



# SQUELCH TALES



## MERRYMEETING AMATEUR RADIO ASSOCIATION NEWSLETTER FOR MAY 2016



### Vessel with Rich Ham History - the Bowdoin - Being Refurbished for Further Exploring

From ARRL website



The schooner *Bowdoin*, which has a prominent place in early Amateur Radio history, will be relaunched this spring. The vessel relied on Amateur Radio operators for communication during explorer Donald B. MacMillan's Arctic Expedition of 1923 and on the MacMillan-McDonald-Byrd Expedition of 1925. Now it's undergoing extensive renovation and refitting in Maine. Named after MacMillan's alma mater, Bowdoin College, the *Bowdoin* today is the official vessel of the State of Maine and the **flagship** of Maine Maritime Academy's Vessel Operations and Technology Program, which readied the vessel for refitting last year.

According to an article in the February 25 edition of *The Ellsworth American* newspaper, work is underway at a Camden, Maine, shipyard on the deck and hull of the 95-year-old schooner, built in East Boothbay, Maine, in 1921. The vessel's diesel engine — a later amenity — is being rebuilt by Maine Maritime Academy students. The *Bowdoin* is set to relaunch around June 1.

In 1923, MacMillan had turned to the ARRL for help in outfitting his expedition with better wireless gear, and, as Michael Marinaro, WN1M, explained in his June 2014 *QST* article, "**Polar Exploration**," that help "was enthusiastically provided. Hiram Percy Maxim and the Board agreed to furnish support as well as recruit an expert operator to accompany the expedition. Donald H. Mix, 1TS, of Bristol, Connecticut was chosen for the task."

League Board member M.B. West custom designed the equipment, which was built by radio amateurs at his firm, Zenith Electronics. The transmitter operated on medium-wave frequencies with a power of 100 W and used the call sign WNP — for "Wireless North Pole." As Marinaro explained in his article, with Mix as the ship's radio operator, "WNP transmitted weekly 500-word press releases and listings of stations worked and heard. Once received by amateur stations, these reports were delivered to local affiliated newspapers of the North American Newspaper Alliance; from there, they were distributed syndicate-wide by telegraph."

In 1925 the *Bowdoin* headed to Greenland. "The outstanding accomplishment of the expedition was in the sphere of radio," Marinaro wrote. "Utilizing short waves, the expedition was in consistent contact with the outside world throughout the journey, to the delight of the amateurs who were able to work them. The phenomenal success proved to the Navy that short waves were definitely superior to the long and ultra long waves on which the fleets had been relying."

The *Bowdoin* renovation is being paid for through the Bowdoin Centennial Campaign, which, according to *The Ellsworth American* article, aims “to keep the schooner exploring, sailing, and training for another century.

The August 2008 *QST* “Old Radio” column, “Where in the world is the *Bowdoin*?” offers additional details on the venerable vessel and its activities that have extended into the 21st century. A June 1959 *QST* article, “The *Bowdoin*’s Last Voyage,” told of plans to permanently park the vessel at the Mystic Sea Museum in Connecticut. .



## Why You Should Get Your Extra Class License

By Dan Romanchik, KB6NU

The Amateur Extra Class license is the highest class of license in the United States, and perhaps the world. Many hams—even hams that live outside the U.S.—aspire to pass the test and be awarded one.

There wasn’t always an Amateur Extra Class license. The Extra class license, as we know it today, was created as part of the 1951 license restructuring, that also created the Novice and Technician Class licenses. (In 1951, the Novice license was the “beginner’s license.” To get a Technician Class license, you had to pass the written test that General Class operators had to pass.)

Although it gave an operator no additional privileges, to get an Extra Class license, one had to:

- \* Pass a 20 wpm code test (Generals had to pass only a 13 wpm code test).
- \* Pass a longer and more difficult written examination than the General Class exam.
- \* Have at least two years of experience as a licensed radio amateur.

Today, without the code test and the experience requirement, many hams upgrade to Extra Class as soon as they can. Some even pass the Technician Class, General Class, and the Amateur Extra Class exams in a single test session.

So, what’s the attraction? Why should you upgrade to Extra?

One of the reasons that you should upgrade to Extra is that you get use of the entire 80m, 40m, 20m, and 15m bands. Portions of those bands, such as 3.6 – 3.7MHz in the 75m band and 14.150 – 14.175Mhz in the 20m phone band, are reserved exclusively for Extra Class licensees. Extra Class operators also have exclusive privileges in the CW portions of the 80m, 40m, 20m, and 15m bands. These are the frequencies where the DX stations hang out.

Another reason to get your Extra Class license is that only Extra Class licensees can administer General Class and Extra Class license exams. General Class operators can become Volunteer Examiners (VEs), but they are only allowed to administer Technician Class exams.

Another reason you might want to get an Extra Class license is to get a fancy vanity callsign. Only Extra Class operators can apply for 1×2 or 2×1 callsigns, such as W8RP or KT8K. A short, snappy callsign can help you work more DX or improve your contest scores.

Whatever your reason, studying for the Extra Class exam will open your eyes to many aspects of the hobby that you may not be familiar with. And, as you work your way through the material, you’ll learn things that make you a better amateur radio operator and enable you to enjoy the hobby more. It’s not easy, but in the end, an Extra Class license will help you have more fun with amateur radio.

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*Dan, KB6NU is the author of the "No Nonsense" line of amateur radio license study guides, a prolific blogger ([www.kb6nu.com](http://www.kb6nu.com)), and an active CW operator in the Extra Class portion of the HF bands. If you have any comments, questions, compliments, or complaints, email him at [cwgeek@kb6nu.com](mailto:cwgeek@kb6nu.com).*



# **ARRL Tells FCC to Restore Balance of Modes on 80 and 75 Meters**

In comments filed on March 23 on its Petition for Rule Making (RM11759) seeking changes to 80 and 75 meters, the ARRL has told the FCC that its primary objective is to "rebalance" the bands by correcting a 10-year old FCC error.

"ARRL's proposal is not fairly viewed as a proposal to take anything away from anyone," the League's comments assured. "It is more properly viewed as the effectuation of a fair, equitable, and efficient 'band plan' looking forward for the foreseeable future that balances everyone's needs, and which remedies a plainly unfair plan, imprudently created in the 2006 Report and Order in WT Docket 04-140." The Report and Order can be found on the web at <http://apps.fcc.gov/ecfs/comment/view?id=5513680269> .

Prompting the League's assurances were comments filed on the ARRL's Petition by a number of Amateur Extra class licensees, who felt that refarming 3600 to 3650 kHz for data modes could prove to be a disincentive to General licensees to upgrade. Others commenters saw it as an unfair spectrum grab. The ARRL noted that prior to 2006, the band was evenly divided between RTTY/data and phone/image subbands, with the RTTY/data subband extending from 3500 to 3750 kHz, and the phone/image subband extending from 3750 to 4000 kHz.

The 2006 FCC Report and Order "substantially altered" what the League called "this even division of emission types." In outlining the history of the proceeding, the ARRL pointed out that the FCC's Notice of Proposed Rulemaking in Docket 01-140 would have shifted the line between the 80 meter RTTY/data subband and the 75 meter phone/image subband from 3750 kHz to 3725 kHz, pursuant to a 2002 ARRL Petition for Rule Making, RM-10413. This would change the ratio of spectrum between phone/image and RTTY/data segments on 75/80 meters from 50/50 to 55/45, and it is what the FCC proposed in its NPRM.

In its Report and Order in Docket 04-140, however, the FCC made "a very substantial and unjustifiable departure" from what it had proposed in its NPRM, the ARRL recounted. The Commission expanded the phone/image subband at 75 meters to 3600-4000 kHz, and it reduced the 80 meter RTTY/data subband to 3500-3600 kHz, eliminating RTTY operation above 3600 kHz and changing "the entire dynamic of this band," the League said.

The FCC had said in its proposal that no licensees would lose operating privileges. Nonetheless, the FCC's phone band expansion reduced by 100 kHz the spectrum between 3500 and 4000 kHz that was previously available to General class licensees, while Advanced licensees lost 75 kHz. In an apparent FCC oversight, the Report and Order completely eliminated access by automatically controlled digital stations (ACDS) to 3620 to 3635 kHz. A subsequent FCC Report and order and Order on Reconsideration only made the situation worse by subband." replacing the deleted ACDS segment with 3585-3600 kHz.

"It resulted in a sudden and severe dislocation of traffic-handling nets using telegraphy, without advance planning or notice," the ARRL said. "It disaccommodated net participants with General and Advanced class licenses; and it worsened the effect of the overexpansion of the 75 meter phone/image subband . "replacing the deleted ACDS segment with 3585-3600 kHz.

The result, the ARRL noted, has been "a shortfall in available RTTY/data spectrum on 80 meters" that has created a significant obstacle to narrowband digital data communications and experimentation. The League said its current Petition "simply restores that which was disrupted in 2006 in error."

In its comments, the League conceded that compromises are inevitable in managing a heavily used band like 75/80 meters, no matter the band planning approach. "Looking forward, it is necessary, in order to encourage experimentation with and expand the use of digital communication techniques, to rebalance the 75 and 80 meter subbands," the ARRL concluded.



# Boxboro 2016!

**September 9, 10 & 11**  
**Tickets Now On Sale**

The Boxboro convention committee announces that tickets for the 2016 convention are now on sale. You can purchase general admission tickets (\$15) in-store at:

Ham Radio Outlet, 224 N. Broadway D12, Salem, NH, (off of I-93 between exits 2 or 3)  
Electronics Plus, 480 King St, Littleton, MA. (off of I-495 exit 30)

Ticket also available online & additional info at <http://www.boxboro.org>:

General Admission \$15 (good for the entire convention)

Flea Spaces \$10 (good for the entire convention)

Friday DX/Contest Dinner \$40 ea or 8/\$280

Saturday Grand Banquet \$40 ea or 8/\$280

Special Convention : General Admission + Friday Dinner + Saturday Banquet  
\$90





NIAIA

*This is a copy of last years award certificate awarded to the American Red Cross NEQP Multi-Op Contest team consisting of MARA members AA4AK, KX1I, AB1RA and N5AGG.*

Again this year the ARC Contest team will be operating Multi-op single-transmitter, SSB/CW, from the Red Cross, N1TRC station in Topsham, on May 7-8. All MARA members and their ham friends are welcome to take a turn. Come join the effort or participate from your own QTH. For more info on the New England QSO Party (NEQP), go to <http://www.neqp.org/>

**ARRL New England Division Manager, Tom Frenaye, K1KI adds the following:**

***The NEQP is a great time to check out antenna systems and offers a moderately paced opportunity to work new states and countries. You'll find a wide variety of participants, from newcomers to experienced contesters, all interested in making contacts with New England stations.***

***We're working to make sure that all of the New England counties are active again this year and would appreciate your help. Get on for at least an hour or two and join in on the fun. Please let me know if you can put in any time at all so we can work on activity from the rarest counties. Will you be QRV? Let us know which county you'll be on from with a message to [info@neqp.org](mailto:info@neqp.org)***

***Oh yes, the NEQP is also lots of fun when mobile. Every time you cross a county line the action starts over again. It's amazing what a 100w radio and mobile whip can do.***

***The QSO Party is 20 hours long overall, in two sections with a civilized break for sleep Saturday night. It goes from 4pm Saturday until 1am Sunday, then 9am Sunday until 8pm Sunday. Operate on CW, SSB and digital modes on 80-40-20-15-10 meters. For each QSO you'll give your callsign, a signal report and your county/state.***

***Last year we had logs from 139 New England stations and 275 more from around the country and world.***

***The full rules are here -> <http://www.neqp.org/rules.html>***

***The 2015 results have been on-line for a week or so and the results since 2002 are also available -> <http://www.neqp.org/results.html>***

***It's just a month until the 2016 NEQP. Please make some QSOs even if you don't want to send in a log.***

***Thanks!***

***73 Tom/K1KI***

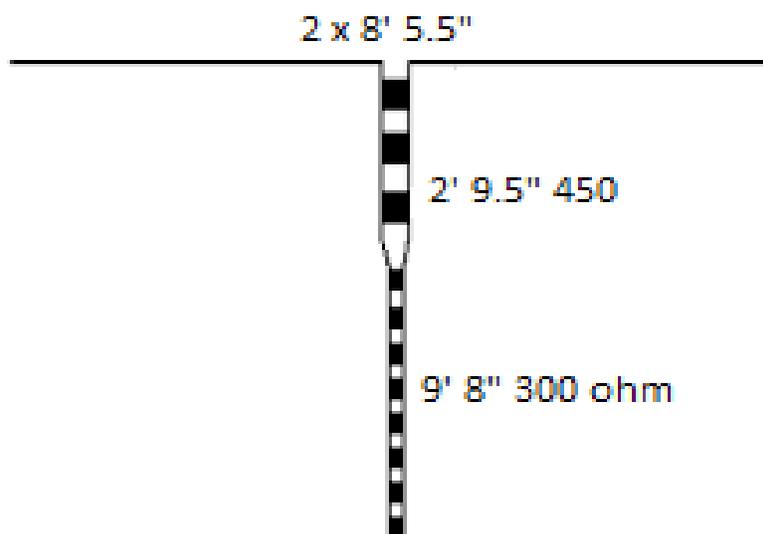


# Dual Band (10 & 6) Doublet

Submitted by Bruce Randall, W1ZE

Originally designed by Zilvis Atkociumas, LY2SS the below homemade doublet (dipole) provides a close to 50-ohm match on 10, 6 and 4 meter bands. Since we here in the US do not have access to the four-meter (70.2–70.4 MHz) band I refer the design as a Dual Band Doublet. The antenna is fed with two sections of ladder (window) line, one 450 and one 300 Ohm, cut to specific lengths to achieve an acceptable SWR on the two bands.

## 10M & 6M Doublet



fed by 50-Ohm coax, any length  
with or without a 1:1 balun

For those of you with a HF + 6 meter transceivers with built-in automatic antenna tuner this antenna should work nicely due to the close match to 50 ohms. No external antenna tuner (transmatch) should be needed.

73, W1ZE



# KQ1L goes Green



Dave Hawke, KQ1L of Augusta has hosted our Associations website ([www.ks1r.org](http://www.ks1r.org)) at no cost for the past several years. Recently he transferred our site to a new energy efficient server to reduce power consumption at his almost all solar/battery back-up/grid-tied home. With the old server the house had a total load of 600 watts, after transferring to the new server the load dropped to 440 watts. That's a saving of ~100KW per month (mostly heat). To see a real-time representation of the KQ1L solar/battery/grid-tied system, go to: [www.conysolar.com](http://www.conysolar.com). A big thank you came from Dave to the MARA for allowing him to make this transition. We all return a big thank you to you Dave for all you have done for the MARA.



## W1DYJ to Present Antenna System Modeling at May Meeting

During the May MARA meeting Larry Banks, W1DYJ will make an antenna system modeling presentation that will include some history about why he started modeling antennas. It will highlight three software packages available in the ARRL Antenna Book: TLW, YW, and HFTA, using one of Larry's home brew antennas as an example. Hopefully it will help you get a start at understanding your own antenna systems. The presentation will take about 35 to 40 minutes. Come and get a good seat.

