All About

Winlink Wednesday

By David Elkins, KN4LQN – 27 October 2021

Description

The original Winlink Wednesday is a weekly amateur radio digital net 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 system among amateur radio operators by providing an opportunity to expand their skills with Winlink, and to practice them on a regular basis. My purpose is to keep users sharp so that, if and when a served agency calls on us, we can perform confidently and professionally. Although previously aimed primarily at Virginia amateur radio operators, participation from outside of Virginia now comprises more than half of each week's check-ins, including nearly every US state and dozens of foreign countries (https://tinyurl.com/WWhistorymap).

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 (WDT) or acquired by the amateur in the future. These include, but are not limited to, Packet, ARDOP, VARA, VARA FM and PACTOR.

The website https://winlinkwednesday.net is devoted to all things Winlink Wednesday, and includes weekly announcements, current Net Report and Roster, links to interactive participant maps, and a number of related documents and resources. For social media users, the Facebook group "Virginia EmComm" (https://www.facebook.com/groups/VirginiaEmComm) is devoted to general discussions related to EmComm topics, but also provides up-to-the-minute information of upcoming and current Winlink Wednesday nets, as well as past results.

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, either directly or via a digipeater or Node. These are referred to as "RMS Check-ins." The message format for a "Standard Winlink Wednesday Check-in" is as follows:

To: KN4LQN
Subject: Winlink Wednesday Check-In
Message body:
call sign, first name, city or town, county, state (HF or VHF, etc.)

Standard check-in message body example:
KW6GB, Greg, Front Royal, Warren, VA (HF)

The format of the message body is important because it is copied and pasted directly into the roster, which is published on Thursdays (see "Net Results," below), and is used to help generate the weekly participant map. Correct formatting also helps in tracking participants' progress towards earning the Winlink Wednesday Century Club (WWCC) certificate, which recognizes 100 weeks of participation. More information regarding WWCC is below, in the "Statistics" section of this document.

Check-in messages that are incorrectly formatted, include misspelled call signs, make use of a Winlink template other than the one requested, or include an attachment when not requested, will not be included in the week's Net Results or count towards WWCC certificate progress.

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

Weather snapshot hints: Do not include weather on the same line as check-in data. Do not include blank lines between check-in data and the weather snapshot. Finally, PLEASE do NOT submit a METAR for a weather snapshot.

On the third Wednesday of each month, check-ins that use an attached, Winlink-native ICS-213 form are requested, though not required. See the next page for a correctly formatted ICS-213 check-in example.

ICS-213 check-in example:

General Message (ICS 213)	
	Load ICS213 INITIAL Data Form Instructions

1. Incident Name:	Winlink Wednesday			
2. To (Name/Position):	Net Control			
3. From (Name/Position):	KW6GB, Net Participant			
4. Subject:	Winlink Wednesday Check-in		5. Date: 2021-10-27	6. Time: 23:23

7. Message:

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KW6GB, Greg, Front Royal, Warren, VA (HF)
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8. Approved by:	G. Butler	Position / Title:	Net Participant
Save ICS213 INITIAL Data	Submit	Reset Form	Ver 41.11

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://winlinkwednesday.net/docs/Winlink_Wednesday_ICS-213_Check-In.pdf
…or directly from David, KN4LQN (kn4lqn 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 and the need to communicate beyond line-of-sight VHF/UHF constraints. The general schedule for the P2P sessions is as follows:

Morning session:
    0730 - 0930 ET, ARDOP P2P, 3582 kHz (dial).

Evening session:
    1900 - 2130 ET, VARA P2P, 3582 kHz (dial).

The message format for P2P Check-ins is the same as for RMS check-ins. With the Winlink Development Team's (WDT) announcement that Winmor is deprecated, Winmor P2P was discontinued during Winlink Wednesday. As technologies evolve, different P2P session types may be used. Any changes will be noted in the weekly reminders.

Weekly Reminders

It is critically important to read and heed the weekly reminder messages. Occasionally, the schedule gets altered due to travel or other obligations. Any changes are noted on the Winlink Wednesday web page (https://winlinkwednesday.net/), in the weekly reminder distributed via Winlink to participants and on the "Virginia EmComm" Facebook group each Tuesday. Once the P2P session is active, it is announced within the Facebook reminder thread. In addition, the current P2P dial frequency is posted near the top-right corner of the Winlink Wednesday web page, in case band conditions or interference require an unanticipated last-minute frequency change. To reduce congestion during the morning P2P session, there are usually several Alternate Net Control Stations (ANCS) available. See the **weekly reminder** for details regarding available ANCS operators and frequencies.

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.

All participants for the week are plotted on an interactive map, which is posted at https://tinyurl.com/WWcurrentmap (or https://www.qsl.net/kw4shp/WinlinkWed/WWmap.html), also linked at https://winlinkwednesday.net/ and on the "Virginia EmComm" Facebook group.

Later that day, the weekly Net Report and Roster is created and posted as a PDF on the Winlink Wednesday website. That document includes notes and observations 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 square brackets, [like this]. The net report and roster for the current week can be found at: https://winlinkwednesday.net/docs/WWRoster.pdf.

If your check-in message is not shown in the check-in list or on the week's map, it may have been rejected for not following instructions. Messages may be rejected for being too early or late, including misspelled call signs (e.g., "KN$LQN" rather than "KN4LQN"), or including an attachment of some sort other than the requested ICS 213 on the third Wednesday of the month. The check-in data should appear on one line, and the call sign should be the first thing on the line before your name, location and mode.

Once the net report and roster is posted to the Web, a second Winlink message is distributed, announcing that it is available. If you need a copy of an older net report and roster, contact me directly.

New participants also receive a "Welcome to Winlink Wednesday" message from KN4LQN.

Statistics

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

"Total messages" is the sum of all messages received at Net Control, plus the Net Control Station. Some stations send multiple check-in messages to test the various modes available to them (e.g., Packet, ARDOP, VARA, VARA FM, and 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.

"Total participants" is the number of unique stations participating. For example, a given week might result in 437 "total messages" from 338 "total participants."

Also of interest is the "Winlink Wednesday Century Club." A Winlink Wednesday Century Club (WWCC) certificate is issued to each station that accumulates 100 weeks of participation in Winlink Wednesday. A list of the current Winlink Wednesday Century Club members can be found at https://winlinkwednesday.net/centuryclub.html. An interactive map showing progress towards Century Club status is at https://tinyurl.com/WWhistorymap (or https://qsl.net/kw4shp/WinlinkWedHistory/WWhistorymap.html). This map is generated from the easy-to-navigate spreadsheet at: https://tinyurl.com/wwcc-tracking. Many thanks go to Steve Palmer (KW4SHP) and Dan Mouer (WA4GSD) for their skilled handling of the data and transforming it into useful resources.

History

I first became interested in Amateur Radio and specifically Packet radio in high school, after many years of exploring modem bulletin board systems (BBSes) and later the world of Unix and the shiny new variant called Linux. A few years later and just after the turn of the century, I started experimenting with a neighbor using 802.11 wireless networking, now known as WiFi, and felt a resurgence of interest in getting licensed. I felt it again in 2008, after GNU Radio went through major updates and was the talk of tech blogs. However, it wasn't until 2017 when a friend pushed me over the edge – he gave me a gift certificate to buy my first inexpensive handheld radio from Amazon. After hearing my first contact between two operators I was hooked, and started studying for the exams.

I was licensed in the spring of 2018, and hit the ground running. The day after I appeared in the FCC database, I went to my first radio club meeting for a local repeater and was full of enthusiasm and excited to ask about Packet. The response was "Packet around here was shut down several years ago". Not to be deterred, I started venturing into the realm of APRS and struggled with a hacked together setup and had a lot of fun. I eventually upgraded my HT to a fancy model with APRS built-in and a bluetooth Packet KISS TNC. I explored my local area and got to know the available APRS digipeaters, and even sent packets through the International Space Station, but was left wanting more.

Still being extremely mic-shy, I also started getting into the digital modes and found my way to installing Winlink. Much to my surprise, Packet was indeed not "shut down", and not only was there a Packet gateway within reach but a very nice central packet digipeater in the area.

I sent my first Winlink message in February 2019, and it was an ICS 213 check-in to the Winlink Wednesday net. I sent another check-in the following week and joined the local P2P subnet, and have participated in both every week since. I started meeting the other Packet operators in the area, and volunteered to help manage the central packet digipeater which is housed at the VDEM headquarters.

In April 2019, I set up my first Winlink RMS gateway running RMS Packet on 2m, adding RMS Trimode on 80m in February 2020. Later that year and beginning with the first net in June, I joined Winlink Wednesday as one of the morning P2P session alternate net control operators (ANCS). Acting as a weekly ANCS, and occasionally as the guest primary net control operator, has given me invaluable experience in varying band conditions and modes.

During this time I was also an active member of the Chesterfield County ARES team, and took the opportunity in July 2020 to become the ARES Emergency Coordinator for the county. Being enamored with both Winlink and nets, I started a small weekly local Winlink net in October 2020.

Winlink, and the regular practice offered by the Winlink Wednesday net, has become a large part of my time spent operating Amateur Radio. It has been a very rewarding journey!

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While Greg Butler, KW6GB, was living near the San Andreas Fault in southern California, he worked in a municipal Building and Safety Department, where his responsibilities included building code enforcement and emergency management. During his graduate studies in Emergency and Disaster Management, he became aware of the need for amateur radio to be part of his personal preparedness plan. In 2010, Greg rejoined the hobby that he had left 36 years earlier.

Knowing that his neighborhood might someday be impacted by a major earthquake, he 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 his station, he used Winlink exclusively on HF to reach distant RMS stations.

Greg retired in June 2014 and immediately moved to Virginia's northern Shenandoah Valley, joining the local amateur radio emergency communications group that served the county. He found that a number of local hams were using Winlink. However, he 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 pass emergency traffic in a disaster that compromised conventional, Internet-dependent communication channels. The capability to communicate with VDEM was also a priority for the county's Deputy Emergency Coordinator.

In an effort to promote the regular use of Winlink among amateur radio operators in Virginia, Greg used Facebook to announce a one-time net to gauge interest, inviting hams to send a simply formatted message to him anytime during the day of Wednesday, 24 August 2016. Sixteen stations participated from around Virginia. Sufficiently encouraged by that result, Winlink Wednesday was born, became a weekly event, and has grown substantially. See: https://winlinkwednesday.net/wwgrowth.html. A number of the original participants continue to participate regularly in Winlink Wednesday even today.

To prevent participation in Winlink Wednesday from becoming just a rote exercise, and to encourage the transmission of timely, useful information, Greg 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. He 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, he 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. Greg's local Deputy Emergency Coordinator asked him to find a way to submit a Situation Report that did not rely on the Internet. With assistance from the WDT, he 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. Virginia operators are encouraged to use these forms during exercises to become familiar with them and to identify any errors that may have been undiscovered at the time of publication. Although the state-specific forms are no longer included in the Standard Template library, they can be downloaded and installed into the Global or Personal library, and are available at https://winlink.org/content/virginia.

Also available for those who have the capability, a PACTOR P2P Subnet also operates each Wednesday, allowing additional practice.

Finally, there are several Winlink Wednesday Local P2P Subnets around the Commonwealth of Virginia using the Packet and/or VARA FM modes on VHF/UHF. As of this writing, three of these subnets (Blue Ridge [Warren/Fauquier County areas], Central VA [Richmond area], and Hampton Roads [Virginia Beach area]) have been operating for several years. Anyone who wishes to start another one in his or her area can contact me for startup tips. The existence of a half-dozen or more Local P2P Subnets will enable the execution of a statewide Winlink-only Peer-to-Peer disaster exercise, currently in draft form and early stages of planning. 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, Winlink Wednesday envisions regular exercises that include amateur radio operators (including the use of Winlink), coordinated with both local and state officials.