



SQUELCH TALES



NEWSLETTER FROM THE MERRYMEETING AMATEUR RADIO ASSOCIATION FOR MAY 2019



**New England Amateur Radio
Festaival
May 3rd & 4th
34 Stage Rd., Deerfield
Fairgrounds, NH
Hope to see you there**

Brunswick American Legion wants to start a Ham Club but needs some help



By Scott Higgin, W3VNE

The Brunswick Am. Legion post in Brunswick is trying to start a radio club. We are looking for donations of a M/70cM FM Radio, antenna and coax, plus an HF rig and antenna and tuner. If you know of any equipment or willing to donate such, it would be greatly appreciated.

POC = myself, Scott Higgins, W3VNE at:
scottdhiggins1@gmail.com

73, *Scott D. Higgins*



NEW ENGLAND QSO PARTY May 4-5, 2019



2000z Saturday until 0500z
Sunday (4pm EDT Saturday until 1am EDT
Sunday) 1300z Sunday until 2400z Sunday (9am
EDT Sunday until 8pm EDT Sunday)

Right after NEAR-FEST come join the fun
and help put Maine in play especially
Cumberland, Sagadahoc & Lincoln counties.

For more information go to:
<https://www.neqp.org/>



Whither Digital Radio Mondiale?

In a recent issue of QST, Steve Ford, WB8IMY, took a look at the forgotten Digital Radio Mondiale (DRM) system. Digital broadcasting was supposed to be the life preserver for international shortwave broadcasters facing the reality of rising costs and shrinking audiences. In 1998, broadcasters, equipment manufacturers, regulators, and others

formed the DRM consortium to create a specification for digital shortwave broadcasting that might stem the growing shift to internet broadcasting and revive listener interest.

DRM promised an FM-quality signal that



also could convey text information such as program titles and news headlines.

DRM signals heard on a conventional AM receiver sound like wide-band noise. The DRM signal carries three separate channels -- a primary audio channel, and two subsidiary channels, one for essential decoding data and a third service description channel.

Unfortunately, DRM failed to halt the decline of shortwave broadcasting; it was too little, too late. In addition, consumer electronics manufacturers lacked enthusiasm for the new format, so an audience for DRM never coalesced.

Some international HF broadcasters still use DRM on a regular basis. The list includes the BBC, Radio France International, and All India Radio. Decoding a DRM signal is far easier today than it was a decade or so ago, and the rise of software-defined radio (SDR) has provided new avenues for DRM listening. Many SDRs specifically include DRM as a reception mode. Radio amateurs early on experimented on HF using DRM-derived software called *WinDRM*. Much has

changed over the intervening years, and today the HF digital voice application of choice is [FreeDV](#). If you hear buzzing signals at 14.236 MHz, chances are it's a *FreeDV* QSO.

For more information on this topic, see "Eclectic Technology" in the April 2019 issue of *QST* (p. 65).



DoD to Transmit Interoperability Exercise Info via WWV/WWVH

ARRL Letter of 03/29/2019

The US Department of Defense (DOD) plans to start making use of a provisional time slot on WWV and WWVH to announce upcoming HF military communication exercises and how the Amateur Radio community can become involved in them. The announcements will occur at 10 minutes past on WWV and at 50 minutes past on WWVH. WWV and WWVH transmit on 2.5, 5, 10, 15, and 20 MHz.

“DOD’s use of the broadcast time slot on WWV/WWVH will benefit the MARS program’s mission of outreach to the Amateur Radio community,” said US Army Military Auxiliary Radio System (MARS) Program Manager Paul English, WD8DBY. “The actual messages to be broadcast are coordinated by the DOD Headquarters that the MARS program supports.”

The initial announcements are set for the period April 20 – May 3, which coincides with the “Vital Connection” interoperability exercise to be held in Wisconsin. Future time slots will coincide

with the Vital Connection exercise Ohio in June; DOD COMEX 19-3 in August, and the DOD COMEX 19-4 in October. Following the proof of concept this year, DOD anticipates making use of the WWV/WWVH broadcast time slot full time, year-round.

At the outset, broadcast messages will likely be static. For future exercises, announcements could be updated throughout an exercise. The messages will direct listeners to a specified website to provide reception reports and feedback.

The reception report will also ask the listener to submit a survey that will be shared among DOD, MARS, and WWV/WWVH personnel. English said that the survey will ask listeners questions about how often they listen to WWV/WWVH signals, how they use them, and what types of messages they would like to hear, but he notes that the survey is still under development.

“We want to provide feedback to WWV/WWVH to improve situational awareness of who is using their service and how it’s being used, as well as future considerations,” English said.



FIELD DAY ANYONE?

At the April 9th MARA meeting the topic of Field Day was raised by Association Pres. Harry McNelley, N1TTT to see if there was any interest in putting KS1R on the air the weekend of June 29th & 30th. The discussion seemed to indicate, if we can get folks out and have them operate maybe we could do a 1F or 2F event. It was decided that we should ask MARA members and friends if they would commit to participating. If we get a goodly number we would do it. BUT, if we only

get the half dozen we should not attempt to do Field Day 2019.

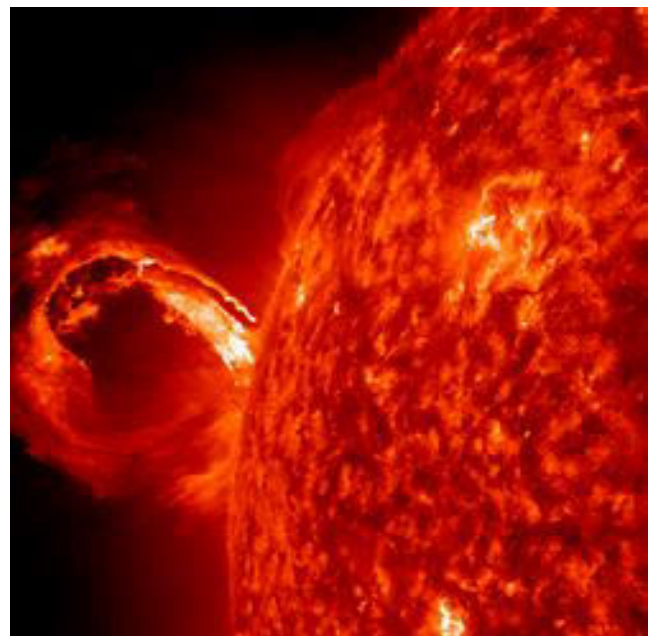
If that is the case and the few that want to operate during the event the recommendation is that you operate from home or join another clubs Field Day activities.

If you would like to have the MARA do field Day at the Red Cross facility, let Harry N1TTT know you want to participate and willing to help operate.



Solar Cycle 25 Predicted to be Similar to Cycle 24

From ARRL Newsletter April 11th



2013 coronal mass ejection (photo by NOAA)
Scientists predicting the sun's activity for Solar Cycle 25 say it's likely to be much like that of current Cycle 24, which is declining and predicted to bottom out in 2019 or 2020. Solar Cycle 25 Prediction Panel experts said Solar Cycle 25 may get off to a slow start, but is anticipated to peak between 2023 and 2026 with a sunspot range of 95 to 130. This is well below the typical average of 140 to 220 sunspots per solar cycle. The panel expressed high confidence that the coming cycle should break the trend of weakening solar activity seen over the past four cycles. The Solar Cycle

Prediction Panel forecasts the number of sunspots expected for solar maximum, along with the timing of the peak and minimum solar activity levels for the cycle. The outlook was presented on April 5 at the [2019 NOAA Space Weather Workshop](#) in Boulder, Colorado.

"We expect Solar Cycle 25 will be very similar to cycle 24: Another fairly weak cycle, preceded by a long, deep minimum," said panel co-chair Lisa Upton, a solar physicist with Space Systems Research Corp. "The expectation that Cycle 25 will be comparable in size to Cycle 24 means that the steady decline in solar cycle amplitude, seen from cycles 21 - 24, has come to an end and that there is no indication that we are currently approaching a Maunder-type minimum in solar activity."

The solar cycle prediction gives a rough idea of the frequency of space weather storms of all types, from radio blackouts to geomagnetic storms and solar radiation storms. In addition to its effects on Amateur Radio signal propagation, space weather can affect power grids; critical military, airline, and shipping communications; satellites and GPS signals, and can even threaten astronauts through exposure to harmful radiation.

Solar Cycle 24 reached its maximum in April 2014, with a peak average of 82 sunspots. The sun's northern hemisphere led the sunspot cycle, peaking more than 2 years ahead of the southern hemisphere sunspot peak. Given that the sun takes 11 years to complete one solar cycle, this is only the fourth time that US scientists have issued a solar cycle prediction. The first panel convened in 1989 for cycle 22.



For Solar Cycle 25, the panel hopes for the first time to predict the presence, amplitude, and timing of any differences between the northern and southern hemispheres on the sun, known as hemispheric asymmetry. Later this year, the panel will release an official sunspot number curve showing the predicted

number of sunspots during any given year and any expected asymmetry. The panel will also look into the possibility of providing a solar flare probability forecast.

"While we are not predicting a particularly active Solar Cycle 25, violent eruptions from the sun can occur at any time," said Doug Biesecker, panel co-chair and a solar physicist at NOAA's Space Weather Prediction Center ([SWPC](#)). [Visit](#) the SWPC to obtain the latest space weather forecast. Read [more](#). -- Thanks to NOAA



Amateur Radio Recognition Day at



the State Capitol

In early April several members of the Maine Amateur Radio community were privileged to receive recognition for the service Maine Hams provide to their communities. In the above photo are Maine hams Eric Emery, KC1HJK; ARRL Maine Section Manager Bill Crowley, K1NIT; Bill Mann, W1KX and George Szadis, K1GDI. They were joined by Maine 14th District State Senator Shanna Bellows,

It is good to be a Maine Ham!



ARRL & FCC Sign Memorandum to

Implement New Volunteer Monitors

ARRL and the FCC have signed a Memorandum of Understanding (MOU) that paves the way to implement the new and enhanced Volunteer Monitor program. The memorandum establishes the Volunteer Monitors (VMs) as a replacement for the Official Observers (OO) program. Current OOs have been encouraged to participate in the new program. "We are excited by the opportunity to codify our partnership with the FCC and to work together to achieve our mutual interests of protecting the integrity of our Amateur Radio bands," said ARRL President Rick Roderick, K5UR. "This Memorandum of Understanding will serve as the foundation for a new level of partnership on this very important issue."

ARRL has contracted with retired FCC special counsel and former Atlantic Division Vice Director Riley Hollingsworth, K4ZDH, to oversee the ARRL's role in the development and implementation of the VM program.

Approved by the ARRL Board of Directors at its July 2018 meeting, the new VM program is a formal agreement between the FCC and ARRL in which volunteers trained and vetted by the ARRL will monitor the airwaves and collect evidence that can be used both to correct misconduct or recognize exemplary on-air operation. Cases of flagrant violations will be referred to the FCC by the ARRL for action in accordance with FCC guidelines.

The intent of this program is to re-energize enforcement efforts in the Amateur Radio bands. It was proposed by the FCC in the wake of several FCC regional office closures and a reduction in field staff.

"Under this program, the FCC will give enforcement priority to cases developed by the VM program, without the delay of ARRL having to refer cases through the FCC online complaint process," Hollingsworth said.

Hollingsworth has identified three phases to the program:

1. The Development phase will include drafting a mission statement, clearly defining the ARRL's and FCC's requirements and needs as part of the program, writing a job description for volunteer monitors, and developing a training manual for VMs.

2. The Solicitation and Training phase will involve identifying the geographic locations where volunteer monitors will be most needed, soliciting applications and guidance from Section Managers in reviewing applicants. (Those currently volunteering as Official Observers are invited to apply for appointment as Volunteer Monitors.)

3. The Implementation phase will involve having the volunteers provide field reports to ARRL, with staff offering guidance to VMs to ensure that the information collected meets requirements for FCC enforcement action.

Hollingsworth has committed to FCC and ARRL officials to ensure the adequacy of training for the new positions, to review the quality and utility of Volunteer Monitor submissions to the FCC for enforcement actions, and to advocate for rapid disposition of cases appropriately submitted to the FCC.

ARRL officials estimate that within 6 to 9 months the first Volunteer Monitors will be in place and ready to begin their duties.



