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IMS2019 Microwave Week

**Boston, Massachusetts
2-7 June 2019**





Amateur Radio Social

Jeffrey Saunders

The IEEE Microwave Theory and Techniques Society (MTT-S) 2019 International Microwave Symposium (IMS2019) is hosting a ham radio social event in Boston, Massachusetts, on Tuesday, 4 June, at 6:30 p.m. All radio amateurs and other interested IMS attendees are cordially invited (Figures 1 and 2).

The keynote speaker will be Howard E. Michel (call sign WB2ITX), the new chief executive officer of the American Radio Relay League (ARRL). The ARRL organization consists of approximately 157,000 people who support the hobby with their

interest in meeting fellow hams on the airwaves and moving radio technology forward. Michel will speak about the

role and vision of the ARRL in the 21st century as well as the latest technologies being used in the hobby.

Jeffrey Saunders (Powerpc9@gmail.com), amateur radio call sign AB1ZL, is coordinator of the Amateur Radio Social for IMS2019.

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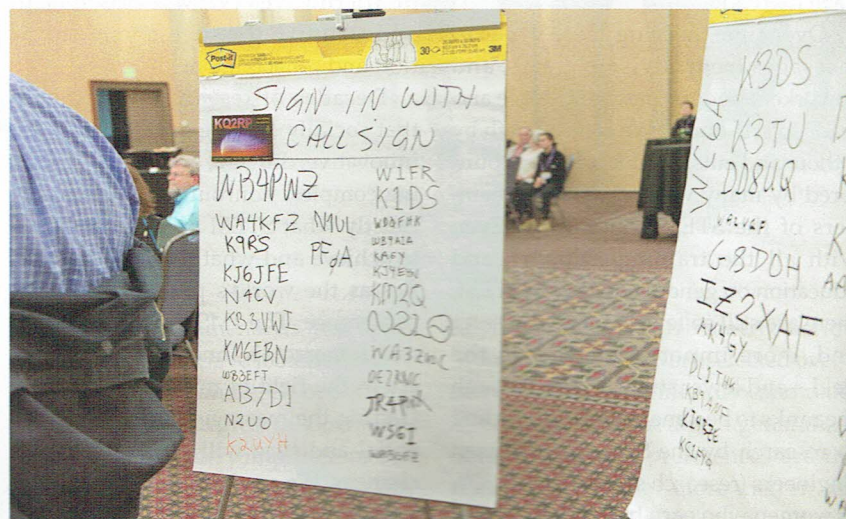


Figure 1. Call signs of the attendees at the ham radio social, IMS2018.

Abstract

- Capstone Amateur network for re-purpose
- When ARRL microwave an alt-net replacing
- Utilizes omnidirectional antennas.
- Maximum is ~25 km H.264/AC
- Develop data compression protocols networking nodes

Background

- Current ARRL is limited to kb/sec bps in the VHF
- Commercial Amateur R channels and 2.407
- Mesh network access po the network

Figure 2. A

2019 RF

real-world such as 5G Michael Pe connectivity ogy at imed by addressi Networks o the Material a look at ho for RFIC cir capacity, rel drive techno 10 years.

Immediate session is th will highlight and student p ing social an supported by



Figure 2. A show and tell poster during the ham radio social, IMS2018.

The Boston, Massachusetts, location for IMS2019 has special significance for amateur radio. In 1903, the first transatlantic wireless communication (via Morse code) originating within the United States was successfully transmitted from Marconi station on Cape Cod. The message went from U.S. President Teddy Roosevelt to the King of England. Three years later, on 24 December 1906, Massachusetts became home to the first radio voice communication when Reginald A. Fessenden used a massive 420-ft radio tower at Brant Rock (a small village south of Boston) to send voice and music to ships along the Atlantic coast.

Today, hams are using the latest digital modes and software-defined radio technology in addition to traditional continuous-wave, amplitude-modulation phone, single-sideband, frequency-modulation, satellite, moon-bounce, and other radio techniques. We hope to see you in Boston for a memorable ham radio event and to renew or begin your interest in this great hobby!



2019 RFIC Symposium (continued from page 69)

real-world examples for applications, such as 5G and automotive radar. Dr. Michael Peeters, program director of connectivity and humanized technology at imec, will conclude the session by addressing the question "Do the Networks of the Future Care About the Materials of the Past?" and take a look at how the latest requirements for RFIC circuit design, new network capacity, reliability, and latency can drive technology choices for the next 10 years.

Immediately following the plenary session is the RFIC reception, which will highlight our Industry Showcase and student paper finalists in an engaging social and technical evening event supported by the RFIC Symposium's

corporate sponsors. You will not want to miss the RFIC reception!

On Monday and Tuesday, the RFIC will have multiple tracks of oral technical paper sessions. The 5G Summit technical sessions on Tuesday afternoon will provide high-level 5G overview presentations that will complement the 5G-focused RFIC technical sessions on Tuesday morning. Two enlightening panels will be featured during lunchtime on both days. The Monday panel session, "The IoT—Back to the Future, or No Future?," will feature experts from industry and academia pondering how the future IoT market will be affected by the accelerated introduction of 5G and developments in big data and artificial intelligence. The Tuesday joint

panel session sponsored with IMS2019 is titled "Will Artificial Intelligence and Machine Learning Take Away My Job as an RF/Analog Designer?," and our distinguished panelists from academia and the CAD/electronic design automation and RF industries will debate the subject of what we may expect in the future and how we should prepare ourselves for the inevitable realities. Please make sure to bring your engaging opinions and questions to both panel sessions!

On behalf of the RFIC Steering and Executive Committees, we welcome you to join us at the 2019 RFIC Symposium in Boston! Please visit the RFIC 2019 website (<http://rfic-ieee.org/>) for more details and updates.

