have a booth this year. Last year’s booth was unmanned. It was discussed about having an unmanned booth this year with various brochures and pamphlets.

The meeting adjourned at 7:33 PM.

The program this month was a presentation of the Avid Big Picture by Craig Jordan, Savva Mueller, and Greg Fahlstrom of Avid.

Submitted by Jim Magee, Secretary

AMATEUR RADIO NEWS

By Tom Weeden, WJ9H

- Some amateur radio groups are expressing concern over the proposed concept of using existing electrical power lines to deliver Internet and broadband service to homes and offices. In mid-April the FCC initiated a Notice of Inquiry (NOI) in ET Docket 03-104. A form of carrier-current technology typically known as power line communication (PLC), it’s also been called “PowerWiFi” and now—the FCC—“Broadband over Power Line” (BPL). The technology is raising serious interference concerns within the amateur radio community, since BPL would apply high-frequency RF to parts of the power grid. One aspect of the NOI is to gather information on potential interference effects on authorized spectrum users.

“Entire communities will be affected, so every amateur in that community could have part of the radiating system ‘next door’ on the power wiring on his or her street,” cautioned Ed Hare, W1RFI, chair of the PLC Work Group of the IEEE C63 Accredited Standards Committee on Electromagnetic Compatibility, which develops standards for emissions and immunity for a wide range of commercial and consumer products. <http://c63.ieee.org/>

The FCC appears enthusiastic about BPL, however, saying it has the potential to “provide consumers with the freedom to access broadband services from any room in the house without adding or paying for additional connections.” FCC Chairman Michael Powell said, “Broadband over Power Line has the potential to provide consumers with a ubiquitous third broadband pipe to the home.”

BPL/PLC technology already has been deployed in some European countries, and amateurs there have complained about interference from the systems. Japan, responding in part to concerns expressed by its amateur community, decided last year not to adopt the technology because of its interference potential.

- The FCC has sent advisory notices to four enthusiasts of what’s become known as “enhanced SSB”–the practice of engineering transmitted single-sideband audio to approach broadcast quality.

“The Commission has received numerous complaints regarding the operation of your station,” FCC Special Counsel Riley Hollingsworth wrote to four amateurs on April 3. Hollingsworth said complaints to the FCC alleged that the bandwidths of the stations’ enhanced SSB emissions were “wider than necessary and contrary to good engineering practice.” Occupying more bandwidth than necessary in a heavily used amateur band, Hollingsworth wrote, not only could generate ill will among operators but lead to petitions asking the FCC to establish bandwidth limits for amateur emissions. At present, the FCC imposes no specific bandwidth limits on various amateur modes. Some amateurs have complained that enhanced SSB signals can take up 8 kHz or more of spectrum, cause splatter and unnecessarily interfere with other stations.

“The Amateur Service is not a substitute for the Broadcast Service,” Hollingsworth said, “and the frequencies allocated to the Amateur Service were not allocated for a ‘broadcast quality’ audio emission or sound.” Hollingsworth suggested the enhanced SSBers operate when the bands are less busy or on bands that are not heavily used.

(Excerpts from the American Radio Relay League’s “The ARRL Letter” and the www.arrl.org web site)
FCC Rulemakings

Compiled By Tom Smith

PROPOSED RULEMAKINGS

ET Docket No. 03-104
Inquiry Regarding Carrier Current Systems, including Broadband over Power Line Systems

The FCC has started an inquiry into allowing the use of carrier current systems for the use of delivering broadband services to the home as well as managing the electric power system. The inquiry addresses two types of carrier current systems. The first is access systems which use the 1000 to 40,000 volt transmission lines to deliver services such as the Internet to homes and offices. Electric utilities could also do load management with these systems. The second system they address is the use on the electric wiring within the home or office to network computers and other devices such as printers.

The FCC currently has rules that allow for the transmission of RF signals over power lines within a building. They operate below 2 MHz and are used for providing AM radio signals within a building such as in a collage dorm or for device control such as the X-10 control systems, which allow for the remote control of lights and appliances. The Commission is proposing the use of devices that operate from 2-80 MHz.

The inquiry asks about the current state of broadband over power line technology (BPL), potential interference to current spectrum users, test results from experimental BPL, measurement procedures for testing emission from all types of carrier current systems and changes in Part 15 rules to allow for development of BPL and to prevent interference to other services from broadband and other carrier current services.

This action was taken by the commission and released on April 23, 2003.

CS Docket No. 97-80
Implementation of Section 304 of the Telecommunications Act of 1996, Commercial Availability of Navigation Devices

In this notice of proposed rulemaking the FCC delayed the deadline on which it would have prohibited multichannel video programming distributors (MVPD’s) from deploying new navigation devices that provide both conditional access and other functions in a single integrated unit. The deadline was moved from January 1, 2005 to July 1, 2006.

Last December, the Consumer electronics Manufacturers and the cable industry signed an agreement that would allow for digital cable boxes that the consumer could purchase, as well as TV sets with digital cable tuners that would have slots for a conditional access device that the cable or other video provider would supply. The conditional access device would allow for the descrambling of pay-TV services. The receiver and the descrambler being separate devices is what the Telecommunications Act of 1996 requires, and this proposal should meet that requirement.

Because there are a number of issues the electronic manufacturers and the cable industry still must settle, the FCC granted a delay, but they are requiring the two industries to give them a progress report every 90 days following the release of this order. The FCC adopted the order on April 14, 2003 and released it on April 25th. Final comments are due on February 19, 2004 with replies due on March 10, 2004.

FINAL RULEMAKINGS

MM Docket No. 95-31
Reexamination of the Comparative Standard for Noncommercial Educational Applicants; Association of America’s Public Television’s Motion for Stay of Low Power Television Auction (No. 81)

Non-commercial applicants will have a harder time getting a license in a non-reserved broadcast channel. Currently the lowest 20 channels in the FM band (88.1-91.9 MHz) and a number of full power TV channels are allocated by the FCC for non-commercial use only. All AM, TV and Low-Power TV and FM translators outside of the 88.1-91.9 MHz band are allocated for use by commercial stations primarily. In the past non-commercial applicants could apply for any channel and have it reserved, in the TV, AM, or FM Band. Commercial and non-commercial stations were on a more equal footing with translators.

With the advent of auctions, the FCC has run into a problem in the commercial bands—they could not require a non-commercial station to bid in auction for a license, but were required to hold an auction if there were one or more commercial applicants. In the new rules, non-commercial applicants will be required to bid at auction unless they meet one of two standards. That they are non-profit educational organization that will use the license to advance an educational

(continued on page 7)
SBE Short Circuits — May 2003

By John L. Poray, CAE
SBE Executive Director

FCC GRANTS STAY REQUESTED BY SBE

The FCC granted a six-month stay that delays the effective date of prior coordination procedures adopted by ET docket 01-75. SBE requested the stay just before the April 16 effective date that would have put into effect new coordination rules requiring fixed aural stations in the 950 MHz band and fixed TV BAS stations in the 2.5 GHz, 7 GHz, 13 GHz, and 18 GHz bands to use Part 101 Prior Notification Procedures.

SBE’s stay request was based on the fact that the FCC’s ULS database is incomplete and inaccurate and that time was needed for licensees to correct receive site information. SBE also said that interference standards for the assorted digital, analog, and hybrid digital/analog links need to be developed before prior coordination procedures are put into effect.

SBE met with FCC officials on April 29 in Washington to discuss ways and offer suggestions on how to correct the ULS. Though licensees will need to check the ULS to make sure that their BAS point-to-point links are accurate, it is not clear at this point whether licensees can make changes in their ULS information without incurring a fee from the FCC. SBE suggests that licensees hold off briefly from making changes until a procedure is devised, hopefully without a fee from the FCC attached. More information will be proved from SBE and the FCC as soon as it is available.

A copy of the FCC stay order can be found at the SBE web site, www.sbe.org.

— SBE Signal —

ENNES WORKSHOP JUNE 7 IN MISSOURI RADIO SESSIONS

SBE will present an Ennes Workshop at the Lodge of the Four Seasons in Lake Ozark, Missouri on Saturday, June 7 from 9:00 am to 4:15 pm. The program is being presented as part of the Missouri Broadcasters Association 2003 Annual Convention and Awards Presentation. MBA is also underwriting part of the cost for engineers to attend.

Ennes Trustee, Fred Baumgartner, CPBE will moderate the Workshop. The following sessions are presenters are planned:

Radio/Audio Sessions
- Pattern Optimization for Side-Mounted FM Antennas by Keith Pelletier, Dielectric Communications
- A Planning Guide: Determining the Best IBOC Migration Path for Your AM or FM Radio Station by Jay Adrick, Harris Corporation, Broadcast Division.
- IBOC Implementation Options for the Short and Long Term by Henry Downs, Dielectric Communications.
- Care and Feeding of FM Multichannel Antennas by William Kerkhoff, Dielectric Communications

Television/Video Sessions
- DTV Status Report: Overview of Current ATSC Activities by Jerry Whitaker, Advanced Television Systems Committee*
- Basics of ATSC DTV Transport by Dr. Richard Chernock, Triveni Digital *
- RF Measurements for a New Era from Z Technology by Dan Rau, Radio Applications Unlimited
- Next Steps in DTV Transmission Implementation by Dave Glidden, Harris Corporation, Broadcast Division
- Control Room Automation: Altering the Workflow of Television News while Relieving the Stress on Engineering by Matt Danilowicz, ParkerVision

Joint Session
- FCC Update/Q&A by Robert McKinney, FCC Enforcement Office in Kansas City

* Sessions and speakers provided by ATSC

To register and for more information, contact the Missouri Broadcasters Association, (573) 636-6692.

THREE MEMBERS HONORED WITH FELLOW AWARDS

The SBE Board of Directors recently elected three members to the membership grade of Fellow. The Fellow Award is the highest award bestowed by SBE. The Board elected Ellis Feinstein, who is former President and CEO of Scala Electronic Corporation and a 50-year broadcast engineering veteran. Also elected was SBE Charter member Peter K. Onnigian, founder of Jampro Antenna Company and another 50-plus year veteran of the industry. The Board also elected John L. Poray, CAE, who has served as Executive Director of the Society of Broadcast Engineers since 1992. Poray’s career in non-profit organization management spans 26 years. A more detailed report on the newest SBE Fellows will be published in the June issue of the SBE Signal.

(continued on page 6)
SBE短路电路 — 2003年5月（从第5页继续）

章节可以“广播”会议

A reminder that SBE chapters can stream chapter meetings or other chapter events for free by taking advantage of borrowing a POTS Codecs unit provided by Tieline of America. Tieline has made the equipment available to SBE chapters through BnetRadio for this purpose. Thanks to BnetRadio studios in Houston, some SBE events will be carried live and all will be archived for others to access on demand. Give Dave Biondi at Bnet Radio a call at 713-926-2209 to arrange use of the POTS Codecs unit.

新手册为无线电操作员在股票

The new SBE Handbook for Radio Operators is now available from the SBE National Office.

This new handbook is designed to help radio board operators learn more about the broadcasting business from both the technical and business side.

SBE has developed a new certification exam for Radio Operators. The Handbook includes sample questions to help readers prepare for the optional test. The cost of the book includes the exam fee. To order, call, fax, or e-mail your order information to the SBE National Office. Phone orders to: (317) 846-9000. Fax: (317) 846-9120. E-mail: lbaun@sbe.org.

最后几年的2003会员驾驶

SBE’s annual membership drive will conclude on May 31. Members who recruit new members between March 1 and May 31 are eligible for prizes and discounts off their 2004 membership renewal. To participate, recruit a new member and be sure they put your name on the “sponsor” line of the membership application. Membership applications are available at the SBE web site, www.sbe.org.

奖项截止日期 — 5月31日

The deadline for nominations for the SBE National Awards is May 31. Nomination forms are available at the SBE web site, www.sbe.org and in the March issue of the SBE Signal. Winners will be announced this summer and will be presented their awards during the SBE National Meeting, October 15 in Madison, Wisconsin.

保持联系 - 今天续会费

Members who not yet renewed can still do so and not miss out on valuable member benefits like the The SBE SIGNAL, discounts on publications and certification, access to SBEJobsOnline, Resume Service or life, health or business insurance. If you need a new form, call or e-mail Angel Bates at the SBE National Office at (317) 846-9000 or abates@sbe.org.

领导技能研讨会移至印第安纳波利斯

Due to a scheduling change, this year’s SBE Leader Skills Seminar, Course I, “Leadership – The Framework of People Skills,” has been moved to Indianapolis. The dates are the same, June 4-6. Those interested in attending should call or e-mail Angel Bates at the SBE National Office (317) 846-9000, abates@sbe.org, as soon as possible. Our instructor will be Dick Cupka, who brings his unique and effective classroom style and enthusiasm to the classroom. Designed to take technically-adept people and instill in them sound supervisory and management skills, the Leader-Skills Series is a valuable tool for professional, as well as personal growth and development.

With the change in location, the cost for the course has dropped to $495, which includes approximately 24 hours of instruction, all course materials, a certificate of completion and classroom refreshments. The course will be held at the Marten House Hotel and Lilly Conference Center, 1801 W. 86th Street in Indianapolis. All transportation, housing, and meals are the responsibility of the participant. Class space is limited to a minimum of 10 and a maximum of 18 participants per course, so be sure to register no later than May 21.

感谢您 Chapter 24

By Denise Maney

It has been a pleasure and personal point of pride to work with the Programming Committee of SBE Chapter 24 over the past 12 years.

I would like to thank Steve Zimmerman for getting me involved. He has been a great inspiration both professional, and personally. You have all been wonderful to work with and are very capable when it comes to coming up with new ideas in a pinch when programs have been canceled for various reasons on short notice.

I want to thank Chapter 24 and Tom Smith for the generous gift and special recognition plaque. It was quite a big surprise! Thank you all.

http://www.CTIinfo.com
email - cti@CTIinfo.com
Phone - 608-831-4636
Fax - 608-836-1840

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CUSTOMER SERVICE FAX 608-778-1495
EMAIL: patrick.keller@gbe.com

WISC-TV 3
WBA-SBE Summer Engineering Workshop (continued from page 1)
complete the seminar.

The one day fee of $25 includes lunch, the evening exhibit reception, and dinner/entertainment with the managers.

For more details about the day’s schedule go to http://www.sbe24.org/WBA-SBE-Shows/Summer03.asp or follow the menus from the sbe24.org front page.

To register call the Wisconsin Broadcasters Association at 608-255-2600, or 800-236-1922, or go to http://www.wi-broadcasters.org.

Thanks to WISC-TV for maintaining the web server for the Chapter 24 Web page!

Thanks to WKOW-TV for providing copying and folding facilities for the Chapter 24 newsletter!

FCC Rulemakings (continued from page 4)
program and can be licensed as a noncommercial educational broadcast station, or they are a municipality that will use the station to transmit only non-commercial programs for educational purposes. The standards track the definition of a NCE station as described on Section 309(j)(2)(C) of the Communications Act.

Stations applying for secondary services—such as translators and LPTV stations—and applicants for AM stations will have an opportunity to settle with a commercial applicant. If there is no settlement, the non-commercial application is dismissed and the license awarded to a commercial applicant.

The FCC will allow for the allocation of a reserved channel in the non-reserved FM band or in the TV band upon the showing of a study that any allocation of a reserved band channel is precluded in the area proposed to be served.

This action was adopted on March 4, 2003 and released on April 10, 2003.

From FCC Releases (www.fcc.gov) and the FEDERAL REGISTER (www.access.gpo.gov)

Thanks to Jim Magee for arranging the Avid presentation for the April meeting.

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Sony Communications Products Company
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Itasca, Illinois 60143
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Fax (708) 773-6046
Service Center (708) 773-6037
Emer. Tech. Assist. (201) 833-9533
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Schar Electronics
Sound Devices, LLC
Swiderski Electronics
Token Creek Productions
WISC-TV 3
WKOW-TV 27
WSMTV-TV 15
Wisconsin Public TV
SBE Chapter 24 Newsletter
2029 Greenway Cross #11
Madison, WI 53713-3000

FIRST CLASS MAIL

Newsletter edited on Pagemaker 7.0 by: Mike Norton
Contributors this month: Leonard Charles, Keith Katers, Jim Magee, Denise Maney, Steve Paugh, Tom Smith, and Tom Weeden.
Thanks to Leonard Charles for his work on the Chapter 24 WWW page.

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High Power Devices for Broadcast Applications

Greg Morton of e2v Technologies will give a technical presentation comparing the choices of high-power amplification devices currently available to the RF designer. He will compare the devices available for use in digital and analog service and discuss a new high-efficiency depressed collector tube design for UHF television applications. Pizza and soda will be provided courtesy of e2v Technologies.

Pizza and Soda
at 6:00 P.M.

Meeting and Program
at 7:00 P.M.

at Wisconsin Public Broadcasting Center
3319 W. Beltline Highway

Visitors and guests are welcome at all of our SBE meetings!

2003 UPCOMING MEETING/PROGRAM DATES:

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Program Committee:  
Steve Paugh  277-5139  
Fred Sperry  264-9806  
Steve Zimmerman  274-1234