



# RADIO WORLD

JUNE 4, 2014 | The News Source for Radio Managers and Engineers | \$2.50 | RADIOWORLD.COM

## INSIDE

### APRE DRAWS A CROWD

Public radio engineers gather to honor and learn — Page 3



Photo by Jim Peck

### STOP, THIEF!

Use these tried and true tips to burglar-proof your remote transmitter sites — Page 14

### BUYER'S GUIDE



It's all about the apps — Page 22



Cuban blogger Yoani Sánchez met with the Office of Cuba Broadcasting before appearing on Radio Martí's daily news magazine in 2013.

## How Effective Is the BBG in 2014?

USIB community debates future of the Broadcasting Board of Governors

BY RANDY J. STINE

**WASHINGTON** — The Broadcasting Board of Governors' recent budget request for funding U.S. international media outreach, while smaller than last year's outlay, nevertheless has renewed scrutiny of its operations by political leaders, some of whom find the patchwork of network services outdated and inflexible.

A new piece of legislation introduced in the House would reform U.S. international broadcasting efforts (see page 8). In addition, recent activities by Russia in and around Ukraine have been cited by some critics as important proof that changes in U.S. international broadcasting in recent years have been premature or misguided.

Taxpayer dollars support the govern-  
*(continued on page 8)*

20002  
 579300000 000003675 769-1SDI  
 TON MILNER  
 ASSISTANT CHIEF ENGINEER  
 2033 S AUGUSTA PL  
 TUCSON AZ 85710-7905  
 #BXNNYDT \*\*\*\*\*AUTO\*\*SCH 3-DIGIT 858  
 #0009383 1# EDVA 0009383 E1401  
 |||

## The Best of Both Worlds



### Millenium Hybrid

12 Channels/24 Inputs/Remote Control  
 Analog + Digital Outputs  
 Master Clock/Monitoring & Talkback

Lowest price ever offered

**\$4,995.00**

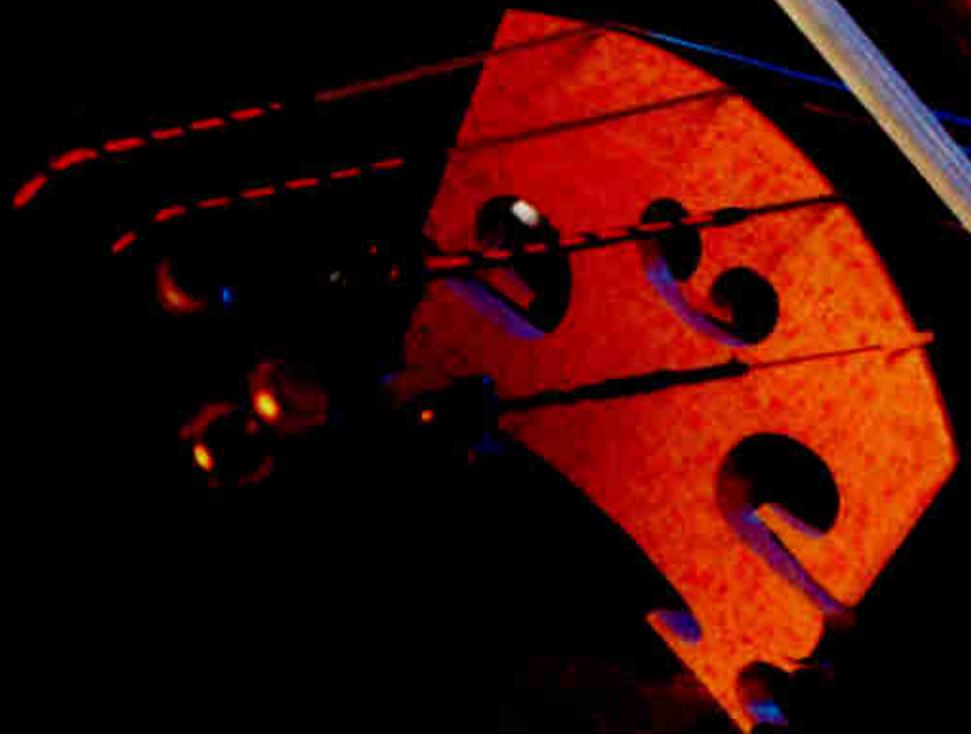
Call your Radio Systems dealer today

856-467-8000 • sales@radiosystems.com

www.radiosystems.com

FM/HD AUDIO PROCESSING  
www.bit.ly/HEARIT2RW

# HEAR IT?



<http://bit.ly/HEARIT2RW>



1.252.638-7080 | [www.wheatstone.com](http://www.wheatstone.com)

FM-531HD  
AURA XS

**Wheatstone**  
ELECTRONIC EQUIPMENT

For address changes and subscription renewal, please visit radioworld.com and click on the "Subscription" button. To submit letters or story proposals, to request writer's guidelines, or for other editorial matters, email the editor at radioworld@nbmedia.com.

**EDITORIAL STAFF**

EDITOR IN CHIEF, U.S. Paul J. McLane  
NEWS EDITOR/WASHINGTON BUREAU CHIEF Leslie Stimson  
GEAR & TECHNOLOGY EDITOR Brett Moss  
TECHNICAL ADVISER Thomas R. McGinley  
TECHNICAL EDITOR, RWEE Michael LeClair  
PRODUCTION EDITOR, RWEE Karen Lee  
CONTRIBUTING EDITOR John Bisset  
INTERNATIONAL EDITOR IN CHIEF Marguerite Clark  
LATIN AMERICA EDITOR IN CHIEF Rogelio Ocampo  
ASSISTANT EDITOR Emily Reigart

**EDITORIAL CONTRIBUTORS**

W.C. Alexander, Barry Blesser, James Careless, Harry Cole, Ken Deutsch, Mark Durenberger, Charles Fitch, Christopher Friesen, Harold Hallikainen, Craig Johnston, Alan Jurison, Paul Kaminski, John Kean, Peter King, Mark Lapidus, Daniel Mansergh, John Merli, Laura Mir, Jim Peck, Mark Persons, Stephen M. Poole, Carl Lindemann, James O'Neal, Tom Osenkowsky, Rich Rarey, John Schneider, Randy Stone, Richard Strickland, James G. Withers, Tom Vernon

**ADMINISTRATION & PRODUCTION**

PUBLISHER John Casey  
EDITORIAL DIRECTOR Paul J. McLane  
PRODUCTION DIRECTOR Davis White  
PRODUCTION PUBLICATION COORDINATOR Karen Lee  
ADVERTISING COORDINATOR Caroline Freeland

**CIRCULATION**

GROUP DIRECTOR, AUDIENCE DEVELOPMENT Meg Estevez  
CIRCULATION MANAGER Kwentin Keenan  
ASSOCIATE CIRCULATION MANAGER Michele Fonville

**SUBSCRIPTIONS**

Radio World, P.O. Box 282, Lowell, MA 01853  
TELEPHONE: 888-266-5828 (USA only 8:30 a.m.-5 p.m. EST)  
978-667-0352 (Outside the US) FAX: 978-671-0460  
WEBSITE: www.myRWNews.com  
EMAIL: newbay@computerfulfillment.com

**CORPORATE**

NewBay Media LLC  
PRESIDENT AND CEO Steve Palm  
CHIEF FINANCIAL OFFICER Paul Mastronardi  
CONTROLLER Jack Liedke  
VICE PRESIDENT OF AUDIENCE DEVELOPMENT Denise Robbins  
VICE PRESIDENT OF DIGITAL MEDIA Robert Ames

**VIDEO/BROADCAST GROUP**

EXECUTIVE VICE PRESIDENT Carmel King  
VICE PRESIDENT / SALES DIRECTOR Eric Trabb

**ADVERTISING SALES REPRESENTATIVES**

US REGIONAL & CANADA: John Casey, jcasey@nbmedia.com  
T: 212-378-0400, ext. 512 | F: 330-247-1288  
US REGIONAL: Michele Inderrieden, minderrieden@nbmedia.com  
T: 212-378-0400, ext. 523 | F: 301-234-6303  
EUROPE, AFRICA & MIDDLE EAST:  
Raffaella Calabrese, rcalabrese@broadcast.it  
T: +39-02-9288-4940 | F: +39-02-7004-36999  
LATIN AMERICA: Susana Saibene, susana.saibene@gmail.com  
T: +34-607-31-40-71  
JAPAN: Eiji Yoshikawa, callems@world.odn.nj.jp  
T: +81-3-3327-5759 | F: +81-3-3322-7933  
ASIA-PACIFIC: Wengong Wang, wwg@imaschina.com  
T: +86-755-83862930/40/50 | F: +86-755-83862920  
CLASSIFIEDS: Michele Inderrieden, minderrieden@nbmedia.com  
T: 212-378-0400, ext. 523 | F: 301-234-6303  
LIST RENTAL: 914-925-2449, danny.grubert@lakegroupmedia.com

Radio World Founded by Stevan B. Dana

Radio World (ISSN: 0274-8541) is published bi-weekly with additional issues in February, April, June, August, October and December by NewBay Media, LLC, 28 East 28th Street, 12th Floor, New York, NY 10016. Phone: (703) 852-4600, Fax: (703) 852-4582. Periodicals postage rates are paid at New York, NY 10079 and additional mailing offices. POSTMASTER: Send address changes to Radio World, P.O. Box 282, Lowell, MA 01853.

For custom reprints & eprints please contact our reprints coordinator at Wright's Media: 877-652-5295 or NewBay@wrightsmedia.com

Globe graphic ©iStockphoto.com / Edward Grajedda

Copyright 2014 by NewBay Media, LLC.  
All rights reserved.  
Printed in the USA



# APRE Experiences Turnout Uptick

## Public engineers honor eight founding members

BY LESLIE STIMSON

Some 85 engineers and other station employees attended this year's Public Radio Engineering Conference. That compares to about 65 last year.

The Association of Public Radio Engineers organizes the annual event. Members pride themselves on offering practical and forward-thinking technical information that can be useful to both non-commercial and commercial engineers.

This year's conference was held at Caesar's Palace in Las Vegas prior to the spring NAB Show. Among the highlights of the 14th annual PREC:

### APRE HAS NEW OFFICERS

The Association of Public Radio Engineers voted in a new slate of officers in May. The group has been around long enough that the makeup of the entire board has now turned over.

The all-volunteer APRE launched in 2006 and incorporated as a nonprofit organization in 2008. APRE launched as an educational member organization for non-commercial radio engineers and other technical personnel. When the group formed, the premise was to be open to technical personnel of any public radio facility. At the Public Radio Engineering Conference, the organization changed its bylaws to allow retired public radio personnel to remain members.

Also, as several of its founding members rotate off the board, APRE wanted to honor them and other former founding board members. Board service is limited

to two consecutive three-year terms.

Eight engineers were recognized with founding APRE board member emeritus plaques: Jan Andrews, former senior engineer, NPR Labs; Gordon Carter, former chief engineer of WFMT(FM), Chicago; Paxton Durham, chief engineer for WVTF(FM), Roanoke, Va.; Ralph Hogan, director of engineering for KJZZ(FM), Tempe, Ariz. who was APRE's founding president; Roger Karwoski, former assistant manager and director of engineering for KBIA(FM), Columbia, Mo.; John Holt, chief engineer, WAMU(FM), Washington; Rich Parker, former director of engineering for Vermont Public Radio and now with Coast Alaska; and Doug Vernier, president and owner of V-Soft Communications.

Those not in attendance received their plaques via mail.

At a subsequent board meeting in May, APRE elected a new slate of executive committee members for 2014-15:

Jobie Sprinkle, director of engineering/IT, WFAE(FM), Charlotte, N.C., is now president of APRE, moving up from vice president. Paxton Durham, one of the eight founding board members, becomes immediate past president and remains on the executive committee.

David Antoine, chief engineer, WBGO(FM), Newark, N.J., is now vice president; Shane Toven remains treasurer. Toven is former director of engineering for Wyoming Public Media, now technology advisor; he is the new editor of Radio magazine.

Dan Houg, chief engineer, KAXE (FM), Grand Rapids, Minn., becomes secretary of APRE.



Among the eight people recognized by the Association of Public Radio Engineers as founding board members were, from left, Paxton Durham, Rich Parker and Ralph Hogan.

Joining the board for three-year terms are Vermont Public Radio Director of Operations Victoria St. John and NPR Labs Technical Researcher Alice Goldfarb. They join other board members: Robert Carroll, chief engineer, WWNO(FM), New Orleans; Jonathan Clark, sales manager, Shively Labs; Dan Mansergh, director of radio engineering and media technology, KQED(FM), San Francisco; and Bruce Wahl, senior solutions architect, NPR Distribution.

### RIPR USES FURNACE TO HEAT SATELLITE DISH

Rhode Island Public Radio uses an unconventional method of melting snow off its 12.5-foot satellite dish.

Most stations have their dishes at their studios, where it's easy to send someone outside with a broom to brush the snow off of the dish. However RIPR's studios



Photos by Jim Peck

Rhode Island Public Radio's Aaron Read discussed a way to use hot air from a furnace to melt snow off a satellite dish.

are in downtown Providence, while the satellite dish is about three miles away in North Providence at its old AM site. The dish also sits on the edge of an embankment, so climbing up to clean out the dish is hard, according to RIPR Director of Engineering Aaron Read.

"Dish heaters can get overwhelmed by heavy, wet snow," Read told PREC attendees. He needed a different solution.

There is a large forced-air furnace in the shelter building near the dish and Read wanted to use that hot air to melt the snow in the satellite dish. He rigged up insulated vent tubing and fans as well as furnace ductwork to the shelter building.

The ductwork goes to the main hot air furnace output inside the building. Now, that hot air is blown into the cavity between the satellite dish and the heavy-duty vinyl dish cover, which was

(continued on page 5)

**FROM THE  
EDITOR**

Paul McLane



# Special Moments Create Radio Memories

Share your favorite photo that captures the romance or thrill of working in radio

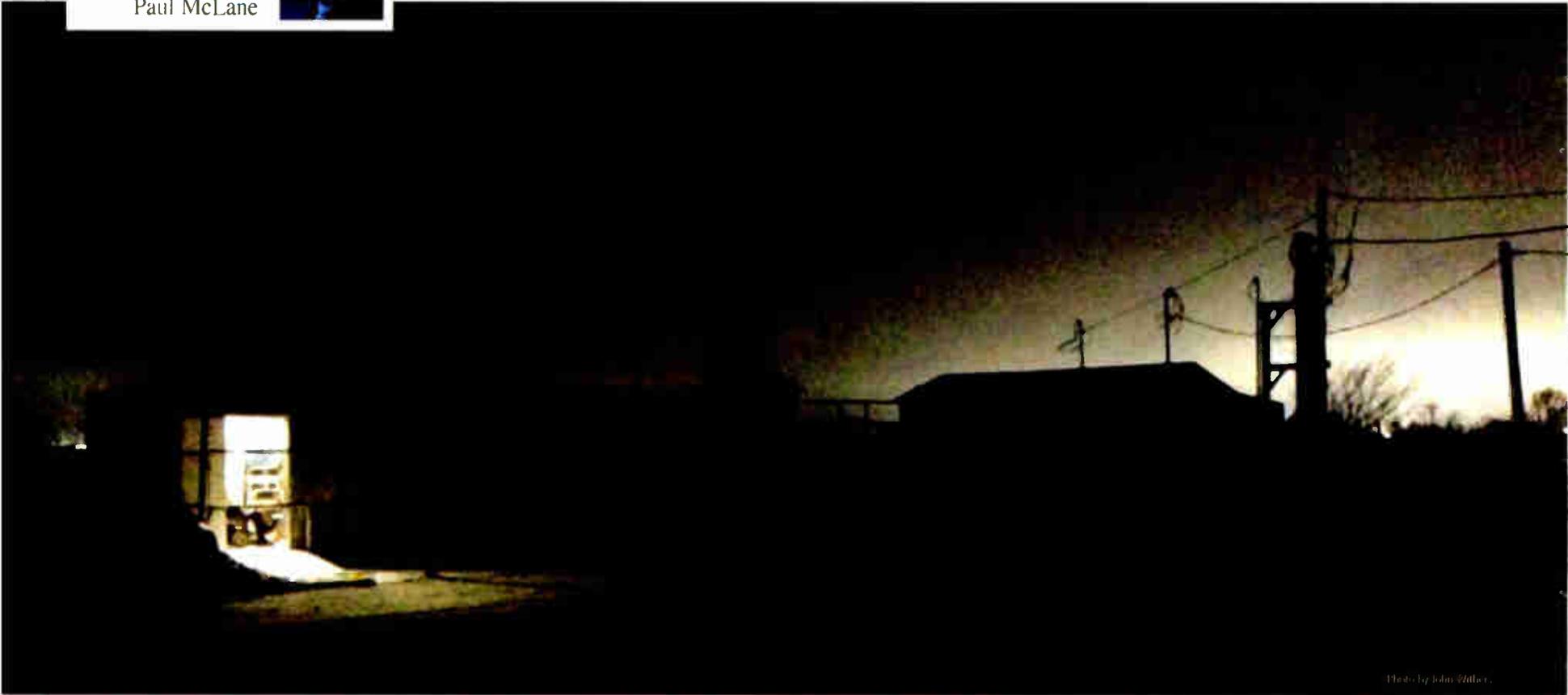


Photo by John Withers

"There's something about a radio station."

I've used that phrase before and recall it now, the special feeling that a broadcast environment can engender in its practitioners.

I was a radio news guy once, and I felt a special sense of entitlement when

able to walk around — not just "my" newsroom and the air studio, but the distant nooks of a fascinating broadcast powerhouse.

I remember roaming radio station halls after hours, when the sales and business offices stood empty but the on-air music kept on playing, audible to

me through ceiling speakers wherever I went in the darkened facility. Listening. I knew that thousands of other people were hearing those songs along with me, despite my apparent solitude. Isn't that part of radio's true power, how the medium combines the sense of many with the sense of one?

I recall peering at the mysterious transmitters in the crowded back room, glowing in the dark through their small glass ports, those harnessed beasts of burden fed in daylight by guys named Scotty, Bill and Joe who might be absent at night yet always felt present during these quiet walks.

I have memories of sitting in a darkened production room, fascinated by the meters and the colored lights, and then of walking up the small backstairs, opening a door to the outside and looking up at the friendly yet lonely tower lights, blinking slowly, reassuringly, way up there against the night sky.

I'm thrust into these reveries by the photograph above, which was sent to me by our friend and contributor Jim Withers.

He emailed me: "I was down at my station doing some emergency transmitter work ('emergency' is probably redundant ... isn't it always an emergency?). My brother John Withers took the attached pic, which I thought was great. Captures the solitude of working at a remote site in the dark, while everyone else is getting ready to cash it in for the night."

I like this photo very much. How would you caption this? Do you have a photo, old or new, that captures the romance, distills what you love about radio? Send it to me at [radioworld@nbmedia.com](mailto:radioworld@nbmedia.com) so I can share it with your fellow radio working stiffs.

## YOUR ULTIMATE SUPPLY & SERVICE SOLUTION



From our Facility to yours



Design & Integration



Repairs & On-Site Service Calls



**LIGHTNER ELECTRONICS** [www.lightnerelectronics.com](http://www.lightnerelectronics.com)

Toll Free 1-866-239-3888 Shop online [www.broadcastsvcsales.com](http://www.broadcastsvcsales.com)

**THIS ISSUE**

JUNE 4, 2014

**NEWS**

How Effective Is the BBG in 2014?	1
APRE Experiences Turnout Uptick	3
Special Moments Create Radio Memories	4
News Roundup	6, 12
Overhaul of U.S. International Broadcasting Proposed	8

**FEATURES**

How You Can Outsmart the Burglars	14
SNMP Is a Helpful Diagnostic Tool	20
Marketplace	20

**BUYER'S GUIDE**

Control "On the Go" From Burk	22
Tech Updates	22, 23, 25-26
Red Peach Scores at Remotes With Report-IT	24

**OPINION**

Reader's Forum	29-30
----------------	-------

**PUBLIC ENGINEERS***(continued from page 3)*

fabricated by Walton De-Ice.

The retrofit is working and kept the dish clear enough this winter for RIPR to maintain its satellite downlink with NPR. The project cost about \$2,000 as opposed to a projected \$16,000 for a full retrofit, he said.

Read hopes eventually to replace the dryer tubing with PVC pipe to reduce heat loss.

**NPR MOVE SPURRED SEVERAL CHANGES**

Employees of National Public Radio's Distribution Division are still ticking various items off their punch list a year after their move to the new building on North Capitol Street in Washington.

And that's perfectly all right, said Mark Murphy, director of engineering for NPR Distribution, which manages the Public Radio Satellite System. The move was a success for NPR Distribution, he said.

Murphy told attendees that PRSS is going through several transitions. For example, the way the uplink equipment is laid out has changed because employees were able to use fiber optics to carry the signal from the roof antenna on down to the Network Operations Center.

NPR Distribution also used the opportunity of new space to shift from analog to digital audio routing, along with the rest of the company. "All audio in this building is now digital," said Murphy.

"The move gave us an opportunity to start fresh and use the latest equipment available. Today, we're in a much better place than if we had tried to do the same modernization without moving."

What has he learned through the move process? "It's worth it to do to things systematically. We managed to do that but the temptation to cut corners and rush gets stronger" as move date approaches. He recommends that project managers fight that urge, and have the discipline to carry out your plan, rather than just responding to the crisis of the day. Keeping up with documentation is important also.

Murphy is one of several NPR employees who spoke at PREC about the move.

**NPR LABS UPDATE**

NPR Labs has several ongoing projects; one of those is the Department of Homeland Security alerting project for the deaf and hard-of hearing. The testing, funded by FEMA and managed by the Department of Homeland Security, involves development of an accessible FM RDS receiver to be used in an emergency alerting demonstration program in the Gulf Coast region.

The work involves testing broadcast emergency texts with some 250 deaf and/or hard-of-hearing volunteers through 26 public stations in Alabama, Florida, Louisiana, Mississippi and Texas.

NPR Labs Director Rich Rarey said the Labs is set to begin testing with the volunteers on this project. One engineer, Sam Brown, has driven some 1,000 miles, making sure all the equipment is ready.

NPR Labs is also working with the National Radio Systems Committee on studies to determine compatibility of FM single-sideband transmissions and a study on AM modulation-dependent carrier level transmissions. It is also updating its HD Radio power calculator.

Rarey was recently promoted, following the retirement of Mike Starling. John Kean is senior technologist, Alice Goldfarb is technical researcher, and Paul Littleton is technical research assistant for the Labs. Dr. Ellyn Sheffield is a consulting partner.

**NEWS****AIELLO, HAERTIG HONORED**

The Association of Public Radio Engineers chose two recipients for its 2014 Engineering Achievement Award: Bud Aiello, director of engineering technology at NPR and Gray Frierson Haertig, owner and principal engineer of Gray Frierson Haertig & Associates.

Award recipients are nominated by their peers. Aiello's nomination noted his work on NPR's new technical facility, where he served as the architect for the overall systems. "From the early days of designing, to climbing in the construction hole to check the contractor's welds of the grounding grid, to wrestling into submission multiple vendors," Bud's work proved to be invaluable, the group said.



**Recipients of APRE's 2014 Engineering Achievement Award NPR's Bud Aiello, left, and consulting engineer Gray Frierson Haertig.**

Aiello's fellow engineers wrote on the nomination form that Aiello "has a keen eye for detail, uncanny instincts for problem-solving, and is a gifted arbiter of where to take advantage of new technologies and where to avoid risks with designs he has reason to doubt will bear the tests of time."

Aiello said he spent the first half of his career in commercial radio and thanked former NPR Vice President/Chief Technology Officer Mike Starling for hiring him from WAVA(AM/FM), Arlington, Va. Aiello called the NPR studio builds — the recent one on North Capitol Street, and the prior one at the old Massachusetts Avenue building — "a lot of fun."

The nomination form submitted for Gray Haertig pointed to his "prolific presence" on the Pubtech listserv that "has educated and mentored a significant number of engineers still on the steep side of the learning curve of radio engineering." Also noted was his work with "numerous new non-commercial radio facilities including those stations serving indigenous populations" for which he provided RF engineering services that were needed to build, remodel or improve.

Haertig estimated he has completed FCC filings for 300 to 350 stations non-commercial stations over the years. He credited Ben Dawson, now managing partner and senior engineer at Hatfield & Dawson Consulting Engineers, for taking him "under his wing" when Haertig was in high school. When Haertig graduated, he got his FCC First Class license and Dawson made him chief engineer of a new station in Portland, Ore.

"I made lots of mistakes. That's how you learn," said Haertig, but he also learned "not to make mistakes in front of a client." Portland is where Haertig's engineering consulting firm is based.

The awards were presented at the annual APRE/PREC Engineering Awards Dinner.

## NEWSROUNDUP

**NAB:** Kevin Gage was offered a new contract, but chose to leave NAB in May after his three-year deal was up. NAB spokesman Dennis Wharton told Radio World that Gage, as executive vice president and chief technology officer, "had a successful tenure at NAB and deserves generous credit for his leadership of the NAB Labs program and for forging a broadcast agenda that fully embraced moving digital radio and TV content to multiple mobile platforms." Discussions are ongoing within NAB about the shape of the department, according to Wharton. In the interim, NAB Senior Vice President Lynn Claudy again takes the reins of the technology department. Wharton said NAB remains committed to NAB Labs and its radio projects like the NextRadio app and all-digital AM HD Radio testing as well as mobile DTV.

**PATENT:** Senate Judiciary Committee Chairman Vermont Democrat Patrick Leahy pulled his patent reform bill from the markup agenda in May after a year of negotiations. "Unfortunately, there has been no agreement on how to combat the scourge of patent trolls on our economy without burdening the companies and universities who rely on the patent system every day to protect their inventions," Leahy said. Some lobbyists believe the move means patent reform is all but dead in this session of Congress. The House in December passed reform legislation,

initially raising hopes for Senate action. Leahy's move was a surprise and a letdown for reform advocates. "We are profoundly disappointed the Senate has abdicated its responsibility to address the skyrocketing costs of patent abuse," said Consumer Electronics Association President/CEO Gary Shapiro. He urged lawmakers to address the issue next year.

**LPFM:** The FCC is "firmly focused on the future" and will continue to update its rules and operations, according to Chairman Tom Wheeler. He cited low-power FM as an example, describing LPFM's expansion as a "Media Bureau" success story. Since the October window for filing applications for new LPFMs, the agency has been busy processing the paperwork. At its June 13 monthly open meeting, the commission plans an update "on the continuing efforts to launch new and diverse voices to the American public via increased access" to LPFMs, according to the agency.

**HD RADIO:** The radio in Volkswagen's 2015 Golf uses station logos as presets; it's part of VW's expanded HD Radio Artist Experience feature. Volkswagen was the first automaker to introduce an HD Radio receiver featuring Artist Experience, according to iBiquity Digital. With Artist Experience, broadcasters airing an HD Radio signal also deliver metadata for artist images and station logos, synchronized with the audio to appear on the receiver display. The 2015 Golf car



The radio in VW's 2015 Golf uses station logos as presets. Volkswagen was the first automaker to introduce an HD Radio receiver featuring Artist Experience.

arrives at dealerships in June. VW plans to offer Artist Experience in its entire lineup in the coming months. AE launched in 2011; according to iBiquity, approximately 1,000 stations are now sending images.

**SPOTIFY:** Digital music service Spotify says it has reached a 10 million subscriber milestone. The company also says it has 45 million active users worldwide.

**APPLE:** Apple will buy Beats Electronics, Dr. Dre's headphones and music streaming company, for \$3 billion. The acquisition would be Apple's largest ever.

Cover the entire operation of a **radio facility** from **acquisition** to **multi-platform broadcast!** **Manage your media** seamlessly.

**BroadcastAsia**

Visit us at BroadcastAsia2014  
17 - 20 June / BCI booth 5M7-06  
Marina Bay Sands, Singapore

 **netia**  
Globecast Group  
[www.netia.com](http://www.netia.com)



# STAC VIP

VoIP TELEPHONE TALKSHOW SYSTEM



**Change is inevitable.** Antiquated POTS phones are being replaced by smartphones and VoIP. This is a great thing for radio provided that you have a caller management system designed to take advantage of the new technology. Enter the STAC VIP Telephone Talkshow System. With features like PBX integration, advanced web-based call screening and high-quality (HD Voice) caller audio, STAC VIP brings heroic performance and value to your station. Take traditional POTS calls while allowing VoIP, SIP and Skype™ callers to sound like they're in the studio with you. *Contact a COMREX dealer to learn more!*

plugged into **Skype™**

18 Pine Road, Davenport, MA 01434 [www.comrex.com](http://www.comrex.com)

**COMREX**  
BROADCAST RELIABLE

[info@comrex.com](mailto:info@comrex.com) 1.800.237.778



World Radio History

## BBG

(continued from page 1)

ment's broadcast and streaming efforts to back up democracy abroad. The BBG is the federal entity that sets funding and gives direction to its various broadcast organizations, which include Voice of America, Radio Free Europe/Radio Liberty, Office of Cuba Broadcasting (Radio/TV Martí), the Middle East Broadcast Networks and Radio Free Asia.

Observers say the U.S. international broadcasting networks, like many media organizations, face challenges from increased global competition. In addition, the adoption of evolving digital strategies, including social media, has left the networks scrambling for a firm footing in digital platforms.

### BUDGET

The BBG continues to reorganize and restructure its broadcast networks although it has not yet hired a chief executive officer, as it had hoped. Its FY2015 budget request of \$721.26 million — compared to a budget of \$733 million in 2014 — includes money to “migrate to media that its listeners ... are increasingly using,” according to a BBG announcement.

The full budget request, released in April, must be approved by the House and Senate and signed by President Obama. The federal budget year begins in October.

The agency proposes to expand its FM reach across parts of Africa and eliminate the use of legacy medium-wave radio transmissions in Vietnam, Belarus, Laos and elsewhere, according

to the BBG. In recent years, the BBG has added FM transmitters in Mali, Chad, Mauritania, South Sudan and the Central African Republic.

“This is an effort to rationalize distribution through reductions of some cross-border (shortwave and medium-wave) broadcasts where they have the least impact,” said a BBG spokeswoman, “either because audiences are small or because people prefer to access programs on other more popular media, including FM radio, television and the Internet.”

The 2015 budget proposal includes staffing reductions across all networks. BBG said the agency will focus on administrative and non-content producing staff to reduce employee numbers. To help minimize cuts, the BBG allowed eligible employees to apply for a buyout

or early retirement. Employees had until May 30 to apply for the program.

Some language services will also be eliminated including VOA Albanian, Bosnian and Serbian, according to the budget request. Though some shortwave and medium-wave broadcasts are targeted for downsizing, shortwave will continue to play a role in certain countries such as Nigeria, Burma, Afghanistan, Somalia, Zimbabwe and other markets in which research shows high shortwave usage rates, the organization said.

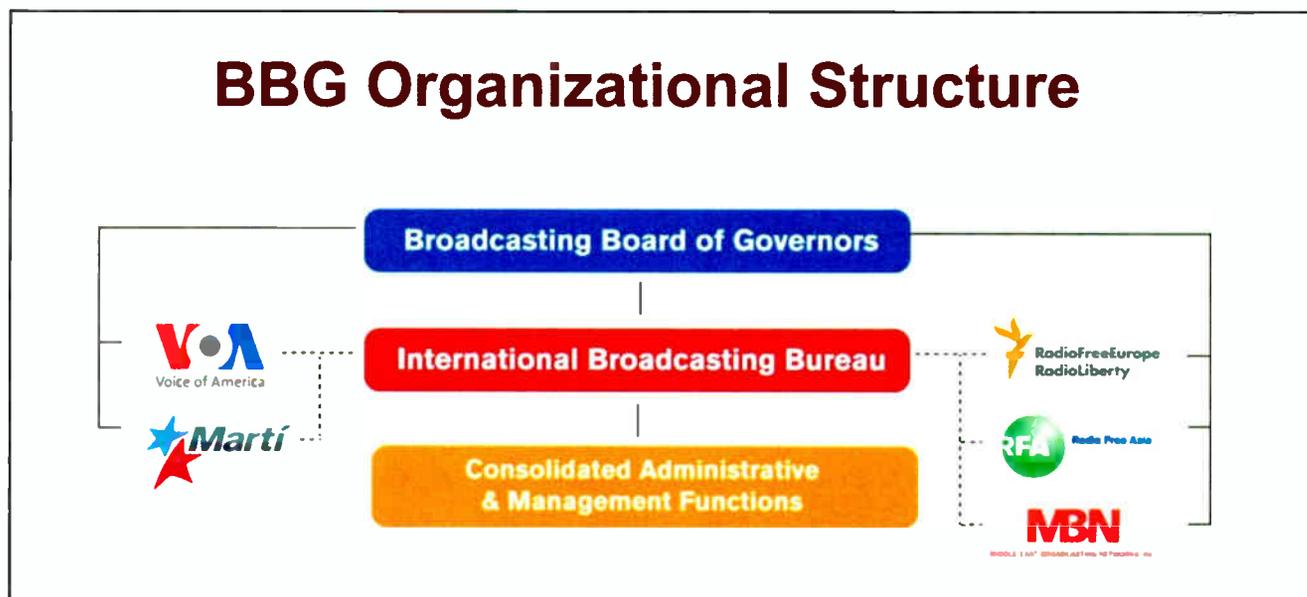
The BBG calls itself “platform-agnostic,” willing to use any media on which audiences prefer to receive information. The board recently established a special committee on the future of shortwave radio broadcasting, which has been conducting a review of the agency's use of shortwave radio as a dis-

tribution platform, costs and the likely reliance on shortwave by next-generation audiences, according to BBG. The committee expects to release its findings and recommendations later this summer.

Gary Thomas, a former VOA senior correspondent and BBG critic, said the organization's latest budget request “pays scant attention to journalism” and “for all intents and purposes is a death notice” for substantive news coverage at VOA. Thomas, writing on the website BBG Watch, also described the budget as “disastrous.” The website often is highly critical of BBG actions. Its organizers say it is edited and published by volunteers including current and former employees of U.S. international broadcasting.

(continued on page 10)

## BBG Organizational Structure



## OVERHAUL OF U.S. INTERNATIONAL BROADCASTING PROPOSED

**WASHINGTON** — A newly drafted bill, introduced and passed by the House Foreign Affairs Committee by unanimous bipartisan vote in late April, would dramatically reform U.S. international media outreach.

The move comes at a time of significant criticism of the management and structure of the Broadcasting Board of Governors, the agency that oversees civilian international news and information programs for people in more than 100 countries and broadcasts in 61 languages.

The BBG says it will become more nimble and streamlined under its FY2015 request, but its critics say the agency isn't moving quickly enough.

Despite the BBG's pledge to adapt, Rep. Edward Royce, R-Calif., introduced the bill proposing to reform the board. The objective of H.R. 4490, the “United States International Communications Reform Act of 2014,” is to improve efficiency, effectiveness and flexibility of U.S. international broadcasting. It calls for creating a United States International Communications Agency.

The next step is consideration of the measure by the House of Representatives, according to a com-

mittee spokeswoman. It's not clear when the bill might be brought up for debate and a vote, she said.

Observers said Republican and Democratic leaders of the House Foreign Affairs Committee collaborated on the bill with colleagues in the Senate and that a version of the authorization bill could be introduced in the upper chamber later this year.

The House legislation, if passed by Congress and signed by the president, would also create the so-called Freedom News Network, which would consolidate RFE/RL, Radio Free Asia and Middle East Broadcasting Networks into a single organization. The Office of Cuba Broadcasting, which manages Radio Martí and Television Martí, would continue to exist within the Voice of America.

The House Foreign Affairs Committee bill describes the BBG as having “limited success” while employing an overabundance of senior civil service positions. It recommends restructuring BBG to ensure that more taxpayer dollars are dedicated to broadcasting and information related elements of the agency's mission.

Current board members of the BBG would automatically hold a seat on the new board of the U.S.

International Communications Agency. New members would be appointed by the president.

The legislation also would clarify the mission of VOA to “provide clear and effective presentation of the policies of the United States and support this country's public diplomacy efforts,” making VOA an explicit arm of U.S. diplomacy, several experts said.

Some international broadcasting experts said they worry that any changes to VOA's mission would undermine the broadcaster's journalistic standards of accurate and objective news.

Susan Haas, lecturer with the Annenberg School for Communication at the University of Pennsylvania, said there will always be “tension” between the missions of international broadcasters and the structural distance from government necessary for doing journalism ethically and responsibly in a democracy.

“Journalism itself, done well, models, promotes and supports the idea of democratic life,” she said.

The BBG said it does not comment on pending legislation.

— By Randy J. Stine

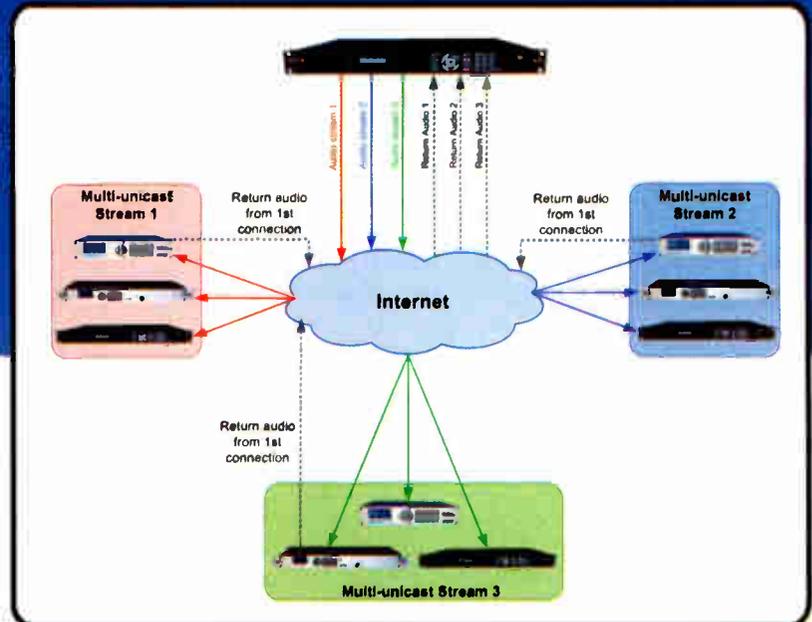
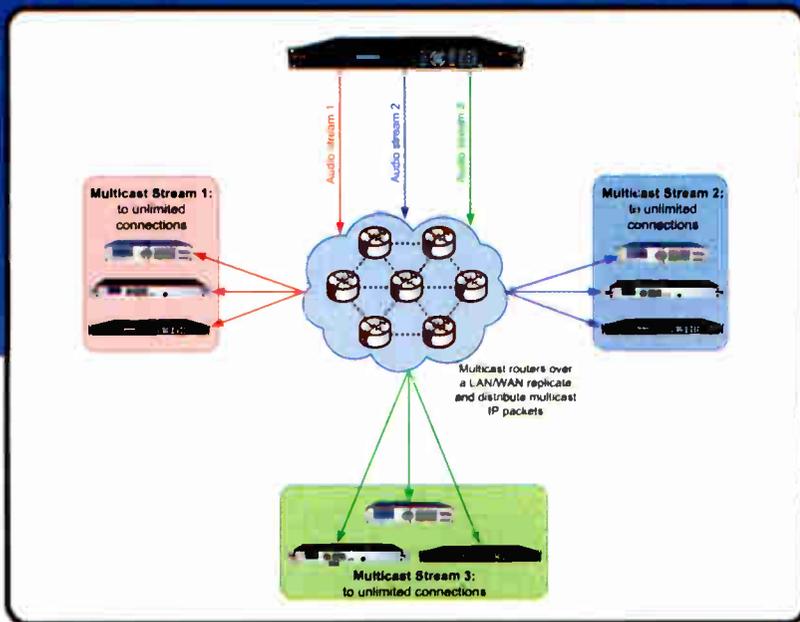
# Expand your Network with...



Latest FREE firmware update includes new program sharing options

### 3 Simultaneous Multicast Audio Streams

### 3 Simultaneous Multi-unicast Audio Streams (up to 50 endpoints in total)



Call: 1-317-845-8000

**Tieline**<sup>®</sup>  
The Codec Company

[www.tieline.com](http://www.tieline.com)

**BBG***(continued from page 8)*

A BBG spokeswoman responded that as the agency “wrestles with difficult budget trade-offs, excellence in journalism remains BBG’s most important objective.”

**DATA QUESTIONS**

Despite naysayers and those critical of the BBG’s core mission, supporters say, listenership continues to swell. The five broadcast networks reached more than 206 million people per week in 2013, according to BBG estimates, up approximately 31 million from the previous year. The BBG’s largest audiences are in Indonesia, Nigeria, Mexico and Iran.

For the first time, TV audiences surpassed radio in listenership, according to the organization. In addition, U.S. International Media reached 22 million online through a variety of streaming services.



**The Committee for U.S. International Broadcasting criticized BBG listener data and said it has lost audiences in the Middle East and other critical regions including Russia. Ann Noonan is executive director.**

However, the Committee for U.S. International Broadcasting disputes the BBG listener reports, contending that BBG has lost audiences in the Middle East and other critical regions, including Russia. CUSIB describes itself as a nonpartisan, non-governmental group working to strengthen the flow of uncensored news from the United States.

“We consider the [BBG] press release to be highly deceptive. Most of the reported gains appear to be in Latin America,” said Ann Noonan, co-founder and executive director of CUSIB.

The BBG spokeswoman disagreed: “We provide an excess of detail including documentation, an audience overview factsheet, research methodol-

ogy and the entire performance and accountability report.”

**‘CRUCIAL ROLE’**

The BBG is coming off a year in which its presiding governor, Michael Lynton, stepped down and the director of the International Broadcasting Bureau, Dick Lobo, retired. In addition, the BBG received a failing grade from the Office of Inspector General for the United States Department of State in a report on U.S. international broadcasting and the Smith-Mundt Act. The act, which banned domestic dissemination of USIB material within the United States, was subsequently repealed last year.

In early 2013, then-Secretary of State Hillary Clinton, testifying before the House Foreign Affairs Committee, described the BBG as “practically defunct in terms of its capability to tell a message around the world.” (The secretary of state serves as an “ex officio” member of the board.) Others have described the BBG as “dysfunctional” and “plagued by infighting.”

The BBG’s impact on worldwide audiences has been limited by “managerial dysfunction,” said Andrew Clark,



**VOA Hausa broadcaster Salihu Garba (right) interviews Nigeria’s Speaker of the House of Representatives Aminu Waziri Tambuwal in September 2013 at VOA headquarters in Washington. During his visit Tambuwal said he grew up in Northern Nigeria, where he listened to Voice of America from an early age.**

Nielsen Holdings N.V.

The board in January released details of a realignment within the International Broadcasting Bureau structure. The IBB, responsible for the agency’s strategic planning and oversight, now has

in 2013 in a revision called the 2014–2018 draft, sought to expand social media innovation and employ leading-edge communication techniques and technologies.

The plan stresses finding ways for expanding social media while coexisting with traditional media like shortwave and FM broadcasts, according to those familiar with its strategic intention.

The plan calls for BBG to integrate its operations in order to have the resources and management structures to innovate. Proposed shifts included scaling back some language services, streamlining news operations and reducing overlap.

Most international media observers contacted by RW think the government agency has made strides in those areas.

Robert McMahon is editor of CFR.org, an online publication published by the Council on Foreign Relations, a Washington-based think tank. He calls the BBG and its broadcasters “early adapters” of digital platforms.

The BBG “has extensive Web operations in scores of languages and channels that span far wider than conventional radio waves, to include texting, social media posting and micro-blogging,” McMahon said. “Its challenge will be enforcing editorial quality control across all of these digital platforms. Social media, in particular, poses challenges in exercising prudent news judgment in the heat of breaking developments.”

**ALL HANDS**

Meanwhile, employee morale remains an issue at the agency, but things appear to be improving, according to international broadcast experts. A BBG closed door, employee-only meeting last November reportedly addressed employee concerns. The BBG “All Hands Meeting,” as it was

*(continued on page 12)*

## We are extremely committed to bringing on board a CEO.

– Jeff Shell, BBG chairman

an associate professor in the department of communication at the University of Texas at Arlington.

“International broadcasting is not defunct. It has a crucial role to play around the world. I believe the BBG needs some restructuring,” Clark said. “Right now it is a convoluted setup.”

Also, the board, which in addition to the secretary of state is supposed to have eight presidentially appointed members, has been undercut for some time by vacancies. Five of the eight seats are occupied, following the resignation of member Susan McCue in May. McCue, appointed in 2010, left to join Millennium Challenge Corp.

However, four new governors, including a new chair, joined the agency in 2013. “The new board quickly focused on organizational issues as a primary matter of strategic importance and adopted a more streamlined structure to handle board business,” said the BBG spokeswoman.

As of late May, BBG was awaiting Senate approval of two presidential board nominees: public relations executive Michael Kempner and Karen Kornbluh, executive vice president of

three senior executives managing day-to-day operations, which “paves the way for a future CEO,” according to the BBG.

“We are extremely committed to bringing on board a CEO, and this interim management structure will prepare the organization for that reform,” said Jeff Shell, who was confirmed as BBG chair last August.

The establishment of a chief executive officer is a “key objective of the BBG to improve the management and efficiency of BBG operations and mitigate the challenges of a part-time board,” according to the panel.

Reformers believe a “single executive” in charge of the five media properties is a must if any strategic plans are to ever be realized. BBG made the request for the CEO position under a plan in its FY2014 request and has hired a search firm to begin the hiring process. It asked for congressional approval to proceed, which it has yet to receive.

**SOCIAL AND BEYOND**

The BBG Strategic Plan 2012–2016 drafted the board’s view of innovation and integration. This blueprint, updated



# Complete Networked DIGITAL SOLUTIONS

IP LINK

IP LINK

**FLEXIVA HD  
TRANSMITTER**



The Flexiva™ air-cooled FM solid-state transmitter family provides today's broadcaster with a single transmission platform capable of analog and digital operation.

Flexiva is designed for low- and high-power requirements, up to 80 kW, while utilizing the most compact design on the market today.

**STUDIO 'A'  
OASIS NETWORKED  
ON-AIR CONSOLE**



The Intraplex® IP Link family of IP audio codecs provides high-end features at an affordable price.

Offering an array of audio coding options, the IP Link codecs are suitable for use in Studio to Transmitter Links (STLs) as well as audio contribution and distribution networks. Support for IP multicast and multiple unicast streams enables one encoder to feed multiple decoders.

**STUDIO 'B'  
OASIS NETWORKED  
PRODUCTION CONSOLE**



Flexiva Oasis™ is a high-value standalone audio console for on-air and radio production applications.

Designed with next-generation studio demands in mind, Flexiva Oasis allows facilities to cost-effectively and easily migrate from analog to digital whenever they're ready. In addition, Flexiva Oasis provides both analog and digital outputs that enable facilities to connect to modern STLs and studio infrastructures.



Call **SCMS** for more information!

**1-800-438-6040**

[www.scmsinc.com](http://www.scmsinc.com)



**Latin America**  
760-650-1427  
Lily Massari

**West Coast**  
818-398-7314  
Doug Tharp

**Central**  
315-623-7655  
Bernie O'Brien

**North Central**  
573-478-3737  
Pam Leffler

**Southern Gulf**  
866-205-6905  
Andy Cole

**North-East**  
315-623-7655  
Jim Peck

**Mid-South**  
877-391-2650  
Bob Mayben

**Pro Audio/South-East**  
877-640-8205  
Ric Goldstein

**Bradley Division**  
800-732-7665  
Art Reed / Bob Eburg

**BBG***(continued from page 10)*

dubbed, was designed to answer employee questions and engage in dialogue with the entire staff, said an observer.

According to the BBG's 2013 annual report to President Obama and Congress released earlier this year, the entity employs 2,748 employees across the five networks.

The American Federation of Governmental Employees Local 1812 represents approximately 850 bargaining unit members within BBG, including broadcasters and journalists at VOA, Office of Cuba Broadcasting and the VOA transmitting station in Greenville, N.C. AFGE has been critical of management within the International Broadcasting Bureau.

"I would expect a slight uptick in employee morale once the data from the latest" survey is in from the U.S. Office of Personnel Management, said Tim Shamble, president of AFGE Local 1812.

OPM conducts the annual Federal Employee Viewpoint Survey. Recent surveys revealed low morale and criticisms of BBG management, according to the reports.

The union believes the broadcast services are severely understaffed. "The problem employees have is not really with the BBG members. Those people only meet about once a month and although they are responsible for running the operation, they can't do it on their part-time schedule," Shamble said. "The ones really running the show are the upper managers of the BBG and the IBB staff. Those are the ones employees have problems with."

Shamble was complimentary of the three-person interim management team appointed by BBG in January to oversee the International Broadcasting Bureau. André Mendes, Robert Bole and Suzie Carroll are "accessible and willing to listen to employee concerns," he said.

The agency has acknowledged work force issues and blamed that partly on tension between employees and contractors.

According to one BBG management



**VOA's Elizabeth Arrot reporting in Ukraine.**

insider, "The BBG's governing board is committed to improving working conditions on behalf of all the staff at BBG." The board points to the 2013 Federal Employee Viewpoint Survey as one barometer of better employee morale and said the BBG has made improvements with increased employee engagement scores.

The BBG spokeswoman said since the appointment of the interim team "through all-hands meetings, smaller information sessions, language service visits, department-wide meetings and meetings with union representatives, a much higher level of transparency has been achieved on critical aspects such as FY14 and FY15 budget details, reorganization plans and new initiatives."

**MEDIA OUTREACH**

Even among many of its critics, there is a belief that U.S. international media outreach needs a strong clear voice, that it remains vital to the interests of the United States, and that its work is a catalyst for democracy and an integral part of national security, reaching millions of people who are deprived of free media.

Victor Ashe, a board member until last year, has called for urgent reforms

of U.S. international broadcasting media. That includes abolishing the "part-time" board and replacing it with a single agency head, confirmed by the U.S. Senate.

Several observers said U.S. international broadcast operations have been fading since the end of the Cold War. Yet recent broadcast expansion by China and Russia add a sense of urgency to any reorganization of the U.S. broadcasting services.

David Hyatt, a former VOA deputy bureau chief and author of the American Diplomacy blog, claimed China is reportedly spending \$8 billion to upgrade its international broadcasting reach. In 2013, China opened what the country claims is a state-of-the-art broadcasting bureau in Washington just miles from the White House.

International broadcast expert Gregory Newton, associate professor in the School of Media Arts and Studies at Ohio University, said moving the broadcast services under the direction of the U.S. State Department would perhaps give the broadcasters a "clearer voice" but could give audiences abroad an even lower assumption of the truthfulness and journalistic standards of the many services.

**The current board is too big to serve as a general overseer and is distracted by their day jobs.**

— Victor Ashe, former board member

"The current board is too big to serve as a general overseer and is distracted by their day jobs. By creating one position accountable to the administration and Congress, the success or failure of America's international broadcasting would become a government priority instead of a mere afterthought," Ashe, a Democratic appointee to the BBG, wrote in a piece for *Ambassadors Perspective*, an online forum for commentary by former U.S. ambassadors. Ashe served as U.S. ambassador to Poland from 2004 through 2009.

Former BBG Chairman James Glassman, a Republican appointee, also believes the board needs to rethink its function.

"The BBG is not dysfunctional, but it could be a lot more effective. The BBG has a confused and sometime contradictory mission and must gain clarity," Glassman said, adding the BBG "must have the same policy objectives as the U.S. State Department and the Department of Defense."

The United States is not keeping up with China, Russia and Iran, in terms of its overseas broadcasting, Glassman said.

Meanwhile, the transition to digital and social media, Newtown said, should continue but not necessarily at the expense of traditional services like shortwave. "There are still regions where traditional media like radio plays a significant cultural role, in particular Afghanistan and several African countries. In other places technology has leapfrogged traditional platforms," Newton said.

The Voice of America — long considered the flagship of U.S. international broadcasting — and the BBG's other media properties face challenges, said Susan Haas, lecturer with the Annenberg School for Communication at the University of Pennsylvania.

"The challenges the VOA faces now do not stem from its structure at the levels of governance and oversight; they are a function of a rapidly evolving global media environment. The VOA needs more freedom, more flexibility, not more political oversight," Haas said.

*Comment on this or any article. Write to radioworld@nbmedia.com with "Letter to the Editor" in the subject field.*

**NEWSROUNDUP**

**QANTUM:** Quantum Communications is getting out of radio. The deal is a three-way station swap. Quantum has agreed to swap the assets of its 29 radio stations to Clear Channel Media and Entertainment in exchange for the assets of WALK(AM/FM), Long Island, N.Y., owned by Aloha Trust, of which it is the beneficiary. In a simultaneous closing, Quantum will sell WALK(AM/FM) to Connoisseur Media. Both deals are subject to FCC approval and other closing conditions. Quantum President Frank Osborn said the agreement is in the interests of stockholders. "It's rare when you find an instance where cooperation among three companies results in higher value for all."

Media Venture Partners brokered the transaction.

Connoisseur Media owns/operates 39 stations and is in the process of acquiring stations in Hartford, Conn.

# THIS WILL KEEP YOU ON THE AIR



The ARC Plus Touch is designed front to back with one important mission... **Keeping you on the air.** From the intuitive touch screen to the tablet-friendly web page, from Smartphone to the new RSI Recordable Speech Interface, you are never out of touch.

No time to install a new system? No problem. With Burk's ARC Plus Touch and Plus-X Adapters there's no rewiring. **Just swap plugs and go.** Replace an ARC-16, GSC 3000, VRC 2500, VRC 2000, VRC 1000, TC-8, or even a Sine RFP-1, **in less than an hour.**

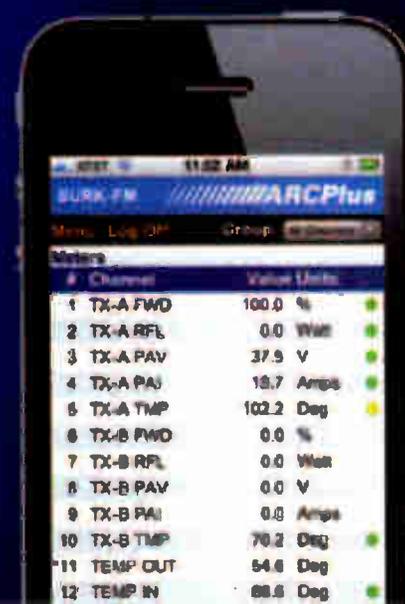
**Easy install. No wiring changes. Less downtime.**

SOLUTIONS YOU CAN USE.  
EXPERIENCE YOU CAN TRUST.

**BURK**  
TECHNOLOGY

www.burk.com | sales@burk.com | (978) 486-0086

World Radio History



# How You Can Outsmart the Burglars

Lessons and experiences from a multi-site security system project

## **BEST PRACTICES**

BY JOHN MARCON

Broadcast facility break-ins are an ongoing concern for station owners and technical staff. Of course, copper theft is common; and AM stations, with miles of wire and strap lying around, are the most vulnerable to that. But regardless of where you work, a good security system will not only protect your investments but help keep you on the air while maintaining a safe work environment.

### CASE STUDY

Here's how my employer and I handled one such situation when I was working at the Victory TV Network in 2013.

First, some background: Our microwave system delivers studio signal and Internet connectivity to the transmitter site in another city about 100 miles away. Four microwave relay stations are used for this link. Each site — with its own tower, microwave building and separate standby generator room — is enclosed with a chain-link fence. A phone system works as an alarm system; it activates when the main door of a microwave room is opened. The fences and gates at these sites had no alarms at first.

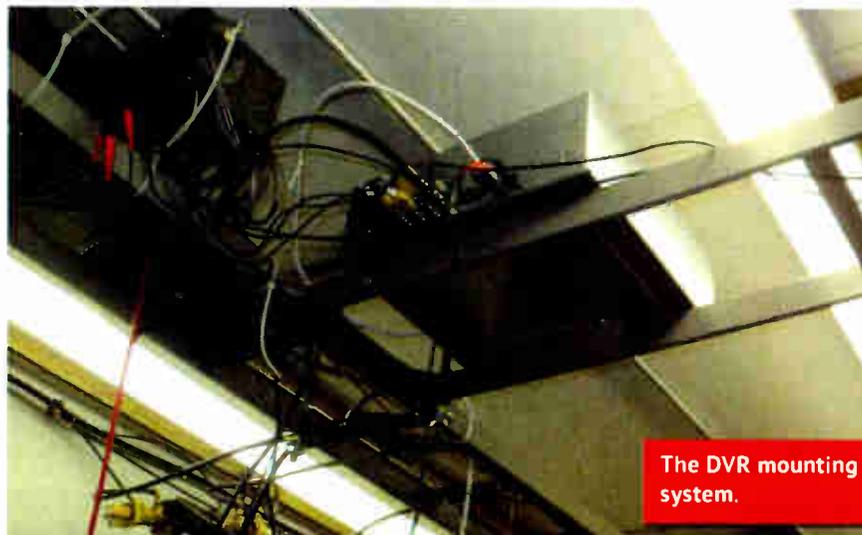
These remote sites were burglarized repeatedly. Thieves took the 3/0 copper grounding wires and they stole the laptop inside the microwave room. In one instance, they even destroyed the phone-alarm system.

Microwave Site 3 was burglarized most frequently. It's in the middle of farmlands, about a mile south from a main highway. The entrance to the site is an access road for farmers who cultivate the back area.

Because of the break-ins there, we added another metal gate at the road entrance of the site. Farmers would not be able to access the road anymore — we expected them to go around — but just a week later we discovered that the metal gate had been pulled down with a truck. We suspected farmers did it but had no proof.

We installed four trail cameras to check the surroundings. "Trail cams" are cheap and easy to install. We mounted each camera inside an old metal circuit breaker box to disguise it.

The trail-cam pictures showed us that the area outside this fence was active, especially during summer. We



The DVR mounting system.

saw trucks, cars, deer and other animals going in and out of the area; but for 11 months, nobody attempted to pass inside the fence. (One night we did see unusual activity. Our pictures revealed a group of men with cars and trucks; these were followed the next morning by an image of a totally burned car being hauled out by a flatbed truck and a police car following behind.)

Sometime during the winter, this site was burglarized again. This time the thieves took not only the copper wires but all four of the trail cams. They also attempted to steal the 240 V wires in the generator room. For some reason they did not finish that job, probably because they'd discovered that the wires were made of aluminum.

The damage was not extensive, and we were back on-air in less than two hours; but this was the proverbial last straw.

Our management decided it was time for a major security upgrade — not just cheap solutions, but a type of layered security system.

We decided to strengthen the weak points of the fence and to install some kind of surveillance system. I also recommended a commercial security system, though management nixed that due to the additional monthly expense.

Based on my experience, here are some methods that may work for your sites and your budget.

### SECURITY CAMERAS

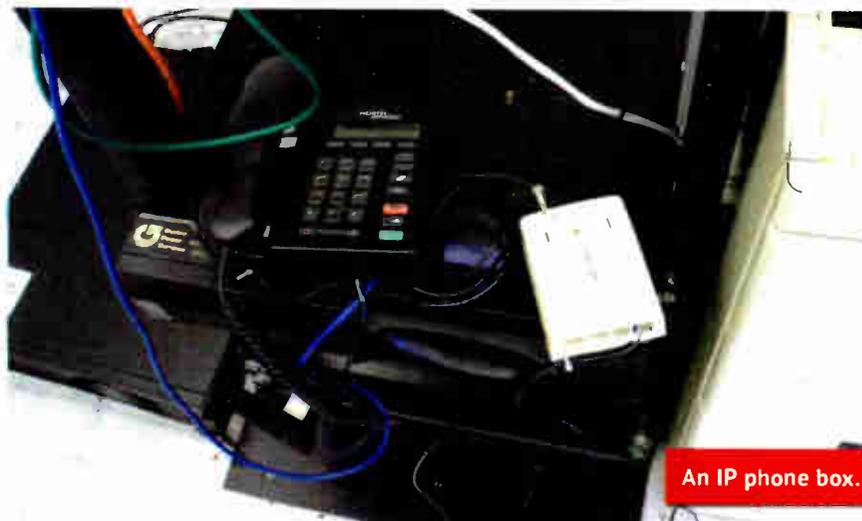
Digital video recorder security systems are used widely. Because we have Internet access at each site, we can view our security cameras in real time.

The ability to recognize a person's face is important but may require a more costly high-definition camera. Of

course, creating a clear picture will require proper lighting, angle, distance and so on. One HD digital security camera costs around \$1,000, while an analog DVR-camera security system with four cameras costs \$300 to \$500. We opted for an analog system.

A few things I learned:

- Choose the best camera available for your budget. There are plenty of cheap brands, but they might not last through next winter. Read specs carefully and don't buy anything without a customer review. Choose cameras intended for the outdoors that can withstand extreme temperatures, wind, snow and rain. Secure the cable connection with an all-weather cover.
- Placement is crucial. I positioned one to view the area from the top, another looking at the main gate, one pointing at the main door and another looking at the ground wires. If at all possible, secure the camera such that it cannot be stolen easily. Install "Under Video Surveillance" signs around the fence.
- Infrared LEDs illuminate at nighttime and can be spotted, so I turned them off and used outdoor lights instead.
- Buy DVRs with more channels than you need at present. Buy additional cameras later as needed.
- Mount the DVR inside a metal box and place it up high so that it cannot be accessed easily.
- The DVR system is equipped with



An IP phone box.



Outdoor speaker system.

audio input, so I bought a condenser mic and made a very high gain preamp for better sensitivity. I mounted the mic just above the door outside the microwave room. The mic can sense cars passing on the main road 150 feet away. Any car close to the fence will be picked up.

- Wired cameras are better than wireless. Some users report interference problems with the latter.
- Ensure that the online viewing system works for every person who will use it, especially management.

#### MOTION SENSORS

There are many motion sensors sold in stores and online; prices vary from a few dollars to thousands. The majority, however, are designed for indoor use.

Outdoor sensors are subjected to more unstable environments and may be more susceptible to false triggers. Winds, insects, leaves and many other factors can trip a motion sensor. Most sensors use passive infrared to detect movement, though some vendors resorted to dual sensing technology to reduce false alarms. These use infrared and microwave Doppler radar. The Doppler frequency is at 10 GHz.

When buying motion sensors, make sure the model and brand have been well tested in the field. Your sensor should trigger only for human-sized objects — not dogs, cats, insects or other small animals.

RF immunity is also important, given the broadcast environment in which this sensor will be used. Immunity typically is specified in a product's technical description.

The next question is where to place the motion sensor. In our project we used three: one on the main gate, one on the back and another on the door of the microwave room. However, we knew farmers would be driving by the fence and that their vehicles might trigger a sensor. Also, a person might approach the fence without intention to steal or break in; this, too, would trigger a false alarm.

Our solution was a circuit that senses three consecutive triggers from any one of the sensors, or an accumulation of three triggers from two or three sensors. If the circuit sees three triggers within one minute (an adjustable setting), an alarm is sent to the Master Control office. If there are fewer than three, the circuit will reset after one minute.

Note that direct sunlight can increase false alarms for an outdoor motion sensor.

#### AUDIO WARNING SYSTEM

Besides the landline phone, there were IT (VoIP) telephones as well at each site. The IT phone is connected to the router via an Ethernet cable. A

“voice call” feature lets a person call the phone at the microwave site and his voice could be heard from the speaker, even if the handset was not lifted, much like the pager function used in shopping centers.

I made a small preamp circuit and connected it to the telephone speaker. The preamp was connected to an amplifier with a loudspeaker mounted outside. In the event of an alarm, or if the operator on duty saw someone on the camera trying to force himself into the fenced area, the operator could talk to the would-be intruders and hopefully

scare them away. A siren circuit could also be used for the input of the preamp.

#### LOCKS AND CHAINS

Believe it or not, most padlocks sold by the local hardware store, Home Depot or Lowe's can be cut easily with a \$27 bolt cutter. Some can be picked easily, too; it's all over YouTube.

Other padlocks are designed to prevent the use of a bolt cutter; one example is the ABUS monoblock 92.

We needed a matching chain as well. Security chains are rated based on the force needed to cut them.

Choose a chain with the highest cutting force, other things being equal. The ABUS square chain fits snugly with the ABUS lock; the company's smallest chain has a cutting force of 4 tons.

Another option for padlocks is the siren lock, which sounds off when touched. It will turn off after a few minutes. This type of lock is inexpensive and will surely fit your budget.

As a last layer of door security, I installed a secret “lock” that does not look like a padlock; it doesn't even have a key. The only way to defeat my

*(continued on page 18)*

**NEW...**  
MAGAZINE

## DIGILINK~HD

- Single station to Multi-site Group
- VPN Remote Voice tracking
- Your Music scheduler or ours
- Multi-sound card Console interface
- Live & Automated Games with Rain delay
- Share audio files across the hall or continent



**ARRAKIS SYSTEMS INC.**  
WWW.ARRAKIS-SYSTEMS.COM

### Scalable, high speed Radio Automation for Multistudio, Multisite Applications



Digilink-HD (DHD) is designed from the ground up for today's fast paced, distributed content, single station or multi-site Group. It empowers local and remote talent to collaborate to deliver exciting content, build your audience share, and increase sales. DHD has the tools to enable you to work faster, work smarter, and do more. For On Air, DHD supports live on air, live assist, hard disk automation, satellite automation, and Games automation. DHD supports multiple sound cards for interface to a console and live crossfading. Audio files can be shared across the station or across the planet. To create live sounding automation and facilitate flexible use of talent, DHD features a powerful segue editor, voice track recorder-editor, and remote voice tracking over a VPN (virtual private network). The voice track recorder-editor supports complete control plus the ability to assign a music bed under the voice track with ducking. DHD supports any kind of programming and any size market or multi-site group.

4 On Air Station cluster only **\$500 / month**

[www.arrakis-systems.com](http://www.arrakis-systems.com)

870.461.0730



get modern...  
modernist-radio.com



### Uniform Audio Across the Network

**You don't have to be into cars to know that a white door on a red car just doesn't work.**

The same goes for all those translators and sister stations that carry the same programming across the network. You shouldn't have to mix and match processors, and have to settle for a different sound for each. That's one reason why we just came out with the SG-192 stereo generator. With a high quality Wheatstone processor at your studio (may we suggest AirAura or the FM-531HD?), you can now distribute that audio uniformly to your transmitter sites by using the Wheatstone SG-192 as the final peak processor and stereo generator at each site.

[Click here to learn more](http://INN11.wheatstone.com) INN11.wheatstone.com



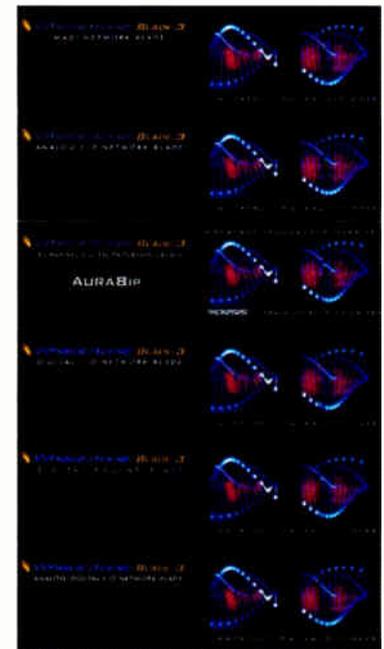
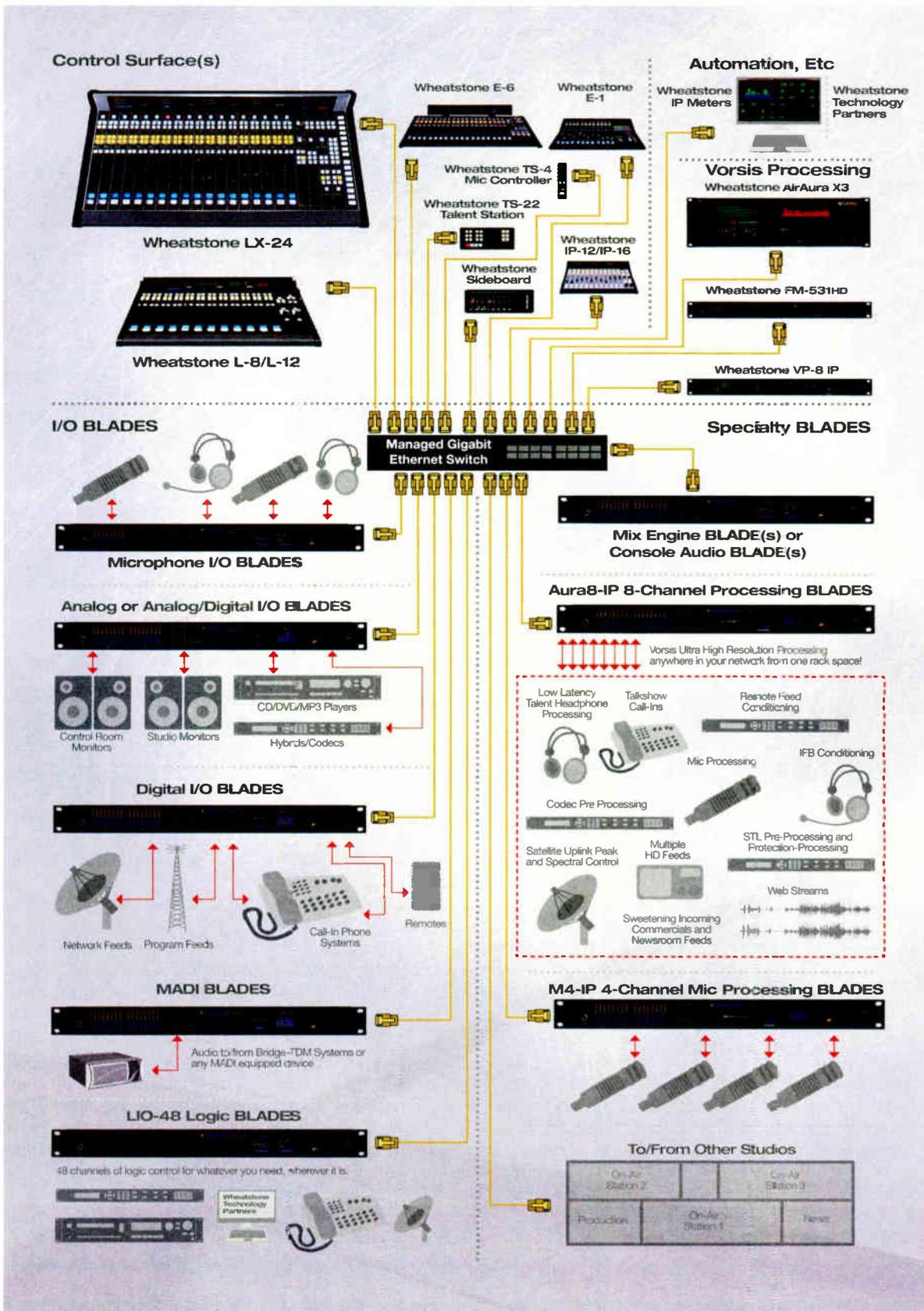
### Virtual Consoles Are a Reality

**Whoever said that the laws of physics are merely a suggestion could be onto something.**

The entirely virtual broadcast studio is not only possible, but most of the pieces are already in place. A good majority of what stations do today – schedule music, stream it, record news updates, even turn on a mic and preload settings for it – can be done without ever leaving the WheatNet-IP network. And, there's more to come, including a suite of WheatNet-IP applications for tablet/iPad devices that will make workflows even more virtual.

[Click here to learn more](http://INN11.wheatstone.com): INN11.wheatstone.com

# With The Right Stuff, Your IP Audio “Feature Creep” is Already Under Control



Your job is to stick to the budget, yet build in some room for all those big ideas that will surely come along the minute you implement your new audio over IP system.



That's why our I/O BLADES have microprocessors inside that we can add to, change, and adapt for just about any scenario the future holds. For example, we did away with costly distribution amps and made routable mixing possible by dropping virtual utility mixers into our network I/O BLADES for this purpose. Now, we're adding multi-band stereo processing to our new I/O BLADES as yet another cool routable function that can be used for spot processing of satellite feeds, headphone audio, web streams or whatever else comes down the studio line. Here's what else you need to know when planning your next IP Audio project.

Read the rest of the story here:

[INN11.wheatstone.com](http://INN11.wheatstone.com)



# SECURITY

(continued from page 15)

“lock” is to destroy the door. You, as the station engineer, can come up with your own secret lock; perhaps it is a mechanical latch that prevents the door from opening even when the padlocks are broken, or a hidden padlock separate from the main lock, one that only you know about.

Also remember that a person working alone and trying to cut a heavy chain might use the ground to help exert force on the cutters. So a chain higher on your gate will be harder to cut than one near the ground.

Another means to protect a padlock from a bolt cutter is a lock box. These can be bought online or custom made.

## BETTER GATES AND FENCES

A chain-link fence is easy to cut with a bolt cutter; for added protection we installed cross braces on the gate using 1-inch pipes and plenty of U-bolts. We added razor wire around the fence. You have to decide how much to use. The wire will not prevent would-be burglars from entering your property but should delay entry. Additional braces or brackets can be added to the fence for strength.

An electric fence is another option. I like the visual “shock and awe” effect of electric wires surrounding the site.



Thieves cut away valuable copper ground wires, leaving nothing behind.



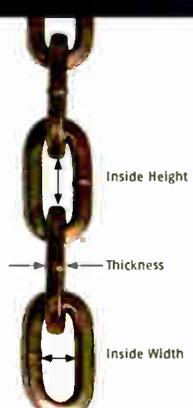
A reinforced security gate, complete with razor wires on the surrounding fence.



Exposed phone wires are a security risk.



### Specifications



A spec sheet from ABUS includes cutting force data.

Chain	Cutting Force	Inside Height	Thickness	Inside Width
6"LS	4 Tons	1 1/8"	5/16"	1/2"
8KS	6 Tons	1 1/4"	3/16"	1/2"
10KS	8 Tons	1 1/2"	3/16"	1/2"
12KS	10 Tons	2 1/4"	1/2"	1/2"
14KS*	12 Tons	2"	3/8"	3/8"

\*Available by special request

Electric fences are common at cattle farms; a system can be bought from the local hardware store. A typical installation consists of PVC pipes and 17-gauge galvanized wires spaced a foot apart. The system is installed inside the existing fence and connected to a 5 kV high-voltage source called the “energizer,” powered from the outlet or a 12 V battery. The output voltage is a narrow pulse and is non-lethal. The system provides relay output to control an external device or alarm in case the wires are cut.

In essence, the wires work as both sensor and shield. No need for outdoor motion sensors anymore. “Danger” warning signs and pictures will add scare factor. However, lawsuits will be a potential downside in the eyes of cautious management.

### CHOOSE ALUMINUM

Replacing copper ground wires with aluminum ones would also

make the facility less attractive to thieves.

We had heard that copper thieves often victimize the utility substation; we went to the local electric utility company and found out that this was true. The utility engineer then decided to replace the copper wires with aluminum. Incidentally, the utility had extra spools of aluminum wires that they would give away for free. These are bigger in diameter than the copper wires we had, but we used them to replace the ground wires at the microwave sites. We used splice connectors (similar to AlumiConn) and antioxidant compound when connecting the structures to the ground rod wires.

If you choose aluminum, do not forget to check the tightness of the connections regularly; aluminum expands and contracts differently than copper. Also, get the right diameter of aluminum wire. For the same ampacity, aluminum wires must have a diameter 25 percent bigger compared to copper. Also remember that aluminum corrodes differently than copper.

### IMPROVE YOUR SURROUNDINGS

A well-lit site will help deter break-ins. In addition to the electric pole light, we added security lights, with a focus on the back, where thieves previously had used the buildings as cover while cutting the fence. By clearing the surrounding area of overgrown trees and bushes, we eliminated places for thieves to hide.

The wire from the utility company phone box typically is exposed. This line should be protected because some thieves are aware that the alarm employs the phone lines. Use metal conduits to protect the wires.

Securing remote sites is critical, and it pays to be a step ahead of the burglars. Determine the weaknesses of your site and make a plan to strengthen them. Begin with practical and inexpensive solutions, such as new doors, fences, gates and locks.

*John Marcon, CBRE, CBTE, has worked in AM, FM, shortwave and television in various capacities over 24 years. He also was a vocational electronics teacher.*

# TAKING RADIO AUTOMATION TO A WHOLE NEW LEVEL



**iDAD-REMOTE** Remote Voice Tracking



# ENCO

800-ENCO-SYS

**ENCO.COM**



#ENCONab



fb.com/encosys

# SNMP Is a Helpful Diagnostic Tool

Also, here's a new use for that old dish hardware on the roof



**Fig. 1:** A satellite dish mount is repurposed to hold a Yagi antenna.

## WORKBENCH

by John Bisset

Read more Workbench articles online at radioworld.com

After a recent SBE meeting, discussion turned to setting up an SNMP graphing system.

SNMP is Simple Network Management Protocol; it collects information from network devices such as printers, switches and servers that are operating on an Internet protocol network.

With so much of the newer broadcast equipment offering SNMP capability, this is a useful skill for a broadcast engineer. The historical display and trending of parameters about critical systems — such as nearly everything you'd want to know about Nautel transmitters — can be invaluable. Furthermore, if you set up graphs for everything on a common server, you can look at the whole environment from any browser.

Consider SNMP a diagnostic tool that gives you a bird's eye view of your facility in a hurry. A variety of limited-use and free SNMP software is available.

Just Google "free SNMP graphing tool." You'll find both Windows and Linux versions, as well as educational white papers to get you started.

One of the best things about writing the *Workbench* column is learning how engineers repurpose broadcast gear.

Jim Davies is with WSUI(AM) and KSUI(FM) in Iowa City, Iowa. When he was doing contract work for Grinnell College, he had to look for an alternative way to mount a Scala CL7 Yagi antenna because the college was not open to installing a roof-penetrating mount.

Jim discovered an old non-penetrating Associated Press dish mount. AP abandoned these a few years ago, and this one, shown in Fig. 1, was on the roof of another station Jim services. Taking it down was a breeze, he says. Just toss the cement blocks off of the roof and onto the grass.

Installing it on the new building meant Jim had to lug the eight blocks up a narrow roof-access ladder.

The work wasn't too bad because, for once, this spring the day was a bit warm. The mount has a 2-3/8-inch diameter pipe sticking up, which is exactly what the antenna needed for mounting. Even though it's a bit low — only 2 feet off the top of the roof — the mount worked just fine for this application.

Thanks, Jim, for sharing the idea.

These unused dishes have other uses too. We've shared previously that one engineer used the dish for miking ball games. The circular aluminum mount makes a great handhold to aim the dish toward the action.

Reach Jim Davies at [jim-davies@uiowa.edu](mailto:jim-davies@uiowa.edu).

Do you own a m!ka copy stand? It's a versatile script holder. The folks at Yellowtec want to make sure you get long life from the copy stand, so they've offered a few hints for the proper care of acrylic glass.

First, the "dos." Do use cleaner designed for synthetic material or lukewarm water with a squirt of dishwashing detergent for stubborn stains. Be sure to use a clean, soft 100 percent cotton cloth.

As for "don'ts," don't use abrasive detergents when cleaning the copy stand. Don't use alcoholic cleaners, household towels or similar paper products. Don't dry-wipe the copy stand, as dust particles may cause scratches. Finally, avoid exposing your m!ka copy stand to extreme temperature fluctuation.

If you don't have a m!ka copy stand, you can find out more by visiting [facebook.com/yellowtec](https://www.facebook.com/yellowtec).

I was at Lowes the other day and noticed that the prices of LED light bulbs are coming down. These bulbs will not only save energy but offer long life — perfect for fixtures at transmitter sites or other locations where the access to bulbs are difficult. Start with a few and see how they work for you.

Contribute to Workbench. You'll help your fellow engineers, and qualify for SBE recertification credit. Send Workbench tips to [johnpbisset@gmail.com](mailto:johnpbisset@gmail.com). Fax to (603) 472-4944.

Author John Bisset has spent 44 years in the broadcasting industry and is still learning. He handles West Coast sales for the Telos Alliance. He is SBE certified and is a past recipient of the SBE's Educator of the Year Award.

## MARKETPLACE

**Gin Guide:** The National Association of Tower Erectors has released guidelines concerning safe operation of gin poles. Gin poles are portable boom-like structures used in building or repairing towers.

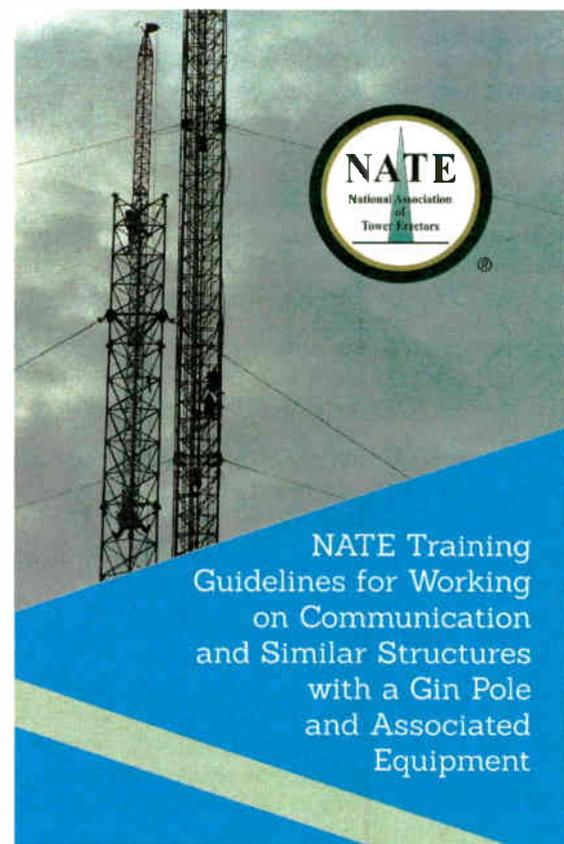
Entitled "NATE Training Guidelines for Working on Communication and Similar Structures with a Gin Pole and Associated Equipment," it provides "minimum worker training guidelines which are required for gin pole use for work relating to the installation, alteration and maintenance of communications structures."

NATE Chairwoman Pat Cipov said, "Many tower contractors utilize gin poles on a daily basis and it is important that the guidelines outlined in this resource are adhered to in order to create a safe work environment when utilizing this equipment on tower sites."

Co-author Ernie Jones of Consolidated Engineering said, "This guide starts with reasonable industry-expected prerequisite training and ends with a field verification process to provide a complete package for responsible and knowledgeable users of gin poles."

Jones, along with Don Doty of Velocitel, Gordon Lyman of Safety LMSystems and the NATE Board of Directors, put the guidelines together.

Info: [www.natehome.com](http://www.natehome.com)



NEW



# AARON 650

Premium FM Rebroadcast-Receiver



## DAVID IV

FM/HD Radio™ Broadcast Audio Processor

UPDATE



Version 3 update adds more features, new controls, and greater sonic power.

## INOmini 402

RDS Sign-Driver/Receiver

NEW



Display your station's live RDS messaging for all to see.

## New at NAB 2014

This year at NAB, we introduced **AARON 650**: a totally-new FM rebroadcast/translator receiver built to handle the most challenging reception scenarios. **Version 3 firmware** added adjustable crossovers, attack and release times, Windowed AGC and more to our **DAVID IV FM audio processor**. And our new **INOmini 402 RDS Sign-Driver** was on hand displaying live RDS for your control rooms, studios and outdoor billboards.

Learn more at  
[www.inovonicsbroadcast.com](http://www.inovonicsbroadcast.com)



# Control “On the Go” From Burk

ARC Plus mobile access provides smartphone and tablet remote control options

## USERREPORT

BY MICHAEL KERNAN  
Chief Engineer  
Greater Media Detroit

**DETROIT** — Broadcast engineers have an exceptionally responsible job. We are charged with keeping our stations on the air at all times without exception. Few businesses place this kind of round-the-clock reliance upon so few personnel. Broadcasters rely on their engineers, and their engineers often rely on remote access.

I use remote access daily for tasks as diverse as checking email, troubleshooting an errant studio computer, helping out a baffled operator and keeping tabs on important back-office systems. Like most engineers, I'm always in possession of my smartphone where I get email, text messages and, if the situation warrants, phone calls — all from automated systems designed to keep me informed and on top of whatever situation may arise.

### OCCUPATION

There was a time when engineers occupied transmitter sites continuously; some literally living in an apartment or bunk in the same building as the transmitters. They were there to perform maintenance, make adjustments and monitor the numerous meters and indicators.

Most importantly, though, they were there to respond to critical conditions as they occurred, ensuring that stations ran within FCC prescribed tolerances and to guarantee maximum uptime for their owners.

Now technology rides herd on technology, permitting the broadcast engineer an opportunity to live a more normal life.

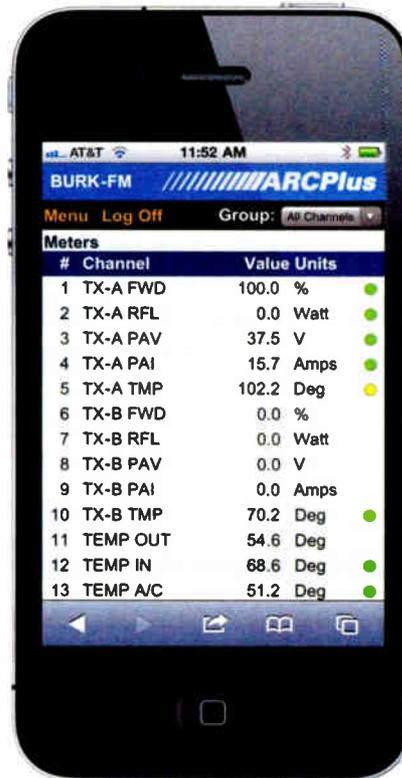
Site control is simply the ability to monitor conditions at a remote location, report anything that goes out-of-tolerance, and allow user interaction for

troubleshooting, selection of alternate operational modes, and hopefully for correction of critical issues. Site control is what Burk Technology is all about, and Burk has been at the forefront of broadcast site control technology for almost 30 years.

Today, a smart majority of broadcasters use Burk products; some have several generations of it installed and still operable. The latest generation, ARC Plus, is their flagship product, with a modular architecture and plenty of connectivity options. Several flavors of ARC Plus serve a broad spectrum of broadcasters' needs. With it, connections to a site or multiple sites can be made via PC, another ARC Plus, or, perhaps most importantly, anywhere your smartphone or tablet has data service.

Smartphones and tablets are well supported by Burk's ARC Plus system in a smart and uncomplicated way. A user simply navigates to the unit's Web page by placing */mobile/* at the end of the URL. This instructs ARC Plus to format its HTML output for a mobile device and in so doing, minimize bandwidth and screen requirements.

I use the ARC Plus mobile access capability on an Apple iPhone 5 and an Apple iPad mini with 4G LTE data



service. By creating shortcut tiles on the iOS home screen I can easily access any of my sites in just seconds. Browser favorites are also set up for quick access should the need arise.

The UI is simple but allows the user to view status, metering, events and alarms. It is possible to issue com-

mands, clear alarms or even to run any macros you may have stored in the unit. Password protection is supported, but as I found out, Safari mobile has a “Private” mode that, when engaged, will prevent you from successfully logging in.

Initially I had hoped that Burk would develop an iPhone app — sort of an iOS version of AutoPilot. But that that would probably would have meant supporting Android, and every other permutation of smart device that comes down the pike. Realistically, leveraging the more or less universal HTML browser language gifts Burk with a nearly perpetually compatible UI and relieves ARC Plus' owner from continually having to patch and update the system or app just to support Jonny's latest muse.

So, what's the mobile UI like? It's clean, fast and easy to navigate. One might call it “dead simple.” It clearly shows metering, status and commands on the first page with a menu to allow navigation to alarms, events and macros. All you need is right there; no nonsense.

Burk will no doubt continue to lead the way in remote site control and mobile access will continue to remain a priority. I appreciate having ARC Plus in my pocket and can confidently say that it will likely save my bacon again soon, as it has on several other occasions to date.

For information, contact Matt Leland at Burk Technology in Massachusetts at (978) 486-0086 ext. 700 or visit [www.burk.com](http://www.burk.com).

## TECHUPDATE

### COMREX INTEGRATES OPUS SMARTPHONE APPS

Comrex Corp. announced integration of the recently developed Opus audio algorithm for its Access and BRIC-Link IP codecs, calling it a high-quality, low-delay algorithm found in a number of free smartphone apps for iOS and Android.

These apps make wideband, high-quality connections to Comrex studio codecs more convenient. For instance, the LinPhone app is a good choice, Comrex says, because it doesn't require registration and can dial directly to the IP address of any Comrex codec running v3.0 firmware. Linphone is easy to set up and use, it adds.

Comrex also has provided compatibility with smartphone apps such as Luci Live and Media 5 as well as its own mobile broadcast apps, ARC and VIP QC. The company says it tries to provide the widest possible connectivity for users.

Technical Director Tom Hartnett said, “We tend to embrace open source technologies where we can. Instead of constantly creating new proprietary apps to sell, we would prefer to connect to a rapidly growing number of freely available third-party apps.”

Comrex says the use of free smartphone apps for remotes does not completely replace full-featured, professional field codec hardware; but for quick drop-ins and news reports, the wideband connections provided by many apps can help eliminate the “sound of the telephone” in a station's on-air product.

For information, contact Comrex in Massachusetts at (978) 784-1776 or visit [www.comrex.com](http://www.comrex.com).



## TECHUPDATES

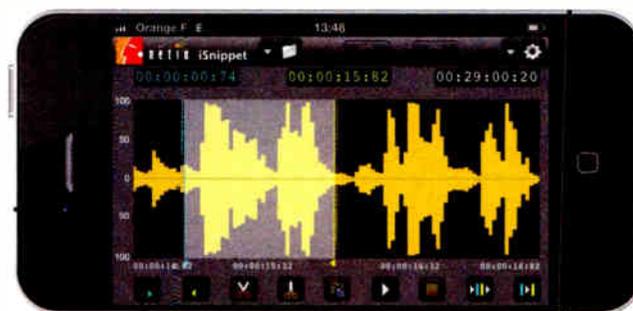
### NETIA RADIO-ASSIST GOES MOBILE

Netia says that its Radio-Assist software suite addresses each part of the production and broadcast workflow, allowing users to record, edit or prepare a playlist.

In addition to providing browse and publishing tools for multimedia functionality, the software features tools for acquisition, archiving, audio editing, commercial and music production, newsroom systems, scheduling, broadcasting and administration.

A new upgrade makes the editing tools available within Radio-Assist available for iOS devices including the iPhone and iPad, as well as for Windows 8 tablets. Sharing the look and ergonomic principles of the Radio-Assist desktop interface, the iSnippet tool for portable devices makes it convenient for field reporters and other remote users to take advantage of familiar Radio-Assist audio editing capabilities.

Netia also has enhanced Radio-Assist with a mobile teleprompter function, which enables journalists to jump into the studio news broadcast, reading their news pieces from tablets

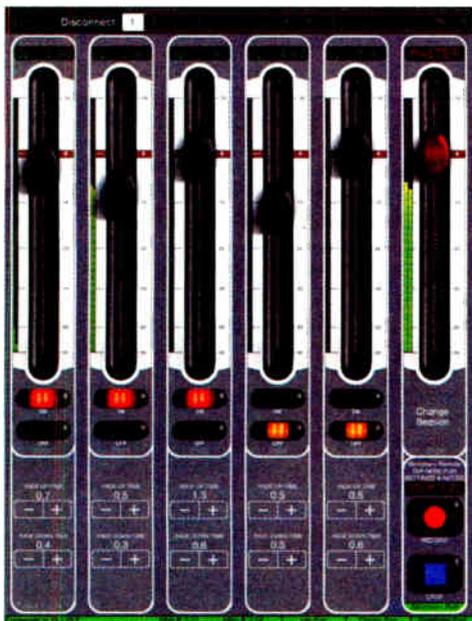


and other mobile devices.

For information, contact Netia in New York at (212) 332-2141 or visit [www.netia.com](http://www.netia.com).

### VMIX FOR AXIA BY BSI

VMix for Axia by Broadcast Software International allows users to control the VMix functionality of an Axia LiveWire Mix Engine or PowerStation from an iPad. Users can now utilize VMix profiles for head-phone mixes for multi-talent studios or use for remote broadcast rigs where a full console is not necessary.



VMix also provides integrated control of the BSI SkimmerPlus audio logging application to start and stop recording and allows a user to keep notes about what is being recorded; these can then be emailed from within the app.

BSI says that the app has been used for national broadcasts by Westwood One and on "radio rows" at the American Music Awards, the Grammy Awards and the Academy of Country Music Awards.

For information, contact Broadcast Software International in Oregon at (888) 274-8721 or visit [www.bsiusa.com](http://www.bsiusa.com).



# THE WORLD'S LARGEST BROADCAST SOFTWARE COMPANY

# Zetta2GO<sup>®</sup>

## PLAYOUT MANAGEMENT **ANYWHERE<sup>®</sup>**

[RCSWORKS.COM](http://RCSWORKS.COM)

© Copyright 2014 RCS. All Rights Reserved. RCS Sound Software and its products and their marks and logos are registered trademarks of RCS.

# Red Peach Scores at Remotes With Report-IT

Sports broadcaster can provide juicy coverage anywhere it can get a 4G cell signal

## USERREPORT

BY GARY MCKENNEY  
General Manager  
Red Peach Radio

**RUSTON, LA.** — We have just finished another high school baseball season at Red Peach Radio. That's some 30 regular season games and 18 playoff/tourney games ending with three finals games on three different stations. All of these games were done with the Report-IT app and Bridge-IT studio units, both from Tieline.

We have been using this excellent system since the fall of 2013 when we bought three Bridge-IT units, three iPhone 5C cellphones and a 10-pack of Report-IT licenses. We use this setup almost every week for sports and remotes.

### REMOTE EFFICIENCY

Red Peach Radio first used Report-IT for high school football. Red Peach produces three football broadcasts each Friday and last season we were able to do all but three via Report-IT (due to a lack of 4G cell signal at those locations, so we used a regular 3G cell call for those three).



Covering a high school baseball game, Red Peach Radio's Nick White points to the Tieline Report-IT-equipped smartphone, his link back to the studio.

Last summer our afternoon sports hosts did their three-hour show live via Report-IT from CUSA Media Days for two days in Dallas, and it sounded like they were in studio.

We have been amazed at the digital sound quality that we get using Report-IT and Bridge-IT. I get calls from other broadcasters that want to know what we are using that sounds so good, even from small rural game sites.

Our standard remote kits include an iPhone 5C with Report-IT app, JK Audio RemoteMix 3.5 or 4, two Sennheiser headsets and a crowd mic. The studio setup uses the basic Bridge-IT, connected to the Web, and connected to the on-air console as any codec.

Sports Director Nick White has road-tested Bridge-IT from high school stadiums and gyms to the New Orleans Superdome. Nick says, "I was skeptical at first when I was told about the Report-IT app. One broadcast with it and I was sold. The audio quality is phenomenal, and super dependable. We even used it to broadcast state championship games from the Superdome in New Orleans, and it didn't let us down. Report-IT is awesome."

We use POTS codecs and ISDN for some shows and events when necessary, but Bridge-IT sounds just as good and many times better.

Another thing I really like about Report-IT is that setup is so easy. Red Peach has at least 10 people, with varying technical skill levels, who will use Report-IT. Most are acquainted with using apps, so my sportscasters and remote talent can easily set it up by hitting "connect" on the Report-IT iPhone app. The only thing needed is a good 4G cell signal at the game/remote site and a good Internet connection for Bridge-IT at the studio.

We also use Report-IT for our college tailgate events and commercial/promotional remotes. Great sound for our clients.

Tieline's Report-IT is the answer to high-quality sports and remote broadcasts via cellphone.

For information, contact John Lackness at Tieline USA in Indiana at (317) 845-8000 or visit [www.tieline.com](http://www.tieline.com).



## PRODUCTS & SERVICES SHOWCASE

### OPTILATOR™

Rack Mount UPS's 1500VA-2200VA  
w/AVR & Optelator!! \$736.95-\$811.95  
Remote dry contact Monitoring is available  
for \$250.00 more for the Rackmount UPS.



\$386.95 ea.

### Fiber Optic Modem Protection

Lightning Protection that keeps on working!  
Fiber optic protection impervious to Lightning.

It is now a recognized name brand in the RF Industry.  
For more technical information call toll free 888-471-1038.  
Ph: 727-823-6100. Fax: 727-823-6044.

For pricing and sales call: Broadcast General Store,  
Broadcastworks, Broadcast Richardson, RF Specialists, Crouse-  
Kimzey, S.C.M.S., or your local distributor.

See our web page: [www.opticsshield.com](http://www.opticsshield.com) It is for real!

The Ultimate Lightning Protection!

Return for Repairs average cost between \$96.60 to \$135.40

## Reach Radio Professionals!

For more information, including  
rates & deadlines,  
call Michele  
at 212-378-0400 x523.

Advertise  
today!



**TECHUPDATES**

**BE FLEXES APP FOR AUDIOVAULT**

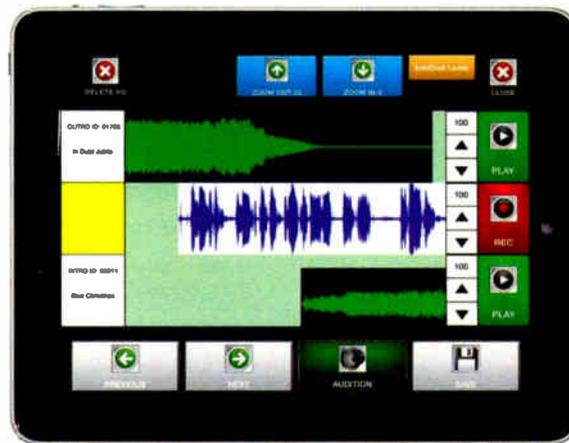
Broadcast Electronics says it received a lot of requests for this one. The new AudioVault FleX Mobile App will allow users to stay securely connected to an AudioVault FleX system from anywhere.



The AudioVault FleX Mobile App has tools for various staff. The station engineer will be able to check on the status of the AudioVault system; air talent can control playout remotely. News staff will be able to record audio and upload it to the Vault system.

The sales staff will have the ability to play ads for clients and record commercial tags from a client's location. The app can also be used in the studio as a Quick Start Console. The AudioVault FleX Mobile App with remote control and Quick Start support is available now for iOS (iPhone and iPad). Additional features and support for Android are coming.

For information, contact **Broadcast Electronics in Illinois (217) 224-9600** or visit [www.bdcast.com](http://www.bdcast.com).



**REMOTE CONTROL OF ENCO DAD AVAILABLE VIA IPAD**

ENCO Systems' new iDAD Remote is an application for iPad that allows on-air control of an ENCO DAD system from any location with Internet access.

The iDAD Remote app allows users to record voice tracks, make playlist changes, change logs and control playout with the automation system. For recording of voice tracks, the user records directly to the iPad, where the audio is saved and then uploaded to the remote DAD system.

"iDAD Remote is a true Internet-based remote control rather than a screen share," said General Manager Ken Frommert. "Users take actual control of the DAD Presenter module in the studio — any changes you make from the iPad immediately appear on the system. It's a valuable tool for stations that require studio operation from a distant location or to use in an emergency situation."

For information, contact ENCO Systems in Michigan at (248) 827-4440 or visit [www.enco.com](http://www.enco.com).

**25 THINGS**

YOU MIGHT HAVE *Missed* at the **NABSHOW**

**A FREE WEBINAR NOW AVAILABLE ON DEMAND**



Not everyone has the time and resources available to see everything presented at the annual NAB Show in Las Vegas. Yet, keeping up with the news and significant technology introductions is vital to your job and career. We can help.

Join us for a FREE executive briefing, originally presented on May 7, on the **25 Things You Might Have Missed at the NAB Show**. The Radio World editorial team traveled the sessions and exhibit floors of the Las Vegas Convention Center to find the people, news and technology certain to have an impact on radio broadcasting and station operations throughout the coming year and beyond.

Brought to you by:



TO VIEW THE ARCHIVE, VISIT: <http://radioworld.com/webinars/12/>

**TECHUPDATES****ZETTA2GO BRINGS MOBILITY TO RCS ZETTA**

Zetta2GO is an application that allows the control of a Zetta automation/playout system from an Internet browser. Using a tablet or smartphone, a user can view and fire off hot keys for a station; from a laptop or remote desktop a user can control much more.

The Zetta2GO desktop Web interface is similar in many ways to the regular Zetta application. The desktop Internet browser can display logs, hot keys and the segue/voice track editor, allowing the user to voice-track empty voice track slots in the log, edit the segue of the voice tracks and fire hot keys from a hot keys bank.

For information, contact RCS in New York at (914) 428-4600 or visit [www.rcsworks.com](http://www.rcsworks.com).

**WIDEORBIT WO VIEW MOBILE ORDER ENTRY APP AVAILABLE**

WO View is a new mobile order entry app from broadcast business software developer WideOrbit. It is now in general release.

WideOrbit says WO View is a quick, easy and mobile way to book orders efficiently and flexibly in WO Traffic.

The app allows a salesperson to enter an order on a mobile tablet device using a simplified process that ingests the order into WO Traffic.

WideOrbit says that the order entry process allows salespeople to:

- Book new orders quickly and easily, even from a client's office
- Draft orders and changes in offline mode and submit when Wi-Fi is connected
- Submit orders securely through WO Central to the WO Traffic Electronic Orders module

WO View is available for iPad and will be available for Android tablet devices in Q3. WO View requires WO Traffic v6.80 or higher. There is no separate license fee.

For information, contact WideOrbit at (828) 252-8891 or visit [www.wideorbit.com](http://www.wideorbit.com).

**NAUTEL INCREASES AUI FUNCTIONALITY**

Nautel's Advanced User Interface, which many users are accessing via smartphones and tablets, has been updated with added functionality for Nautel transmitters.

At the recent NAB Show, enhancements to the AUI were unveiled. Users can

access site control functions, enabling monitoring and control of items external to the transmitter (such as doors or generators). Also added to the AUI is an oscilloscope view that monitors audio source signals in the time domain.

Approximately 4,000 transmitters are enabled with the Nautel AUI, with commercial-grade instrumentation that makes transmitter monitoring and control a matter of tapping buttons on a touchscreen. Functionality such as an onboard spectrum analyzer, SNMP support, email notifications, easy-to-use presets and enhanced support services are available locally and remotely via smartphone or tablet.

The Nautel Advanced User Interface works across six Nautel product families, including the new GV series.

For information, contact Nautel in Nova Scotia at (902) 823-5131 or visit [www.nautel.com](http://www.nautel.com).

**DAYSEQUERRA REMOTE DASHBOARD ACCESSIBLE BY SMARTPHONE**

DaySequerra's Remote Dashboard can now be accessed using a smartphone or browser. The Remote Dashboard webserver makes remote control monitoring of AM and FM HD Radio broadcasts easier and is available for DaySequerra M4.2S, M2HDSP and M2DSP models.

The Remote Dashboard application also allows a remote user to simultaneously monitor HD Radio program availability and digital audio presence for MPS (HD1) and multicast HD2 through HD8 broadcasts, along with analog audio presence, analog delay bit and RF carrier signal strength.

The HD Radio PAD and SIS data package including station descriptions and program song title, artist, album, genre and comments can be simultaneously displayed along with the album artwork via Artist Experience.

Alarm capability is provided for Remote Dashboard functions including analog and digital audio silence sensing; active alarm notification is via email. Built-in logging capabilities are provided for PAD and SIS data as well as alarm conditions.

DaySequerra's Remote Dashboard is easy to use and access using an Internet browser on a smartphone or computer, providing total remote control, display and remote reset from anywhere. With password-protected access, users can feel secure about accessing the remote dashboard no matter where they are.

For information, contact DaySequerra in New Jersey at (856) 719-9900 or visit [www.daysequerra.com](http://www.daysequerra.com).



## Broadcast Engineering Software



- Create stunning "real-world" coverage maps, interference studies, and population reports with Probe 4™
- Find STL broadcast auxiliary and Part 101 microwave frequencies and generate PCN letters with Microwave Pro™
- AM Pro 2™, used daily by FCC engineers, performs skywave and groundwave allocation studies and AM coverage mapping.
- Map FM stations and discover upgrade possibilities using FCC minimum separations and contour-to-contour methods with FMCommander™



www.V-Soft.com

(800) 743-3684

### ACOUSTICS

**Acoustics First**  
-SOUND AND NOISE CONTROL MATERIALS-  
Toll-Free Number: **888-765-2900**  
www.AcousticsFirst.com

### ANTENNAS/ TOWERS/CABLES

### AM LOOPS

FOR EAS RECEIVERS  
FEMA RECOMMENDED  
www.PixelSatRadio.com  
(303) 526-1965

### WANT TO BUY

Wanted: Replacement parts: 3 bullets with connecting parts inside single bay 1105 Series ERI single antenna, any frequency. Please call 318-599-9590.

### AUDIO PROCESSING (INCLUDES ON-AIR)

### WANT TO SELL

Optimod 8100A1 w/XT2 in great cond, serious offers only. mjradio@hotmail.com.

### WANT TO BUY

Teletronix LA-2A's, UREI LA-3A's & LA-4's, Fairchild 660's & 670's, any Pultec EQ's & any other old tube compressor/limiters, call after 3PM CST - 214 738-7873 or sixtiesradio@yahoo.com.

Wanted: Inovonics Model 222 AM Broadcast processor, must be in good working condition & cosmetic condition. Scott Bailey, WMRO Radio, 615-451-2131.

### AUTOMATION EQUIPMENT

### WANT TO SELL

It's free and it has been expanded. The only cost is to keep us informed as to how the system is performing and let us know how you are using it. DIY-DJ, is a Linux based radio automation system and now sports a record scheduler (DIY-DJ-RECORDER) which allows you to schedule the recording of a network or any other program for replay later as well as a basic logging system. Beside these additions the system schedules music, does voice tracking (ALWAYS hit the vocal), create a shell, live assist, exact time events, join satellite feeds, automated temperature announce, do unattended remote events and more. Call (406) 679-0527 or email krws@digitaldevelopment.net for a copy today.

### CONSOLES/ MIXERS/ROUTERS

### WANT TO BUY

Harris Stereo Statesman, 5-chnl audio board, can be parts unit, mainly for chassis. Pete Russell, 321-773-2746 or Peter\_Russell@bellsouth.net.

**RADIOWORLD**  
Equipment Exchange

# CONSULTANTS

**OWL ENGINEERING, INC.**  
Consulting Communications Engineers  
5844 Hamline Ave. N., Shoreview, MN 55126  
**651-784-7445**

- AM/FM/NCE Applications
- Allocation and Upgrade Studies
- Pre-Purchase Inspections
- ANSI and NRSC Measurements
- AM Directional Array, Design, Tuning and Proof using Method of Moments
- Tower Detuning
- Intermodulation Studies
- Radiation Hazard Evaluation and Measurements

Fax (651) 784-7541 E-mail: info@owleng.com "Member AFCCE"

**GRAHAM BROCK, INC.**  
BROADCAST TECHNICAL CONSULTANTS  
Full Service: From Allocation to Operation AM/FM  
Field Work: Antenna and Facilities Design  
Over 45 years engineering and consulting experience  
**912-638-8028**  
**202-393-5133**  
www.grahambrock.com

**EVANS ENGINEERING SOLUTIONS**  
Full-Service Broadcast Engineers  
Transmitter Upgrade or Relocation  
FM Translators  
STL/TSL/RPU Licensing  
Coverage Studies  
(262) 518-0002  
evansengsol@gmail.com  
Over 35 Years Experience - Member AFCCE

### MICROPHONES/ HEADPHONES/ SPEAKERS/AMPS

### WANT TO SELL

1934 RCA 77A double ribbon microphone, originally used by Arthur Godfrey at WFBR Baltimore. 100% perfect condition. Contact Bill Cook, 719-684-6010.

### WANT TO BUY

RCA 77-DX's & 44-BX's, any other RCA ribbon mics, on-air lights, call after 3PM CST, 214 738-7873 or sixtiesradio@yahoo.com.

### MISCELLANEOUS

**ROTRON BLOWERS AND PLATE BLOCKERS**, new & rebuilt for Elcom, Harris, CCA, CSI, McMartin, Goodrich Ent. 11435 Manderson St. Omana, NE 68164 402-493-1886 Email: CGoodrich@iconl.com

### WANT TO SELL

Radio broadcasts of Major League Baseball, NFL, and some college football games that are on cassette tapes, approx 100 to 125 games, time period of entire collection os from the 1950's - 1970's, BO. Must purchase entire collection. Contact Ron, 925-284-5428 or ronwtamm@yahoo.com

### WANT TO BUY

Collector wants to buy: old vintage pro gears, compressor/limiter, microphone, mixing consoles, amplifiers, mic preamps, speakers, turntables, EQ working or not, working transformers (UTC Western Electric), Fairchild, Western Electric, Langevin, RCA, Gates, Urei, Altec, Pultec, Collins. Cash - pick up 773-339-9035 or ilg821@aol.com.

2" plastic "spot" reels 6.5 or 8" diameter, as used for quad video. Wayne, Audio Village, 760-320-0728 or audiovlg@gte.net.

Equipment Wanted: obsolete, or out of service broad-

cast and recording gear, amplifiers, processing, radio or mixing consoles, microphones, etc. Large lots preferred. Pickup or shipping can be discussed. 443-854-0725 or ajkivi@gmail.com.

I'm looking for San Francisco radio recordings from the 1920's through the 1980's. For example newscast, talk shows, music shows, live band remotes, etc. Stations like KGO, KFRC, KSFO, KTAB, KDIA, KWBR, KSFX, KOBY, KCBS, KQW, KRE, KTIM, KYA, etc, I will pay for copies... Feel free to call me at 925-284-5428 or you can email me at ronwtamm@yahoo.com.

Looking for a broadcast excerpt of a San Francisco Giant's taped off of KSFO radio from 1959, interviews with Willie Mays, Dusty Rhodes & some play by play excerpts,

also features a homerun by Willie Mays and Felipe Alou stealing second base, running time is 18:02, also looking for SF Giants games and/or highlights from 1958-1978 also taped off KSFO Radio. Ron, 925-284-5428 or ronwtamm@yahoo.com.

Looking for KFRC signoff radio broadcast from 1930 Andy Potter, running time is 0:22 & also the KLX kitchen the program guest is Susanne Caygill, a discussion of women's affairs with a long promotion for Caygill's appearance at a local store. Anne Truax, Susanne Caygill, running time is 13:44. Ron, 925-284-5428 or email ronwtamm@yahoo.com.

Looking for KTIM FM radio shows from 1981-1984 if possible unscoped. R Tamm, 925-284-5428 or ronwtamm@yahoo.com.

### RECEIVERS/ TRANSCIVERS

### WANT TO SELL

Free sample SCA decoder. 417-881-1846.

### RECORDING & PLAYBACK HARDWARE

### WANT TO BUY

Large or small collections of 16" transcriptions or 12" transcriptions, not commercial LPs. Bill Cook, 719-684-6010.

Schnader telescriptions 16 mm musical films produced in the early 50 s. Bill Cook, 719-684-6010.

Standard Short-tune series. Bill Cook, 719-684-6010.

### TAX DEDUCTIBLE EQUIPMENT

Donations Needed: All Volunteer, Non-profit Low Power community radios stations need Equipment. Will offer tax deduction letter, You determine donation value, We will pay shipping. Equipment shared between three Wisconsin stations. Looking for Mics, Mixers, field equipment, etc. You name it. Email: Dan@WIECradio.org.

### TRANSMITTERS/ EXCITERS/TRANSLATORS

### WANT TO SELL

CCA AM 10,000 D - Call John KQSS 928-595-0263 between 10 & 6 PM Pacific Time.

### WANT TO BUY

FM transmitter 1kW or 500W, can arrange pickup, will pay cash or issue a donation letter which is tax deductible as we are IRS 501c3 non-profit, tube type is fine, may also need larger units up to 25kW. Chuck Harder, Peoples Network, Inc, White Springs, FL. 386-397-4489 or chardcr@windstream.net.

## DISTRIBUTOR DIRECTORY

The following distributors serving the broadcast industry would be glad to help you with any of your requirements.

**CORNELL-DUBILIER  
MICA CAPACITORS**

FROM STOCK

**JENNINGS VACUUM  
CAPACITORS**

FROM STOCK

**HIGH ENERGY CERAMIC  
CAPACITORS**

**SURCOM ASSOCIATES**

5674 El Camino Real, Suite K  
Carlsbad, California 92008  
(760) 438-4420 Fax: (760) 438-4759  
e-mail: link@surcom.com web: www.surcom.com

## TUNWALL RADIO

SWITCH AND TRANSMITTER CONTROLLERS



AM/FM/MULTI-SWITCH AND CUSTOM DESIGNS

330.995.9642

www.tunwallradio.com



## Rebuilt Power Tubes 1/2 the cost of New!

Se Habla Español

# ECONCO

Se Habla Español

Tel: 800-532-6626 Web: [www.econco.com](http://www.econco.com)  
 Intl +1-530-662-7553 Fax: +1-530-666-7760



### TRANSMITTERS/EXCITERS/TRANSLATORS

**TRANSCOM CORPORATION**  
*Serving the Broadcast Industry Since 1978*  
 Transmitters and Broadcast Equipment for Radio & Television

Used FM Transmitters

100 W	2008	BE FM100C
250 W	2004	Crown FM250E
500 W	2000	BE FM 500C
3.5 KW	2000	Harris Z3.5CD, solid-state
5 KW	1995	Harris HT5CD
5 KW	1998	Harris Z5CD w/2XFlexstars
5 KW	1999	Harris Z5CD, solid-state
5 KW	2006	Harris Z5, solid-state, unused
7.5 KW	2002	Harris Z7.5CD, solid-state
10 KW	2004	Harris Z10CD, solid-state
20 KW	2012	BE FM20S, solid-state
20 KW	2004	Harris ZD20CD, solid-state
25 KW	2008	Continental 816HD w/Flexstar/Exporter
25 KW	1988	Harris HT25CD
27.5 KW	1994	Continental 816R-4B, SS IPA
30 KW	1988	Harris FM30K

Used AM Transmitters

Please see our website or contact us for current listing

Exciters & Miscellaneous Equipment

BE FC30, SCA Generator  
 Bird Model 8936, 10 kW air-cooled RF Load  
 Harris N + 1 Controller  
 MCI 4 Port 1-5/8" Coaxial Switch  
 Phasemaster T12,000  
 Sola Constant Voltage Transformer #23-23-230-8

Please visit our website,  
[www.fmamtv.com](http://www.fmamtv.com), for additional listings.



**HARRIS nautel**

**CROWN BROADCAST**

TV Transmitters- Analog and Digital  
 Used FLO TV Transmitters\*\* Axcera  
 \* Rohde & Schwarz\*\* Harris Maxiva

New TV Transmitters- Analog and Digital  
 OMB, Rohde & Schwarz and Technolox  
 VHF and UHF TV Antennas  
 (10 W to 10 KW) TV STL

800-441-8454 • 215-938-7304 • FAX: +1-215-938-7361

[www.fmamtv.com](http://www.fmamtv.com) • E-mail: [transcom@fmamtv.com](mailto:transcom@fmamtv.com)

RETUNING & TESTING AVAILABLE • CALL US FOR A QUOTE!

# www.radioworld.com

### TUBES

**RF PARTS™ CO.**  
 Se Habla Español We Export  
 EIMAC • TAYLOR • SVETLANA  
 New & Rebuilt Tubes - Same Day Shipping  
 Motorola • Toshiba • SGS • Thomson & Mitsubishi Semiconductors  
**800-737-2787 760-744-0700**  
[rfp@rfparts.com](mailto:rfp@rfparts.com) [www.rfparts.com](http://www.rfparts.com)

**SPACE IS AVAILABLE!**

**FOR THE BEST PRICE**  
 & 24 Hr service on transmitting tubes & sockets/parts, new & rebuilt call Goodrich Ent. at 402-493-1886 day or night, [www.goodrichenterprises.com](http://www.goodrichenterprises.com)

**ADVERTISE YOUR EMPLOYMENT AD ON OUR WEB SITE FOR ONLY \$2 PER WORD!**  
 ADS GET POSTED THE NEXT BUSINESS DAY AND WILL RUN FOR A FULL TWO WEEKS!  
 COMBINE THIS WITH AN AD IN OUR RADIO WORLD NEWSPAPER EMPLOYMENT SECTION AND REALLY COVER THE BROADCAST INDUSTRY AND THEN SOME!  
**www.radioworld.com**  
 Call Michele Inderrieden for all the details at **212-378-0400 ext. 523**  
[minderrieden@nbmedia.com](mailto:minderrieden@nbmedia.com)



**ISO 9001 Certified**  
 The Choice of Successful Broadcasters Since 1934

**NEW POWER TUBES**  
 Triodes  
 Tetrodes  
 Pentodes  
**NEW SOCKETS & REPLACEMENT PARTS**

**Worldwide Availability**

**Made in U.S.A.**

CALL 800-414-8823  
 Int'l (650) 846-2800  
 Fax (650) 846-3795

Visit our Web Site at [www.eimac.com](http://www.eimac.com)



# EMPLOYMENT

### POSITIONS WANTED

Creative, enjoy writing music, and interesting copy material/Voiceovers. MCO, Utility player who thrives to encourage others and stays extremely positive. John, 972-251-3616 or [johnnallison0128@gmail.com](mailto:johnnallison0128@gmail.com).

Creative, Bold, Free-thinker. Good behind the scenes broadcast individual suited for producing, copywriting, and boards/MCO. Deadline driven, friendly and a great listener. Kimbreon, 817-542-6313 or [ksb1123@yahoo.com](mailto:ksb1123@yahoo.com).

Young hard worker who is willing to relocate. Will do the job I'm asked to do plus some! ColeDurrett9@yahoo.com or 918-348-2276.

Are you a small market station needing a good nuts & bolts engineer in the Los Angeles area? I will make your station shine! CET, fully FCC Licensed. Available for Full/Part-time/Contract work. Available immediately. Mitchell Rakoff, 909-446-6820, [mitchellrakoff@yahoo.com](mailto:mitchellrakoff@yahoo.com).

Experienced radio station manager seeks new management opportunity. More than 39 years experience in radio. Willing to relocate. Family-friendly format(s) preferred. Send details about your management opening to: [radiogm@hotmail.com](mailto:radiogm@hotmail.com).

Extremely social Mobile DJ/Entertainment talent, deep rooted passion for music/broadcasting industry. Strong On-air/production abilities with loyalty and commitment as overall main focus. Kevinjordan1968@gmail.com or 903-851-3653.

Two FM combination Spanish stations need a manager who wants to make big bucks! Top dollar for right applicant. Mexican regional format in San Angelo, TX, with listening audience of 100,000+. Good potential advertising budget. Call and "make it soon". Speak only with Armando, 352-655-0960.

Charismatic, passionate broadcaster On-air/Production/Sports. Skilled, well-rounded and love for music/sports, production copywriting, and board-operations. Seeks to be an asset for your station. Dyllan, 907-355-1920 or [dyllan.larson@gmail.com](mailto:dyllan.larson@gmail.com).

Extremely knowledgeable and articulate racing writer/talk show host Adam Amick is available for shows, correspondent, features, etc. Check out [www.bleacherreport.com](http://www.bleacherreport.com) for samples. Call 214-384-5812 or email: [adam@rubbinsracingshow.com](mailto:adam@rubbinsracingshow.com).

**READER'S FORUM**
**OPERATING COSTS**

Regarding "SSR Renews Push for FM Class C4," published on [radioworld.com](http://radioworld.com) on April 1:

I personally don't see this as doing much at all, except driving up operating costs. Double your energy bill for a 3-mile increase in coverage? Seriously?

Much like the Class A 3 kW to 6 kW power increase of years ago — not much improvement in real-world coverage was obtained or should be expected.

*Tim Sawyer  
Managing Partner  
T.Z. Sawyer Technical Consultants  
Falls Church, Va.*

**BEYOND 20TH CENTURY TECH**

Finally, the public alerting service is moving beyond mid-20th century technology and reaching public in an intelligent and targeted manner ("Texas DPS Installs Digital Alert Systems Equipment," [radioworld.com](http://radioworld.com), May 7).

This should provide the capability of notifying individuals at risk rather than the "sky is falling" broadcast system of the past — if used responsibly by the public service agencies.

*Larry Kent Woodmansee  
Fairfax, Va.*

**CONVENIENCE WITHOUT BETTER SOUND**

I read with interest the Jan. 1 article about NPR Labs regarding codecs and transmission rates ("NPR Labs Eyes Streaming Technology") and the conclusions in favor of ACC+. Unfortunately, ACC+ does for music what the iPod started years ago. It provides convenience but not better sound.

I am an engineer and more of a classical music lover than audiophile. I have personally tried to receive a favorite public radio station that switched to ACC+. Many music-streaming devices cannot decode ACC+ in the streaming radio format. Logitech Squeezebox, Sonos and Roku are some of the devices I have used. The radio station is just out of range of HD Radio, so that is not an alternative. I am an adult; so sitting around with headphones or earbuds at my computer or smartphone is a non-starter.

Computer sales are falling off a cliff as tablets take over, so that leaves smartphones as the logical receiver of the future. Most will agree that earbuds used with iPhones or Androids leave much to be desired in the sound department. Until there is hardware that can decode the signal in real time, why bother switching to a better codec when the devices that can use it don't sound good anyway?

The old radio alternative of increasing listenership was to compress the dynamic range and overmodulate the signal. The modern equivalent of increasing listenership is MP3. The other codecs, while theoretically appealing, will diminish audience size. Advertising dollars or pledges in the case of public radio must go down no matter how many repeaters you put up.

HD Radio was to offer better sound, but the radius of transmission is smaller. Internet streaming is great, but the codecs now being adopted cannot be used by most stereo tuners/streamers. The audience for classical music goes down when people cannot easily hear it. Then the stations are less profitable and switch format, and popularity keeps going down.

I hope stations look at the broad implications of these codecs and don't just focus on technical theory.

*Tom Zuraw  
Wayne, Pa.*

**LOBBYING? USE "FORCE MULTIPLIERS"**

In his Feb. 1 commentary "Don't Just Keep Us 'Down on the Farm,'" Larry Tighe wrote: "One answer [for AM stations] is your local congressman. In New Jersey, a local broadcaster in a large city was a tennis buddy of the late Rep. Matthew Rinaldo, who slipped into an unrelated bill that any city with more than 100,000 residents must have a full-time AM radio station. Elizabeth, N.J., gained a full-time AM station. It was that easy."

I was at one time Rep. Rinaldo's legislative counsel on Capitol Hill. Rinaldo's task was relatively "easy" because he was not a typical "local congressman." He served on the House Subcommittee on Communications, which has direct jurisdiction over FCC regulation. He also had more seniority (basically, higher rank) than any other Republican on the subcommittee. Those "force multipliers" smoothed his path considerably.

If small commercial broadcasters begin to lobby legislators more energetically — as I certainly hope they will — I urge them not to limit themselves exclusively to local legislators and/or those whom they know through their social network.

Stations should prioritize approaching legislators who (a) serve on a subcommittee, or failing that, a full committee that has direct jurisdiction over the subject matter involved, and (b) ideally, have some seniority under their belts. For obvious reasons, a legislator from the majority party is likely to be more effective; a bipartisan mix of sponsors is even better.

Also, if the goal is to recruit legislators with "force multipliers," regardless of geographical location, access to all possible legislators will usually be easier for a national organization than a radio station that is locally based.

In this regard, Larry Tighe is absolutely correct about the NAB: Sixteen years of lobbying on FCC issues have convinced me that the NAB does not represent small commercial broadcasters at all. It is time — really, past time — for small commercial broadcasters to form their own national organization.

The group will probably have more clout if it is able to combine small commercial stations on both the AM and FM bands. In any event: If enough radio stations sign up, whatever their orientation, dues can probably be held to \$50 or \$100 a year. I suggest a "flashy" name for the new group. Personally, I would call it the Federation of Independent Radio Enterprises: FIRE.

*Don Schellhardt  
Waterbury, Conn.*

*The author has been a government relations attorney since 1975. He and Nickolaus Leggett were the first parties to propose a low-power FM radio service to the FCC.*

**NO MORE MUSIC?**

Sounds like a lot of stations will stop playing music at all ("New Royalty Bill Surfaces," [radioworld.com](http://radioworld.com), May 8). And what about TV stations that are co-owned with all-talk/news radio stations?

Sounds like just more of the "take the money out of the TV broadcasters' pockets, by eliminating retrans fees" mantra.

I have to wonder why so many laws seem to always fault the TV broadcasters, and seem to "zero in" on the retransmission money, which TV stations rely on for their livelihood.

If radio stations are not paying what some people would call "fair," why pull the rug out from under the TV stations? It probably will result in some sort of "spinoff" of radio and TV properties to separate ownership companies, if nothing else.

*Ken W. English  
Studio Engineer  
KSL(TV)  
Salt Lake City*

**HOW TO**
**SEND A LETTER TO THE EDITOR:**

Email [radioworld@nbmedia.com](mailto:radioworld@nbmedia.com) with "Letter to the Editor" in the subject field. Please include issue date.

**CHANGE YOUR MAILING ADDRESS:**

Visit [radioworld.com](http://radioworld.com), click on the subscription button and follow instructions to change a subscription address.

**CONTRIBUTE FREELANCE ARTICLES:**

Email [radioworld@nbmedia.com](mailto:radioworld@nbmedia.com) and request our Writer's Guidelines.

**GET INFORMATION**
**ABOUT ADVERTISING:**

Download a media kit, including editorial calendar, at [radioworld.com/advertise.shtml](http://radioworld.com/advertise.shtml).

**OPINION****READER'S FORUM****IHEARTRADIO MUSIC AWARDS**

The recent iHeartRadio Music Awards primetime television show on NBC was an epic moment for the entire radio industry.

Everyone in radio from the smallest to the largest market can celebrate this occasion as the power of the radio medium was recognized on the national stage. Let there be no doubt that radio was the foundation of the program's very existence. That message will resonate with viewers, artists and advertisers.

The iHeartRadio Music Awards is a brilliant concept and represents the type of "big idea" that places radio in the major leagues of media. The program heralds: "Radio Makes the Hits, the Stars and Now Rightfully Proclaims Those Honors!"

Bob Pittman and his creative team at Clear Channel understand that radio is and always has been a major player in the entertainment business. It is clear that the hugely successful iHeartRadio Music Festival fostered this next step of capitalizing on radio's historic partnership with singers and songwriters by creating the concept of an awards program not on cable, not on an upstart network or in syndication, but by going right to the top by working with one of the "big three." in this case NBC. Someone at Clear Channel said, "That is where radio and this show belong."

Naysayers may say this is a TV show, but they are wrong. The iHeartRadio Music Awards is an extension of the radio brand, and yes, recognition by the big players that radio operates in the big leagues. How great it would have been if the RAB and NAB had created image-building branding for radio to run within the show as paid commercials.

At a time when many would write radio off as a local medium, Clear Channel had the vision to say no, radio is the major player in the music business! My guess is that this is only the beginning. Will the next evolution of "The Voice" or "American Idol" have its roots in a cross-platform production with a radio company? Why not?

The exponential benefits of the iHeartRadio Music Awards are enormous. The entire industry has a share in the success of radio taking national center stage in prime time on the first day of May 2014.

Congratulations to everyone at Clear Channel who made the iHeartRadio Music Awards possible. This is all good, very, very good for radio.

*Gordon Hastings  
Stamford, Conn.*

*The author is a founder and retired president and CEO of the Broadcasters Foundation of America. He also served as president and CEO of Katz Radio and Katz Television and was a founding director of the Radio Mercury Awards.*



**Musician Pharrell Williams speaks onstage during the 2014 iHeartRadio Music Awards at The Shrine Auditorium on May 1 in Los Angeles, California. The awards were broadcast live on NBC. Photo courtesy Clear Channel Media + Entertainment.**

**VOA CUTS**

Rep. Matt Salmon (R-Ariz.) has introduced a bill that would block any federal dollars from going to VOA. He calls it a Cold War "relic" that's been "rendered obsolete with the rise of the Internet and social media."

The VOA received \$196.4 million during the 2013 fiscal year. Perhaps Rep. Salmon has had his eyes closed for too long. The "Cold War" is taking new form. Major governments such as China and Russia are taking steps to isolate their own brand of Internet from the rest of the world, and censor what content they choose to allow through. Terrorists operating in Third World countries don't have to worry about the Internet because it does not exist in many of these locations. In both situations, radio is the only voice that can carry the message of hope and freedom to these people.

Yes, major governments may have the money to build jamming stations, but they will need to spend money to do so. Why make it easy for them?

I suggest that all contact their representatives and tell them "no" to VOA cuts.

*Paul Litwinovich  
Director of Engineering  
WSHU Public Radio Group  
Fairfield, Conn.*

**MYSTERY FOLLOWUP**

Hello Mark Persons: Just read —and enjoyed — your article in RW ("What Is That Irritating Sound?" May 7 issue). Bob Orban will be interested in the cause. It was a good display of how stations can cooperate to chase a problem.

Keep creating the good reads.

*Paul Gregg  
President  
Bauer Transmitters Inc.  
El Paso, Texas*

**RADIOWORLD**  
The News Source for Radio Managers and Engineers

**Our readers have something to say:**

**"Radio World either expands my understanding of what's happening in radio or opens a new window I hadn't thought about. Thanks for keeping me sharp!"**

**Jon Vaught**  
Station Manager  
Life Changing Radio  
WFIF 1500 AM  
Milford, Conn.

**ADVERTISER INDEX**

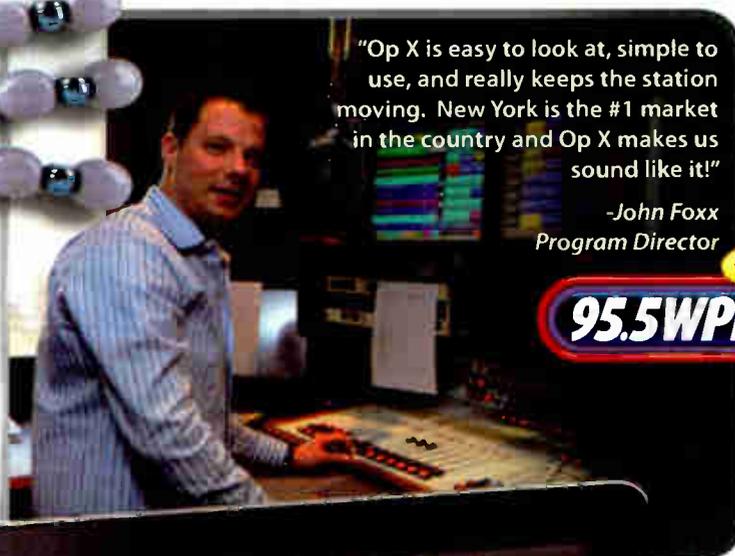
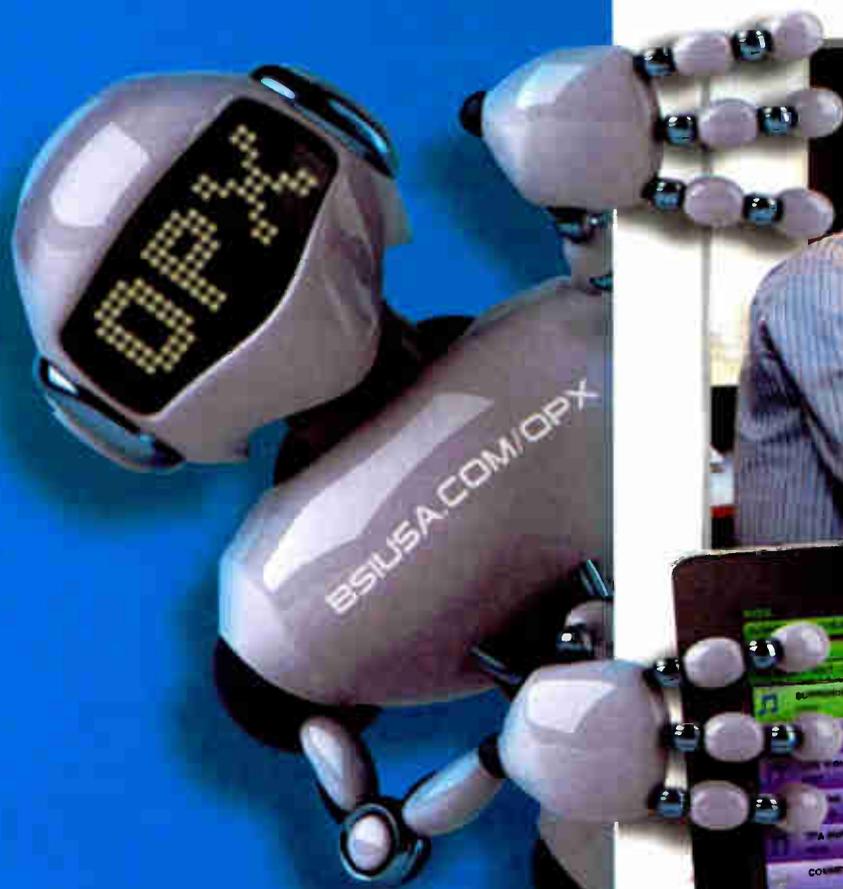
This listing is provided for the convenience of our readers. Radio World assumes no liability for inaccuracy.

PAGE	ADVERTISER	WEB SITE/URL
15	Arrakis Systems Inc.	www.arrakis-systems.com
31	BSI	www.bsiusa.com
13	Burk Technology	www.burk.com
7	Comrex Corporation	www.comrex.com
19	ENCO	www.enco.com
30	Heil Sound, Ltd.	www.heilsound.com
21	Inovonics Inc	www.inovonicsbroadcast.com
4	Lightner Electronics	www.lightnerelectronics.com
10, 22	Nautel	www.nautel.com
6	Netia	www.netia.com
1	Radio Systems Inc	www.radiosystems.com
23	RCS	www.rcsworks.com
11	SCMS	www.scmsinc.com
24	Stormin Protection Products	www.opticsshield.com
9	Tieline Technology	www.tieline.com
2, 16-17, 32	Wheatstone Corporation	www.wheatstone.com

Charter sponsor  
of Radio World's  
Free iPad/iPhone  
edition now at iTunes!

# OP-X AUTOMATION

SIMPLE • POWERFUL • REDUNDANT



"Op X is easy to look at, simple to use, and really keeps the station moving. New York is the #1 market in the country and Op X makes us sound like it!"

-John Foxx  
Program Director

Scott & Todd  
Mornings

**95.5 WPLJ**



Ask us about  
our iPad  
app!

- Modular Operation in Op-X allows for a tiered system at a fraction of the cost of its competitors.
- Each studio client is capable of accessing all Audio Server modules on the network.
- Remote voice-tracking allows for creation of content for remote studios also running Op-X.
- The revolutionary design of Op-X's clock builder turns the previous task of scheduling satellite programming into a few simple clicks.
- Share serial devices from any machine using the Op-X Serial Server.
- Importing logs now gets its own module that takes confusion out of the process.
- Engineers will enjoy Op-X because it's easy to install, maintain, and has automatic backup features.

## iPad app Features

- Live show real-time control from almost anywhere
- A powerful tool for remotes or voice tracking
- Take a show on the road
- Start, stop, copy and paste functions from the log
- Insert audio items into the log
- Initiate audio playback from hot buttons
- Run macro command from hot buttons
- Secure access to your system



**Broadcasters  
General Store**  
352-622-7700  
www.bgs.cc



RADIO AUTOMATION SOFTWARE



THE INTELLIGENT NETWORK

THINK BIGGER  
(but not too big)

IP-12

IP-16

sweet...sixteen input faders control a virtually unlimited number of audio sources

### introducing the IP-16

(more of a good thing)

WheatNet-IP Intelligent Network Native

Fully Modular Construction & Operation

Flexible, Functional, Reliable, Affordable

for more info, visit:  
<http://bit.ly/thinkbig16>



phone 1.252.638-7000 | [audioartsenineering.com](http://audioartsenineering.com) | [sales@wheatstone.com](mailto:sales@wheatstone.com)

World Radio History