

IMS2000 Sets New Records and Innovates in Boston

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I. OVERVIEW

MICROWAVE Week spanned Sunday, June 11, 2000 through Friday, June 16, 2000, with no pause in the action from Sunday's International Microwave Symposium (IMS) and RF Integrated Circuit (RFIC) workshops to Friday's Automatic RF Techniques Group (ARFTG) sessions, exhibits, and workshops.

After seven years of preparation, the two things a symposium General Chairman learns the best are first to hold his breath and second to trust the Steering Committee's judgment. The IMS 2000 Steering Committee did such an outstanding job preparing and staging the symposium; my ability to hold my breath was not even tested. Boston was a huge success! As the final totals begin to be counted, new records were set in many categories. This is the result of a robust economy, a valuable technical area, the attractive city of Boston, and the tireless work of over 50 members of the Steering Committee.

Every time the symposium returns to Boston, new attendance records are set; this June was no exception. More than 12 500 attendees from dozens of countries attended the exhibits and participated in the IMS. Attendance records were also set for the Technical Program, Workshops, and Panel Sessions as listed below. Please take a moment to read this TRANSACTIONS' "An Overview of the IMS2000 Technical Program" to calibrate how this monumental task was done so well.

Registration Information

IMS	2824
RFIC	1060
ARFTG	199
Panels	1957
Rump	216
Exhibition Only	1969
Exhibitors	5997
Workshops	4207
Guest Programs	367
Awards Banquet	503
Total Attendance	12 578



General chairman Glenn R. Thoren welcomes the banquet attendees.

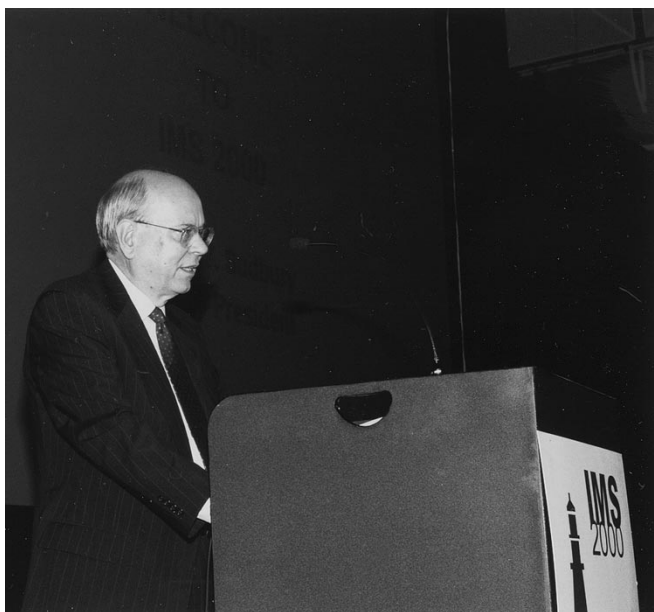


A record number (803) exhibitor booths at John B. Hynes Convention Center.

Joining in the IMS2000 success were the Radio Frequency Integrated Circuits (RFIC) Conference, held on Sunday, Monday, and Tuesday, and the Automatic Radio Frequency Techniques Group Conference, held on Thursday and Friday. If the first reports hold true, both conferences also set attendance records.



The Lexington Minutemen take center stage at the opening of the Plenary Session.



IEEE MTT-S President Roger Sudbury welcomes the attendees to the Plenary Session.

The Exhibition was another stunning success. A new record number of booths were seen in the two stories of exhibition space in the John B. Hynes Convention Center. There were also



Ted Saad and his wife Fi listened as the symposium is dedicated to Ted for his many contributions to the IEEE and the IEEE MTT-S.



Plenary Session keynote speech is delivered by Agilent Senior Vice President Byron Anderson.

booths in the halls and in overflow rooms. The total number of vendor booths and the total for all booths set a new record at 803 booths. I never thought I would see the day, but unless a new convention center is built (and it is under construction), IEEE MTT-S IMS may be too big for Boston.

II. PLENARY SESSION

The Plenary Session on Tuesday morning was a special event indeed, hosted by the Symposium Vice Chairman Dick Sparks. A rousing welcome to all began with the "town crier" and the fife and drums of the Lexington Minutemen leading the procession into the Plenary Session. Roger Sudbury, President of the IEEE Microwave Theory and Techniques Society (IEEE MTT-S), and a member of the Boston Steering Committee, welcomed the large audience.



Ben Franklin, Paul Revere, and Abigail Adams greet guests at the Pre-Banquet Reception.



General Chairman Glenn R. Thoren and his wife Evelyn welcome guests at the Chairman's dinner.



Ted Saad escorts and then introduces the banquet keynote speaker Doris Kearns-Goodwin.



Boston never ran out of food in spite of the best efforts of the Steering Committee, AdCom, and the attendees.

It was then my honor and privilege to dedicate the IMS2000 to one of the stalwarts of the IEEE MTT-S. A mentor, leader, and great friend of the Boston Section—Theodore (Ted) S. Saad. For over 48 years, since he worked at the Massachusetts Institute of Technology (MIT) Radiation Laboratory during World War II, Ted has provided service and leadership to the IEEE MTT-S as well as the IEEE, asking for little in return. We were thrilled to honor his years of service with this dedication. Thank you, Ted!

The President of the IEEE, Bruce Eisenstein, then took the stage to award the IEEE Millennium Medals, the IEEE MTT-reviewed Class of 2000 IEEE Fellow certificates, and the IEEE Heinrich Hertz Medal to Arthur (Art) A. Oliner. In addition, Roger Harrington, recipient of the IEEE Electromagnetic Award, was recognized for his extensive contributions to electromagnetic education. This was followed by the keynote address of Byron Anderson, Senior Vice President and General

Manager of Agilent Technologies Electronic Products and Solutions Group. The address "Accelerating the Web, Meets the Wireless Revolution" was right on the mark for the IMS2000 event.

III. INNOVATIONS

Boston has, in the past, and will, in the future, go out on a limb to try something new. The first open forum session and the first hardcover digest were introduced in Boston. This year, the number of firsts continued with the monumental step of the first fully electronic technical paper submittal and preliminary paper review; for details, refer to "An Overview of the IMS2000 Technical Program." A few other firsts come to mind. The first live web broadcast of the Plenary Session, the first CD ROM of the Workshop Sessions, the first video on the digest CD ROM, the first fully electronic submittals to the IEEE TRANSACTIONS ON



Committee members and guests are still having a great time as the week wears on.



What can be better than an IMS in Boston?

MICROWAVE THEORY AND TECHNIQUES, the first expanded Student Awards luncheon with guest speaker Bob Buder, the first corporate-sponsored bus routes, the first newsletter for previous guests announcing the Boston guest program plan and choices, the first guest program survey conducted over three years to tailor the program, and the first police-escorted motorcade to the Chairman's dinner, not to mention the first symposium of the new millennium. The Boston Steering Committee hopes the legacy of many of these new additions continues.

IV. EVENTS

The social events were an important part of the IMS2000. There were more social events offered this year than at any other symposium. Besides the traditional evening offerings, Tuesday night had two dinner and two theater choices to keep attendees and guests entertained. Three early morning walking tours were scheduled for the early risers. The Guest Program had a wide selection of choices covering varied aspects of past and recent history offered as both full- and half-day tours. A survey was processed from the guest attendees at the 1999 Anaheim, CA IMS to determine the favored choices for IMS2000. There were tours of the JFK library, Newport Mansions, Lexington and Concord, Cape Cod, and Cambridge, to name a few. The Hospi-

tal Suite presented a variety of culinary delights throughout the day from Sunday to Friday. Computers for e-mail and videos for children were available. Informational pamphlets abounded for those seeking to do shopping and touring on their own or in small groups. For the first time, a newsletter was sent to those guests that signed up at the previous five symposiums. Sending more information to guests resulted in early subscription to programs and fewer hassles at registration.

The highlight of Wednesday evening was the Awards Banquet, held at the Westin Hotel. Graduate Fellowship Awards were announced followed by Certificates of Recognition for the 1999 Society President Ed Rezek and the 1999 IMS Chairman Bob Eisenhart, highlighting the work behind a successful symposium few people ever see unless you volunteer for a local Steering Committee assignment. It is both fun and hard work. The result is an event that everyone is proud of year after year. The "almost invisible" Steering Committees do the "almost impossible" IMS. That is what makes the IEEE MTT-S one of the great technical societies in the world.

The banquet evening went into high gear as the awards were presented. Scott Barker and Gabriel Rebeiz received the 2000 Microwave Prize. Arye Rosen was honored with the 2000 Microwave Application Award. Yevgenii Kuleshov received the 2000 Microwave Pioneer Award and offered his thanks via video recorded in the Ukraine. The 2000 Distinguished Education Award was bestowed on Tatsuo Itoh. Eikichi Yamashita was honored with the 2000 Distinguished Service Award. Jim Wiltse was the honored recipient of the 2000 Microwave Career Award. To know any of the preceding award recipients is indeed a privilege. Their hard work and achievements over many years is a model for success to all our membership. They have paved the way. The evening was capped by Ted Saad introducing Doris Kearns-Goodwin, who gave a captivating speech on her personal interaction with President Lyndon Johnson, the Kennedy family, and her love of baseball, both the Brooklyn Dodgers and Boston Red Sox. Humor and history were a hit with the Boston audience of over 500.

The Student Paper Contest was the precursor for the Student Awards Luncheon on Thursday, where Bob Buder signed a copy of his book *The Invention that Changed the World* for every attendee. The student award winners and their friends sprang to their feet and cheered as each award was announced. Now that's the spirit of Boston and all the award winners!

Microwave week was packed with activities for all the family and the symposium attendees and exhibitors. It is truly an event that creates memories. If you leave with a smile, with new and renewed friendships, and technical knowledge you have captured, you have successfully experienced the Boston IMS2000.

ACKNOWLEDGMENT

There are many stars recognized at the symposium. However, the "unsung heroes" award certainly belongs to the members of the Boston IMS2000 Steering Committee. Some of these committee members have stuck with it for over seven years. They are listed as follows so that all the world will know that no great event like IMS2000 would ever happen without the sweat, dedication, and talent these men and women have poured into it so

selflessly for so long. A standing round of applause for each of them!

Position	Member
General Chairman	Glenn Thoren
Vice Chairman	Dick Sparks
Secretary to the Committee	Doreen Healey
Technical Program, Co-Chair	Peter Staecker
Co-Chair	Fred Schindler
Workshops	Larry Kushner
	Mark Gouker
	Cheryl Liss
Panel Sessions	Philip Smith
	Dave Meharry
Interactive/Open Forum	Dan Swanson
	Doug Teeter
Micro-Applications	Brad Cole
Website	Marc Goldfarb
	Jeff Pond
Special Sessions	George Jerinic
Student Papers	Steve McKnight
	Geoff Dawe
ARFTG Liaison	Mike Fennelly
RFIC Liaison	Luciano Boglione
Historical	Nick Kolias
Publications	George Heiter
Digest, Editor	Tom Perkins
	John Guenard
	Steven Lardizabel
	Raghu Mallavarpu
CD ROM, Editor	John Wendler
	Scott Smith
	John Ardizzone
Transactions, Co-Editor	George Heiter
Co-Editor	Mohammed Afsar
Local Arrangements, Co-Chair	Richard Jerome
Co-Chair	Tom Costas
	Kevin O'Donnell
	Tom Rose
	Ronald Shamus
Banquet	Hilde Heaton
	John Heaton
Guest Programs	Evelyn Thoren
	Dottie Sparks
	Adrienne Jerome
	Mikelle Carr
Audio-Video	Larry Kemp
Conference Services	Larry Wicker
Operations, Co-Chair	Mark Russell
Co-Chair	Bob Alongi
Registration	Cliff Drubin
	Joe Nizko
	Ray Waterman
Exhibition	Harlan Howe
	Kristen Dednah
Publicity	Tony Marinilli
	Mike DelCeccolo
	Cliff Drubin
Program Publication	Amy Norcross
At Large Members	Howard Ellowitz
	Dan Masse
	Ted Saad
	Roger Sudbury
	Steve Yates



Glenn R. Thoren (S'79–M'80–SM'96) received the B.S. degree in applied and engineering physics, the M.S. degree in applied and engineering physics, and the Ph.D. degree in electrical engineering from Cornell University, Ithaca, NY, in 1972, 1973, and 1981, respectively.

He has held numerous assignments for over 16 years at Raytheon Missile Systems Division. He was a Section Manager in the Millimeter Wave Systems Department, and a Member of the Senior Staff in both the Antenna-Microwave Department and the Missile Microwave Department. He also served as a Manager for the AMRAAM Producibility Enhancement Program and the AMRAAM Missile Program. For 13 years, he has been with Sanders, a Lockheed Martin Company, where he was the Director of Intellectual Property Exploitation. His earlier positions include the Director of the Microwave Technology Center, Director of the GaAs Microelectronics Center, Director of Strategic Technology Development, and Department Manager of the Microwave Technology Department. He is currently Senior Vice President of Business Development and a founder of TeraConnect Inc., Nahua, NH, an optical component venture start-up company. In his professional career, he has over 50 presentations and publications on microwave and millimeter-wave technology, as well as technology and intellectual property strategy. He holds four patents on microwave solid-state devices. He is also a frequent speaker at student groups and technical forums. He was the Lockheed Martin Liaison to Worcester Polytechnic Institute (WPI) and serves on the Dean's Advisory Committee in the Mechanical Engineering Department. He had previously been the Raytheon Committee Chairman to Cornell University and the Sanders' Liaison to the School of Engineering, University of Massachusetts (UMASS) (at Amherst and Lowell). He has been an advisor to schools of Engineering at Cornell, WPI, and UMASS (at Amherst and Lowell).

Dr. Thoren is a member of Eta Kappa Nu. He has been an active member of the IEEE Microwave Theory and Techniques Society (IEEE MTT-S) for many years. He has served as publicity chairman and membership services chairman of the IEEE MTT-S AdCom (1990–1998). He was also a member of the Defense Research and Development Committee, the Long Range Planning Committee, as well as several other committees. In June 2000, he was the general chairman of the IEEE MTT-S International Microwave Symposium (IMS), Boston, MA, which broke attendance records with over 12 500 attendees. He was also co-chairman of the Technical Program Committee for the IEEE MTT-S IMS Symposium, Boston, MA, in 1991 and chairman of the *IEEE MTT-S IMS Symposium Transactions* in 1983. He was the chairman of the Boston Section of the IEEE, after having served as treasurer, secretary, and vice chairman. He was chairman of Division IV Membership Development (1981–1983) and guest editor of the *IEEE MTT-S IMS Symposium Digest* in 1983. He also served as chairman of the local IEEE MTT-S chapter. He was chairman of the Board of Directors of the Cornell Society of Engineers and has served on the Board since 1987. He was elected as a member of The Cornell University Council, was a member of the Board of Advisors to the Dean of Engineering, and was the corporate advisor for the IEEE student branch at Cornell University for several years. He has also been an advisor to the National Science Foundation and has served on the Board of Directors of Electro (1988–1992). He held a Raytheon Fellowship and was a McMullen Scholar at Cornell University. He recently received the IEEE Millennium Medal for contributions to the section and was the previous recipient of the 1991 IEEE Professional Leadership Award presented by Region 1.