



Squelch Tales



Newsletter from the Merrymeeting Amateur Radio Association for October 2010

Support continues for Dan Michaud Ride

Brunswick: On the morning of August 28th a group of MARA volunteers with assistance from hams from the PAWA gathered on the mall to lend their continued support for the MARA oldest public service volunteer effort, the Dan Michaud Memorial Ride that helps raise funds for the Maine Hospice Council.

This year was the 25th time the event has been run. And the MARA has supported it since the first century (100-mile) ride in August of 1985. As you may know, Dan Michaud was one of the original members of the Merrymeeting Amateur Radio Association, an enthusiastic Ham and cyclist who became a Silent Key in 1984 after a battle with cancer.

This years even included a 100-mile and 50-mile bike ride in the mid coast area that included the town of Brunswick, Freeport, Durham, Lisbon Falls, Topsham, Bowdoin, Bowdoinham and Richmond. This year a walk was added, for folks not into biking, that used the walking path along the Androscoggin River in Brunswick.

This years ride went off without a hitch. And the efforts of the ham radio volunteers were much appreciated by the event organizers.



Thanks go to the following MARA folks:

- Al Corderman, W3ZD of Georgetown
- Jim McIrvin, N1IPA of Topsham
- John Munton, N1OIG of Brunswick
- Harry McNelley, N1TTT of Brunswick
- Donnie Dauphin, WD1F of Phippsburg
- Bruce Randall, W1ZE of Phippsburg

A special “THANKS” goes to the following PAWA folks for coming to the MARAs rescue at the last moment.

- Tom Berman, N1KTA of Portland
- Gene McAvoy, KG7XD portable Portland

Editors Note: I especially appreciate the support of my fellow hams for lending support to this worthy cause. As you may know, my XYL of 48 years passed away in May of this year and the loving care she and our family receives from the Hospice folks was a big help and comfort during that sad time, my thanks to you all. W1ZE



AA4AK's XYL on the mend

Brunswick: Steve Kerchel, AA4AK has passed along that his XYL, Nancy is on the mend from a out patient lump removal procedure during the first week of September. The procedure was a success and it appears that she will be fit to go in a few months.. Steve advised that he is the chief cook and bottle washer during Nancy's recovery period. We have seen Steve fading away is size the past six months and hope that he is providing his better half with the required nourishment for a speedy recovery.

We all wish Nancy a swift recovery!



Early Newsletter, an Editors note:

Please excuse this months early newsletter. As I indicated in the last issue, I will be on the road to W-6 land during the time the monthly newsletter gets sent out to you all. I will be heading west for several weeks, first reason to attend the wedding of the daughter of a childhood friend in Napa, California. In route and during the return trip I plan to do some sight seeing and visit old friends along the way. Oh yes, some are Ham Radio operators.

I plan to drive my Nissan Rogue-SUV across country because it has my IC-706MKIIG in it and I plan to do some mobile HFing on the way. If you were a mind, I would be happy to have HF schedules along the way with folks back in Maine.

Al Corderman, W3ZD will be back in New Orleans during that time period and asked me to swing through southern Louisiana so he can show me the good life in the Big Easy. I may just do that. I have a hankering for good gumbo and black beans-n-rice. I plan to be back in Maine by mid October, some time....

73, Bruce, W1ZE



ARES programs responded to requests for communications aid.

Over the years the equipment has changed, but the decentralized communications nets that ARES can create to blanket regions without the need for other infrastructure remain critical in emergency planning. Recognition of this capability has led to renewed formal agreements with DHS, FEMA, NOAA and other federal agencies. With over 20,000 of the country's 680,000+ Amateur Radio operators involved in ARES--all of them truly "amateur" and providing their time, services, knowledge and equipment totally uncompensated--they are more than worthy of recognition for their 75 years of community services in the worst of times.

You can find more information about ARES at: <http://www.arrrl.org/public-service>
Information about the anniversary is at: <http://www.arrrl.org/ares-anniversary>

Click <http://www.arrrl.org/current-contact-issue> for more information on celebration plans and resources. -- *Allen Pitts, W1AGP*



KS1R's 147.81 receiver working OK now

Oak Hill, Brunswick: After disappointing repeater performance during the Dan Michaud bike event, on October the 29th Harry, N1TTT and Bruce, W1ZE joined Bill "*on the hill*," K1MNW and his trusty service monitor to see what was going on with the Associations two-meter repeater receiver. Bill noted that the receiver had .15 uV of sensitivity but even with a duplexer, notch cavities and two pass-cavities the local (on the hill) pager transmitter was still raising the received noise floor and in turn degrading the receivers performance.

The team proceeded to replace the coax jumpers between the duplexer and the receiver but that did not help much. Bruce recommended taking out the receiver pre-amp and see what would happen. Bill did that and placed the notch cavity where the pre-amp was, just ahead of the receiver's input. The noise floor dropped considerably. Bill suspected that the preamp's 12db gain might have been swamping the front end of the receiver and causing the front end RF

ARES 75th Anniversary

By Allen Pitts, W1AGP, ARRL Public Relations Manager

ARES® is celebrating its 75th anniversary from September through December. ARRL's ARES program has provided emergency communications for agencies such as the American Red Cross, Salvation Army, countless Emergency Operations Centers and others in the worst of times. In events from ice storms to Hurricane Katrina, when normal communications systems were down or overloaded, the Amateur Radio operators of the



stage to go into oscillation and injecting internal IMD products. His trusty service monitor said the receiver's sensitivity was now .2 uV at 12db SINAD, Just what the receiver specifications said it should be.

It appeared that the repeater was working OK but time would tell. In the following two weeks several folks tested the repeaters coverage and it seemed to perform pretty well. On September 4th, Bruce took a drive up 295/95 to Waterville and tested the repeater performance all the way. The repeater had solid coverage from Brunswick to the Winthrop street exit in Augusta. Coverage was a bit scratchy between there and the Augusta Civic Center but came back in pretty well up to the Sidney town line. After that location performance dropped of considerably. Bruce could access the repeater from Colby College but the return signal was weak.

The return trip down 95 and Route 27 along the Kennebec River appeared to have the same coverage we had experienced in years past.

Donnie, WDI1F experienced reliable coverage from his house in Phippsburg to his employer's facility in Westbrook.

By Jove, I think we got it!

Another "THANK YOU" goes to Bill with his trusty service monitor and 2-way radio skill-set for solving another pesky issue in the repeater building.



News from Newington

ARRL on FCC's Review of CB Rules

From ARRL HQ 09/09/2010

In June the FCC opened a proceeding -- WT Docket No. 10-119 -- "to simplify, streamline, and update the Part 95 rules to reflect technological advances and changes in the way the American public uses the various Personal Radio Services." The Citizens Band (CB) Radio Service is one of several Personal Radio Services regulated by Part 95. Three of the CB-related issues raised in the *Notice of Proposed Rule Making* ([NPRM](#)) are of interest to the Amateur

Radio Service. On September 3, the ARRL filed [comments](#) limited to these issues.

Citizens Band vs. Amateur Radio Equipment

In the *NPRM*, the FCC sought to consolidate the rules pertaining to the modification of certificated CB equipment. The Commission noted that CB equipment that has been modified by the CB operator -- or persons other than the manufacturer -- to operate on unauthorized frequencies or to operate with higher power than authorized often causes interference to other radio services. "Indeed, there are many recent instances of the operation of modified CB equipment (or equipment imported or manufactured domestically with the inherent capability of operating outside the HF CB channels) by unlicensed individuals in the Amateur Radio Service bands," the ARRL agreed, saying that this interference most often occurs in the 28.000-28.500 MHz segment of the amateur 10 meter band.

While the ARRL certainly supports the Commission's proposal to clarify the Part 95 rules relative to the prohibition on modification of certificated CB equipment, "much of the problem of misuse of CB equipment is due to the lack of enforcement of equipment authorization and marketing rules, rather than the language of the rules themselves," the ARRL maintains. "CB shops and truck stops, for example, are often found to be actively marketing and selling modified or illegally imported equipment which is actually intended to operate not on CB channels, but on amateur or government frequencies between 27.415 MHz and 28.500 MHz. Often, this equipment is not marketed as CB equipment, but instead is marketed inaccurately as Amateur Radio equipment. It is typically neither used by nor useful to licensed radio amateurs, and it cannot be accurately described as Amateur Radio equipment."

The rules should, and currently do, prohibit the marketing of unauthorized CB equipment (Section 95.603) and the modification of CB equipment to add additional transmit frequencies (Section 95.607): "However, those who seek to circumvent the rules often do so by referring to their equipment not as CB or Part 95 equipment at all, but as Amateur Radio equipment. The latter does not require, with a few exceptions, a

grant of equipment authorization prior to marketing, sale or use.”

The ARRL suggests that the present rules regarding certification of CB equipment and the modification of legitimate CB equipment are “generally adequate. Enforcement of those rules is, however, complicated and resource-intensive. Additional equipment authorization rules are unnecessary. Nor is it desirable to implement equipment authorization requirements for the Amateur Radio Service. It is important to insure that Amateur Radio equipment is marketed solely to radio amateurs, however. Furthermore, the determination of what constitutes Amateur Radio equipment for enforcement purposes should include the criterion that the equipment is used and useful, and is intended for use solely (or at least principally) by licensed Amateur Radio operators.”

The ARRL pointed out that “it is vitally important in any case to minimize, and to maintain the utmost flexibility in, equipment authorization requirements for Amateur Radio equipment, because Amateur Radio is in essence an experimental radio service. It is important not to make amateur station equipment unavailable or expensive, nor to stifle experimentation by application of equipment authorization requirements to Amateur Radio equipment generally.” But at the same time, the ARRL noted that “it is not desirable to legitimize or encourage the actions of unscrupulous manufacturers who market products labeled as ‘Amateur Radio equipment’ which are neither useful to, nor intended for use by licensed radio Amateurs.”

According to the ARRL, these manufacturers “seek to subvert the Commission’s spectrum management policies by merely labeling their products ‘Amateur Radio equipment’ when it clearly is not such, but instead is intended for use by unlicensed persons without regard to the Commission’s rules.”

Combination Radios

The ARRL supports the Commission’s proposal to prohibit the certification of radios that are intended to transmit on both Personal Radio Service channels and on Part 97 frequency allocations. Noting that it is undesirable in general to combine transmit capability in radios intended for use in a licensed radio service with

transmit capability in radios intended for use in a service licensed by rule -- such as the CB service -- the ARRL agreed with the Commission’s finding that this invites unauthorized operation on frequencies allocated to the licensed radio service by users in the unlicensed service.

“An example is the marketing of radios which include both FRS and GMRS channel transmit capability,” the ARRL explained in its comments. “This practice has resulted in numerous instances of operation by unlicensed individuals on GMRS frequencies. ARRL is very much concerned that instances of unlicensed operation on Amateur Radio frequencies, which create a difficult and time-consuming enforcement problem when they occur, would increase considerably if Part 95 equipment was permitted to include Amateur Radio frequencies as well.” The ARRL strongly recommends that the Commission “continue to prohibit, without exception, the certification of Part 95 radios which include as well the capability to transmit on Amateur Radio frequencies.”

Long Distance CB Communication

In the *NPRM*, the Commission discussed the current prohibition on CB communications between two stations located more than 250 kilometers apart. The rule, Section 95.413(a)(9), is intended to discourage CB skywave communications. This rule, the *NPRM* states, is necessary because of the need for frequency reuse (what the Commission refers to as a “commons” band regulatory structure). The ARRL supports the existing Part 95 rule against long-distance CB communication.

But, as the *NPRM* acknowledges, it is exceptionally difficult to enforce the rule, given the 27 MHz location in the radio spectrum where the CB band was placed many years ago, and the regular occurrence of long-distance propagation. “The *Notice* asks how to address this on a regulatory basis, and asks whether, for example, power reductions or prohibitions on the use of directional antennas should be implemented,” the ARRL said in its comments. “The presence of skywave propagation at 27 MHz has, as the Commission notes, enticed some to utilize unlawful linear amplifiers on CB transmitters, and to deliberately attempt to conduct long distance skywave communications despite the rule limiting path distance.”

In its comments, the ARRL suggests that there is not a good regulatory solution to the skywave communications issue in the HF CB service, “other than moving it to a more appropriate segment of the radio spectrum. A power reduction is not helpful because at 27 MHz, during periods of skywave propagation, even very low power transmissions are capable of exceptionally long distance communications. As to the use of directional antennas, it is quite clear that directional antennas in the CB service increase frequency reuse by creating nulls in the antenna pattern in azimuths other than on the desired communications path. Thus, the use of directional antennas in the CB service should be preserved as a means of encouraging frequency reuse.”

The ARRL put forward the idea that the best path to Section 95.413(a)(9) compliance is a non-regulatory solution: “The Amateur Radio Service provides a convenient, positive and appropriate option for those CB users who are interested in long distance radio communications. There is no longer a Morse telegraphy examination requirement in the Amateur Radio Service for licensing. The Amateur Radio Service is and always has been the proper radio service for those interested in HF communications using long distance skywave propagation and other techniques. It is suggested, therefore, that the Commission should encourage those who might be tempted to conduct long-distance CB communications to instead obtain an amateur license. Such migration would leave the HF CB band available for its intended short-distance communications purposes, and those who might otherwise be tempted to utilize the CB band for long-distance propagation would be directed to a more constructive and educational alternative.”

ARRL Introduces First Challenge Coin

From ARRL HQ 09/07/2010

This month, the ARRL and the Amateur Radio community celebrate the 75th anniversary of the Amateur Radio Emergency Service ®, or ARES®. To help commemorate this milestone, the ARRL has introduced an anniversary Challenge Coin. The die-struck, 1.5-inch brass

coin depicts the ARES 75th anniversary logo in gold with red, white and blue color fill, while the reverse shows the ARRL diamond logo against a hemisphere of the world.

Around the perimeter of the ARES® logo are the words *Ready, Resilient* and *Responsive*. “These words represent the critical need that ARES® activities have provided, and will continue to provide into the future,” said ARRL Emergency Preparedness and Response Manager Mike Corey, W5MPC. “The Challenge Coin honors the service of ARES® volunteers and all Amateur Radio operators who respond to the call of public service. We hope ARES® volunteers will enjoy the honor of having the first Challenge Coin issued by the ARRL.”



While there are many stories about the origin and history of challenge coins, these medals have been popular with organizations and leagues for decades. “Challenge Coins are probably most common among the military and civil service organizations,” explained ARRL Marketing Manager Bob Inderbitzen, NQ1R. “These mementos are often used to commemorate a special occasion or to show loyalty among individuals that share pride and affinity for a particular service or agency. The coins are even popular among police, fire and EMS officials.” The new ARRL Challenge Coin is struck with the year-of-issue, which in this case is 2010. Five diamond shapes on the coin’s head signify the five ARRL pillars: Public Service, Advocacy, Education, Technology and Membership. “We hope this is the first of a series of Challenge Coins for the ARRL,” said Inderbitzen. The ARES® 75th Anniversary Challenge Coin -- as well as commemorative T-shirts and mugs are available directly from ARRL.

