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By Greg Butler, KW6GB – 1 January 2019

# **Description**

Winlink Wednesday is a weekly amateur radio digital net in Virginia where check-ins are accomplished by using the Winlink (global email via amateur radio) system.

# **Purpose**

The primary purpose of Winlink Wednesday is to encourage the regular use of the Winlink among amateur radio operators in Virginia. Although participants from outside of Virginia take part each week, out-of-state check-ins are not counted in statistics or plotted on the participant map generated each week. Operators from outside of Virginia are welcome to participate as long as they wish, but are encouraged to start a similar net in their own state to broaden the use of Winlink even further.

Regular practice in the use of Winlink is heartily encouraged, in all of its various modes currently available to the end user, as well as any modes that may be developed by the Winlink Development Team or acquired by the amateur in the future. These include, but are not limited to, Packet, Winmor, ARDOP, VARA, and PACTOR.

The Facebook group "Virginia EmComm" also provides a forum for assistance in station setup and technique as well as allowing for a free exchange of ideas.

# **Participation**

Check-ins may be submitted anytime between 0000 and 2359 (ET) each Wednesday. The use of Winlink Express client software is preferred, but alternative software packages are available, possibly with limited features. Messages may be sent by accessing any RMS station (Winlink gateway) that the participant can reach. These are referred to as "RMS Check-ins." The message format for a "Standard Check-in" is as follows:

To: KW6GB

Subject: Winlink Wednesday Check-In

Message body:

call sign, first name, city or town, county, state (HF or VHF, etc.)

*Message body example:* 

KM4DC, Don, Reston, Fairfax, VA (HF)

The format of the message body is important because it is copied and pasted directly into the roster, which is distributed on Thursdays (see "Net Results," below).

On the first Wednesday of each month, check-ins that include a brief weather snapshot on the second line of the message are requested, though not required.

Weather snapshot message body example: K4YOU, Bob, Virginia Beach, VA, (HF) 0841L, Clear, Sunny, Calm Winds, 41°F

On the third Wednesday of each month, check-ins that use an attached, Winlink-native ICS-213 form are requested, though not required.

### *ICS-213 check-in example:*

General Message (ICS 213) Form Instructions					
1. Incident Name: Winlink Wednesday Msg #: N4ACK-75					
2. To (Name/Position): KW6GB, Net Control					
3. From (Name/Position): N4ACK, Participant					
4. Subject: Winlink Wednesday Check-in	☑ Use local Time	5. Date:	2018-12-20	6. Time:	1900L
7. Message:					
N4ACK, Lyle, Windsor, Isle of Wight, VA (HF)					
				.:	
8. Approved by: L. Piner Position / Titl	e: Participant				
Submit Reset Form Senders Base Call: N4ACK				Ver 33	

Complete, step-by-step instructions for the use of an ICS-213 for Winlink Wednesday check-in are available in a separate document available at:

https://qsl.net/kw6gb/Winlink\_Wednesday/WW\_ICS-213.pdf

...or directly from Greg, KW6GB (kw6gb at arrl dot net).

# **Peer-to-Peer Sessions**

Peer-to-Peer (P2P) sessions on HF are conducted during the net each week. These sessions allow practice for an "Internet down" scenario. The general schedule for the P2P sessions is as follows:

Morning session: 0730-0930L, Winmor P2P, 3582 kHz (dial).

Afternoon session: None.

Evening session: 1900-2130L, ARDOP P2P, 3582 kHz (dial).

Occasionally, this schedule gets altered due to travel or other obligations. Any changes are noted in the weekly reminder distributed via Winlink to participants and on the "Virginia EmComm" Facebook page each Tuesday. Once the P2P session is active, it is announced within the Facebook reminder thread.

The message format for these "P2P Check-ins" is the same as for RMS check-ins. When atmospheric conditions improve for intrastate communication, the afternoon session, typically on 40 meters, will be reinstated. As technologies evolve, different P2P session types may be used. Any changes will be noted in the weekly reminders.

# **Net Results**

Each Thursday, several things take place to report the results of the previous day's net.

On Thursday morning, a brief message is distributed via Winlink to the current week's participants, acknowledging their check-ins.

Each Virginia participant's location is plotted on a map created in Google Earth, which is posted on the "Virginia EmComm" Facebook page. A better quality version of the current week's map can also be found at: <a href="https://qsl.net/kw6gb/Winlink\_Wednesday/WWMap.jpg">https://qsl.net/kw6gb/Winlink\_Wednesday/WWMap.jpg</a>.

Later that day, a second message is created. That message includes notes about the previous day's net and a complete roster of its participants. Roster entries are copied and pasted directly from each participant's check-in message. Any notes from net control are enclosed in brackets, [like this]. The net report and roster are distributed via Winlink to everyone who has checked into Winlink Wednesday in the previous six months.

The current week's report can also be found as a PDF file at: <a href="https://qsl.net/kw6gb/Winlink\_Wednesday/WWRoster.pdf">https://qsl.net/kw6gb/Winlink\_Wednesday/WWRoster.pdf</a>.

The distributed net report includes links to both the Web-based map and net report.

# **Statistics**

The most commonly tracked and mentioned Winlink Wednesday statistics are "total check-ins" and "total participants." A few notes about the tabulation of statistics are in order.

Some stations send multiple check-in messages to test the various modes available to them (e.g., Packet, Winmor, ARDOP, VARA, PACTOR); others send messages using a single mode, but from various locations to which they might be deployed during an emergency. All stations are welcome to send multiple check-in messages each week.

Each Virginia station is credited for a maximum of two check-ins each week: one for an RMS check-in, and one for a P2P check-in. Second and subsequent check-ins (RMS or P2P method) are not counted. Out-of-state check-ins and check-ins not leaving the sending station via RF (Telnet connections) are noted, but not counted. For example, a given week might result in 119 total messages received, consisting of 86 "total check-ins" from 68 "total participants."

# **History**

While living near the San Andreas Fault in southern California, I worked in a municipal Building and Safety Department, where my responsibilities included building code enforcement and emergency management. During my graduate studies in Emergency and Disaster Management, I became aware of the need for amateur radio to be part of my personal preparedness plan. In 2010, I rejoined the hobby that I had left 36 years earlier.

Knowing that my neighborhood might someday be impacted by a major earthquake, I explored options for transmitting detailed messages to someone outside of the "disaster zone." Winlink fit the bill perfectly. Because there were no VHF RMS gateways within range of my station, I used Winlink exclusively on HF to reach distant RMS stations.

I retired in June 2014 and immediately moved to Virginia's northern Shenandoah Valley, joining the local amateur radio emergency communications group that served my county. I found that a number of local hams were using Winlink. However, I noticed three interrelated difficulties. First, they were using it almost exclusively on VHF. Second, they weren't using it with any regularity, so the steps of creating, posting, and sending messages within Winlink were easily forgotten. And third, the Shenandoah Valley is topographically isolated from the Virginia Department of Emergency Management (VDEM), in Richmond. These factors combined to make it nearly impossible to reliably use Winlink to get emergency traffic in a disaster that compromised conventional, Internet-dependent communication channels. The capability to communicate with VDEM was also a priority for our county's Deputy Emergency Manager.

In an effort to promote the regular use of Winlink among amateur radio operators in Virginia, I used Facebook to announce a one-time net to gauge interest, inviting hams to send a simply formatted message to me anytime during the day of Wednesday, 24 August 2016. Sixteen stations participated from around Virginia. Sufficiently encouraged by that result, Winlink

Wednesday was born and became a weekly event. At the close of 2018, no fewer than nine of those original participants continued to participate regularly in Winlink Wednesday.

To prevent participation in Winlink Wednesday from becoming just a rote exercise, and to encourage the transmission of timely, useful information, I requested that check-ins on 5 October 2016 include a brief weather snapshot. That practice continues today on the first Wednesday of each month.

Also on 5 October 2016, the first Peer-to-Peer (P2P) session was held. I invited operators to check in during a Winmor P2P session, bypassing the need for Internet connectivity at any point in the communication circuit. Four stations took advantage of that opportunity. Peer-to-Peer sessions continue each week, using varied session types.

To further expand user capabilities, on 16 November 2016, I asked participants to check in using an attached, Winlink-native ICS-213 General Message form. The purpose was to encourage users to become comfortable using one of the most commonly used forms that they might need to transmit or receive for a served agency. This practice continues today on the third Wednesday of each month.

VDEM advertises that WebEOC, a Web-based application, is the primary means for local jurisdictions to contact Richmond officials with incident-related information, largely by submitting a Local Situation Report in the online portal. My local Deputy Emergency Manager asked me to find a way to submit a Situation Report that did not rely on the Internet. With assistance from the Winlink Development Team, I designed an HTML form that mimics the format of the WebEOC form. In October 2017, the Virginia Local SITREP was incorporated into the Standard Template library in Winlink Express. Not long afterwards, the Virginia Resource Request was added through the same process. Both of these forms allow Virginia amateur radio operators to better serve their local emergency management officials.

A PACTOR P2P Subnet also operates each Wednesday, allowing those with PACTOR capabilities to practice that mode.

Future plans for Winlink Wednesday include the creation of Local Packet P2P Subnets around the Commonwealth. As of this writing, at least three of these subnets (New River Valley [Carroll County], Blue Ridge [Warren/Fauquier Counties], and Central VA [Hanover County]) have already begun operation, and several others may begin in 2019. The existence of a half-dozen or more Local Packet P2P Subnets will enable the execution of a statewide, radio-only, Winlink-only disaster exercise (already in draft form). Such an exercise will demonstrate the ability to collect detailed local situation status reports from around Virginia and forward them to VDEM, even when all conventional means of communication are compromised. Ultimately, I envision regular exercises that include amateur radio operators (including the use of Winlink), coordinated with both local and state officials.

