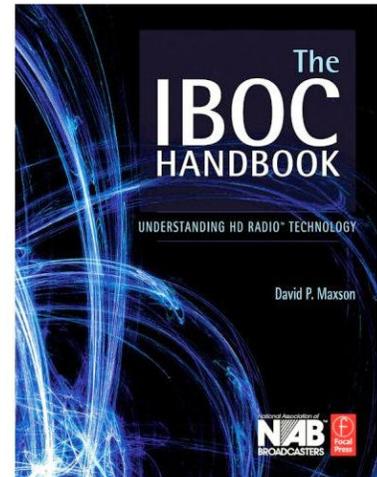




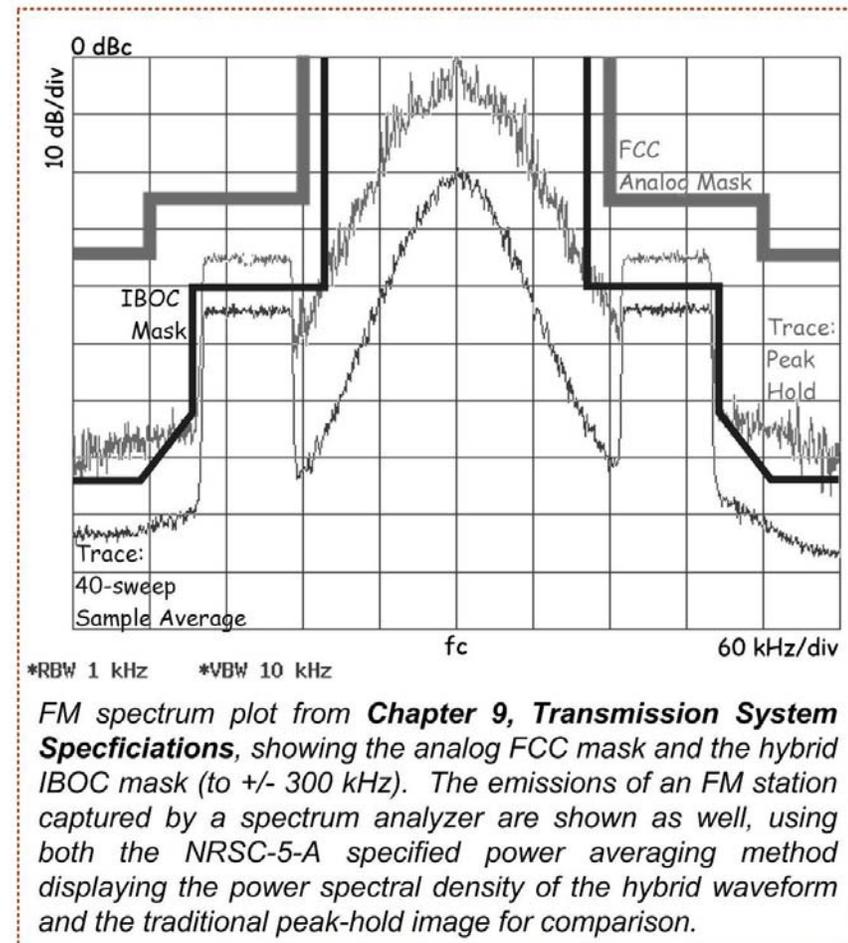
## NEW NAB PUBLICATION *THE IBOC HANDBOOK*

Last week NAB began shipping copies of its latest technical publication, *The IBOC Handbook*. Authored by broadcast engineer David Maxson, *The IBOC Handbook* provides an in-depth look into the background, design, and implementation of the HD Radio in-band/on-channel digital radio system, standardized by the National Radio Systems Committee (NRSC) in the NRSC-5-A standard.

*The IBOC Handbook* is written for the analog broadcast engineer who is looking for a sound tutorial in digital radio concepts and a definitive overview of the HD Radio™ system and the NRSC-5A IBOC Standard. *The IBOC Handbook* presents new material that is easily accessible to both newcomers and experts alike. With more than 20 years of broadcast experience, author David Maxson provides thorough coverage detailing the transmission and reception systems for HD Radio while showing the inner workings of HD Radio technologies.



In addition, *The IBOC Handbook* provides the fundamental history that is necessary to fully grasp the evolution of IBOC and HD Radio technologies, keeping an eye toward future developments. Maxson's use of both practical and in-depth examples (such as the spectrum plot shown here) give insight into the industry's best practices for establishing station operating systems, both for AM and FM HD Radio broadcasters. This book is written for the technically minded broadcast professional who seeks a better understanding of IBOC and HD Radio technology.



Fully illustrated to provide key concepts within a visual context, this book is organized into three sections and fourteen chapters which explore many topics including:

- Protocol stacking
- Convolutional coding
- Multiplexing protocols
- Multicasting
- Service protocols
- Program associated data (PAD)
- Transport protocols
- Latency & logical channels
- Forward error correction (FEC)
- Orthogonal frequency division multiplexing (OFDM)

Radio broadcast engineers seeking to design and operate HD Radio transmission systems will benefit from the detailed exposition of the technology. The book lays out the entire structure of this digital transmission system. System equations are presented in a manner that is useful to those interested in them, while retaining a clear narrative for those who are looking for a general understanding of how the technology works. *The IBOC Handbook* is available online from The NAB Store at <http://www.nab.org/AM/Template.cfm?Section=Home1&Template=/Ecommerce/ProductDisplay.cfm&ProductID=2054>.

**About the Author** – David Maxson is Managing Partner of Broadcast Signal Lab, LLP, (Cambridge, MA, [www.broadcastsignallab.com](http://www.broadcastsignallab.com)) which he co-founded in 1982 to serve the needs of radio and television stations in the northeastern United States. Under his direction, Broadcast Signal Lab provides a full spectrum of technical services related to radio frequency safety, regulatory compliance, compatibility and interference issues. David also consults with emerging wireless and broadcasting technology companies on digital media deployment issues. For twenty years David served Charles River Broadcasting Company, whose flagship station was classical radio WCRB, Boston. As Vice President, Director of Engineering he was responsible for technical and engineering matters for the company's radio stations, its classical music production and syndication company, and its commercial sound system company. David is Broadcast Signal Lab's representative to the NRSC's Digital Radio Broadcasting Subcommittee. He has published and presented numerous technical papers on IBOC signal measurement technique and on data broadcasting technology.



**NAB Engineering Handbook**  
**New 10th Edition**  
**The Definitive Resource for Engineers**  
**Shipping Today!**  
Click here to order.

The image shows the cover of the NAB Engineering Handbook, 10th Edition. The cover is primarily gold and black with a red circular badge in the bottom right corner that says "New Edition".

**THE NAB**  
**RADIO SHOW**

**Radio**  
Reignited

Sept. 26-28  
Charlotte, NC

A promotional graphic for "The NAB Radio Show". It features the text "THE NAB RADIO SHOW" in large, bold, white and yellow letters. To the right, it says "Radio Reignited" in a stylized font, followed by the dates "Sept. 26-28" and location "Charlotte, NC". The background is dark with some abstract, glowing elements.