

RADIO WORLD

Your guide to radio technology

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LeGeyt raises the volume on radio

The head of NAB talks with Radio World about his first year on the job.



Radio and young people

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Radio on the radar

Don't lose sight of the threat to radio in the dashboard



Paul McLane
Editor in Chief

In this issue, NAB President/CEO Curtis LeGeyt talks about his first year on the job with our contributor Randy Stine.

The NAB is active in a lot of areas, of course; but it is, foremost, a lobbying and advocacy organization. For an example of the importance of such work, you don't have to look further than an announcement in December by U.S. Sen. Ed Markey.

Markey is a member of the Senate Commerce, Science and Transportation Committee. He issued a press release saying that he had written to 20 carmakers urging them to maintain broadcast AM radio as a feature in new cars, including electric vehicles.

Markey asked each carmaker to tell him, in writing, whether they have decided to discontinue free AM and/or FM radio in any of their products. His letter was sent to all the big names: General Motors, Ford, BMW, American Honda, Hyundai, Jaguar, Kia and so on.

"Although EVs can cause electromagnetic interference with AM radio signals, car manufacturers appear to have developed innovative solutions to this problem," Markey wrote.

"Therefore, as the United States works to meet President Biden's goal of 50 percent electric vehicle sales by 2030, we urge your company to maintain broadcast AM radio in its vehicles to ensure that consumers have access to critical emergency response information."

Judging from the depth and nature of its contents, this three-page letter was almost certainly prepared in coordination with the NAB. It's a perfect example of how an effective advocacy group can work through its legislative allies not only to influence public policy but to put pressure on market partners. So score one for NAB.

But the larger issue here is very concerning.

As consultant Fred Jacobs pointed out a few weeks earlier, the latest Ford F-150 Lightning truck, an electric vehicle, does not have AM tuning.

"Following in the footsteps of Musk's Teslas, this amazing truck won't be able to receive stations like WABC, WWL, WGN and other AM stalwarts, still slugging it out in the broadcast radio landscape," Jacobs wrote on his blog and

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On the cover

Curtis LeGeyt is shown at last spring's NAB Show. Photo by Jim Peck

on the Radio World website. He wondered why more radio people weren't expressing concern about it.

"These stations will be accessible via apps, of course, but the AM tuner is a thing of the past in these forward-leaning F-150 Lightnings. ... The 2022 F-150 Lightning had a whip antenna to facilitate AM reception. Now, the Ford brain trust has apparently concluded it's not worth the expense for a radio platform that is clearly facing the death spiral. ... In an obvious slap in the face to radio broadcasters, Ford is sending the message that AM radio doesn't really matter to their drivers."

Jacobs adds that FM broadcasters should not feel smug because such decisions by carmakers could be seen as a lack of confidence in radio itself.

We spend a lot of time and space in Radio World writing about how radio is presented in the connected car and how it may evolve further. These latest developments demonstrate why this topic is so important.

I've heard it said that today's cars are like smartphones on wheels. Given how central the radio was to a driver's experience in the past, we might realize that, at one time,



Above
The F-150 Lightning has nifty features like external zone lighting ... but no AM radio.

cars were like radios on wheels. But our medium doesn't enjoy that secure and privileged position anymore.

It's crucial that our industry stays engaged with the question of how drivers and passengers experience radio and how carmakers perceive its value. We'll continue to cover that story. Send me your own ideas to radioworld@futurenet.com.

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Writer



Randy J. Stine

Radio World's lead news contributor wrote recently about iHeartMedia's initial efforts in the metaverse.

Above

Curtis LeGeyt, left, welcomed attendees to the first in-person NAB Show in three years in April. He's with Steve Hill, president/CEO of the Las Vegas Convention and Visitors Authority, and Mary Beth Sewald, president/CEO of the Las Vegas Chamber of Commerce.

Curtis LeGeyt completes his first year on the job

Association leader says radio needs to capitalize on emerging tech capabilities

As Curtis LeGeyt completes his first year as president and CEO of the National Association of Broadcasters, he and his members are assessing the policy implications from the 2022 midterms, preparing to defend against additional music royalty costs and worried about another FCC regulatory fee increase.

LeGeyt's first 12 months on the job saw the radio and television industry emerge from a pandemic while navigating a quickly evolving media environment. LeGeyt sets the edge for the group's advocacy priorities on Capitol Hill. Observers say his deep knowledge of how lobbying works in Washington has made for a smooth transition from his predecessor Gordon Smith.

"The most striking thing to me in this first year," LeGeyt said, "is the degree to which policymakers are very focused on the state of our industry. They understand the value broadcasters provide to communities. How important what broadcasters offer stands in contrast to what happens

in the rest of the media landscape and in particular social media."

He added: "Broadcast issues are not partisan. We have champions on both sides of the aisle in the House and Senate."

LeGeyt, 44, was NAB's chief operating officer for several years and its executive VP for government relations from 2015 to 2020. Prior to joining NAB in 2011, he was senior counsel to then-Senate Judiciary Chairman Patrick Leahy. He and his wife Kacey reside in Washington; they have three children, Caitlin (10), Jack (8) and Desmond (5).

Radio World interviewed him in November.

RW **What do you see as NAB's most important actions regarding broadcast radio in the year since you took the top job?**

Curtis LeGeyt: There are a few things. We started the year with so much disruption with this Congress and what happened on Jan. 6 (2021). Being able to overcome that

polarizing environment and still be able to attract a majority of lawmakers in the House and then another nearly 30 in the Senate, on both sides of the aisle, to come together in support of the Local Radio Freedom Act opposing any new royalty on local radio is a significant accomplishment.

Then the work at the FCC to reduce their initial regulatory fee increase — which saw nearly 100 members of Congress write to the FCC to oppose the fee increase — was a significant win for local broadcasters. I'm sure that issue will be near the top to our efforts again for 2023.

“ Sometimes in this very fragmented media landscape, the popularity of radio gets lost in the layers. So we are raising the volume on that story. ”

And then the bipartisan support and progress we had on the Journalism Competition Preservation Act, especially for those radio broadcasters that focus disproportionate resources on local news. It would provide some revenue from tech platforms when they are repurposing our content. That bill passed out of the Senate Judiciary Committee just before Congress went out of session prior to the election in the fall.

Those are the three significant wins for local radio this year.

RW **What are the top goals for radio members going into 2023?**

LeGeyt: On the advocacy side, we will remain focused and advocate against any new terrestrial performance royalty. That fight is not going away. The recording industry is investing more resources on the other side of this. They have recruited the former head of the House Democratic Caucus, Joe Crowley, to lead their MusicFirst effort, so they are not going anywhere.

And secondly, we need to work toward legislation that ensures a level playing field between the big tech platforms and local broadcasters. We need to make sure policymakers understand the impact that big tech is having on the local advertising market.

As listeners migrate online, we understand the tremendous gatekeeping ability those platforms have, enabling us to have a direct relationship with our audiences. If they are going to repurpose our content we want to be fairly compensated for it. We will engage with lawmakers on both side of the aisle for legislation that allows broadcasters to compete with big tech.

RW **Is there any reason to think the latest American Music Fairness Act to pay music performers will actually become law? The latest proposal would limit payments by small and local stations to about \$500 annually. Does the idea of a capped payment for smaller broadcasters open the door at all for you on this?**

LeGeyt: No. I don't think that is a starting point. A starting point for NAB would be a proposal that looks at music royalty more holistically and provides some relief for local broadcasters on the royalties they are paying when streaming to audiences online. I think those fees are far too burdensome and I feel they are impeding innovation by local broadcasters. That is innovation that needs to happen to enable our medium to thrive.

I think solving something holistically and creating a sustainable royalty model that allows for broadcasters to thrive in the digital space is a win-win for local broadcasting and performing artists who will benefit from more airplay on our platforms.

But the current economics are not sustainable. So we are willing to have a conversation about what a terrestrial fee should look if it is wrapped into the larger conversation around digital. Absent that, and the current AMFA doesn't have anything to do on digital, then it's a non-starter.

RW **Should the Senate approve the nomination of Gigi Sohn to the FCC?**

LeGeyt: We made very clear when Gigi Sohn was first nominated that we had some significant concerns involving her role with regards to some of our television issues. She since had proffered that if she is confirmed, she would recuse herself from a set of television issues. We were clear in the aftermath that given her voluntary recusal on those television issues, it satisfied the NAB's most significant concerns with her nomination.

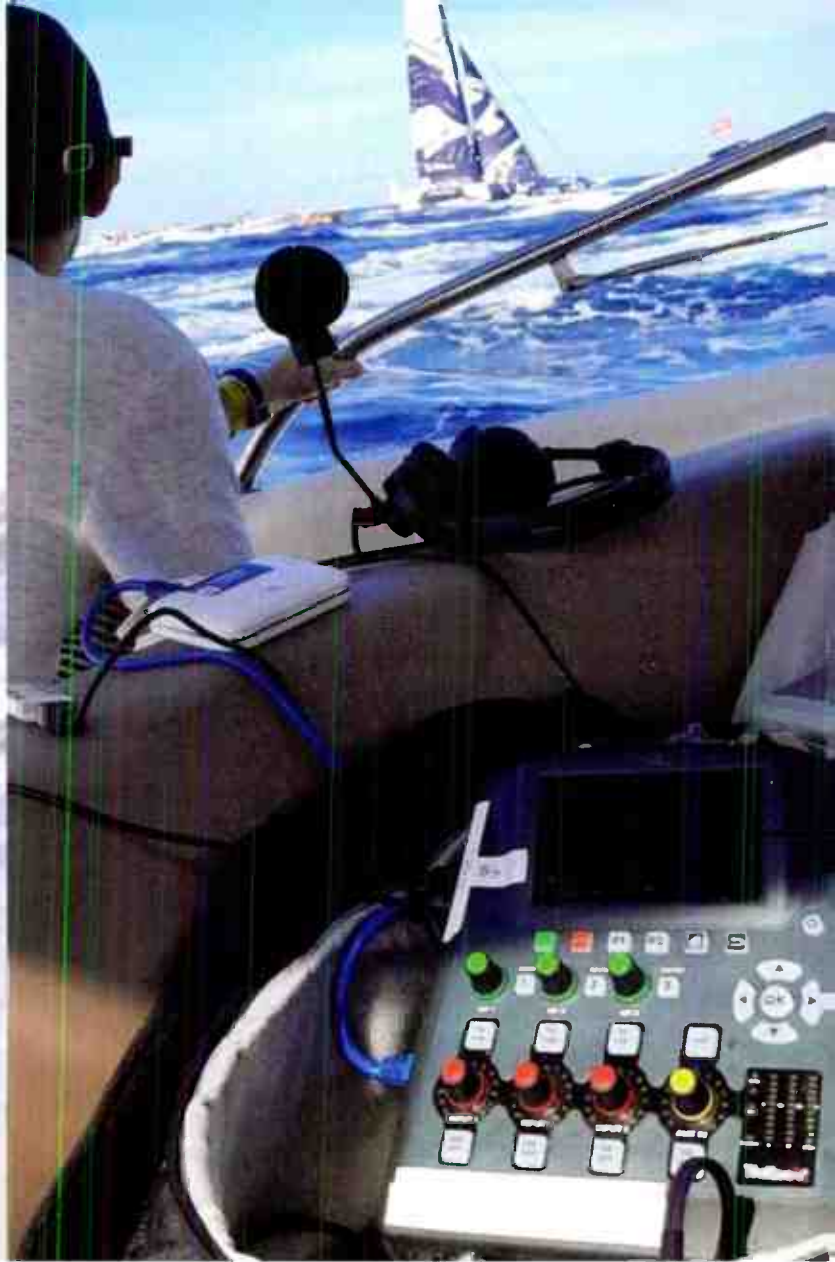
RW **Do you feel that matters of importance to NAB members are being held up by lack of a fifth commissioner?**

LeGeyt: We certainly think the FCC functions best when it has its full complement of commissioners. We need to give real credit to Chairwoman Rosenworcel that she has forged a very, very productive tenure with a 2-2 commission. I think the structure has taken the temperature down on some telecom issues and enabled her to focus on those



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places where there is bipartisan consensus and has looked pretty productive from where I sit.

RW NAB has been vocal in opposing the GeoBroadcasting proposal to allow limited geotargeting on FM boosters. You've made policy and technical arguments against it, but geotargeting proponents say NAB also has been "savage" in its opposition, issuing "disingenuous" arguments with "out of context personal allegations" that go too far. How do you feel about those characterizations?

LeGeyt: I'm not going to get into specific adjectives, but it is fair to say we have significant concerns with the GBS proposal. Our members just don't see geotargeting as a

Above
At the spring show, LeGeyt joined Library of American Broadcasting Foundation Co-Chairs Heidi Raphael and Jack Goodman in presenting the inaugural Insight Award to LeVar Burton, second from right, for his contributions to broadcasting, history and American culture.

viable technology that will help them compete in today's media landscape.

RW So NAB's criticism of GBS co-founder Chris Devine and his business background have been fair?

LeGeyt: Yes. The record right now reflects significant concerns raised by a litany of voices across the broadcast industry. And the opposing viewpoint is what has been submitted by Mr. Devine's company. I do think his credibility is an extremely important factor here, given the fact that he is asking the FCC to rely entirely on his company's assertions in terms of the viability of the technology and its efficacy.

RW The National Association of Black Owned Broadcasters recently reversed its stance on geotargeting and no longer supports it. Did NAB ask NABOB to change sides?

LeGeyt: No truth to that. I would love to have the ability to influence the positions of other trade associations but NAB has no ability to do that.

RW NAB held off the FCC's foreign sponsorship ID proposal via a successful court challenge; but the chairwoman has revised the proposal and is trying again. Does the NAB accept her revised proposal?

LeGeyt: I think it is important to say at the outset that the NAB shares the FCC's goal of ensuring the public knows

“ The work at the FCC to reduce their initial regulatory fee increase ... was a significant win for local broadcasters. ”



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when it is listening to foreign propaganda. And we are committed to working with the chairwoman on a fair proposal that achieves that goal. However, we remain concerned about rules that unfairly burden the vast majority of broadcast stations that are not engaged in that practice, that do not air foreign propaganda. Our worry with the current proposal is that it imposes a burden on stations far outside the intended target.

RW **Do you expect the commission to at least consider easing subcaps on radio ownership in 2023?**

LeGeyt: I am absolutely hopeful that FCC will conclude the quadrennial review of media ownership rules that encompasses the subcap issue. The rules [aimed at] assuring a diversity of voices within local communities are outdated. This premise that local broadcasters are only competing against other broadcasters in local markets is antiquated.

The way Americans engage with audio platforms has changed, and the FCC needs to look at it. Unfortunately the rules just haven't kept up. The FCC needs to consider rules that will allow radio broadcasters to compete.

RW **It's unique that broadcasters are in a relationship with big tech in certain areas, the car for example, but yet compete with them in that space.**

LeGeyt: Well, I think if we want to perform the service we are paid to do for our industry, which is to make sure they are equipped and ready to innovate to remain competitive in this current media environment, we need to be at the table with some of these platforms.

The work we have done with Google on the Android Automotive project is a great example of that. We have completed and presented to Google a proposal affecting radio including extensions meant to maintain interoperability between car interface developers and hardware suppliers for tuners.

Without having a seat at the table, radio is going to end up not being fairly represented in the technology as the connected car develops.

RW **Speaking of the connected car, you got a demo of the DTS AutoStage platform from Xperi at the NAB Show New York this fall. What's your take on that platform?**

LeGeyt: I think Xperi has done tremendous work putting the AutoStage platform not just here in the U.S. but globally. I think it has a lot of potential for what radio can offer to audiences as well as advertisers. The marrying of a radio station's over-the-air content with internet-delivered content opens up all kinds of new opportunities for broadcasters and advertisers.

RW **Talk of AM revitalization seems to have died off at the commission. Meanwhile some new electric vehicles are shipping without AM capacity. What encouragement can you offer your AM members?**

LeGeyt: We are going to continue to tell the story here in Washington about the incredible service that both AM and FM stations are providing. I also think that as a trade association, there is a real role for us to play to make sure the auto manufacturers have the latest data in terms of consumer preferences as it relates to radio.

Sometimes in this very fragmented media landscape, the popularity of radio gets lost in the layers. So we are raising the volume on that story. To the degree that a manufacturer is making a decision that might make radio accessibility more difficult, that is not going to be in the best interest of their consumer, and I'm sure not in the interest of policymakers in Washington concerned about public safety.

RW **You have been in the new Washington headquarters**

near the capitol for a while now. How is NAB benefitting from its proximity to the decisionmakers it seeks to influence?

LeGeyt: It's an incredible opportunity for our industry. It enables us to get more members of Congress over to our headquarters in a building that really represents the future of broadcasting. It allows us to tell the story of radio and the great innovations happening.

RW **What stations do you like to listen to and on what platforms do you listen?**

LeGeyt: I utilize a little bit of everything. When it comes to terrestrial radio I'm a political junkie and sports junkie. Here in Washington I probably spend a disproportionate amount of time listening to [Hubbard's] WTOP as well as [Audacy's] 106.7 The Fan, WJFK(FM). 🎧

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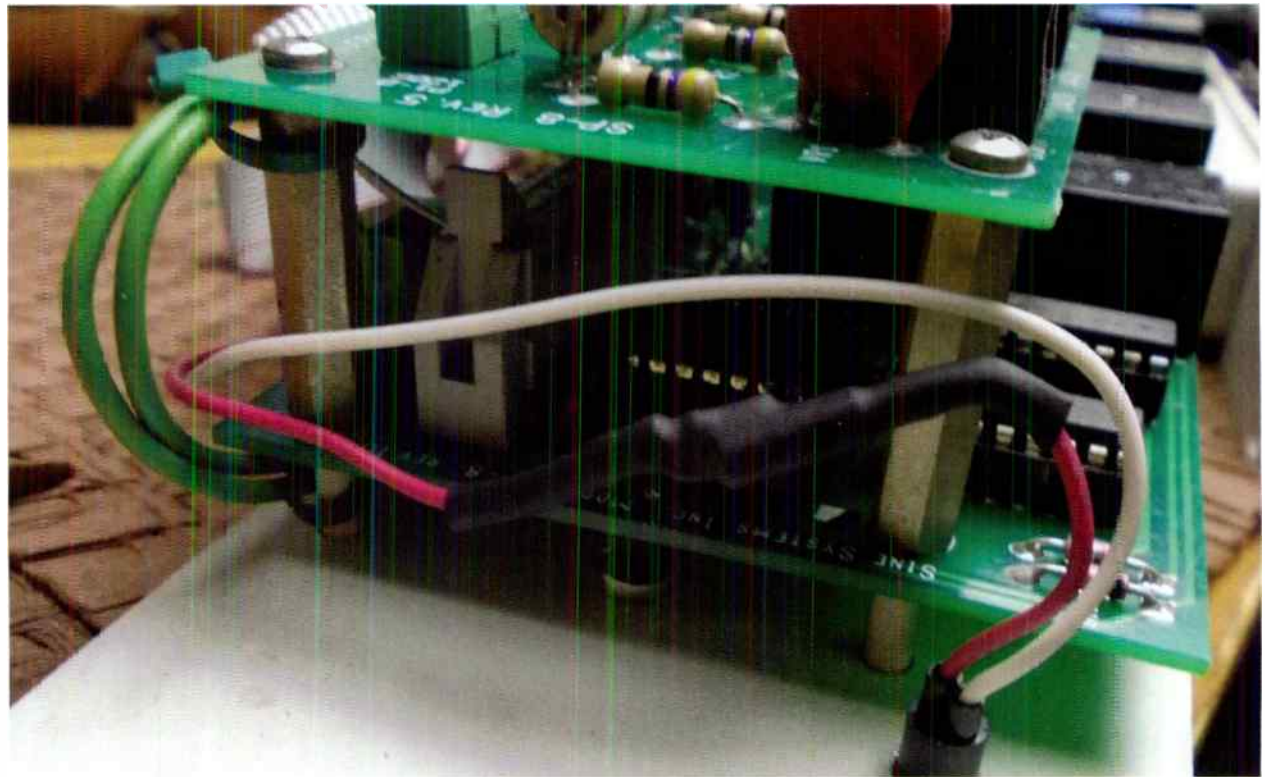
“ We need to give real credit to Chairwoman Rosenworcel that she has forged a very, very productive tenure with a 2-2 commission. ”



John Bisset

CPBE

The author has spent over 50 years in broadcasting and is in his 32nd year writing Workbench. He handles western U.S. radio sales for the Telos Alliance and is a past recipient of the SBE's Educator of the Year Award.



Tips are GEP, too

Workbench submissions are encouraged and qualify for SBE recertification credit. Email johnpbisset@gmail.com.

GEP: Ditch the wall wart

A simple project using junk box supplies gets rid of the wall wart

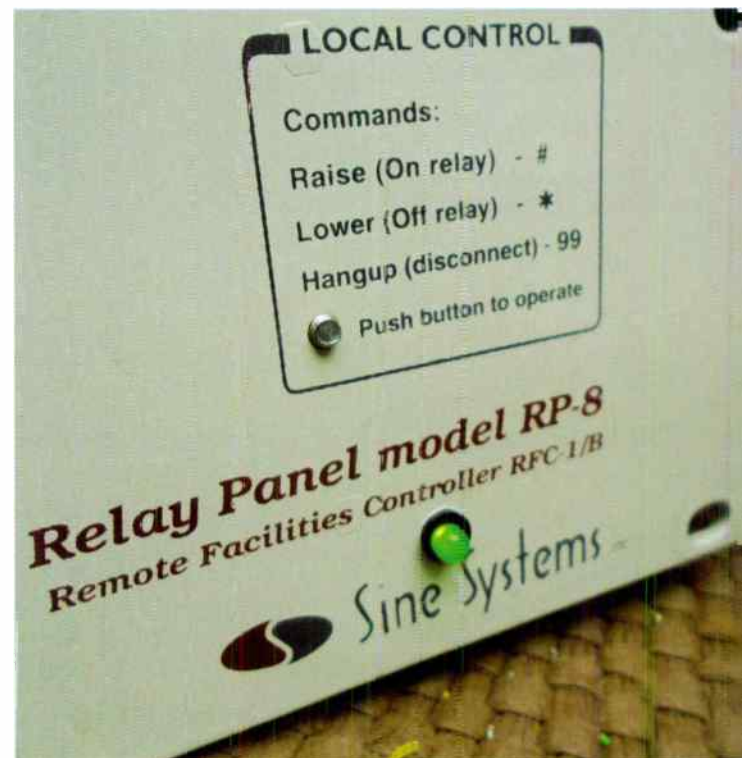
Consulting engineer and Radio World colleague Charles "Buc" Fitch, P.E., recently had one of those ubiquitous Sine Systems remote control panels on his workbench. He decided to forgo the wall-wart power source and convert it to a plug-in device.

In the broadcast engineering business, you may hear mention of GEP, which stands for Good Engineering Practice. In working on this project, Buc was reminded of one of its more basic tenets: the treatment of the line voltage input.

When 120 volts single-phase enters a unit, the phase line — the 120 volt potential referenced to neutral and ground — should go first to the fuse or circuit breaker, then to the on/off switch, and from there onto the transformers and circuits that use this power.

More specifically, the phase line goes directly to the center pin (the deepest contact) of any bayonet/twist-type fuse holder. The goal is to keep this potential as far as possible from anyone changing the fuse who might touch the capture ring just under the lip of the fuse holder.

GEP also expects that any appearance of this killer voltage will be covered by some sort of insulation or barrier, to minimize any shock.



Above
The front-panel LED wiring.

Right
Placement of the AC power "on" LED.

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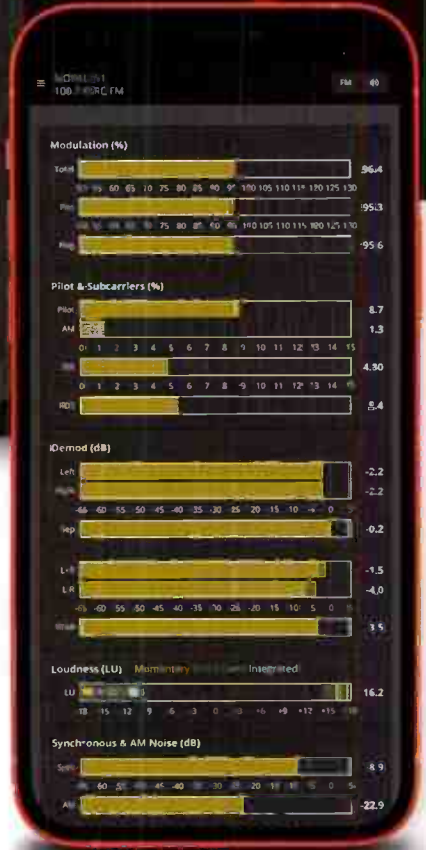


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Buc chose a Visual Communications L10005 (green). Any diode that can handle better than 20 mA will work.

The Sine uses 12 to 16 volts AC, so this little Stancor 12.6 volt 250 mA transformer (or equivalent) is perfect. The LED is powered by a diode — in this case a 1N4004 because he bought 100 of them for about five dollars — with a series voltage drop/current limiting 470 ohm 1/2 watt resistor. Buc reminds us to observe polarity or the LED won't light.

The image at the top of page 11 shows the entire assembly covered with shrink wrap.

The only item of concern is the exposed AC, and as Buc has noted in the past, those connections on the fuse holder can be covered in GE silicon caulk, seen in the third photo.

“ The main board of the RP-8 allows enough space to install a transformer, fuse and LED power indicator. ”

Shrink wrap buries all other sins.

The final current flow is about 18 mA. Because this LED (like the Sine itself) will run continuously, it's good to hold down the current. As mentioned, all items are dressed tightly so that the panel can continue to be rack-mounted.

It's a simple project, using junk box supplies, that gets rid of the wall wart.

PS: If you like modifying equipment, Dan Slentz, our roving internet explorer, shares a fun clip of a Roomba vacuum clear modified to run at 35 mph, affectionately known as the VRoomba! On YouTube, search "Building the World's Fastest Roomba."

Reminder

Don't forget to send me your list of three things that you absolutely "must check" when visiting a transmitter site. We'll summarize your suggestions soon including some surprises for best entries. Email your list to johnpbisset@gmail.com.

Above
Plenty of room for mounting the transformer. Note the GE silicone sealant that Buc used to insulate the fuse.

Right
Buc mounted the transformer and fuse holder so as not to interfere with the front-panel silk screening.

Obviously if you must have a bare appearance of 120 volt, such as a voltage selection terminal strip, you should mark the presence of the potential on the strip or chassis.

The construction

The main board of the Sine Systems RP-8 is undersized for the 2 RU rack panel, which leaves just enough space to install a transformer, fuse and other components on one end and an LED power indicator on the other.

Buc only needed to drill four holes: two for #4 screws to mount the transformer, a 1/2-inch hole for the fuse holder on the right side of the panel, and a 1/4-inch hole on the

left for the LED. The positions were chosen so the holes wouldn't cover the informational lettering on the front of the panel.

Buc harvested the AC cable from a computer. The fuse holder is a Bussmann GMA type (fast-blow) to minimize size. The LED was not critical;





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How can radio address its problems with young consumers?

Radio has reinvented itself before to “go where the listeners are.” It could do so again

Broadcast radio is facing some significant challenges — and one of them involves young people.

That’s according to a recent report to the government of the United Kingdom. Though specific to the U.K. marketplace, the “Digital Radio and Audio Review” explores issues that are relevant to broadcasters everywhere.

The report was a joint government/industry project commissioned by the

Writer



James Careless

The longtime Radio World contributor wrote about the surprising resilience of shortwave radio in the Sept. 1 issue.

Department for Digital, Culture, Media & Sport, prompted by the question of whether analog radio services should be sunset.

The report has many positive things to say overall. It describes radio as “a great British success story” and said the medium has evolved to embrace digital opportunities to maintain universal appeal. It describes a “thriving” radio market and said new online formats from broadcasters and new entrants have grown rapidly, bringing “increased choice and new habits to the U.K.’s audio sector.”

It said radio remains a strong, trusted medium, and it goes on to explore issues such as consumption trends, the role of competing services, the state of DAB+, the impact of voice activation

and so forth. It makes dozens of recommendations, some relevant only to the U.K., others that could be applied broadly. Its main conclusion was that the time is not right in that country for a switch-off of analog radio services.

For anyone interested in large-scale radio trends, it is worth reading; find the report and the government’s response at www.gov.uk, search “Digital Radio and Audio Review.”

But its discussion about trends among young listeners is eye-catching.

Losing ground

The report notes an ongoing decline in young listeners as online music options proliferate.

“In the 10 years from 2010 to 2020, the weekly reach of live radio



among 15–24s declined by 8% (or 7.1 percentage points) from 88.7% to 81.6%,” the review stated.

“During the same period, the average hours per 15–24 listener fell by 23% (from 16 hours 8 minutes in Q1 2010 to 12 hours 30 minutes in Q1 2020).”

“As a result, the total listening hours of 15–24-year-olds fell during the period by 34%,” it continued. As well, “Young audiences do not seem to sufficiently grow into radio later in life to compensate: 25–34s today are listening to slightly less live radio (16 hours 6 minutes in Q1 2020) than they were 10 years ago.”

Then there’s the emergence of smart speakers for in-home listening. The good news is that many people do listen to radio broadcasts on their smart speakers. The bad news: “Use of smart speakers to listen to the radio falls to 34% among 16–34s but rises

to 67% among those aged 54 and over,” said the review.

“In contrast, 67% of all smart speaker users listen to music via a streaming service on their device, rising to 77% of 16–34s but dropping to 55% of those aged 54 and over.”

Radio World asked industry observers about the implications of these declines in listening among the young.

“While come/reach isn’t a problem, total time spent listening seems to be in decline for radio, especially at the younger end,” said James Cridland, radio “futurologist” and editor of the Podnews podcast newsletter.

“In the U.K., radio’s weekly time spent listening for people aged 15–24 on AM/FM, DAB and online has declined by almost 40% since Q2 2013. I see similar declines for TSL from young audiences in the U.S.”

There is no doubt that the emergence of online music services

with tailored music experiences has cut into radio’s audience.

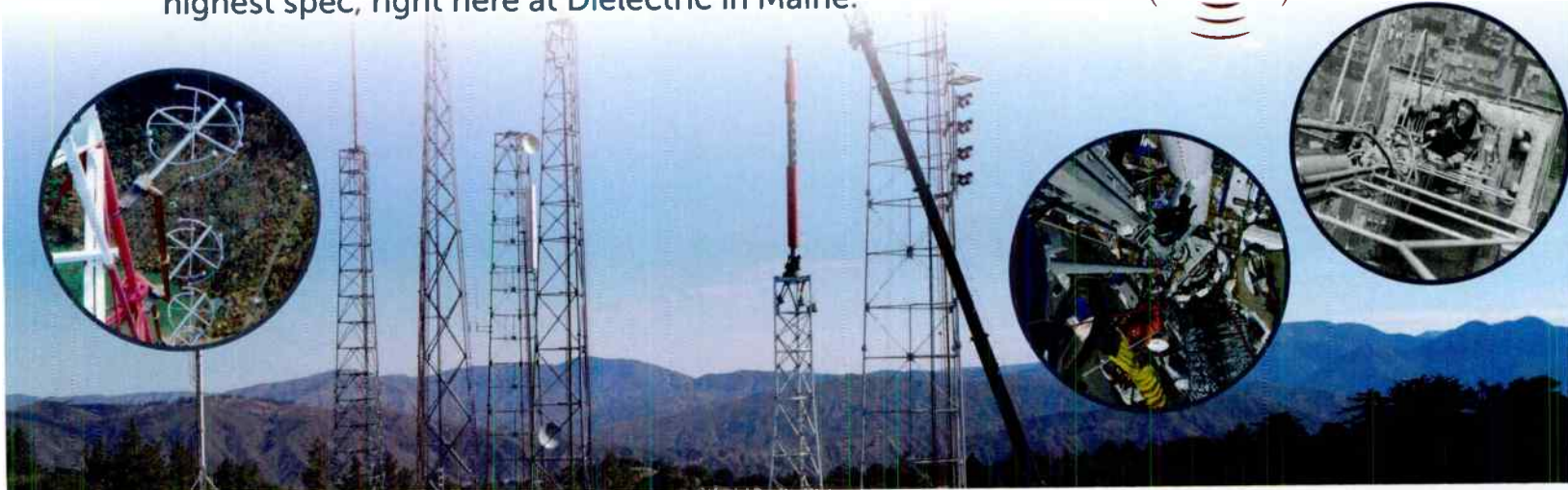
Meanwhile, “About a decade ago the radio audience began to split into two listener groups who wanted different things,” said Ben Downs, vice president and general manager of U.S. company Bryan Broadcasting, who is on the board of the National Association of Broadcasters.

While some listeners remain dedicated to listening to broadcast radio, he said, “There was the ‘jukebox group’ that had no interest in anything that stopped the music such as news, sports, traffic, weather — and unfortunately commercials. That’s the group that has drifted away from radio, because we generally can’t operate outside of our advertising-supported business model.”

However, some observers say the industry isn’t doing enough to build relationships with younger consumers

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and doing absolutely everything to attract them.

"I worry that programmers are doubling down on programming that attracts the older demographic, leaving nothing for younger listeners and accelerating the decline of the industry," Cridland said.

In the long term, he said, "Radio aimed at people aged 55+ is hard to make money from, and harder to see new listeners dipping into."

Online competition

What will it take to keep broadcast radio competitive, attractive and relevant to new generations of listeners?

Fred Jacobs has been pondering that. He is president of Jacobs Media, renowned for creating the classic rock format that is still popular today.

"Radio's future can still go a variety of different ways, depending on how industry actors in these various countries choose to play their hands," Jacobs told Radio World.

"They can lean into radio's strengths, being live, local and free, and perhaps carve out a sustainable but different future. They can specialize in personality development, another core strength not being

pursued by most streaming players. Or they can meet the audience where they are, weaning themselves off transmitters and towers as the dominant distribution outlet to provide content and services on myriad other channels. Many are doing this now, but in fits and starts."

These are not the only options for broadcasters to compete with online services, said Jacobs.

"They can explore and experiment with alternative business models, not unlike what Bauer Media is doing in Europe with its subscription service. Offering versions of broadcast radio stations that are commercial-free and with 'song skips' could prove to be a viable option for already strong, well-established radio brands.

"They can also seek out strategic mergers, acquisitions, collaborations and partnerships to bolster their portfolios and capabilities, in much the same way that public radio station WBEZ recently purchased the Chicago Sun-Times. If that strategy is correct, the new Chicago Public Media entity could 'own' local news in Chicagoland."

Broadcast radio's unmatched ability to deliver "local and live" content

was emphasized by NAB President/CEO Curtis LeGeyt in a recent edition of "Borrell's Local Marketing Trends Podcast,"

"What is always going to differentiate radio is the trust of the local personality and the live programming," LeGeyt said. "I think radio will continue to thrive in that regard, whether they are distributing that programming through an AM/FM traditional terrestrial signal, or whether that programming is being consumed through a stream through an adjacent podcast, whatever it may be."

Radio critics have said for years that this "local and live" advantage is compromised when a station relies too much on automation and voice-tracking, not supporting listener music requests and on-air interactions, or using out-of-town announcers with no presence or connection in the community.

Another programming possibility: Radio stations could offer audiobooks and author interviews through HD Radio channels and web streams. According to www.wordrated.com, globally, audiobook revenue is projected to be worth \$4.11 billion in 2021. So that's one area where new listeners might be found.

"The other thing we have to do is quit annoying our listeners," Downs said. "Our spot loads are now and have always been the greatest turn-off to free radio. Syndicated talk formats have places in their formats built for 20 to 22 minutes of commercials each hour — and don't forget to count the top-of-hour newscasts. It's hard to listen through that plus poorly researched playlists.

"As well, we need to find on-air talent that super-serves the community and keep them in our studio chairs. If we do all this, we may not get 100% of our audience back, but we can win back a lot."

Unfortunately, said Cridland, "Radio's reaction to declining linear audiences appears to be to cut costs on output, thus making radio

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even less likely to compete well with more interactive offerings by Spotify, Amazon and other services.

"Real human beings, producing relevant output to their audiences, appears to be the way forward," he said. "Real and relevant" can come from live and local, but it doesn't have to. That said, it's much harder to deliver 'real and relevant' using non-stop automated music or short presenter breaks voice-tracked six days ago in a different city."

Another solution is offered by John Lund, president of the Lund Media Group consultancy.

"There needs to be a paradigm shift from perceiving radio as a device receiving content distributed from a transmitter and antenna," he said. "Instead, radio should be perceived as content distributed by a transmitter and over the internet — apps for cellphones, website streams and smart speakers. The advantage terrestrial radio

“The teen issue is especially challenging, largely because most broadcasters have mistakenly and myopically chosen not to compete in that arena. But Gen Z is not actively ‘anti-radio.’”

has is that it is a mass-marketing mechanism limited by licenses from the FCC. Satellite and internet content providers do not have this valuable marketing vehicle."

Winning back the young

If one considers the data in the U.K. report, one might conclude that broadcast radio is doomed simply because it seems unable to attract younger listeners. Without them, radio's fate presumably is tied

to the life expectancy of the 55+ demographic.

But it doesn't have to be this way, its supporters say. Radio has faced doom before, as when television supplanted radio as the mass-market venue for comedy, drama and other spoken-word programming. Radio survived by reinventing itself as a youth-focused music medium.

Young listeners can again save broadcast radio and will do so if the industry lets them.

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Patrick Hannon is president of WorldDAB, which advocates for the DAB/DAB+ digital radio platform. "The key challenge for radio is to pursue a course that balances the need to encourage innovation, whilst simultaneously protecting the core strengths of broadcast radio," he said.

He believes the multitude of additional channels provided by DAB+ digital radio makes it possible for radio to rebuild its connection to younger audiences.

"DAB+ can offer listeners more choice, such as new stations targeted at children, including 'Fun Kids' in the United Kingdom and 'ABC Kids listen' in Australia," he said. "These stations help build radio listening habits from an early age, as well as providing educational and entertaining content."

On the other hand, said James Cridland, "Podcasting is showing that younger audiences are keen to seek

out the kind of programming they want on their terms. It's telling that the big U.S. broadcasters are heavily investing in the podcasting industry, though also telling that podcasting accounts for just 9% of iHeart's total revenue or 6% of Cumulus Media's revenue."

Downs said, "While I wish young people were more interested in their community, they will listen to our signals if we give them something they can't find anywhere else. And if we're good enough we'll be able to share them with the all-music services. In our case, our collegiate sports radio programs are a unique product that motivates young people to listen."

Said Fred Jacobs: "The teen issue is especially challenging, largely because most broadcasters have mistakenly and myopically chosen not to compete in that arena. But Gen Z is not actively 'anti-radio.' There's simply never been anything

on the radio of interest or relevance to them."

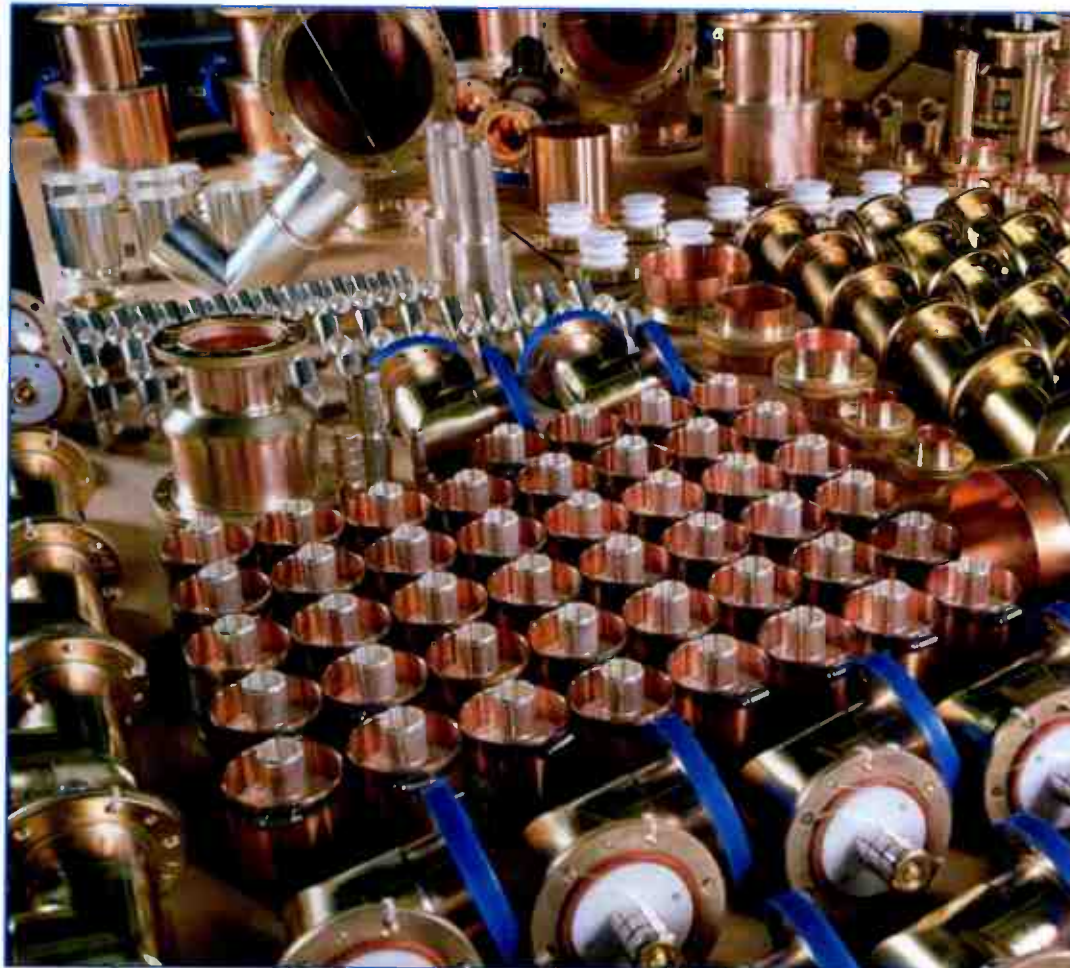
But that does not mean a content stream or platform couldn't be devised that would appeal to them. Jacobs noted that TikTok has disrupted juggernauts Facebook, Instagram and others but it didn't even exist until 2016.

What's ahead?

Can radio survive this second extinction-level event, the onslaught of online music services? Our conversations with experts keep coming back to the notion that stations must reinvest in the "local and live" model to which so many publicly traded broadcast groups give lip service.

"Radio — in a more complex media future — cannot and will not be what it was," concluded Fred Jacobs.

"But in every phase of its evolution, it has morphed to meet the moment. The challenge of today is more



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arduous and financially precarious, but the medium has the ability to adapt and become a different version of itself. The question is whether its owners/operators have the wherewithal, the stamina and the innovativeness to make it happen."

And what did the "Digital Radio and Audio Review" conclude about the youth issue?

"The U.K. radio industry is actively trying to address the shifting needs of these young listeners," it told the government.

their investment in music streaming and podcast services."

More broadly, the report acknowledges that radio is facing "significant" challenges.

"While the BBC and commercial broadcasters have invested heavily in developing and improving DAB transmission infrastructure, and broadcast platforms continue to dominate both in-home and in-car audio entertainment, the options for what to listen to and the ways of listening to radio services

“The other thing we have to do is quit annoying our listeners.”

"Commercial radio has launched a number of new digital-only services such as KISS Garage and developed online audio players such as Global Player, while the BBC has further evolved BBC Sounds and launched, for example, a new stream of content to help young audiences manage stress and wellbeing.

"Existing initiatives show some signs of success," it stated, "but the challenge will intensify as online audio audiences grow, leading competing global providers to further increase

continues to increase. Audiences are changing, distribution is changing, and connected audio and global streaming platforms such as YouTube, Amazon Music and Spotify are competing for the radio audience.

"The future is still a bright one — especially as opportunities open up for the audio production sector — but significantly less certain, and much will depend on industry continuing to collaborate to sustain a thriving audio ecosystem of U.K.-produced content." 

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About Buyer's Guide

The Buyer's Guide section appears in every other issue, focusing on a particular category of equipment and services. It is intended to help buyers know what's on the market and gain insight into how their peers are using such products.

Tech Update

A Lower-Cost Surge Suppressor for Solid-State Transmitters

Sine Control's PowerClamp HP200-1-TX Surge Protective Device is for broadcast transmitter sites, network studio complexes and other mission-critical installations. The new unit is suitable for solid-state transmitters that use switching power supplies.

"PowerClamp SPDs use a hybrid of multiple technologies to greatly reduce the amplitude of AC spikes and surges that often damage these switching supplies," the company says.

"The unit's 'clamping level' performance is exceptional, reducing surges and spikes to within just a few volts of the sinewave peak."

The new PowerClamp HP200-1-TX is rated at 200,000 surge-amps per phase.

The HP200-1-TX is for single/split phase 120/240 volt power; other Series 200 models are available for three-phase wye electrical service from 120 to 480 volts. LEDs monitor the unit's fuses, with Remote Status Monitoring optionally available.

Load matching is not required. There is no insertion loss or risk of power cutoff. In the unlikely event of an overload, the PowerClamp's internal fuse will open, but power to the load (the transmitter) will remain on.

Series 200 SPDs have more surge-amp capacity than previous PowerClamp units but cost less due to newer production technology. Units are generally in-stock.

Info: <https://henryeng.com/powerclamp/>

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Tech Update

ERI Upgrades FM Channel Combiners With 3 dB Hybrid

Electronics Research Inc. has incorporated its newly designed HY0241 and HY0244 3 dB hybrids into its 955, 780 and 783 series constant impedance FM combiner modules.

These filters are used in FM channel combining systems with four or more FM stations sharing a single master FM antenna. The new hybrids cover the entire FM band and exhibit very flat response from 88 to 108 MHz with isolation of greater than 30 dB, ERI reports.

"Both HY0241 and HY0244 hybrids have very high-power handling capability and are rated to handle the significant peak RF voltages for systems with multiple FM stations operating with hybrid analog FM and HD Radio signals."

The HY0241 is available with any combination of coaxial ports including 1-5/8, 3-1/8, 4-1/16 or 6-1/8-inch. The HY0244 has a higher power and peak RF voltage rating and is available with standard coaxial ports, including 3-1/8, 4-1/16, 6-1/8 or 9-3/16-inch in any combination.

The individual FM bandpass filters included with these combiner systems are usually three- or four-section filters with optionally available non-adjacent coupling for additional isolation when



combining closely spaced frequencies. The filters are typically floor-mounted or can be stacked vertically to reduce the footprints of the filters.

"When included with an ERI Axiom Master FM Antenna, the channel combiner offers a high-performance economical solution for shared transmission facilities for multiple FM broadcast stations."

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Dielectric accelerates a transition in the Maritimes

MBS Radio has moved several AM stations over to the FM band

Canadian broadcaster MBS Radio, which owns and operates 22 radio stations across Atlantic Canada, has transitioned several former AM stations to FM frequencies. CKNB(FM) on the Quebec/New Brunswick border is the most recent, switching from 950 kHz to 100.7 MHz on Nov. 14.

"AM transmits using the ground plane, and we could reach listeners well given the regional topography," said Kevin Feltmate, director of information technology at MBS Radio. "Audio quality and listenership is limited, however, and with our transmitter showing signs of age we didn't want to invest in new AM technology."

FM would reach more listeners with improved audio quality, but it required an entirely new infrastructure. MBS Radio erected a new 120-foot tower and side-mounted a new Dielectric DCR-H ring-style FM antenna at the 100-foot elevation on the tower to enable the switch.

Feltmate asked contract engineer Francois Gauthier to determine the antenna specifications best suited for the regional topography.

"Francois worked closely with Dielectric on the pattern and antenna



Above
Installation work in progress.




More Info
www.dielectric.com

design and confirmed that a two-bay array would keep our 1.4 kW signal within our regulated boundaries. We have installed DCR-H antennas at another FM station recently. This site is more challenging for coverage due to signal reflection from a mountain range."

The CKNB(FM) antenna is itself notable because it was among the first virtually modeled Dielectric

antennas. The manufacturer said this greatly reduced the time and labor of physical antenna modeling. Feltmate plans to order another Dielectric antenna for CJCW(FM) in Sussex using the same Dielectric Artificial Intelligence Optimization technology. He anticipates a spring completion.

He said installation of the DCR-H with radomes was simple and that Dielectric supplied the connectors and flex transmission line. "The riggers used a basic boom truck to raise and mount the antenna, and the radome protects the antenna in a wild climate that ranges from -20 to 30 Celsius. Outside of building the tower, Dielectric supplies all the components we need for a new FM antenna system. They take care of everything." 

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Tech Update

Kintronic Supplies Custom ATU for JOCR

JOCR in Kobe, Japan, recently installed a Kintronic Labs AM antenna tuning unit to serve a 1 kW relay station on 1395 kHz.

The project was unusual in that the new unit had to replace an older ATU that was equipped with a built-in MAD switcher and dummy load. The replacement needed to have those as well, and fit in the same footprint.

"It was driving an unusual pole with rigid top hat, for which the user had both old and new measurements of impedance," said Kintronic Senior Staff Engineer Bobby Cox.

"The new and old impedance figures didn't match, and they were quite high impedances. We modeled the pole and top hat to get an idea of the expected impedance, allowing for variation due to stray base capacitance influences. The designed ATU would be able to tune to reach the range of measured impedances they had found in their documentation as well as our modeled impedance."

The customer also requested all-roller inductors to allow for quick tuning of the four-branch matching network. The unit also incorporated a third-order harmonic filter for the transmitter.

When the ATU was installed, the client emailed Cox: "We only needed to do a very small fine adjustment to the ATU and it took us only five minutes to do so."



Kintronic offers a range of specialized RF products. For AM/medium-wave, these include ATUs; impedance matching units; diplexers, triplexers and quadruplexers; phasing and matching systems, multiplexed directional systems; skirt kits; transmitter combiners; dummy loads; and ground system kits.

Info: www.kintronic.com

Tech Update

A Smart Antenna Monitor System From BDI

The SWP-206 Digi-Monitor Antenna Monitor system from Broadcast Devices is for master antenna system monitoring, VSWR protection and interlock control.

"Master antennas for radio and television use have grown in popularity due to their economy of use of sites and tower space," BDI states. "Accordingly they require monitoring of both the antenna and the combiner system itself."

The SWP-206, below, used with BDI's DPS-1000 series power monitor, shown at right, provides a compact and "smart" antenna monitor system. It gives essential information like RF power, VSWR level, line pressure and temperature, but also can be programmed to provide an interlock system that knows whether a problem is broadband or narrow-band in nature.

For example if a broadband event is detected with one of the antenna feeds, the SWP-206 interlock system opens all system

interlocks. If a narrow-band event occurs affecting only one module of the system, it will only open the interlock of the affected module of the combiner and associated transmitter feed.

Emailed alarms and thresholds for various alerts can be set using BDI's application software. And the SWP-206, along with other BDI RF support products, are SNMP agents compatible with SNMP-based remote control systems and third-party software.



Info: <https://broadcast-devices.com>



Tech Update

ISS Is "AMReady" With Antennas and Accessories

Information Station Specialists and its website theRADIOsource.com now offer three styles of temporary AM antennas for quick deployment should the need arise. They are intended for use in situations such as antenna failures, loss of transmitter sites and other auxiliary applications.

"Representing varying levels of efficiency and power capability, these low-power solutions can handle up to 270 watts and can be installed on buildings with flat roofs or on independent support pole/towers," the company states.

The lightweight antennas range from 15 to 30 feet in length and weigh from 15 to 32 pounds, depending on the model and frequency. The various designs match to near 50 ohms so antenna tuning units are not required.

"Information Station Specialists can bundle the antennas with options, such as insulator mounts, matching transformers, support masts, cable/junctions and prefabricated ground planes," it said. Commonly required frequencies are in stock for quick shipment as part of the AMReady line of products.

Low-power transmitters, new or preowned, can be included if required and may be purchased or rented by the month for short-term applications. The antennas and transmitters are small enough to be portable/shippable. AMReady products are frequency agile so they can be moved to various frequencies as the need requires.



Info: <https://theradiosource.com/products/AMReady.htm>

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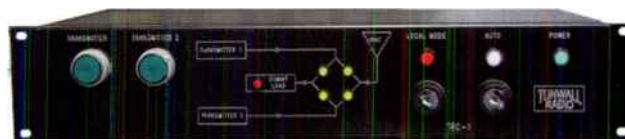
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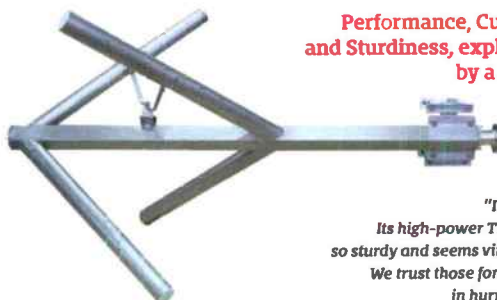


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Pirate hunting looks good on paper

Regarding the FCC sending letters to property owners about pirate radio operations:

Leave it to Congress to pass yet another spineless, barely enforceable act, the PIRATE Act of 2020, bringing back shades of the worthless 1986 Electronic Communications Privacy Act.

While I can see where pirate broadcasting can certainly be a problem, in all honesty the majority of listeners love listening to pirates. Radio magazines even run columns devoted to it.

While I don't necessarily disagree with fine-levying, such levies are worthless if the FCC is powerless (or fund-less) to collect. Quoting your article on pirates: "To date ... no forfeitures have been assessed under the act."

In an earlier letter I pointed out that the FCC's 2016 \$25,000 forfeiture order against an amateur radio operator has yet to be collected. His callsign was recently appropriated

by a friend of his, and the obscenity, sexist and racist jamming of the WARFA net on 3.908 has now doubled, with current and former owners of the callsign tag-teaming to jam net operations nearly every Sunday, Tuesday and Thursday.

Over 100 complaints have been filed through the FCC's website, only to be given a case number while "the band plays on."

This individual has loudly proclaimed on 3.908 that WBJ means "World's Best Jammer" and that the FCC will never collect the \$25,000. He even plays a song on top of the net showcasing the "virtues" of being a jammer. He been at it for over 10 years. Isn't it time to bring in the local sheriff or federal marshals and shut this clown down?

How can we believe the FCC will be capable of enforcing any \$100,000 to \$2 million judgements when they can't even collect a six-year-old \$25,000 forfeiture? I'm all for the FCC doing their enforcement job. My question is, when will that be?

Ron Fitch, WQ6X
President

Amateur Radio Club of Alameda



Software has its limits

Lou Sabatini, Scott Todd and Archie Stulc were "spot on" in their comments about maintaining consistent audio levels, especially when dealing with digital technology. And as always I appreciate Mark Persons' contributions and experience. [To see those letters, search "RW Readers Comment About Audio Levels" at radioworld.com.]

Yes, we do have means to make small corrections "ex post facto," but even the best software has its limits.

My introduction to digital audio recording was at a small TV station nearly 30 years ago. As an "experienced" engineer, I wondered why this device's indicator was several dB lower than the mixer's VU meter, so I "corrected" its gain. Big mistake!

That was my first (and only) lesson on allowing sufficient "headroom" for peaks that the board's analog meters couldn't display. My church's nascent "media ministry" started with cassettes and VHS, but I soon discovered the tremendous improvement in quality when I started mastering the audio on a (now long-obsolete) Sony MiniDisc recorder (properly adjusted, of course).

Now I use rack-mounted recorders with SDHC memory-cards, and Audacity on my PC to produce some really good CDs or MP3 files for distribution.

The only thing that's still somewhat out of my control in my churches is the participants' mic techniques and vocal styles. I've had folks who shout one minute, whisper the next; walk away from their mic; neglect to turn their wireless mic on; or somehow twist its lapel clip so their mic points anywhere but up.

While Audacity has tools to fix some problems, it still can't make filet mignon out of hamburger.

Michael Shovan, WB2KHE
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