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Your guide to radio technology

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After SCOTUS, what?

Further deregulation of radio ownership rules anytime soon seems unlikely.

An adapter for every occasion

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APRE looks past COVID

A chat with President Victoria St. John.



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CONTENT

Managing Director, Content & Editor in Chief Paul J. McLane,
paul.mclane@futurenet.com, 845-414-6105

Senior Content Producer — Technology Brett Moss, brett.moss@futurenet.com

Technical Advisors Thomas R. McGinley, Doug Irwin

Technical Editor, RW Engineering Extra W.C. "Cris" Alexander

Contributors: Susan Ashworth, John Bisset, James Careless, Ken Deutsch, Mark Durenberger, Charles Fitch, Travis Gilmour, Donna Halper, Craig Johnston, Alan Jurison, Paul Kaminski, John Kean, Peter King, Larry Langford, Mark Lapidus, Jim Peck, Mark Persons, Stephen M. Poole, James O'Neal, Rich Rarey, Jeremy Ruck, John Schneider, Randy Stone, Tom Vernon, Jennifer Waits, Chris Wygal

Production Manager Nicole Schilling

Managing Design Director Nicole Cobban

Senior Design Directors Lisa McIntosh and Will Shum

ADVERTISING SALES

Senior Business Director & Publisher, Radio World

John Casey, john.casey@futurenet.com, 845-678-3839

Publisher, Radio World International

Raffaella Calabrese, raffaella.calabrese@futurenet.com, +39-320-891-1938

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Head of Print Licensing Rachel Shaw licensing@futurenet.com

MANAGEMENT

Senior Vice President, B2B Rick Stamberger

Vice President, Sales & Publishing, B2B Aaron Kern

Vice President, B2B Tech Group Carmel King

Vice President, Sales, B2B Tech Group Adam Goldstein

Head of Production US & UK Mark Constance

Head of Design Rodney Dive

FUTURE US, INC.

11 West 42nd Street, 15th Floor, New York, NY 10036



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Chief executive Zillah Byng-Thorne
Non-executive chairman Richard Huntingford
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Protect your critical asset

The name of our ebook says it: "Mission-Critical: Maintaining Your Transmitter Site"



Paul McLane
Editor in chief

Y

our RF site is more than a transmitter and a tower. It's an entire ecosystem. Our latest free ebook will help you to make sure it is running efficiently,

safely and profitably.

I had more than the usual amount of fun putting it together.

We have not one but two of the industry's best tips mavens sharing their expertise: Workbench legend

John Bisset and Nautel's "tips and trickster" Jeff Welton. That right there is already a powerful combo.

But then Paul Tinkle helps non-engineers understand what to watch for when they visit a site.

Peter Burk explains how a remote control system can help you improve routine maintenance and reduce emergency calls.

Buc Fitch lays out a philosophy for clean reliable power. Sean Edwards helps you identify trouble spots in your antenna system. Josh Bohn explores options for site connectivity.

And the folks at Fluke list 10 dumb things people do when testing electricity.

A few days after we posted it, this ebook was already one of our most-downloaded in recent years. A lot of readers, it seems, understand the importance of a well-maintained site.

Find it at radioworld.com under the Resources tab.



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Radio Show will have tabletop exhibits

Plans shaped up for how the Radio Show will coexist with the larger NAB Show in this unusual pandemic recovery year.

Last year's Radio Show was supposed to be in Nashville but was cancelled; this year's originally was set for New Orleans.

Now it will be held on Oct. 13 and 14 at the Westgate Las Vegas. Its first day is the last day of the NAB Show at the Las Vegas Convention Center next door.

Registrants to the Radio Show can go on the NAB Show floor and attend any all-access NAB Show Main Stage sessions and special events.

The Radio Show will have its own tabletop exhibit area at the Westgate. The conference agenda for the Radio Show includes time slots dedicated to exhibits on both days.



2019 NAB Show Photo by Jim Peck

George Beasley dies, age 89

George Beasley died this month.

The founder and patriarch of Beasley Media Group was age 89 at his passing in Naples, Fla.

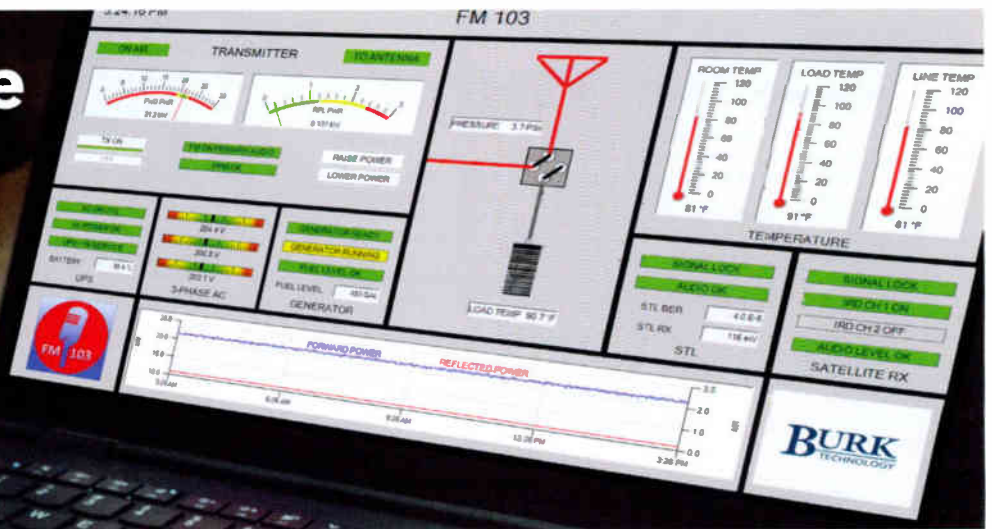
The company called him a "radio industry innovator, advocate, mentor and pioneer and community philanthropist" who led his company for 60 years.

He had stepped down as CEO in 2016 but continued as executive chairman of the company's board.

Beasley built his first station, 500-watt WPYB(AM), in Benson, N.C. while working as a high school assistant principal in 1961. The company now has 62 stations in 15 markets, digital platforms and an e-sports arm. Four of Beasley's five children joined the company as employees. The company went public in 2000.



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Writer
Randy J.
Stine

The longtime news contributor wrote about FM6 stations in the May 26 issue.

Further relaxation of ownership seems unlikely

But could easing of subcaps still come into play?

The FCC's ongoing local media ownership review is in a state of flux without a confirmed chairperson leading it.

Since late January the Federal Communications Commission has been led by Acting Chairwoman Jessica Rosenworcel, and FCC watchers consider it unlikely that she would proceed with the 2018 Quadrennial Review of Media Ownership Rules until a chair is named by President Biden and approved by the Senate. As of mid June the FCC remained split 2-2 along party lines.

But even when a chair is named — Rosenworcel or anyone else — we shouldn't expect a Democratic-controlled FCC to relax ownership rules further.

Unanimous vote

Broadcasters got a big win in April when the Supreme Court unanimously upheld changes that the FCC made to ownership rules in 2017. The commission had a Republican majority at the time.

The ruling in "Federal Communications Commission v. Prometheus Radio Project" allowed the FCC to abolish the ban on newspaper/broadcast and radio/TV cross-ownership, and relax several local TV ownership regulations. Court challenges have now been exhausted.

That outcome "effectively reinstates the rules adopted in the 2017 Recon Order," according to a FCC spokesperson.

One attorney familiar with the process says the FCC is likely to tread lightly on further rule changes at least until a chair is named.

"Traditionally an FCC interim chair is unwilling to begin any new initiatives, or in this case conclude the review with any changes. Especially when the current commission is deadlocked," the attorney said.

And the political world has continued to turn since then-Chairman Ajit Pai prioritized relaxation of media ownership limits.

Rosenworcel voted against the rule changes then; and she again made her feelings known in a statement following the SCOTUS announcement.

Above
Then-Commissioner Jessica Rosenworcel is shown at a Senate hearing in 2020. She is now acting chairwoman.

“While I am disappointed by the court’s decision, the values that have long upheld our media policies — competition, localism and diversity — remain strong. I am committed to ensuring that these principles guide this agency as we move forward.”

Congress directs the FCC to review ownership rules every four years and update them to reflect competitive changes that affect the radio and television business. The process is intended to allow reforms to reflect the evolving media marketplace. In addition, local ownership rules seek to “promote competition, localism and viewpoint diversity in today’s radio marketplace,” according to the FCC.

The current cycle will likely be completed late this year or early 2022.

“A Democratic commission is unlikely to relax the multiple ownership rules any more than the Supreme Court required.”

The review does offer the commission an opening to change the radio subcap limit, observers said. The Notice of Proposed Rulemaking that launched the process mentions the “local radio ownership rule” as one of those subject to review.

And pressure to relax ownership rules further has increased in light of the economic hit radio took during the pandemic.

The current caps were adopted in 1996. They allow for an entity to own up to eight stations in the largest markets, no more than five of which may be in the same service (AM or FM). The limits drop in smaller markets.

The National Association of Broadcasters thinks that one party should be able to own up to eight FM stations in any of the top 75 Nielsen radio markets. It also has said there should be no FCC ownership limits in markets smaller than the top 75, and that AMs should not be counted against the ownership limits.

In addition, NAB hopes that radio owners that incubate the ownership of stations by new entrants into broadcasting would be allowed to own up to two additional FMs in a market.

NAB in its proposal cited a dramatic increase in competition from streaming and

satellite radio. It said over-the-air radio should have a level regulatory playing field with the new competition.

“We should take a close look”

The association is optimistic there will be some movement on radio subcaps.

“We think there will be changes. It’s more of a question how far the FCC will go. A lot will depend on who the chair is. Everyone has a different opinion,” an NAB spokesperson told Radio World.

The spokesperson anticipated that the FCC would issue a notice to refresh the record and collect additional comments before releasing a final order — and that in fact happened in early June.

The FCC wrote: “Beyond reviewing the existing record in light of the passage of time, we also seek submission of new or additional information regarding the media marketplace that commenters believe is relevant to this proceeding,” mentioning the broadcast industry’s evolution since early 2019, the growth of online audio and video sources and the impact of the pandemic.

When NAB floated its subcap proposal in 2019, the largest ownership group was opposed to higher FM limits. According to an internal memo reported on several industry websites, iHeartMedia Chairman and CEO Bob Pittman and COO Rich Bressler described the NAB proposal as “bad for the industry” and worried “what NAB’s idea would do to the value of AM properties.”

Emails requesting comment from iHeartMedia leadership were not returned.

Matthew McCormick, co-managing member at the law firm Fletcher, Heald & Hildreath PLC, would be surprised if there were any significant further relaxation of ownership rules. “I think it is unlikely that a Democratic-controlled commission will adopt the NAB’s proposal to loosen the radio ownership caps,” he said.

Commissioner Geoffrey Starks, in a speech to the Media Institute in May, said it is not clear if consolidation will accelerate following the Supreme Court decision.

“I certainly have a renewed interest in using the next Quadrennial Review to ensure that the pillars of diversity, localism and competition are fully considered in determining what future media ownership regulation should look like,” said Starks, the other Democrat on the commission.

“We should take a close look at everything and see what makes sense in today’s markets.”

Starks compared today’s media ownership landscape to how it was just 40 years ago.

“In 1983 there were about 50 dominant media companies. Today there are five media conglomerates that own about 90 percent of the media in the United States, including newspapers, magazines, movie studios and radio and television stations,” he said.

David Honig, president emeritus and co-founder of the Multicultural Media, Telecom & Internet Council, thinks it

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unlikely that this quadrennial review will result in further major changes.

"MMTC, along with NABOB [National Association of Black Owned Broadcasters], has asked the commission to maintain the local ownership caps, and we expect that to happen," Honig told Radio World in an e-mail.

Others pointed out that as political administrations swing back and forth, so do priorities.

"A Democratic commission is unlikely to relax the multiple ownership rules any more than the Supreme Court required. [And] while the commission is tied 2-2, don't expect controversial changes," said Melodie Virtue, a communications attorney with Foster and Garvey PC.

More comments?

David Oxenford at Wilkinson Barker Knauer wrote on his blog earlier this year: "Now that the Third Circuit's reasoning has been rejected, that still does not mean that the FCC, particularly a Democratic-controlled FCC, will automatically look to relax the radio rule."

When Oxenford wrote that, he too anticipated that the commission would ask for more comments (as it eventually did). "In other words, any change in the radio ownership rules will not come quickly."

But political volatility in Washington could also lead to a more unpredictable FCC, according to Scott Flick, a Washington-based attorney with Pillsbury Shaw Pittman LLP.

"The traditional Washington perspective on the FCC is that Democratic commissioners seek to regulate and Republican commissioners seek to deregulate. There was a period of time, however, when the views of an FCC

commissioner were more informed by their background and experience than by their party affiliation," he said.

"Whether it was the result of more flexibility in party ideology or a greater willingness to horse trade on issues to achieve the best overall result in that commissioner's view, it led to a more predictable and consistent FCC."

That consistency, Flick said, benefited everyone — not just those appearing before the FCC trying to build new businesses and business models without finding their plans upended every four years, but also "the FCC staffers themselves, whose job is made easier when the correct answer on a particular point is the same this year as it was last year, unaffected by perennial changes in commissioners and politics." 🗣️

“ There was a period of time ... when the views of an FCC commissioner were more informed by their background and experience than by their party affiliation. ”

NewsWatch REC Networks Tries Again for 250-Watt LPFMs

Advocates of low-power FM in the United States in early June hoped that the FCC might soon consider a proposal to raise the maximum power level for many stations from 100 to 250 watts.

It's not a new idea, but supporters were excited because the commission recently opened a 30-day window for public comments on a fresh petition from REC Networks. This led some to speculate that under a Democratic presidential administration, the FCC may be more willing to entertain the idea.

At the same time, the FCC was expected at its June meeting to approve a separate order that would, among other things, affirm 100 watts as the maximum power. But LPFM proponents believe the commission remains open to the possibility for 250 if the right proposal comes along.

The proposal to amend Parts 73 and 74 of the rules was submitted by Michelle Bradley, founder of REC Networks. Bradley says the dial can accommodate the change, noting that nearly two-thirds of LPFM stations are outside of the top 100 Nielsen Audio markets and that only 15% are in "deep-urban areas."

Specifically, the proposal would create an LP250 class of service

with an effective service contour of about 4-1/2 miles, in addition to the current LP100 service.

There would be a second distance separation table for the new class that includes distances up to 9 km longer than the LP100 service.

Bradley said the proposal "fully respects the 20-kilometer buffer zone" and includes a suggested policy for upgrades on stations that are already second-adjacent short-spaced. She said the proposal does not add any new processes that would involve a contour study. It would allow class upgrades and downgrades as a minor change as long as other minor change criteria are met.

"In other words, this is simply like the LP100 service that has been around for the past 20 years, but just an add-on with the LP250 'numbers,'" Bradley wrote. "Or, in other words, simple."

Bradley said the new proposal addresses past concerns about 250 watts.

The separate LPFM order that the FCC seemed ready to approve in June included language affirming 100 watts as the LPFM maximum. But the FCC indicated in a footnote that it had not precluded new proposals and that it was still taking comments on the REC Networks idea. Read the proposal at tinyurl.com/rw-simple-lp250.

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“...very good right out of the box”

“VOLT wins, period!”

“obvious choice”

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“perfect”



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“impressed with the amount of power...”

“power beyond its entry-level price”

“right out of the box”

“You must hear this processor to believe it”

“That’s a powerful clipper!”

“loud, clear on-air sound”



Writer
Randy J.
Stine



APRE looks to life after COVID-19

“We really are a networking and live event group”

The Association of Public Radio Engineers is mapping out a return to its networking roots. They won't meet this fall, but APRE announced plans for its Public Radio Engineering Conference in Las Vegas to run adjacent to the NAB Show next spring.

The leadership says “having engineers rub elbows at networking events” is what APRE does best.

Radio World spoke to Victoria St. John, president of APRE and director of operations for Vermont Public Radio.

These are the smartest and most talented people you're talking about. And they are asked to do everything from unclogging sinks to setting up towers. They are the most technically savvy people within most organizations and they deserve a lot of credit for keeping things together the past year. They were often called on to do things they never have before. This was unprecedented.

And obviously they were personally impacted by the pandemic just like everyone else; socially distancing and being required to stay away from the office in some cases. And all the time trying to protect their loved ones.

RW What has APRE learned about itself during the course of the pandemic?

Victoria St. John: We wanted to keep our members involved and engaged, but it also caused us to look at what we are really about as an organization. We thought about all kinds of ways to keep membership engaged that were not in-person, but when the pandemic hit our membership was so busy. We did a few webinars, but it made more sense to not create extra busy work for them.

And we really are a networking and live event group. We prefer meeting and talking to each other in person. Our strength and our foundation is in connecting with people and sometimes that doesn't relate to having webinars and holding Zoom meetings. We didn't want to change who we are and what we do.

RW Your membership had to react quickly to the pandemic?

St. John: I'm so proud of them. Our members were just bombarded with work. Broadcast engineers were helping their co-workers work remotely and problem solving the issues involved in that. And many of them had to continue working at the radio station. They are typically people who have screwdrivers in hand and are physically doing work at the stations and transmitter sites. It's not a job where you can do everything remotely.

Of all the people in our industry, the station engineers were the ones who had to make sure everyone else could do their job remotely. That took a lot of energy and focus. They were incredibly important during that transition and keeping radio stations on the air and broadcasting important information. The pandemic created extra layers of work for broadcast engineers.

RW Are there plans for a PREC this year at the NAB Show in October in Las Vegas?

St. John: We are not expecting to have a formal presence there this fall though some APRE members may be on-hand. There may be the potential for social or professional connections.

RW And next year? PREC will be back for sure?

St. John: Yes, we are expecting to be there. Engineers so often work alone in the field. It's exciting for them to get together and talk about projects and compare notes. We are expecting a full PREC experience in 2022.

RW What issues or topics are priorities for APRE for the rest of 2021?

St. John: We are focusing on our core foundational efforts. I call it the iron side of engineering — the transmitter and the tower; the whole RF side. You have to know software obviously if you're an engineer, but cables, fiber and networking are just as important.

We also want to examine how this pandemic changed the broadcast industry. How remote work changes what we do as broadcast engineers and how to best support our team members to that end.

RW What else is on your mind these days?

St. John: This whole idea that broadcast radio is dead is silly. I believe that close to 90% of all radio listening is still done over the air via transmitters. So that part of the industry is still alive and needs a strong engineering team.

There is a lot of focus on the bright and shiny with multiplatform delivery and we'll focus on that as well, but the foundation of what we do is broadcast. 🎧

Above
Victoria St. John

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John Bisset

CPBE

has spent over 50 years in broadcasting and more than 30 writing Workbench. He handles western U.S. radio sales for the Telos Alliance. He is a past recipient of the SBE's Educator of the Year Award.



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Workbench submissions are encouraged and count toward SBE recertification. Send to johnpbisset@gmail.com.

William Harrison, chief engineer at WETA(FM) in Washington, wrote us to share a simple way to connect an S/PDIF (Sony/Philips Digital Interface Format) output to an EAS input on an

Axia xNode.

He uses a combination of two readily available adapters: an RJ45-to-F adapter and an F-to-RCA. William chose adapters from Tech Tool Supply (www.techtoolsupply.com) as shown in the first photo, but you can find them elsewhere as well.

The adapter obviously doesn't take into account the difference in peak-to-peak voltage between AES and S/PDIF, but it usually works, and it is incredibly easy and inexpensive.

William has only tried this to get audio into the xNode. Getting audio out of it, or using it with, say, WheatNet-IP may give different results; but the adapter cost is minimal, so you may want to try it.

The process is straightforward. First plug an RJ45-to-F adapter into the xNode. (At the Tech Tool site, a Rexford Tools Female F to RJ45 Plug is Product Code RTC-RJ45-F). Then add an F-to-RCA adapter to mate to the S/PDIF plug (that's Product Code SKY01130).

The same result can be achieved using an RJ45-to-BNC (www.newbecca.com/product/546275219824) and BNC-to-RCA adapter (at techtoolsupply.com, search Product Code 200-173).

William says the adapter combination also works great in getting the audio from consumer gear into your AoIP network.

“Here’s a simple way to connect an S/PDIF output to an EAS input on an AoIP system.”

I really connect 2U

Speaking of adapters, Dan Slentz amazes me with the things he finds on the internet.

The microphone people at Shure Products are selling a useful device called the X2u. It's a connector adapter

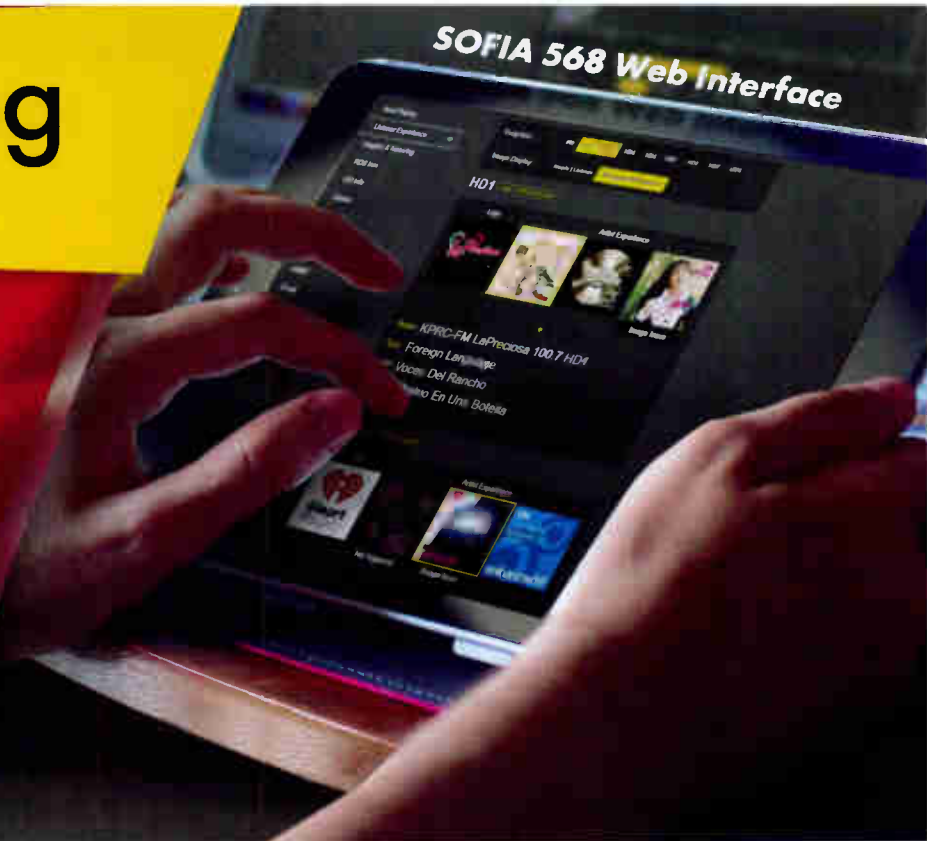
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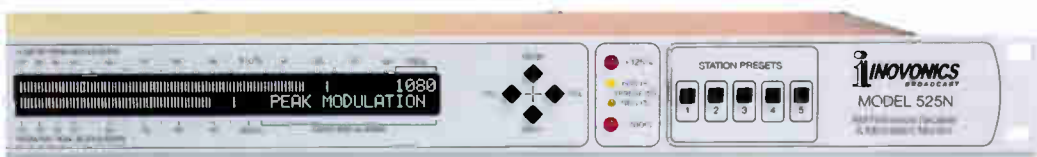


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Above
Shure X2u XLR-to-USB Signal Adapter.

that mates the XLR connector of a professional broadcast microphone to a USB plug.

This makes for easy connection directly to a computer without the need for any additional hardware.

Ideal for podcasters or home recording studios, the connector adapter is compatible with Windows 7, 8, 10 (both 32- and 64-bit), as well as XP, 2000 and Mac OS X (10.1 or later).

What makes this adapter especially helpful is the built-in headphone jack. It lets you monitor the sound without an additional sound card. The adapter includes an integrated pre-amp with mic gain control, so signal level can be controlled. The X2u also has phantom power, so a condenser microphone can be connected to your computer.

This is a plug-and-play solution, no software is needed. A USB cable and zippered pouch are included, all for \$99. Order from your Shure dealer or head to www.shure.com/en-US and enter X2u in the search box.

In addition to ordering, this search will bring up over a hundred application notes; user questions and answers; and specifications.

Learn the basics

Dan also found something for every entry-level engineer on the Radio Shack website: a complete electronics course in 128 pages, originally written for Radio Shack in 1984 and later updated.

Author Forrest Mims teaches the basics, takes you on a tour of both analog and digital components, explains how they work and then shows how they are combined for various applications.

This sounds ideal for the jock ops manager who wants to know more about electronics and move into engineering.

The lessons include circuit assembly tips and 100 electronic circuits and projects you can build and test. "Getting Started in Electronics" by Forrest Mims is an e-book costing less than \$20. It's available from www.radioshack.com.



Engineering textbooks

And speaking of learning, Charles Frodsham is a retired engineer, nearing 79 years young. Charles writes that he is starting to downsize his library of classic radio and antenna engineering textbooks collected over the years. Charles hasn't had much success in finding buyers or even a non-profit to donate the books.

Finding classic radio engineering books is a rarity, so here's what we'll do. If you have an interest, send me an email with "Workbench Engineering Textbooks" in the subject line, and your contact information. I'll forward your message on to Charles. These volumes were published between 1937 and 1956. If you are interested, my email address is johnpbisset@gmail.com.

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World Radio History

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Writer



James
Careless

Radio and
podcast
producer,
host and
interviewer
who has
written for RW
since 1990.

Saving on power in Little Current

Going off-grid generates massive savings for station owner



More Solar

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LPFM station
put solar
power to work
at radioworld.com, keyword
KUHS.

Electricity is the lifeblood of any radio station. Without power, everything from the office lights to the digital audio systems to the transmitters would cease to run after the generators ran out of fuel. There is no radio without power.

Craig Timmermans is the CEO and owner of Manitoulin Broadcasting Corp., which operates Great Lakes Country 103 FM CHAW(FM) and Hits100 CFRM(FM) in the aptly named community of Little Current, situated on Manitoulin Island in Ontario, Canada.

Timmermans knows all about sky-high electricity bills. That is why his company has made renewable energy investments that slashed their transmitter electrical bills by 80 percent and took their studio/office complex completely off the grid.

"I am very, very happy with this system," said Timmermans. "I can't believe that I'm getting all of this energy from the sun and wind to power my stations. Best of all, Mother Nature doesn't charge me a delivery fee."

Transmitters first

Timmermans' venture into radio broadcasting began in 2001, when he was given permission to open CFRM — at a whopping 1.4 watts. Over the next six years he was able to move up incrementally to 27,500 watts, vastly increasing CFRM's reach from local to regional coverage.

Unfortunately, what also changed was Timmermans' electricity bill.

"The first one I received from Hydro One was for about \$6,000 for two months," he told RW. "I almost had a heart attack."

Fortunately, Timmermans is an electrical engineer who knows all about renewable energy. So after his heart

settled back to normal, Timmermans decided to slash his transmitter costs by going green.

In 2009, Timmermans took action. "Since we're on a mountaintop, it only made sense to install a micro wind turbine to take advantage of the air moving around up there," he said. "So we did. Now instead of buying \$3,000 per month of power from Hydro One, we were buying less than \$1,200 per month." This was at Manitoulin Radio's original rented 300-foot tower site.

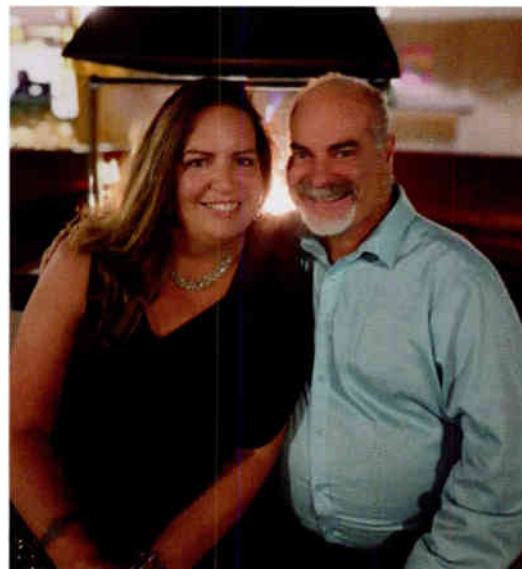
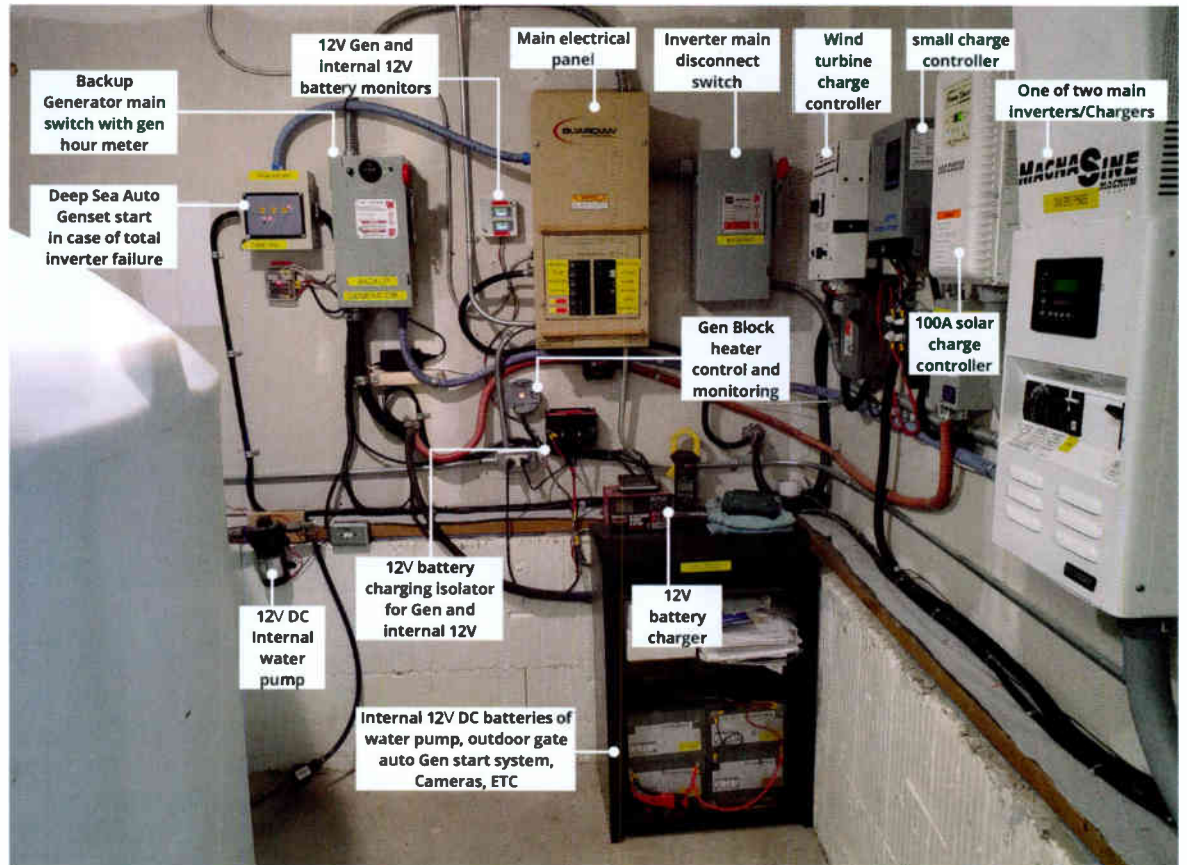
In 2016, Timmermans added CHAW, Country 103, a 50,000 watt commercial station, to the portfolio. Two years later he bought and erected a new 450-foot tower and transmission site on his property on McLean's Mountain outside Little Current.

"With both the 50,000-watt transmitter for the country station and 27,500 watt transmitter for the hits station, our monthly electricity costs were projected to hit \$6,000-plus! So we bought three more micro wind turbines and put all four of them at the new transmitter site. The result is that our actual monthly electricity bills are \$1,350."



Right
The turbine that
powers the office.

Alternative Power



A bonus: Timmermans has configured the power system here so that it only draws on the outside grid when the wind isn't generating sufficient electricity. Otherwise, Mother Nature is working to keep his two transmitters on air — for a lot less money and reducing our carbon footprint.

As for the cost of installing the micro wind turbines and the associated equipment to power the transmitter complex?

"It was a significant investment, but the money we saved paid it back in about eight months," Timmermans said. He has since purchased solar panels to install here, "to bring the transmission bill a lot closer to zero."

Studios came next

Great Lakes Country 103 FM and Hits100 FM have a total of nine employees. Prior to 2020, the offices and studios were in a rented facility in downtown Little Current, population about 2,500.

"People could see our DJs working through the front window," Timmermans. "It was a way of connecting to the community." The facility was powered by a biodiesel generator.

But Craig and his wife KT also own and operate two major music festivals, Manitoulin Country Fest and Rockin' the Rock, on their own 84 acres outside of town every summer; and building a new studio complex on their own land was a logical move.

their own land was a logical move.

"After all, we interview the artists who appear at our festivals on our stations as a way of boosting their profiles," he said. "So it just made sense to have our studios in the same place as our permanent stage and campgrounds."

In 2020, despite the pandemic, they built a two-story, 2,600-square-foot studio complex to house the

Above
The stations' electrical room.

Left
KT and Craig Timmermans.



20 “ I am very, very happy with this system. I can’t believe that I’m getting all of this energy from the sun and wind to power my stations. ”

two FM stations at 1 Radio Road, Little Current, on the Timmermans’ “Manitoulin Country Fest” grounds.

Because Hydro One wanted to charge a hefty sum to run power lines to the new complex, Manitoulin Broadcasting built it to run entirely off-grid.

To make this possible, Timmermans installed a battery storage system capable of storing 2,000 amp hours of power at 48 volts. When charged, the system has enough power to run the complex for a week, 24/7.

It is primarily charged by a series of south-facing solar panels constructed outside the facility, supplemented by pole-mounted vertical wind turbines.

“Compared to conventional wind turbines, the vertical turbines are extremely quiet,” Timmermans said. For times when there isn’t enough sun nor wind to fully recharge the batteries, the studio complex has a diesel generator, which uses about \$20 of diesel fuel per month during the winter.

Above left
Solar Panels.

Above right
Bank of batteries.

“During hot summer months, we generate enough electricity from the sun to power all the lights, computers, broadcast consoles, support equipment and even our central air-conditioning for free,” he said.

“It just amazes me that I can get all that energy from just the sun. I am very proud to say our 2,600-square-foot, air-conditioned office building with two FM radio studios is 100% off-grid.”

Renewable works

The power is consistent and reliable, and the money saved grows every day.

Timmermans expressed a willingness to share his knowledge with other broadcasters. Contact him through www.hits100.ca or www.country103fm.ca.

But some quick advice: For station owners with rural transmitter/tower sites, “small wind turbines to help power your facility just makes good business sense,” he said. “To survive in today’s economy, you have to look at fixed costs that are very high, such as electricity, and find ways to offset those costs and just be greener.”

Owners who can add solar panels and vertical wind turbines to their studio complexes can also save money over time and keep these costs controllable as the grid’s power prices go up.

There is satisfaction associated with generating most or even all of the electrical lifeblood that your station needs.

“We just put in all brand-new carpet in the office, and I was vacuuming it the other day,” said Timmermans. “And I said to some friends that were visiting, ‘You know what? I’m vacuuming for free! It’s not costing me a dime to vacuum our building.’”

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Mark Lapidus is a veteran multi-platform media and marketing executive.



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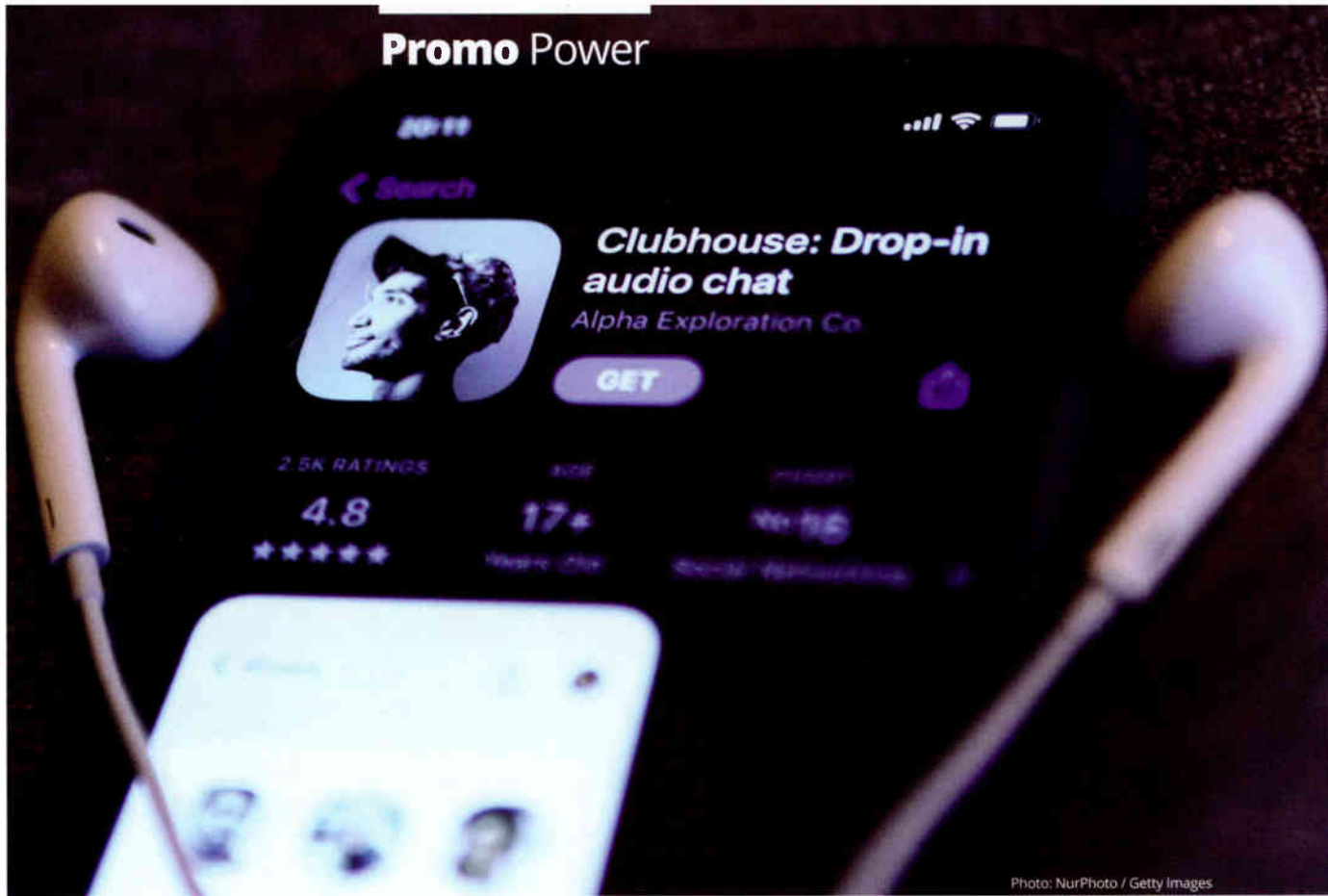


Photo: NurPhoto / Getty Images

Your listeners have many choices

Does your product compel them to listen to yours?

More than ever I am paralyzed by choice. I first recognized this syndrome way back in the days of Blockbuster. I'd spend 45 minutes looking at movies and leave with nothing. I experience this now with Netflix, Prime Video, Hulu, Spotify, YouTube, Apple Music and podcast platforms.

Trader Joe's has capitalized on this uncomfortable consumer experience by offering fewer choices. Instead of 10 choices of mustard, there are two or three.

As I attempt to listen to the latest audio talk apps, 10 zillion podcasts and nearly every song ever released, I can't stop thinking about choice.

In a world of many audio choices, broadcast radio is the solid utility. With finite choices on radio, it's easy to decide; this obvious intrinsic advantage is one we take it for granted.

I hope the big guns in our industry are constantly engaging the auto industry regarding the ongoing expansion of the new immersive car dashboard. Ignoring

broadcast radio's placement on the evolving car radio real estate is perilous.

Stay focused

There's no question that we continue to deliver our product to smart speakers, apps and other live streaming platforms, so we're in the game and can continue to grow revenue.

However, let's not lose focus! For the foreseeable future, we should continue to pour power into promoting broadcast properties and reasons to tune in. This is where radio wins.

I'm not opposed to promoting listening on digital platforms, but there is limited air time and advertising money to invest in sparking interest for tune-in.

When I hear stations promoting listening on a smart speaker or app four times an hour, I wonder if the station is missing a chance to promote a reason to actually tune in. By now, don't our audiences know we're on all these platforms?

Growing audience on digital platforms requires a specific on-platform approach that is often missing from promotional strategy.

Above
Social media darling Clubhouse adds to the long list of audio choices.

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AVOID TRIPS
SAVE TIME
SAVE MONEY

However I'd be remiss if I didn't salute Clubhouse. This latest Talk app, is a natural social media evolution. Their promotional geniuses created demand and buzz by limiting listening to "invitation only."

It was born on iPhone. Android arrived only in May.

Not listened yet? Browse topics, click on one and hear amateur hosts pontificate to micro-audiences. Raise your hand and join the conversation.

Sometimes it's more like a conference call than a talk show. It's sad news for Clubhouse that this is easy to replicate, as Clubhouse will be challenged by Twitter, Facebook, Spotify, Discord, Telegram, Reddit, Leher, Riff, Spoon, and even LinkedIn.

A threat to local radio? Not in terms of obtaining consistently large local audiences, or competing for local advertising. Still, if I were searching for new talent, I'd be

hunting for those rare natural hosts who could be groomed for radio.

What about podcasts? Talk about choices! I subscribe to 20. I listen regularly to four.

With hundreds of thousands of podcasts, discovery is an issue. The potential is huge with explosive younger listener growth.

Will podcasting steal hours from broadcast radio, or grow overall time spent listening to audio? I'm going with the latter, but so much depends on the quality of local radio. Jukeboxes will eventually fail. Winners will have compelling local talent; local information; local entertainment; local community involvement and yes even local news (bring it back!).

The future of local radio depends on the choices we make today. 

“ When I hear stations promoting listening on a smart speaker or app four times an hour, I wonder if they are missing a chance to promote a reason to actually tune in. ”



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AudioLogger is a multi-use tool

Tracy Johnson



More info

<https://tjohnsonmediagroup.com/blog/audiologger/>

Above Tracy Johnson

Tracy Johnson Media Group announced the availability in North America of AudioLogger, a software product that can be used to record “any radio station in the world.”

The company, based in San Diego, said approximately 100 stations in the United States and Canada are using the software. It says AudioLogger is intended to be used for competitive monitoring, accessing air checks and video publishing, among other things.

As part of our “Supply Side” series with manufacturers and product distributors, we asked Johnson about it.

RW What exactly is AudioLogger and what is its function for radio?

Tracy Johnson: AudioLogger allows users to record any radio station in the world 24 hours a day, 7 days a week, then edit, manage, export and share that audio in many ways.

RW What does Tracy Johnson Media Group do, as its main business?

Johnson: My main business focus is consulting radio stations on talent coaching, programming and marketing. We also have a show prep service, Personality Magnet; a premium content site for programmers, personalities and marketing pros, Insiders Radio Network; an air check coaching service, AirCheckCoaching.com; and have now launched AudioLogger.

RW You don’t actually make the product, so what is your business involvement with it?

Johnson: We are the exclusive dealers for North America and have been intimately involved with the creator through the development of the app. The software has been beta testing in the market and is now in general release. Tracy Johnson Media Group is the first dealer in the network, but

there are likely to be more added to represent other parts of the world in the coming months.

RW I believe I read in your materials that the designer is in Belgium?

Johnson: The company that designed the software is Rute98, which is headed by programmer Alain Claes. I’ve known Alain for many years as a colleague and client.

RW What is unique about AudioLogger that other products in this sector don’t do?

Johnson: There are several unique aspects. First, it’s so easy to use. All of the functions are intuitive and take place on one dashboard. Second is the ability to record any station in the world, regardless of location. Third is the ability to export audio to video instantly.

And fourth is the cost. AudioLogger starts at just \$9.99 per month. There are three subscription tiers ranging from \$9.99 to \$49.99 per month. The difference between the tiers is the features unlocked at each level. Additional users and stations can be added to any subscription for a modest fee.

RW Are there other features or functions in the software that we should know about?

Johnson: There are dozens of features, but some of the most popular include the ability to download the music log and most-played list of any station. We’ve already had two new clients tell us they plan to drop their current music monitoring service. The video to audio export feature is a major timesaver. It’s so easy to create an online video. A digital manager told me they would be saving up to four hours a day in their department with this feature. And a user can export any segment to a branded landing page, then invite listeners, winners or advertisers to hear and share the segment.

RW Thanks for taking time with us. Is there anything else we should know?

Johnson: I’ve been using AudioLogger for several months and I can’t imagine my life without it. It really is the world’s smartest, most affordable audio logging system with benefits for every department in any radio station, from sales to programming to promotions to the digital team to engineering and air talent. **RW**

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Dan Slentz

Veteran radio and TV engineer, and longtime RW contributor.



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Good, inexpensive USB desktop mic held back by flimsy USB connector

Recently had the opportunity to test out the new Movo UM700 USB Desktop Studio Microphone.

Movo Photo is an L.A.-based dealer that offers its own products along with those of others in the field of audio, video, photography and lots of accessories for those disciplines.

The UM700 costs about \$100. The company markets it as "a Blue Yeti killer."

To throw the specs out first, it stands about a foot tall on its desk mount and weighs just over 2 pounds.

It is a solid mic as far as its metal body and overall build, and certainly has the physical feel of a mic that will stand up to time, with a notable exception to be discussed.

It uses a 1/2-inch diaphragm and shows a frequency response (per manufacturer) of 20 Hz–20 kHz. As a USB microphone — no XLR — it's limited to the world of PCs and laptops. It pulls its 5V power over the USB (at 150mA per manufacturer's specification), and that is to power the internal headphone amplifier (using a mini 1/8-inch stereo jack).

The sample rate listed is 48 kHz with a 16-bit depth. According to the company the headphone amplifier output impedance is 16 ohms, and headphone amp output frequency response is 15 kHz–20 kHz.

Choose your pattern

What makes this microphone unique for an affordable USB microphone is an adjustable polar pattern.

On the back of the mic are two controls. One for mic gain/sensitivity, and the other for pick-up pattern. By rotating a solid



“The UM700 costs about \$100. The company markets it as ‘a Blue Yeti killer.’”

Right
Under the control for gain/sensitivity is one for pick-up pattern — stereo, cardioid, omnidirectional or bidirectional.

switch, it can have a stereo, cardioid, omnidirectional or bidirectional pick-up pattern.

The front of the mic has a headphone volume adjustment, plus a handy "mute" button (which illuminates to remind you that it is muted). It has a green indicator light to show you when it has a connection and is powered. One other feature is the 5/8-inch threaded opening in the bottom for a standard mic mount. Though you can't swivel the mic on its included stand, it can be removed and used with a microphone stand, gooseneck or boom arm.

How does it sound? This is always a subjective question when working with microphones. So much relies on an individual's own voice; mine is lower. For that it sounds decent.

It has a "proximity effect" to it, meaning you can "color" the audio quality of the mic by working it close or far. This is not something I like with mics in general, but some mics (like the EV RE320 and 20 series)



situations (like an interview where you only use a single mic) really provides an excellent "audible image" of the interview. You can hear the placement of the people in relation to the listener (or the mic). This is very nice.

The sensitivity is also a plus, though it should be noted that there's enough gain to the mic to really increase noise as well.


Though I've had this mic for testing for about a month, there is a notable weakness. The micro USB connection on the bottom of the mic is flimsy. Mine is already loose and occasionally causes an intermittent issue.

That is a serious flaw and, in my opinion, likely to cause failure and a short life. Unless they redesign it with a much more robust connection (or full-size) USB,

are excellent at producing the same tonal quality no matter what the distance.

On the positive side, the adjustable pattern is a cool feature, and using a mic in stereo mode for some

I wouldn't recommend it because of that problem.

For the quality of the sound, features and otherwise robust built, it's a shame that a 25-cent connection limits this microphone. 



Marketplace Inovonics Adds Features to David IV

Inovonics introduced a new version of the David IV broadcast processor, one that adds important remote and networking features.

The David IV 719N FM/HD Radio Broadcast Processor With Network Interface adds web access for setup, control and increased networking capabilities.

The retail price is the same as the current model 719, which is \$3,150. Users who purchased a 719 processor since the beginning of 2020 can receive an upgrade that is free except for the cost of shipping. Users of older units can upgrade for \$500.

President/CEO Ben Barber said in a press release, "Adding the Network Interface to our popular 719 processor really gives it two very important features. One, the Web GUI can be controlled from any web enabled device; and two, adding SNMP makes remote management and control a breeze."

Info: www.inovonicsbroadcast.com





ENCO Updates WebDAD, enCaption

ENCO Systems announced improvements and updates to WebDAD and enCaption.

WebDAD is an HTML-5 browser-based native remote control companion to the DAD automation and playout system. "Across both the DAD and WebDAD products, passwords with special characters are now supported, which will help many use a more secure password to better conform with their station's data security policies," Media Solutions Account Manager Bill Bennett said.

"Along those lines, we've added button and deck security within WebDAD so the log-in follows button security for normal DAD users."

For those who like to edit arrays and libraries and manipulate assets within the WebDAD interface, they can now download library cuts via the HTML client directly to their remote computer. And WebDAD's user interface has also been updated.

enCaption, shown, is an automated captioning and transcription platform used by TV and radio broadcasters to make programming more accessible. Bennett said the system now inserts a chevron into captions to indicate when someone new is speaking.

"We've also integrated a powerful new punctuation detection feature that inserts commas, exclamation points, periods and question marks automatically, based on voice characteristics."

To change input and output signal mapping across various types of sources, or to change between sources across live and file-based content, the user can save each configuration mapping as a unique



profile and call it back up, manually or by API call. enCaption also has improved word filters and an updated optional CEA-608/708 Embedding capability.

Info: www.enco.com



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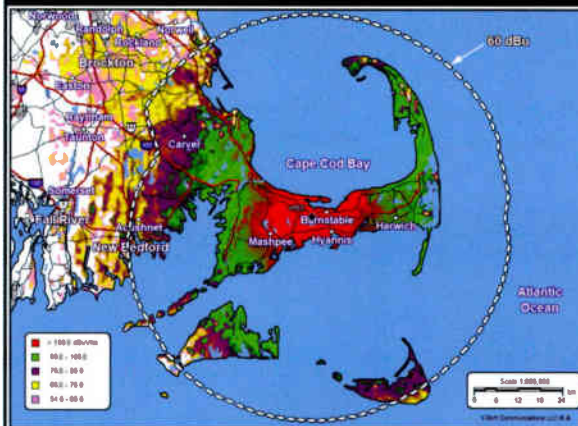
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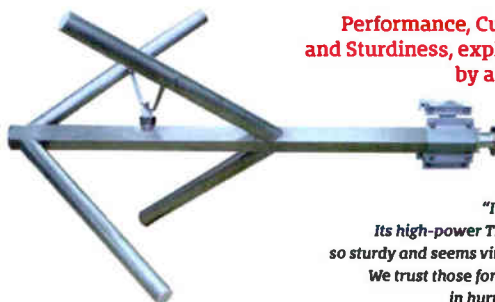


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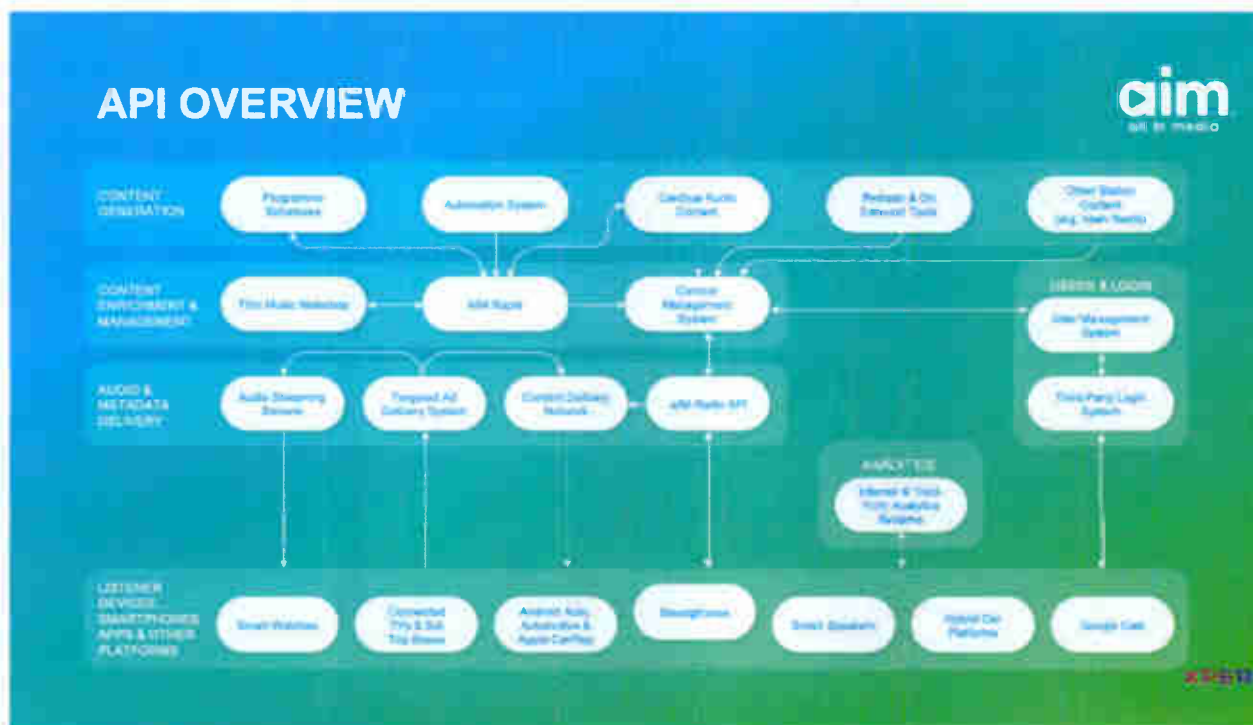
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Writer



Chris Gould

Founder and VP digital technologies at All in Media, supplier of radio station applications and part of Xperi.



Apps are a conduit to success

A future-proof digital strategy starts with your app infrastructure

Above Backend app infrastructure is complex. Here's a sample infrastructure required for a broadcaster to support their smartphone apps and other connected platforms.

There are, more or less, 131 FM radio stations in New York. And only 75 AM stations. That's it — that's the expanse of a content choice that is advertiser-supported and has a built-in limit to how broadly it can get its message out.

Now compare this to the wonderful, sometimes wild, world of apps.

In the iOS world, you can listen to 40,000 radio stations in your car, accessible through your phone or CarPlay. It's hands-down the sector with the biggest growth — and has been for a long time.

This massive and noisy environment is, today, the cornerstone of a broadcaster's digital strategy: The infrastructure that a radio station invests in to deploy mobile apps dictates its ability to innovate user experiences, leverage metadata and expand into new integrations such as Amazon Fire TV, Android Auto, Sonos, Bose and Amazon Alexa.

Indeed, the right digital infrastructure helps to ensure an expanding and evolving experience across many digital ecosystems.

Expanding the ecosystem

About a decade ago, the drive for apps was arguably a curious "me too" trend, with little upside.

Since then, as it has morphed into a driver of affordable, scalable innovation, it has, frankly, become a survival imperative for broadcasters to stay ahead of a competitive and constantly evolving digital content landscape. And in the process it has changed the game.

But while good app infrastructure is critical to cost-efficient innovation, it can be a tall mountain to climb.

On the surface it looks easy: Apps are user-friendly and simple (that is the whole point of an app); but as seen in the image above, behind the curtain is a complex set of systems and moving parts that must be integrated into

“ Apps are a conduit to increased monetization, analytics, efficiency, content and interactivity. ”

a single API in order to open up that innovation efficiency for broadcasters.

A great example of how good app infrastructure opens up new opportunities is Commercial Radio Australia's app, which brings together different radio stations into a single aggregator app, owned and operated by the radio industry.

At AIM, we worked for years with Australia's big commercial and public service broadcasters, so we understood their specific needs and requirements. When the industry evolved and an app was needed, we were able to create an app and app infrastructure that enabled Commercial Radio Australia to have control of the platform.

This work also helped build support for new platforms, such as Google Home and Alexa.

For example, a key issue radio stations were having was with the accuracy of station matching on Alexa. Radio is one of the most used features on Alexa but, in Australia, Alexa would get the right station just 23% of the time. That could be because Alexa misunderstood the name, or a station had changed name, or there were multiple stations with the same name, and Alexa wasn't matching.

Supported by the app infrastructure, AIM was able to work with Commercial Radio Australia and Amazon to enable a smarter, more sophisticated way of searching for radio stations and improved the accuracy to close to 100%.

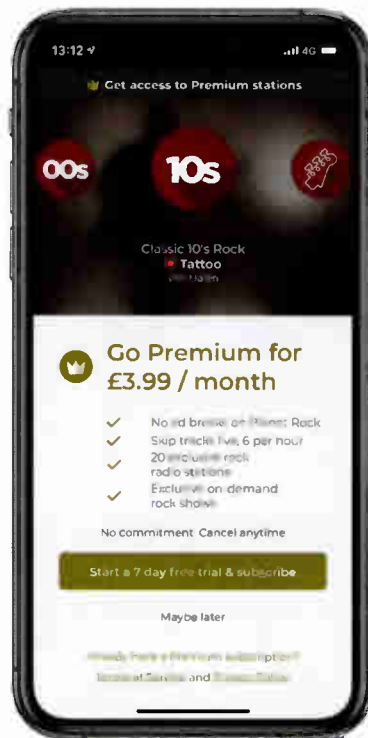
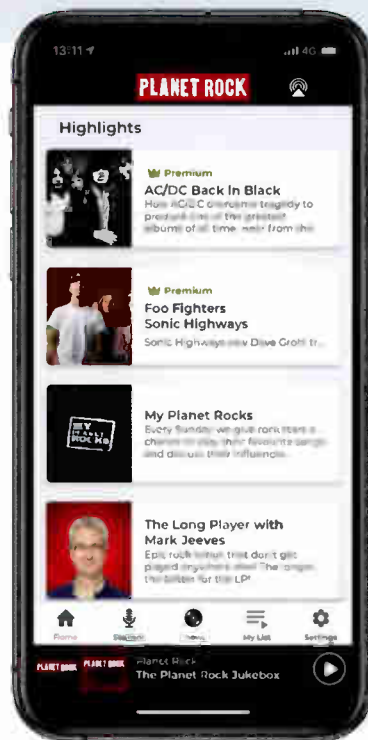
Affordable innovation

Any broadcaster can innovate, but innovation takes a lot longer and more resources without the kind of adaptable, end-to-end platform that a centralized digital app infrastructure offers: It can make innovation more time- and cost-efficient, and easily scaled, for example to allow the launch of an Alexa service, Siri, Sonos or any number of digital extensions.

But is it possible for broadcasters to DIY app infrastructure to reach this affordable innovation? Maybe — if they have the resources for a permanent team of developers to keep the apps fresh enough to engage listeners, to build infrastructure that can integrate multiple disparate elements — from scheduling to third-party content to live streams, podcasts, user login, ad systems, analytics, listening systems and more.

The reality? Most broadcasters don't have the resources, time or focus to develop this infrastructure. "Buy vs. build" truly makes sense when it comes to app strategy.

At AIM, we do it for broadcast customers with RadioAPI, which enables simple distribution of content to platforms



Above

Bauer recently introduced its Planet Rock Premium subscription service with a strong base of mobile app listeners and access to analytics.

including broadcast, mobile, web, hybrid cars and smart speakers, while keeping content within the broadcaster's control.

A personalized app experience

Online listening, mobile listening, listening via smart speakers is growing in popularity; and radio stations are at its heart. Not being available via app means missing out on an exponentially expanding audience through the sheer volume of listeners and through access to analytics.

Apps can track listener behavior, from listening times to played tracks. People often search for a local radio station in the App Store, presenting a golden opportunity: Broadcasters can surface additional content, including on-demand to podcasts, catch-up content or new stories.

Being in control of the gateway to listeners — because you own the app — means full control of the user experience. That's when your listeners come to your app and start listening to your content.

A good example is Bauer, which rolled out its subscription service, left, with two things: a strong base of mobile app listeners and access to analytics.

The listener base helped Bauer monetize new options and features, while expanded analytics told them who, and when, users were consuming content — down to what tracks people were tuning into ... and out of.

Revenue opportunities and control

This all opens up revenue opportunities. Subscription radio for an enhanced experience is one example, as is targeted audio advertising.

Ultimately, great content underpins it all. Good infrastructure and tools mean that content produced for the live broadcast stations can be easily repurposed for the app, then for a smart speaker or connected car platforms. You go into a system and do it once — and the content gets published across the range of platforms that matter to radio stations.

And because good app infrastructure gives the broadcasters complete control, and enables tight access management, their high-value content and unique intellectual property are protected from hijacking aggregators.

Ultimately, apps are a conduit to increased monetization, analytics, efficiency, content and interactivity. And that's something that makes everyone happy, from listeners to broadcasters and technology providers. **RM**



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