



COMMUNICATIONS

by Ken Reitz



SHORTWAVE/AMATEUR RADIO

TV via Shortwave. Really!

Fraunhofer Institute for Integrated Circuits announced the worldwide launch of Diveemo, the new small-scale video service for Digital Radio Mondiale (DRM), September 13 at the IBC 2010 show in Amsterdam at the Thomson booth. The live video broadcast featured BBC-based video content displayed on a NewStar DRM receiver. If the receiver looks familiar, it's made by the same company that makes the Uniwave DiWave DRM receiver (a review of which is found in the April 2010 *MT*).

According to a press release from the company, "Diveemo offers free of charge reception and is independent of gatekeeper and third party providers like satellite and cable networks." The system was developed with Fraunhofer IIS, Thomson, and NewStar to "offer a convenient, mobile, small scale video service allowing users to quickly switch between channels and enjoy consistent audio and video even under bad reception conditions." The system, designed for a single DRM transmitter, also offers one or more audio channels allowing multi-language support.

Radio/TV Martí Director Resigns

Fallout continues at the Broadcasting Board of Governors (BBG) as Pedro Roig, who served seven years as the director of the Office of Cuba Broadcasting (OCB), resigned, according to a BBG press release. Months ago the Senate issued a stinging report that showed the ineffectiveness of both Radio and TV Martí in reaching its target audience, the people of Cuba. Since that report was issued there has been a shake-up at the OCB, the director's resignation being the latest.

Judge: HT not a Cell Phone

With many states enforcing new laws prohibiting the use of a cell phone while driving without using a hands-free device, hams operating mobile may be subject to being cited for such a violation. Since these laws vary from state to state, challenges will also have to happen state by state. Last year California's Department of Motor Vehicles ruled that CB and amateur radios were not to be considered cell phones,

regarding its rules for driving and talking on a non-hands-free device.

The ARRL reported that recently a New York state ham was pulled over for talking on his HT. While the traffic court judge ruled against him, an appeal to city court found a favorable ruling that "... a handheld Amateur Radio does not fit the description of a mobile telephone."

FCC to Review Personal Radio Services

In August the FCC issued a sweeping 92 page Notice of Proposed Rule Making (NPRM) that represents a grocery basket of proposed changes, and in some ways the dawning of reality. The NPRM states, "we propose to eliminate obsolete or redundant rules where appropriate and to consolidate, conform, and update general operating rules under a new subpart... to apply to all Personal Radio Services (PRS) that we propose to keep under Part 95."

To view the entire document go to: http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-10-106A1.pdf. The PRS includes Family Radio Service (FRS), General Mobile Radio Service (GMRS), Multi-use Radio Service (MURS), Radio Control and CB radio services among others. Here's a quick look at some proposed changes.

General Mobile Radio Service (GMRS):

Usually paired with Family Radio Service (FRS) frequencies, the GMRS has required a license for legal use, but few of the millions who bought such sets ever applied for such a license. Now the FCC wants to drop the license requirements, fees and call signs issued. They would also like to ask GMRS makers to narrowband their frequencies from 25 kHz to 12.5 kHz.

Voice Scrambling:

Somehow some companies have been allowed FCC certification with features that amount to voice scrambling that were designed to add another layer of privacy to FRS and GMRS channels. Now, under this NPRM, the FCC wants to de-certify these products.

Combination Radios:

The FCC is concerned about manufacturers offering radios with combined band capability, specifically FRS/GMRS and VHF marine frequencies. The obvious potential problem is widespread use of VHF marine channels by land-lubbers; especially channel 16, the emergency channel.

CB Radio:

The FCC may agree to allow hands-free wireless microphones and after-market adapt-

ers for such devices. The FCC has admitted the dramatic drop in CB radio use over the last 15 years and that archaic rules regarding the length of time an operator may transmit and then remain off the air before resuming transmissions should be changed. I'm sure that's been the cause of sleepless nights for many CB operators.

Further, and this may be hard to even read, "We also seek comment on whether the Commission should amend or eliminate section 95.413(a)(6), which prohibits the transmission of music, whistling, sound effects or any material to amuse or entertain." This is surely a sign of the end times.

And, finally, after some 50 years, the FCC wants to discuss the issue of skywave propagation on CB channels. The FCC believes, according to the NPRM, that the temptation for working skip on 27 MHz is what leads CBers to use illegal linear amplifiers and wonders if reducing the allowed power output might not be the answer.

It Pays to Advertise

While researching AM loop antennas this past summer I found myself reading the reviews for the Eton Grundig AN200 antenna sold on the Radio Shack website. One customer wrote: "... By placing the loop at a right angle to the radio, it produces, full quieting on AM and shortwave stations. I listened to a pirate (WBNY) on 6925 in USB and, by moving the loop, it gave me a super clean, quiet and readable signal."

I asked Commander Bunny if this was not a most clever piece of propaganda. To which he replied, "Ah yes, we have infiltrated the instructions-for-monkeys arena and are controlling ape-humans via the 'loop antenna' route."

It's as we feared.

Former SW Talk Show Host Convicted

Radio Business Report noted the conviction mid-August of Harold (Hal) Turner of threatening three federal judges after two previous trials had ended in mistrials. Turner had been part of a radio talk show called "The Right Perspective" but left that show in 2002. For the next two years he bought time on WBCQ shortwave and since then he was heard via the Internet. The report said that Turner faced up to 10 years in prison and a \$250,000 fine.



Cobra 29 LTD CB radio (Courtesy: Cobra Radio)



FM RADIO

Radio Free Austin Scorns FCC

A story in the *Austin (Texas) Chronicle*

detailed the group calling themselves Radio Free Austin, an unlicensed FM broadcaster on 90.1 FM. According to the report, the FCC had issued a \$10,000 forfeiture nearly a year ago to the group which claims the FCC lacks jurisdiction over their station. Those associated with the station told the *Chronicle* they had no intention of paying the fine. The station has no plans of shutting down and plans instead expanding their operation to cover more of Austin, according to the article. A spokesperson for the group said they planned to launch a series of law suits that could have the issue tied up in court for years.

“We-are-not-Pleased” Dept.

The New Jersey-based personal injury law firm, Keefe Bartels, LLC., is looking for comments from those who are not happy with their HD Radio reception in new cars that included built-in HD-Radios in the purchase price. At the center of their investigation is “whether consumers are being forced to purchase technology that does not work as claimed.” It’s not clear if the information gathering will lead to some sort of consumer-related class-action law suit.

SATELLITES

XM Slow to Minority Programming

Among the few concessions the FCC required from the merger of Sirius and XM satellite radio into a monopoly in 2008 was that subscription fees would be frozen for a certain amount of time; low price, a la carte programming would be available to those not able to or not wishing to pay the full \$14/month subscription fee, and that a certain percentage, amounting to six channels for each of the two program platforms would be given to minority groups for programming.

While a la carte never appeared to be available, subscription fees were kept at the same rate, though a \$2/month royalty fee was added last year. The deadline for handover of channels to minorities has been extended by the FCC several times, and they’ll do it at least once more. The FCC agreed at the end of August to let the issue slide until late November.

DARPA’s Mini-Satellite Network

The Defense Advanced Research Projects Agency (DARPA) is one of those quirky government research institutions that seem opaque and transparent at the same time. Announcement of a new initiative at DARPA appeared in *InformationWeek Government Newsletter* with this cheery intro: “The Department of Defense’s research arm (DARPA) is modifying a program to build a wirelessly connected small-satellite network to provide a more scalable set of technologies that can be integrated through open standards.” Hmmm.

On the surface this sounds interesting, yet nothing is revealed. Or is it? DARPA, as usual, has playfully named the initiative F6, standing for “Future, Fast, Flexible, Fractionated, Free-Flying Spacecraft United by Information Exchange.” Now, that sounds like a fun project. But, what exactly is it?



Courtesy: DARPA

According to *InformationWeek*: “The system is meant to replace traditional large, monolithic satellites that are costly to build, launch, maintain and update with a group of smaller, wirelessly networked modules that share resources and thus are more cost-effective.” Hmmm. Sounds like this satellite system would be harder to hit.

It actually gets better. Quoting DARPA, it says that the program will entail, “real-time, fault-tolerant resource sharing over wireless cross-links; algorithms for safe and agile multibody cluster flight; persistent broadband communications between low earth orbit (LEO) spacecraft and the ground; and a robust and scalable multi-level information assurance architecture.” That’s just exactly what you thought.

Japanese Spy Satellite over DPRK Down

An article on the *Voice of Russia* from *ITAR-TASS*, reported that a Japanese spy satellite operating over the Democratic People’s Republic of Korea (aka North Korea) has stopped working. The report quoted Japanese officials as saying the radar-based satellite, launched in February 2007, was expected to have a five year lifespan but suddenly, “went down...causing the satellite to go completely out of order.” That left, according to the report, only three other Japanese spy satellite looking at the Korean peninsula, one of which was at the end of its design life and none of which are radar-based, relying instead on “optical devices.”

CELL FONE FOLLIES

Déjà vu Cell Phone

An AP report told of a California man who bought a cell phone from an Internet seller only to discover it was his old cell phone that had been stolen in a recent car burglary. Police investigators found some 163 phones at the seller’s address – found on the outside of the package in which the phone was sent.

FCC ENFORCEMENT

FM Pirates Busted in 6 States and P.R.

FCC Enforcement was active during the months of August and September rounding up unlicensed FM operators from California, Michigan, New Mexico, New York, South Dakota, Washington, and Puerto Rico. All received Notices of Unlicensed Operation (NOUO).

There were two cited for QRO (high power) pirate operations. One, from Carlsbad, New Mexico who was transmitting on 101.9 FM from his residence with an output of 293,473 microvolts/meter at 3 meters, and another from California operating at more than 522,000 microvolts/meter at 262 meters. Maximum allowed output for an unlicensed Part 15 FM device is 250 microvolts/meter at three meters.

Fined in Florida

A Lauderhill, Florida man has been issued a forfeiture notice in the amount of \$10,000 by the FCC for operating an unlicensed FM station at 95.9 from his home after ignoring his first NOUO and Notice of Apparent Liability (NAL).

Oregon Sweep Nets 3 on 1710 kHz

Two Portland, Oregon men and one Woodburn, Oregon man were issued NOUOs for operating unlicensed AM stations on 1710 kHz from separate residences. Agents measured the output of one station at 1,200 microvolts/meter at 320 meters, another at 8,000 microvolts/meter at 580 meters and the other a whopping 14,000 microvolts/meter at 50 meters. The maximum allowed for an AM Part 15 device is 30 microvolts at 30 meters. *Radio World Online* speculated that the three may have been playing pass-the-transmitter in order to avoid FCC detection and confiscation.

Another Ship Radio Malfunctions

Nearly every month the U.S. Coast Guard reports a malfunctioning VHF transceiver aboard a docked ship causing interference on the VHF distress frequency 156.800 MHz. This month’s loser was docked in Seattle, Washington.

PA CBer Caught with Linears

A Pittsburgh, Pennsylvania CB operator, whose signal was apparently getting into neighbors’ televisions and telephones, was visited by FCC field agents who, on inspection of the man’s station, found several linear amplifiers. According to FCC documents, the man admitted to having and using the amps as well as one in his car. He claimed he had a business repairing such equipment.

CBer Warned on Gear and Language

A CB operator in Enid, Oklahoma was issued a NOUO by the FCC for operating a non-certified transmitter at his residence. And, for good measure, they cited the CBer for indecent language. It was not clear from FCC documents if the swearing was heard on the air or after having had his station inspected. At any rate, everyone knows that swearing and linear amplifiers are reserved for 80 meters.

“Communications” is compiled by Ken Reitz, KS4ZR (kenreitz@monitoringtimes.com) from news clippings and links supplied by our readers. Many thanks for this month’s fine reporters: Anonymous, Rachel Baughn, Bob Grove, Norman Hill, Steve Karnes, Larry Van Horn and Jim Ward.