

David P. Maxson, WCP

Curriculum Vitae

Isotrope, LLC, Medfield, Massachusetts, 1982*-present

Founder, CEO

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| a) Radio communications facility and network design and construction | b) Safety planning and evaluation of communications facilities, safety protocol development |
| c) Research and development on digital media initiatives | d) Evaluation of radio frequency facilities for compliance with technical and regulatory standards |
| e) Radio frequency interference remediation | f) Expert consultation in radio and digital communications litigation |
| g) Municipal guidance in wireless planning and regulation | |

*Note – Isotrope, LLC continues a prior business operated by David Maxson since 1982. Isotrope was formed in 2009.

Charles River Broadcasting Company, Waltham, Massachusetts, 1978-1998.

Vice President, Director of Engineering and Technical Operations

Affiliations

- Certified IEEE Wireless Communications Professional®, demonstrating “a thorough understanding of different key technologies in the wireless arena.”
- Member of National Radio Systems Committee, 1998-present.
 - Digital Radio Broadcasting Subcommittee, IBOC Standards Development Working Group
 - Chairman: Location Based Services Working Group, 2012-2015
 - RBDS Subcommittee, AM/FM Analog Broadcasting Subcommittee
- Member of International Committee on Electromagnetic Safety (“ICES”) 2016 – present
 - Certificate of appreciation for service on the Editorial Working Group for C95.1-2019 *IEEE Standard for Safety Levels with Respect to Human Exposure to Electric, Magnetic, and Electromagnetic Fields, 0 Hz to 300 GHz*.
- Member of the Committee on Man and Radiation (“COMAR”) 2019 – present
 - Electromagnetic safety policy and information
- Charter Member of Wireless Infrastructure Association’s DAS Forum (the small-cell group) 2008
- Corresponding Member: IEEE-USA Committee on Communications Policy, 2012 to present
- Senior Member, IEEE; Certified Broadcast Radio Engineer, Society of Broadcast Engineers; FCC General Class Radiotelephone License with Radar Endorsement, Massachusetts Licensed Construction Supervisor #CS073481.

Project Highlights

- Subject Matter Expert and trackside network design lead for Caltrain trackside broadband project, 2019 to present
- Subject Matter Expert and Design and Construction Manager for Trackside Facilities – Amtrak wireless data trackside network, 2014-2018
- Expert testimony, *Strayton v. Martha’s Vineyard Commission*, New Cingular Wireless, MVWiFi, *et al*, Massachusetts Superior Court, C.S. No. 1874 CV0008, 2020.
- Subject Matter Expert and Project Manager - Utah Broadband Project’s Wireless Broadband Surveys: developed test plan and conducted 7000-mile drive tests of wireless broadband service availability across Utah in 2011 and 2013.
- Project Reviewer - NTIA Broadband Technology Opportunities Program and USDA Rural Utilities Service Broadband Initiatives Program – American Recovery and Reinvestment Act, 2009.
- Project Director and Engineer, PAVE PAWS Radar Environmental Emissions Modeling and Survey, for PAVE PAWS Public Health Steering Group, 2004-2005 (results peer reviewed by Nat’l Academies of Science)
- Massachusetts Department of Public Health, follow-up survey of specific locations not evaluated in PAVE PAWS study; 2007-2008
- US House of Representatives Telecom Subcommittee, Testimony on RF interference study, February 2000.

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- Wireless facility evaluation and planning consultant to the Cape Cod Commission as well as to over a hundred municipalities in New England and beyond, 1999 to present. Performed more than 500 wireless facility reviews
- Appointed member of Massachusetts Department of Public Health ad hoc committee on revisions to electromagnetic energy safety regulations 105 CMR §122, 1997.

Selected Publications

- Peer-reviewed paper: *FM 8th Harmonic Interference to Wireless Facility Not Radiated by the FM Station: A Case Study*, Proceedings of the National Association of Broadcasters Broadcast Engineering Conference (“NAB-BEC”), 2020.
- Peer-reviewed paper, co-author: *IEEE Committee on Man and Radiation—COMAR Technical Information Statement: Health and Safety Issues Concerning Exposure of the General Public to Electromagnetic Energy from 5G Wireless Communications Networks*, Health Physics: [August 2020 - Volume 119 - Issue 2 - p 236-246](#)
- Author, *Your Mileage May Be Different – Reflections on Megabits per Second and Miles per Day [on a statewide drive test of broadband data connectivity in Utah]*, Above Ground Level Magazine, December 2011.
- Principal Author, *A Tractable Approach to Defining and Measuring IBOC Signals against the RF Masks*, Annex 1, NRSC Guideline -G201: NRSC-5 RF Mask Compliance: Measurement Methods and Practice, 2010, reaffirmed 2016
- Peer-reviewed paper: *New Kinds of Interference in the FM Band: 2 Case Studies of Stuff You Didn’t Know*, NAB-BEC, 2016
- Author, *The IBOC Handbook— Understanding HD Radio Technology*, 2007, Focal Press, ISBN 13:978-0-2408084-4-4.
- Article, *Evaluating Emissions of Your New IBOC Transmitter*, Radio World Engineering Extra, June 2005.
- Article, *Posting Hazard Communications Signs at Your Radio Transmission Plant*, Radio Guide, April 2005.
- Peer-reviewed paper: *Interference Potential of Hybrid Digital Transmission: An IBOC Occupied Bandwidth Case Study*, NAB-BEC, 2004.
- Peer-reviewed paper: *Integrating ANSI-Compliant RF Signs into Corporate RF Safety Programs*, NAB-BEC 2004.
- Peer-reviewed paper, co-author: *Applying the Principles of Data Communications to the Development of an Open and Universal IBOC Data Protocol*, NAB-BEC 2003.