

IEEE

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NEWSLETTER

Society Description: Providing the technologies to deliver information and entertainment over the air, cable, satellite and Internet to audiences worldwide, at home and on the go.

From the President

Dear BTS Members:

It was good to see many of you again at IBC in September or at our Broadcast Symposium the following month. Along with NAB each year, these conferences are opportunities to catch up with our long-time members, meet new

and prospective members, and try to stay abreast of the rapid changes in the “broadcast” industry. Note my use of quotation marks in the preceding sentence – more about that later.

Attendance at IBC was up 12 percent from last year, with nearly 41,000 attendees representing 120 countries,

and 38,000 square meters of exhibit space sold. Our 11-percent ownership stake should bring more than \$300K to the BTS coffers again this year. And, already, reservations for next year’s exhibit space are coming in at a record pace. We are committed to plowing back our IBC income for the benefit of the industry – through greater participation in the IBC conference program and expansion of our Newsletter to include more tutorials and applications-oriented articles, for example.

The Broadcast Symposium was, likewise, a great success this year, again attracting nearly 200 attendees. The meeting room was packed for all of the sessions, and the Wednesday evening Workshop – which we tried for the first time this year – drew some seventy people back after dinner. My thanks go to our Symposium Chair, David Layer, and to perennial Technical Program Chair, Ed Williams, for pulling all of this together again. A special nod this year goes to Yiyang Wu and his colleagues for the Wednesday tutorial and demo of video and audio distribution over wireless LAN. Yiyang personally presented four papers at this year’s Symposium – that must be a record!

On the day before the Symposium, the BTS AdCom held its annual fall meeting. Special guests were Ralph Wyndrum, IEEE Vice President of Technical Activities, and Moshe Kam, Region 2 Director and Chair of the

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From the Editor

For the last couple of issues, I have discussed changes that were coming to the Newsletter. However, it seems that this issue may have taken a step back instead of moving forward with our planned improvements. Unfortunately the added content that was expected to appear, in this issue along with some previously added contributions, have fallen victim to the authors’ busy work schedules. This is the price we pay when our contributors are volunteering their time which, at the moment, is in short supply. These problems are compounded by the current limited pool of contributors making it difficult to fill a slot when someone is unable to find the time to complete their contribution.

As the Editor I must take the blame for not delivering on the promised improvements. On reflection, I believe I was a bit too optimistic concerning the potential for new material and also not aggressive

enough in seeking it. That being said a renewed and more aggressive effort will be made to solicit authors and to fill the “pipeline” so there will always be sufficient and interesting material for our readers.

With that thought in mind, why don’t you get to the keyboard and share your knowledge with your colleagues. Keep in mind that the type of articles we are seeking are intended to be more of a practical nature instead of the type that appear in the Transactions that, for some of us, are, to say the least, over our heads. You don’t need to be a PhD to contribute; you just need to have some useful information or thoughts to share with others in our industry. It does not even need to be technical but just something that you think would be useful to our membership. This is a newsletter so we welcome and encourage contributions of news about our colleagues or events taking

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Newsletter Deadlines

The BTS Newsletter welcomes contributions from every member. Please forward materials you would like included to the editor at wmeintel@computer.org. Here are our deadlines for upcoming issues:

Issue	Due Date
March, 2005	January 20, 2005
June, 2005	April 20, 2005
September, 2005	July 20, 2005
December, 2005	October 20, 2005

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From the Editor continued

place in our industry. And one last thought – Don't be concerned about your writing skills – If need be we will help you clean it up.

Although I apologize for not delivering on the promised new material we do have several things of interest in this issue. There is a great report from Jerry Berman on the USTTI activities and a story about a new publication, the *Journal of Display Technology*, which is jointly sponsored by BTS and six other IEEE Societies along with the Optical Society of America. There are also, thanks to April Nakamura our

society administrator, articles about our very successful Symposium and the recent awards presented by BTS to some of our friends and colleagues for their contributions to the Transactions and the 2003 Symposium.

As always – let me hear from you – comments, suggestions and criticism are all welcome. And don't forget to send those articles to share with our readers.

Happy Holidays and Best Wishes for the New Year

Bill Meintel
wmeintel@computer.org

From the President continued

IEEE Membership Project. Ralph has been making the rounds to meet with all the societies' AdComs this year. He reported on the universal dismay he's found with the increasing overhead costs being passed on to the societies, and on his successful efforts to get the IEEE Finance Committee to recommend a \$2-million reduction in these costs in the 2005 budget.

Moshe briefed the AdCom on the Membership Committee's proposal to reach out to professionals in the Broadcast, Multimedia, and Entertainment community, which I mentioned in my previous Newsletter column. The Committee has determined that developers and technical users of broadcasting, multimedia, and electronic entertainment systems are underrepresented in the IEEE membership and, thus, comprise a potential growth segment. Although arrived at independently, many of their observations are in harmony with our own strategic plan-

ning discussions. One of Moshe's observations was that the term "broadcast" sounds too old-fashioned to attract younger members, who identify more with "multimedia." Hence, he's used an expanded description for the community we'd like to attract. Our own Society Description, quoted at the top of this Newsletter, also embraces cable, satellite, and Internet. But, to many, "broadcasting" connotes only over-the-air delivery. We need volunteers to work with our AdCom and the Membership Committee on this segment outreach effort in the coming year. If you'd like to know more, or step up to help, please send me an e-mail.

Best Wishes for the Holidays and the New Year!

Tom Gurley
President
IEEE Broadcast Technology Society
tgurley@ieee.org

Annual Report

2004 USTTI Broadcast Training Courses

Gerald A. Berman

Background

The United States Telecommunications Training Institute (USTTI) was established in 1982 by Ambassador Michael Gardner, Chief of the US delegation to the ITU Plenipotentiary Conference in Nairobi, Kenya. It was established as a non-profit organization whose purpose was to provide tuition-free training for humanitarian purposes to qualified communications professionals, regulators and entrepreneurs in developing countries. A number of US government agencies and private sector telecommunications corporations enthusiastically supported the endeavor. The International Broadcasting Bureau (Voice of America) was one of the founding organizations and in 1983 committed to sponsoring two courses annually. I had primary responsibility for organizing, coordinating and teaching these courses. Most of their content and lecturers were drawn from VOA. I have continued in the role of primary coordinator on behalf of VOA since retiring from the organization in 1996.

In order to keep the courses current with the very latest technologies I expanded the content beyond VOA's capabilities and turned more and more to industry and friends in the IEEE Broadcast Technology

Society (BTS) for support. Because many of the lecturers were from BTS I offered the Society the opportunity of becoming a co-sponsor along with VOA. In 1999 the Society committed to doing so.

Current

The two courses are: New Technologies in Broadcasting and Radio and TV Studio Design, Operation and Management. They are offered annually in Washington, DC and are comprised of lectures, field trips and hands-on practice. Lecturers are drawn from VOA, IEEE, and industry. Tours include visits to studio and transmitter sites at radio and TV stations in the Washington DC area.

The New Technologies course received some 105 applications. Invitations were extended to 45 who appeared most qualified to benefit from the experience. Attrition due to funding and visa problems reduced the class size to 11 individuals.

The "Studio" course received 164 applications. Invitations were extended to 57 who appeared most qualified. Attrition due to funding and visa problems reduced the class size to 11 individuals.

This attrition rate is common and is the reason why invitations are offered

to roughly 4 times the number of students desired. Because of logistical issues ideal class size is between 9 - 12 students.

The applicant screening process was tightened this year and resulted in getting more highly qualified attendees. Accordingly, this year's classes had excellent students. They participated fully, asked a lot of questions and remain in e-mail contact for follow-up help.

Preparations are currently underway for the 2005 season. The dates are June 1 - 17, 2005 for New Technologies and July 5 - 21, 2005 for Studios.

On or around January 1, 2005 I will begin developing day-by-day schedules for both offerings and will be contacting potential lecturers. I would be very pleased to receive any suggestions for subjects to be included and offers for covering a lecture or providing a tour. Please contact me by e-mail at g.a.berman@ieee.org with suggestions and ideas.

Also, if you know of anyone who would benefit from participating in these courses, please encourage them to apply. Applications are available on-line from the USTTI website (www.USTTI.org) or by navigating from the IEEE/BTS website.

Brain Teaser

Answers to questions in the last issue

- 1.) A mother and father have six sons and each son has one sister. How many people are in that family?
Answer = 9
- 2.) A technician is making coax jumper cables. He has 100 yards of coax on a single roll and needs to divide it into 100 lengths of 36 inches each. It takes him 3 seconds to cut each length. Working non-stop, how long will it take to

cut all 100 pieces?
Answer = 297 seconds, not 300 as most people would guess. 100 pieces are made in 99 cuts. The last cut made results in 2 pieces instead of only 1 piece.

New Teaser

- 1.) A car travels at a speed of 50 miles per hour over a certain distance, and then returns over the same distance at a speed of 40 miles per hour. What is the average speed for the total trip?

- 2.) Divide 30 by and add 10. What is the answer?
- 3.) How many 2 cent stamps are there in 3 dozen?
- 4.) Solve for ?

7	4	8
3	9	7
6	5	10
?	8	4

Answers and/or contributions can be emailed to elnass@cbs.com

Inaugural Issue of *Journal of Display Technology* Scheduled for September 2005



Jointly sponsored by seven IEEE Societies, and the Optical Society of America, the Journal of Display Technology (JDT) is a new archival journal devoted to the timely dissemination of new results and discussions in all aspects of display technologies, from understanding the basic science and engineering of devices, to device design and fabrication, to system design, applications, and human-factors topics. Clearly, these topics span many disciplines, and this journal will bridge, for the first time, these multidisciplinary themes. Papers are solicited in all areas of display technology including:

- Display systems and engineering
- Materials and components
- Optical design
- Lighting technologies
- Display drivers and interfaces
- Display packaging
- Manufacturing technology
- Reliability and testing
- Applications

The inaugural issue of the JDT is scheduled for September 2005. The mid-year introduction in 2005 will be followed by quarterly publication in 2006. The member prices for the introductory year will be \$13 for online, \$14 for print, and

\$17 for both in 2005, reflecting just two issues printed in the launch year. Subscriptions will be available during the 2005 renewal period this fall. In 2006, when four issues will be printed, subscription rates will be adjusted. A wide circulation is assured because approximately 900 libraries worldwide subscribe to IEEE periodical packages that will contain the IEEE/OSA Journal of Display Technology. Additionally, OSA will include JDT as an offering in its top-ranked Optics InfoBase.

Manuscripts can be submitted electronically for peer review thorough IEEE's Manuscript Central <http://www.ieee.org/> New authors should create an account. Authors who have previously submitted manuscripts to LEOS publications simply select the IEEE/OSA Journal of Display Technology and log on. For questions contact Linda Matarazzo, Manager, IEEE LEOS Editorial Office, l.matarazzo@ieee.org (phone +1 732 562 3910; fax +1 732 981 1138).

The JDT will utilize "rapid-posting," that is, as soon as an article is edited for publication, the staff-formatted version will be posted in *Xplore*®. When JDT is printed, the version with page numbers and issue ID suitable for citation referencing will replace the earlier online pre-print copy.

Shin-Tson Wu Named Editor-in-Chief of JDT



Shin-Tson Wu will be the first Editor-in-Chief of the new IEEE/OSA Journal of Display Technology and will form his editorial board this fall. Dr. Wu is the Provost-Distinguished Professor of Optics at the College of Optics and Photonics, University of Central Florida (UCF). Prior to joining UCF in 2001, Dr. Wu worked at Hughes Research Laboratories (Malibu, California) for 18 years. He received his PhD from the Center for Laser Studies, University of Southern California, and his BS in physics from National Taiwan University.

Dr. Wu's entire career has been devoted to liquid-crystal display science, technology, and electro-optics. His major contributions are in projection liquid-crystal displays, wide-view and fast-response liquid-crystal televisions, transfective liquid-crystal displays for cell phones, and high birefringence liquid crystals for tunable photonic devices. Several of his inventions are implemented in commercial products. His studies at UCF, concentrate in five areas: liquid-crystal displays, liquid-crystal materials, foveated imaging, bio-photonics, and optical communications. His research group consists of two professors, seven research scientists and thirteen PhD students.

Dr. Wu is a Fellow of the IEEE, SID, and OSA. He is a recipient of the IEEE Outstanding Engineer Award, SID Special Recognition Award, ERSO (Taiwan) Special Achievement

Award, Hughes team achievement award, and Hughes Research Labs outstanding paper award. Dr. Wu has co-authored two books: Reflective Liquid Crystal Displays (Wiley, 2001), and Optics and Nonlinear Optics of Liquid Crystals (World Scientific, 1993), four book chapters, over 200 journal papers, 60 invention disclosures, and 150 conference presentations.

Dr. Wu has been serving as a Technical Advisory Committee member for steering Taiwan's display industry for more than a decade. Most of Taiwan's display engineers benefit directly or indirectly from Prof. Wu's seminars or training courses. Dr. Wu is serving as a conference co-chair for the IEEE/LEOS (Display), CLEO (Display and Solid-State Lighting), and MRS (Liquid Crystal Materials) conferences.

Hirohisa Kawamoto Named Steering Committee Chair of JDT



Hirohisa Kawamoto is the Chair of the first Steering Committee organized to launch the new IEEE/OSA Journal of Display Technology in 2005. Kawamoto, an IEEE Fellow, is Visiting Professor of Nara Institute of Science and Technology, Takayama, Nara, Japan. He received the B.S. degree in electronics from Kyoto University, Japan, in 1961 and the M.S. and Ph.D. degrees in elec-

trical engineering and computer sciences from the University of California, Berkeley, in 1966 and 1970 respectively.

From 1961 to 1968, he was with the Matsushita Electronic Corporation, Osaka, Japan. In 1970, he taught as an Acting Assistant Professor at the Department of Electrical Engineering and Computer Sciences of the University of California, Berkeley. From 1970 to 1980, he worked for RCA David Sarnoff Research Center, Princeton, NJ. In 1980 he founded the Sony Consumer Electronics Laboratories in Paramus, NJ where he served as General Manager until 1985. During the same time he founded the Princeton Community Japanese Language School, Princeton, NJ and served as its Chairman of the Board of Trustees until 1985.

From 1985 to 2001, he was with the Sharp Corporation, Japan, where he participated in the founding of Sharp Laboratories of Europe at Oxford, U.K., and Sharp Laboratories of America at Camus, WA. His last assignment at Sharp was Vice President and Division General Manager of the Technical Information Center.

Since July 2001, he has been a Senior Business Advisor with Silicon Image Inc., Sunnyvale, CA, stationed in Nara Gakuen-Mae, Japan. From 1994 to 2000, he acted as a delegate from Japan to the Committee of Action of International Electro-Technical Commission, Geneva, Switzerland.

Dr. Kawamoto was elevated to IEEE Fellow in 1992 for contributions to materials, device, and systems technologies for the use of video systems. Dr. Kawamoto has also received the IEEE Centennial Medal and Third Millennium Medal.

Communications Re-established for Members in Embargoed Countries

The IEEE has completed changes to its computer systems that enable the organization to re-establish electronic communications for members in embargoed countries. Effective immediately, IEEE members in Iran, Sudan and Cuba are able to set up an IEEE Web account and use it to do the following:

- access publications online via IEEE Xplore(R)
- renew or reinstate their memberships online

- update contact information online
- obtain an IEEE email alias

IEEE members in embargoed countries now also may be considered for various grades of membership. If they choose to organize locally, they may access any of the information or guidelines that are available on the web for all members. Nonmembers in these countries also may join IEEE online.

However, IEEE continues to be lim-

ited by embargoes on sending funds to embargoed countries and in formally establishing local units.

A letter from IEEE President Arthur Winston announcing these changes has been sent by email to members in embargoed countries and will be included in their renewal packages that are sent by postal mail.

For more information visit www.ieee.org/ofac or send questions to ofac@ieee.org.

IEEE 54th Annual Broadcast Symposium Report

What a year for the IEEE Broadcast Symposium! Record turnout and a new program format marked this year's successful Symposium. With over 190 attendees from nations around the world, the audience at the 54th Annual Symposium was treated to an outstanding program.

Features this year included three days of technical sessions, a demonstration of HDTV over wireless LAN, and the first ever "Evening Session".

Features this year included three days of technical sessions, a demonstration of HDTV over wireless LAN, and the first ever "Evening Session". The "HDTV Over Wireless LAN Demonstration" was put together through the work and talent of Yiyang Wu and his team including Hong Liu and Wei Li and the support of the Communications Research Center Canada. Attendees were able to pick up the signal throughout the session room all day Wednesday.

The Symposium Planning Committee had a nice surprise when over 70 people turned out for the DTW Repackaging Transition Issues Workshop on Wednesday evening. After a long day of Sessions and a quick meal at the terrace restaurant, it was rewarding to see so many people turn out for this question and answer panel session. The Society gratefully acknowledges Victor Tawil, Keith Larson, Dennis Wallace and Charles Cooper who answered the many questions

related to this monumental change in the industry.

We are particularly fortunate to have had use of the services of long-time BTS member John Reiser who generously provided the professional sound mixing and recording equipment and skills during all of the sessions. John arrived before attendees and left after them each day. His efforts are gratefully acknowledged by this Society.

Of course, each year, the keynote speeches are highlights of the Symposium.

At this year's IEEE/AFCCE Joint Luncheon Mr. David Solomon, FCC Enforcement Bureau Chief, addressed the relationship between broadcast engineers and the Enforcement Bureau. In his closing remarks, he pointed out what is probably the most important aspect of dealing with this important government agency: tell the truth. More on Mr. Solomon can be found at: <http://www.fcc.gov/eb/solomon.html>

During the BTS Awards Luncheon, Dr. Vanu Bose of Vanu Inc. provided a thorough overview of the need for a software radio and his company's plan for implementing it. Information about Dr. Bose can be found at <http://www.vanu.com>.

Recognized at the BTS Awards Luncheon were the Scott Helt Memorial Award winner, Gary Sgrignoli, for the best paper published in the Transactions on Broadcasting and the Matti S. Siukola Memorial Award winners, Oded Bendov, John F.X. Browne, Charles Rhodes, and Yiyang Wu for the best paper presented at the 2003 Broadcast Symposium. Receiving a Special Award in recognition of his years of service as the Editor-in-Chief of the IEEE Transactions on Broadcasting, Theodore J. Kuligowski was awarded a special plaque. An article about the award recipients is published elsewhere in this newsletter.

Finally, the BTS wishes to thank all of the authors who presented outstanding papers and made the Symposium such a success. It is known that the Broadcast Symposium is one of the few places where an engineer can attend three days of in-depth and no-nonsense technical sessions. Thanks to the authors and presenters who don't make sales pitches, and so generously share what they have learned in the past year. Thanks go to the corporations who sponsor these authors and allow them to continue their innovative work.

We hope to see you at next year's Symposium – October 12-14, 2005 at the Hotel Washington in Washington DC.



Large crowds attended every session



Vanu Bose, David Layer and Tom Gurley



Session Chairs: Guy Bouchard, Greg Best, Bob Surette and William Meintel accept thanks for their efforts. Not pictured: Tom Gurely, George Harris



Left to Right: Tom Silliman, AFCCE President & BTS Secretary, David Solomon, FCC Enforcement Bureau Chief, Tom Gurely, BTS President, David Layer Broadcast Symposium Chair



Vanu Bose, at the IEEE Awards Luncheon, discusses software radio



Federal Communications Commission (FCC) Enforcement Bureau Chief, David O. Solomon delivers the Joint IEEE AFCCE Luncheon keynote speech



Prof. Trainotti from Argentina



Canadian Research Center (CRC) group demonstrates HDTV over Wireless LAN

Awards Presented at Broadcast Symposium.

The winners of the IEEE Broadcast Technology Society's awards programs were announced October 15 during the Annual Symposium. These prestigious awards are based on votes provided by the colleagues in the industry.

BTS Special Service Award

Theodore J. Kuligowski was presented with a Special Service Award for his five-year tenure as Editor-in-Chief of the *IEEE Transactions on Broadcasting*. During that time, Ted established a formal review system, increased the regularity of the print schedule, opened the staffed Editorial Office and saw a doubling of the papers submitted to the Transactions. Ted is retiring from the Transactions in order to spend more time with his family.

Scott Helt Memorial Award (established 1957)

The 2004 Scott Helt Memorial Award was awarded to Gary Sgrignoli, for his paper, "DTV Repeater Emission Mask Analysis". The paper appeared in the *IEEE Transactions on Broadcasting*, vol. 49, pp. 32-80, March 2003.

Gary Sgrignoli received his Bachelor and Master of Science degrees in Electrical Engineering from the University of Illinois, Champaign-Urbana in 1975 and 1977, respectively. He joined Zenith Electronics Corporation in January 1977, where he worked as an engineer in the Research and Development department for 27 years. Currently, Gary is a DTV transmission consultant.

He has worked in the R&D design area on television "ghost" canceling, cable TV scrambling, and cable TV two-way data systems before turning to *digital* television transmission systems. Since 1991, Gary has been extensively involved in the VSB transmission system design, its prototype *implementation*, the ATTC *lab tests* in Alexandria, VA, and both ACATS *field tests* in Charlotte, NC. He holds 35 U.S. patents.

Gary was involved with the DTV Station Project in Washington DC, helping to develop DTV RF test plans. He has also been involved with numerous television broadcast stations

around the country, training them for DTV field testing and data analysis, and participated in numerous DTV over-the-air demonstrations with the Grand Alliance and the ATSC, both in the U.S. and abroad.

In addition to publishing technical papers and giving presentations at various conferences, he has held numerous *digital* VSB transmission system seminars around the country.

The Scott Helt Memorial Award is awarded annually for the best paper published in the *IEEE Transactions on Broadcasting*. The purpose of the IEEE Scott Helt Memorial Award is to recognize exceptional publications in the field and to stimulate interest in and encourage contributions to the fields of interest of the Society. Papers are nominated by reviewers and voted upon by the entire BTS Publications Committee.

Matti S. Siukola Memorial Award (established 1982)

The 2004 Matti S. Siukola Memorial Award was awarded to Yiyang Wu, Oded Bendov, Charles W. Rhodes, and John F. X. Browne for their paper entitled: "Planning Factors for Fixed and Portable Reception" presented at the 53rd Annual Broadcast Symposium.

The Matti S. Siukola Memorial Award is presented to the best paper presented at the Annual Broadcast Symposium. The award was established in 1982 "to encourage presentation at the Annual Fall Broadcasting Symposium of technical papers of excellence by authors engaged in the field of broadcast engineering." The recipient of the Matti S. Siukola award is presented with a plaque and certificates at the following year's Annual Symposium Awards Luncheon. To determine the winner, ballots are distributed at each Technical Session during the Symposium. Attendees are asked to vote on the presentations' various qualities. The winner is the presentation with the highest all-around score.

Dr. Oded Bendov

Dr. Bendov is president of TV Transmission Antenna Group, Inc., During the past 37 years he has been responsible for the analysis and design of the

most complex analog and digital antenna installations in the US. He holds several patents, has published many technical papers and is the author of chapters on Transmitting Antennas in the TV Engineering Handbook and the Encyclopedia for Electrical and Electronics Engineering.

John F.X. Browne is the principal of John F.X. Browne & Associates, PC, an engineering consulting firm located in Bloomfield Hills, MI. A registered professional engineer, he is a member of the Association of Federal Communication Consulting Engineers and served as its president in 1978-1979 and in 1994-1995; he is a Life Fellow of the Society of Motion Pictures and Television Engineers. He serves as Chairman of the AFCCE Digital Television Committee and his firm is presently involved in the design and regulatory aspects of the transition to digital TV broadcasting in major US markets.

Charles W. Rhodes was the Chief Scientist of the Advanced Television Test Center Inc. from its beginnings in 1988 to its completion of its task- the testing of proposed Advanced Television Systems at the end of 1995. In 1996, he received the Lifetime Engineering Award of the NAB for his contributions to the metrology of television signals and the MSTV Engineering Award. He has remained active in the industry both as a consultant on technical matters of NTSC and DTV and is a feature technical writer for "TV TECHNOLOGY." He was with Tektronix Inc. from 1956 - 1982 and headed the Television Engineering Department.

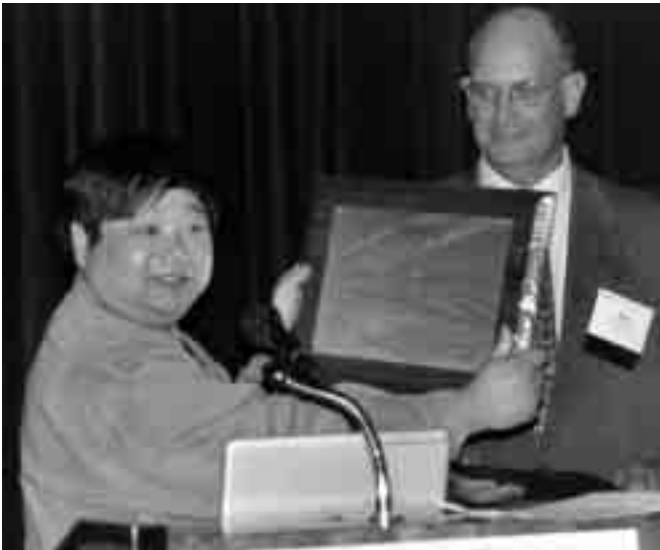
Dr. Yiyang Wu is a Principle Research Scientist with the Communications Research Centre in Ottawa, Canada. Dr. Wu's research interests include digital television and multimedia signal processing, and broadband wireless communications. He is an IEEE Fellow, an adjunct professor of Carleton University in Ottawa, Canada, a member of the IEEE Broadcast Technology Society Administrative Committee, and a member of the ATSC Board of Directors, representing IEEE.



Oded Bendov Receives the Matti S. Siukola Memorial Award



Charles Rhodes receives the Matti S. Siukola Award



Yiyang Wu receives Siukola Award at the BTS Symposium Awards Luncheon



Gary Sgrignoli is presented with the Scott Helt Memorial Award by IEEE Transactions on Broadcasting Editors-in-Chief Yiyang Wu and Theodore Kuligowski.



Ted Kuligowski receives a BTS Special Service Award.

IEEE Broadcast Technology Society Meeting Minutes

NAB Building, Washington, DC, USA
15 June 2004

Attendees:

Greg Best
Yiyan Wu
Rich Biby
Theodore Kuligowski
E. Lanny Nass

William Meintel
William Hayes
Charles Einolf
Sid Shumate
David Layer

Ed Williams
Tom Gurley (President)
Eric Wandel
Jules Cohen
Tom Silliman

Not Attending:

Robert Baker
Guy Bouchard

Walter S. Cicora
Stephen Dukes

Richard Freidel
Alan Rosner

1. Meeting called to order by Thomas Gurley at 10:00 AM
2. Approval of meeting minutes:
 - a. It was noted that the lengthy minutes should be shortened for inclusion in the newsletter. D. Layer suggested that we put a summary in the newsletter and possibly link to a full version online.
 - b. Minutes Corrections: D. Layer & E. Williams should be included in the attendance list.
 - c. An action item summary has been added to the end of the minutes.
 - d. In Section 9.3.3, the "Symposium Meeting" should be listed as the "Symposium Planning meeting"
 - e. Motion to approve by C. Einolf: Approved Unanimously
3. Action Items from Previous Meeting
 - a. IBC Joint Reception – April contacted Fred Motts (SMPTE Executive Director) and T. Gurley spoke with Gavin Schutz (SMPTE President). Hopefully, we will be able to arrange a joint reception this year.
 - b. Education: D. Layer heard from B. Goldman regarding the proposed broadcaster education project. They haven't progressed much, but it will be worked on later this year. D. Layer will continue to follow up.
 - c. Newsletter: W. Meintel has begun to solicit more papers for the expanded newsletter, and will keep up on this.
4. T. Gurley and J. Whitaker (ATSC) will continue to create a proposal for the IEEE Proceedings Special Issue on DTV, the DVB guest editor needs to commit, and Yiyan Wu can help us find someone in Japan.
5. Journal of Display Technology: The question was asked, if a subscriber belongs to more than one society, which society gets the proceeds? P. Shumate of the Lasers and Electro-Optics Society is researching the answer.
6. Registering the Symposium record as a conference proceeding? [any activity?]
7. Strategic Planning: All Committee chairs were asked to make an effort to fill out the forms distributed at this meeting.
8. IEEE Sensors Council Representation:
 - a. Our current representative has been inactive.
 - b. Charles Einolf will be the BTS Representative.
9. Strategic Planning: There were some updates to the Strategic plan list. The committee Chairs were asked to come up with objectives for their committees.
10. Membership:
 - a. In list of committees and representatives, representatives to conferences are responsible for membership booths. Perhaps they should be shown under the Membership committee.
 - b. One reason membership in the Society has dropped is because of IEEEExplore. All transactions are available online through a university.
11. President's report:
 - a. T. Gurley will be going to Kansas City on Thursday (17 June) for the IEEE TAB Meetings. On Friday, they hold a caucus and President's forum. T. Gurley will follow up on the JDT and speak with the Society review chair to find out what is expected and how it will progress. A brand new template has been distributed and will be used for our Society Review.
12. The logo and color scheme:
 - a. A sample of aviation orange was circulated. Some samples of colors that are close to aviation orange have been found in the Pantone book, but there is no exact match.
 - b. The color on the transactions is a much paler, "oranger" orange. We will be able to change our transactions color at a year-end. We should include a letter from the Editor or notation in our Transactions that we are changing our color.
 - c. Regarding the logo design itself, IEEE Creative Services has used up our initial funding. Option 4 revision 5 was becoming a favorite at the time that

- the money ran out. That option was circulated amongst those present. Tom would like to have Creative Services work on this a little more and have them come up with some fresher ideas for the logo – perhaps a more futuristic logo that we could eventually transition to. Tom suggests that we spend a little more money and look for a logo that embraces our field in a more forward-looking manner.
- d. Next week, we may set up a conference call with Creative Services to look at this a little more.
 - e. Motion by S. Shumate: The AdCom shall authorize up to another \$2K expenditure, to further revise the logo.
 - i. A quorum was determined.
 - ii. Friendly amendment: Put the logo to an e-mail ballot of the voting members for a vote before spending more money on a further revision.
 - iii. Discussion on this topic: It was noted that the logo is a significant part of our image and should not be rushed into or chosen to avoid a relatively small expense.
 - iv. Motion to call the question:
 - f. Motion by S. Shumate, as amended: the AdCom should hold an e-mail ballot of the voting members of the AdCom to see if the logo Option 4 Revision 5 (as shown at: <http://www.ieee.org/test/bts>) is acceptable, and if not to approve a budget of up to \$2K for further revisions. Seconded by C. Einolf. Approved Unanimously.
9. Nominations Committee: We should finalize the slate of nominees for the next year's AdCom by the October AdCom meeting. When the meetings were in September, it gave us some time to gather information. Now, we really need to have the slate for the AdCom election finalized before the Symposium. We need to determine whose term is up and who is eligible for another three years. Suggestions for nominees should be given to Sid Shumate.
 - a. At the last TAB meetings, it was observed that some Societies' AdComs have become "old boy's clubs." That doesn't broaden the AdCom. Our AdCom should embrace our field of interest, and we should try to find more international members.
 - b. Yiyen was asked to look at finding someone from Taiwan who might want to join the AdCom. He will go to Taiwan during the second week of August and will discuss it then. We also need representatives from Europe.
 10. Treasurers Report
 - a. \$20K from the Symposium was verified in the BTS surplus account.
 - b. Regarding the \$49K set aside for Newsletter support placed in the budget, TAB finance advised the AdCom to hold off on any further refinement.
 11. Publications Report: C. Einolf
 - a. Ted Kuligowski submitted a report on the Transactions. The June issue was delayed slightly, but it is in the mail. The September issue is completed and the December issue is well underway. Two new Associate Editors were suggested: Dr. Chow and Prof. Trainotti. Prof. Trainotti is an expert in broadcast antenna systems.
 - b. We are receiving more and more manuscripts for the Transactions, and we should receive a great number this year.
 - c. Appreciation was expressed to Kathy Colabaugh and Yiyen Wu for all of the hard work they have done to support the Transactions. Yiyen was the first Associate Editor for the Transactions.
 - d. Nomination of Yiyen Wu to become the Editor-in-Chief of the Transactions as of 15 June, 2004.
 - e. C. Einolf: Motion to approve Dr. Yiyen Wu as the Editor of the Transactions. Seconded by T. Gurley. Approved unanimously.
 - f. Ted Kuligowski started in September of 1999 and has been EIC for nearly 5 years. Charlie Einolf noted the 5 years of work Ted has put in and how the Transactions greatly improved in that time. Five years ago, at the publications review, we were criticized for our Transactions, and in the past five years, we have developed a review process and turned around the entire publication. Ted's role in this was recognized and his offers for continuing help were gratefully accepted. In this time, the submissions have doubled, the quality of the transaction (the reference rate) has improved, and the journal is climbing out of the lower 20% of Journals. All of the Associate Editors were recognized for their hard work and asked to keep working for Yiyen as they have worked for Ted.
 - g. The AdCom offered a round of applause for Ted.
 - h. Regarding the paper submissions to the Transactions, some are communications, and some need more references to BTS papers.
 12. Newsletter: W. Meintel, Editor, reported there is no further news – the last issue was out on time. Everyone was asked to help solicit newsletter articles.
 13. IBC
 - a. We hope to have joint Reception with SMPTE.
 - b. Joint Tutorial with SMPTE: SMPTE has been contacted. W. Hayes continues to contact Fred Motts and met with him at NAB briefly.

14. Broadcast Symposium
- A list of topics was distributed.
 - Dates 13 – 15 October 2004, At Hotel Washington, Washington DC, USA. This is the same location as the 2003 event.
 - At the meeting in October, we will need to get conference management contracts for 2005 and 2006. A management company has been recommended to us, if we elect not to use IEEE CMS.
 - Possible Themes: BT for the 21st Century, Keeping up with a Changing World, Tune in Tomorrow
 - Program: With the success in 2003, we would like to keep this same format. Three days of sessions with a Wednesday tutorial session (a Session that features tutorial papers).
 - We may consider adding a Wednesday night event, such as a low power TV workshop. The night before the Symposium a few years ago, there was a DTV event before the Symposium started. It would be more informal and may include some food, etc.
 - Potential speakers were suggested and discussed.
- h. Contracts: The Hotel Washington contract is the same.
- i. Budget: Highlights:
- Suggest that we keep our fees the same from 2003. We profited this year but in previous years, we did not. We don't want to lower our rates and thereby appear desperate for attendees.
 - Build the sponsorship program: We have already been approached by someone who wants to be a sponsor this year.
 - Everything we did last year worked. Diner's club and AmEx were removed from the list of available cards. We will add them back to this list this year.
- j. We will put abstracts online this year again.
- k. A postcard will be sent to all BTS members – directing them to the Webpage. Include e-mails to the membership .
- l. Offer some trades with other Affiliated societies to advertise our event.
- m.Registration will be basically the same.
- n. Should we produce a formal proceedings or not?
- This would raise copyright issues and take significant time and effort. It may take a few papers away from the Transactions. If a paper is not suitable for the transactions, it may be suitable for the newsletter.
 - The sense of the AdCom was that the Symposium Record should not become a formal Conference proceeding.
15. The AdCom meeting adjourned at 1:00 PM to begin the Paper Review Session.

Action Item Summary:

- Prepare an article for the newsletter announcing Yiyan Wu as the new Editor in Chief of the IEEE Transaction on Broadcasting
- W. Hayes to continue outreach to SMPTE regarding IBC joint tutorial or reception.
- T. Gurley to ballot AdCom regarding Society Logo
- A. Nakamura to assist S. Shumate in preparing a slate of candidates for the 2005 election
- Symposium planning teleconference calls to be carried out regularly.
- A. Nakamura to prepare Society and Publications review for AdCom input.

New IEEE Foundation Grants

New Foundation Grants Support Education Programs? At its November 2004 meeting, the IEEE Foundation awarded two new education grants totaling US\$50,000. One grant will provide

resources to the IEEE's grassroots leaders at IEEE Sections Congress 2005 while the other will work through the global scouting movement to improve the technological literacy of boys and

girls around the world. To view a full list of the grants awarded in 2004 please visit us on the web at <http://www.ieee.org/organizations/foundation/html/2004grants.html>.

New IEEE Officers

NEW OFFICERS: At its 17 November meeting in San Antonio, Texas, the IEEE Assembly elected the following individuals to serve one-year terms on the IEEE Board of Directors beginning 1 January 2005:

Moshe Kam , Vice President - Educational Activities
 Leah H. Jamieson, Vice President - Publication Services and Products
 Marc T. Apter, Vice President - Regional Activities
 Mohamed El-Hawary, IEEE Secretary
 Joseph V. Lillie, IEEE Treasurer

Welcome to New IEEE Broadcast Technology Society Chapters!

The IEEE Broadcast Technology Society is pleased to announce the formation of a new Chapter in the Spain Section. Thanks to the hardworking volunteers who made this Chapter come together and especially to Chapter Chair Pablo Angueira who led the effort.

If you are interested in forming a BTS Chapter in your Section, please contact April Nakamura at a.nakamura@ieee.org

The current IEEE Broadcast Technology Society Chapters are:

ARGENTINA SECTION CHAPTER BT02

Chapter Chair : Hector O. Vila
Email: hvila@rosario3.com

BEIJING SECTION CHAPTER BT02

Chapter Chair : Zhixiang Xu
Email : xuzxiang@online.sh.cn

JAPAN COUNCIL CHAPTER BT02

Chapter Chair: Fumio Okano
Tel: +81 3 5494 2223

NEW YORK SECTION CHAPTER BT02

Chapter Chair: Warner W. Johnston
Email: warner.w.johnston@abc.com

OTTAWA SECTION JT. CHAPTER, BT02/CE08/COM19

Chapter Chair: Ian N. Glenn
Email: ian.glenn@ieee.org

PHILADELPHIA SECTION JT.CHAPTER, SP01/BT02/CE08

Chapter Chair: Ruifeng Zhang
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RUSSIA SECT,BT02

Chapter Chair: Mark Krivocheev
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SPAIN SECTION CHAPTER,BT02

Chapter Chair: Pablo Angueira
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TAIPEI SECTION CHAPTER, BT-02

Chapter Chair : Ying Li
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Topics may include:

- Digital and analog radio and TV systems, including *terrestrial, cable, satellite, and Internet*
- Transmission, propagation, reception of broadcast signals
- AM, FM and TV antenna systems, measurements
- RF radiation standards, testing
- Other new developments in broadcasting system engineering

Send 250 word abstract, by e-mail, no later than 25 May 2005 to:

a.nakamura@ieee.org

Please include with your abstract: name, job title, company, address, telephone, fax, and e-mail.

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 **IEEE**

IEEE Broadcast Technology Society Organization

IEEE Broadcast Technology Society Administrative Committee

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Vice-President: Dr. Charles W. Einolf Jr.
Treasurer: E. Lanny Nass
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