Introduction to the Winlink-RRI Radiogram Text Creator

Overview

The Winlink Express Amateur Radio Radiogram Text Creator was developed as a partnership between Radio Relay International and the Winlink Development Team. Its purpose is to provide a structured forms-based approach to producing a correctly formatted radiogram with a text output that appears in the Winlink Express New Message panel. The completed radiogram can then be sent to a Winlink-RRI Liaison Station. That station will then inject the radiogram into the traffic system.

Background of the Winlink Radiogram Text Creator

Winlink Express has included a radiogram template for several years. The original template was based on the ARRL's printed radiogram form. This template, like the other Winlink Express templates produced and transmitted the form elements. This permitted the html form to be recreated at the receiving end where it could be viewed or printed. However, neither the form nor the message screen text was usable by a traffic handler operating with cw, voice or digital modes. As a result, the format and form was only really useful for Winlink to Winlink transmissions outside of the traffic networks.

In early 2018, RRI began a process to bring the format up to traffic system standards. That resulted in an improved html layout that includes the proper space for a signature - the old template and the current printed ARRL form do not have a signature line so they were and are not in total accord with the official Methods and Practices Guidelines (MPG) for radiograms. The big improvement was the production of the correct text format in the Winlink Express message panel. That format can be transmitted without changes by cw and voice and can be used as is for insertion into the Digital Traffic Network.

In early July, one operator tried to forward several exercise radiograms directly to the traffic system using the digital network addressing scheme. That didn't work because there existed no formal interface between the Winlink and traffic networks. The radiograms were sent but went nowhere. He posted a note on the Winlink for Emcomm message board expressing his frustration.

In response we developed a system for bridging the gap. Winlink introduced a set of tactical addresses and RRI put in place a network of traffic handlers that would monitor the tactical addresses and then insert the radiograms into the traffic system. This can be done via section or local NTS nets, the RRI digital traffic network or one of the region, area or transcontinental voice or cw nets - whichever is appropriate. We're still building out the liaison network but the goal is to have more than one liaison per region. That will provide redundancy.

Thanks to the Winlink folks, the entry form has also be significantly improved so that an operator with minimal or no experience with radiograms can properly format the message without making errors. As an example, the "." character is replaced by X, R or DOT depending upon context (X is a period, R is a decimal point and DOT is for email addresses).

The Universal Radiogram Format

Perfected over a century and a half of legendary use by Western Union, RCA, transoceanic shipping lines and the U.S. Armed Forces, the humble radiogram format remains as relevant as ever. Containing enough space for concise, efficient communication, delivery and reply instructions, and the vitally important network management and audit data of its header, a radiogram is the ultimate in 21st century interoperability. It is seamlessly transmitted over vast distances using an unlikely combination of modes and methods, including hand-sent Morse code, high-speed HF Pactor, NBEMS (Narrow-Band Emergency Message System), SSB, FM, and handwritten paper delivered by phone, phone-patch, email, or hand-carried by couriers. RRI subtly revised the traditional radiogram form by adding space for a proper signature line while removing word count limitations. Long requested by EmComm volunteers, we introduced a special ICS-213 radiogram that is fully compliant with FEMA's published specifications. (This form will be added to the Winlink templates in early fall 2018).

Here is an example of a properly formatted radiogram:

1 R HXG W1NJM 8 NEWINGTON CT 1830 JUL 1
DONALD SMITH
164 EAST SIXTH AVE
NORTH RIVER CITY MD 21201
410 555 1234
OP NOTE DELIVER WEEKDAY
BT
HAPPY BIRTHDAY X SEE YOU
SOON X LOVE
BT
DIANA
OP NOTE SERVICE TO STATION OF ORIGIN
NEWINGTON CT

The radiogram has 4 primary sections:

1. The first line is the preamble and includes the message number (assigned by the originating station), precedence (importance i.e. Routine, Welfare, etc.), handling instructions for the delivering station (e.g. HXC is a request for delivery confirmation from the delivering station), originating stations call sign, check (number of words/groups in the message body), town, state and date of origination. Note: If doing a message relay back into the system, be sure to use the original message number. The SVC check box is for NTS handler use for servicing back a message.
2. The preamble is followed by the recipients address and contact information. It is very important to note that routing through the entire system is based on the recipients postal code, state and town The street address and phone number (10 digits only 555 555 5555) and other information are used by the delivering station. The deliverer is a human who can exercise different methods as

might be appropriate to complete the delivery. This is especially important in disaster communications.

3. The message body is enclosed between breaks (BT). For compatibility with all transmission modes, the radiogram uses a limited character set, as is true throughout the radiogram. The period character is interesting as there are several uses. A period at the end of a sentence becomes an X. A decimal point is R, such as 146R750 The ".com in an email address is DOT COM. Other substitutions include QUERY for the question mark, ATSIGN for @, UNDERSCORE for _. The slant bar (slash) / is a permitted character. Telephone numbers are 10 digits - area code, exchange and number with no dashes. An entered extension is numbers only and will add EXT to the front. The / (stroke) can be entered and will remain as a /. The Text Creator assists with all of this by making the substitutions for you, or not allowing certain characters.
4. The last section is the signature of the sender. All radiograms must have a signature, (name). In the case of 3rd party messages, the signature is that of the person who provided the message - not the originating stations ham radio operator.

OP NOTES are for special instructions to the traffic handers. They are not part of the message and are not delivered to the addressee.

The first (address) OP NOTE is for special instructions to the traffic handlers. This could be a note that the addressees phone number is a daytime work number, additonal delivery instructions, etc.

The second (signature) OP NOTE can be for return handling instructions, notes you feel are applicable to pass on. Please keep OP NOTES brief!

Creating a Radiogram Message and Getting it Into the Network

The Radiogram Text Creator is accessed like any other Winlink template. In your New Message screen, click “Select Template - Standard Templates - RADIOGRAM_RRI_Forms - Radiogram_Initial.txt

This will open the template in your browser Note that there is a Help file as well as numerous instructions in the fields as well as a number of mouseovers.

Once you have completed composing your message, you need to get it into the traffic system. The traditional way to get a message into the network is to check into a local or section traffic net and transmit the message by voice or cw. As a Winlink operator, you will need to get your message to a Winlink-RRI Liaison Station. These are listed as tactical addresses in the drop down at the bottom of the form. You should send your message to the regional station that is closest to the addressee.

Once you select the correct liaison tactical address, submit the form and return to your New Message screen. You will see the properly formatted message that is addressed to the liaison tactical address along with a cc to RRI-ARCHIVE. You will also see that the subject line is filled in. Do not change this. The line is of the format:

QTC 1 R NORTH RIVER CITY MD 21201

Send your message and you are done with your part.

Special Instructions - General

Radiograms are delivered by humans. This has the advantage of providing multiple options for delivery and a diligent traffic handler can often make a delivery even if the information provided is somewhat incomplete. That said, please ensure that the addressee information is as complete as possible. (Put yourself in the place of the delivering party, could you deliver the message you are sending?)

If the addressee or the sender (signatory) are hams, include their call sign with the name.

In the case of optional fields, if not applicable leave the field blank. Don't insert NONE.

States should always be the two letter state code. CA, not CALIF or CALIFORNIA.

Zip codes should just be the 5 digits.

For USA addressess, there is no need to add the country.

If indicating a return email to obtain a delivery notification (SVC) do not use a Winlink address. You do not know if the final traffic handler is in your whitelist. Remember while you are using Winlink to input the traffic, the next delivery route may not be Winlink, it could be CW or voice.

Non-Routine Traffic

Note: During the introductory phase of injecting messages into the traffic network by this template, not all of the procedures or personnel have been put in place to handle traffic with a precedence above Routine. Please restrict use at this time to "R" Routine or TEST R, W or P traffic. Do not use the system for any EMERGENCY precedence. However if an event or disaster occurs that warrants originating a series of welfare, priority or emergency precedence traffic, please notify the RRI National Emergency Communications Coordinator immediately to request activation of the RRI National Emergency Communications Response Plan at 269-650-0215 or inject a message requesting RRI emergency activation via an available IATN (Inter-Area Traffic Network) circuit, or to KB1TCE@winlink.org

References & Links

1. The most up to date information on RRI and message handling is being provided by Radio Relay International http://radio-relay.org/
2. The RRI Publications page http://radio-relay.org/about/publications/ has a number of other useful guides and aids.
    - The Traffic Operations Aid or "Pink Card" is a concise 2-page summary of radiogram formatting and transmission procedures for voice, cw and digital. Have a copy at your operating position as you enter a message into the Winlink Text Creator.
    - Two manuals of special note are the Traffic Operations Field Manual FM-001 and the RRI Training Manual TR-001.
    - Printed radiogram forms are also available on the Publications page.

Comments and Assistance

Questions or suggestions concerning the Radiogram template or its use, may be submitted via Winlink to KB1TCE.