

QNI NEWSLETTER

FEBRUARY, 2023

NEWS FLASH—NEW TRAFFIC SYSTEM INITIATIVES

Radio Relay International continues to improve the traffic system! Thanks to the hard work of our many volunteers and supporters, we have implemented new programs including:

- A collaboration between RRI and the radio amateurs of Puerto Rico to expand the RRI Digital Traffic Network in an effort to ensure the response failures of other organizations during Hurricane Maria do not occur again.
- The implementation of the “I Am Safe “ program, developed in cooperation with the Seattle, Washington Communications Hubs and Auxiliary Communications Service, The Winlink Development Team, and the Western Washington State ARRL Section.
- The implementation of updated *Numbered Radiogram Codes* (RRC Radiogram Texts) to accommodate these new programs thanks to the efforts of the RRI Emergency Communications Committee.
- The development of a prototype DTN to VHF packet routing methodology in cooperation with New York City Amateur Radio Emergency Communications Service.

RRI continues to facilitate the development and enhancement of these programs. For example, RRI will be adding Spanish language documentation for use by our fellow radio amateurs in Puerto Rico, and Central and South America.

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Mid-Winter Issue

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Register as an RRI Radio Operator Today! Stay in touch to receive operational bulletins, training information, and more! RRI does not charge dues, but we do expect high standards of operating excellence.

QNI MISSION STATEMENT

QNI is dedicated to promoting genuine emergency communications preparedness.

Our newsletter is independently published and distributed free of charge to the Amateur Radio and emergency management community. The opinions contained herein do not reflect

the policies or opinions of any particular net or emergency communications organization.

Our mission is to provide a forum for EmComm volunteers throughout North America. We operate on the premise that Amateur Radio public service volunteers should be, first and

foremost, communicators and technicians.

If you share this vision, please support QNI. Submit your news and articles for publication.

The RRI Digital Traffic Network, the Neighborhood Radiowatch (Hamwatch) Program, and similar RRI programs continue to grow, particularly in areas where the failure of cellular data networks at critical times is a recent memory..

These initiatives show what can happen when politics is eliminated and radio amateurs and organizations WORK TOGETHER with mission success as the primary goal. This is what happens when one steps away from the “we’ve always done it this way” attitude to gain new perspective. This is what happens when we put the Amateur Radio Service and our local community FIRST.

Public service communications is a TEAM EFFORT. Success requires cooperation at all levels, from the local nets and EmComm organizations to the infrastructure level operated by organizations such as RRI and Winlink. Most of all, mission success requires a positive, constructive attitude in which we keep our shoes clean and out of the mud of petty politics and egotism. This is why all traffic operators should register with and support RRI.

- If you like the idea of an re-invigorated traffic system, register with RRI today.
- If you like the idea of a diverse infrastructure in which multiple organizations can meet on the level and work together to “get the message through,” register with RRI today.
- If you believe that public service communications should be based on altruism and a sense of community, register with RRI today.

More information on new RRI initiatives can be found in this newsletter as well as on our web page at: www.radiorelay.org. Also, don’t forget to check-out the RRI blog on our web page for more RRI news between the regular issues of the “QNI Newsletter.”

PRESS RELEASE

DIGITAL TRAFFIC NETWORK EXPANDS TO PUERTO RICO

January 11, 2023

Radio Relay International (RRI) is pleased to announce that it has expanded its Digital Traffic Network (DTN) infrastructure to Puerto Rico.

The RRI Digital Traffic Network is a modified hybrid mesh network that is International in scope. The primary backbone of DTN operates in the high frequency radio spectrum while also facilitating the development of VHF or UHF gateway functions to support local emergency communications efforts.

Over the past year, RRI has been working with volunteers in Puerto Rico to improve emergency communications preparedness. Our Puerto Rico volunteers have been attending RRI training courses, while our Area Digital Coordinators have assisted with technical support and one-on-one assistance.

“Since its founding, RRI has advocated for the development of genuine emergency communications capabilities and skills at the local level” said James Wades, RRI Emergency Management Director. “During Hurricane Maria, while other organizations lost days identifying and preparing teams to travel, RRI volunteers were already working with spontaneous volunteers in Puerto Rico establishing effective communications.” He went on to add, “One RRI volunteer alone handled over 2000 welfare messages out of the stricken area.”

The RRI system is fully interoperable and integrated with other emergency communications resources. Message traffic in the form of radiograms and radiogram-ICS213 messages can flow seamlessly between voice, CW, and digital networks via the Digital Traffic

Station (DTS) function. RRI-Winlink gateways also facilitate the origination and routing of record message traffic between Winlink and the RRI system. This supports universal interoperability between both digital platforms as well as common-denominator voice and CW circuits.

In recent years, RRI has worked with the Winlink Development Team to support the specialized needs of various local communities and organizations. This collaboration has resulted in the development of specialized radiogram and radiogram-ICS213 message templates, as well as specialized welfare message forms and methodologies designed to support community welfare message teams.

RRI also sponsors the “National SOS Radio Network,” and “Neighborhood HamWatch “(Neighborhood Radio Watch) programs, which establish interoperability between community volunteer organizations active in disaster response and local Amateur Radio Service assets. These programs also make direct-to-public emergency communications possible in the event of cellular outages during major disasters.

Radio Relay International was established in 2016 using assets from the Traffic System. Over the past six years, RRI has been modernizing and updating the system to be responsive to evolving needs. “For all practical purposes, ‘NTS’ now only exists at the state/local level, with RRI providing the standardized training, methodologies and infrastructure needed to support an international network,” said Mr. Wades.

RRI networks and registered radio operators are now active Internationally, with volunteers and Digital Traffic Network connections in locations as far away as Europe, Asia, and Oceania.

RRI would like to thank Victor Rivera (WP4QZH) and Emmanuel (Emma) Cruz (NP4D), for their interest and dedication to this project and their altruistic support of the Citizens of Puerto Rico. Without their efforts, this initiative would not be possible. We would also like to thank Steve Hansen (KB1TCE), the RRI Affiliated Programs Manager and Jim Kutsch (KY2D), the RRI Eastern Area Digital Coordinator for their valuable contributions to this project.

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**The “I Am Safe” Initiative
By Steve Hansen (KB1TCE)
RRI Affiliated Programs Manager
RRI Emergency Communications Committee**

During Field Day 2022 some curious radiogram messages began appearing at the RRI-Winlink gateways. These were TEST WELFARE messages addressed to a number of non-hams (about 70 in total) around the country, all of which originated in Seattle, WA.

Most of the Field Day traffic was, of course, radiograms to ARRL officials and to other Field Day teams. Something just short of 1000 messages in total were handled via the RRI-Winlink Liaison team, but the TEST WELFARE messages definitely stood out from the pack.

This got my curiosity up, so I contacted one of the originators. He referred me to Cindi Barker, a coordinator for the Seattle Emergency Communications Hubs Network (<http://seattleemergencyhubs.org/>). According to their mission statement:

A Seattle Community Emergency Hub is a pre-determined location where neighbors and community members are likely to gather to begin exchanging information and resources among themselves without outside assistance from city services.

A Seattle Emergency Communications Hub is an enhanced Community Emergency Hub. It has a core of trained volunteers with additional skills who can collect information on local situations, needs, and resources and assist in the allocation of resources to needs. They can relay information between Hubs, the Auxiliary Communications Service, or other locations so that it reaches those in need. Hub volunteers also aid the City of Seattle in encouraging neighbors to be individually and

collectively prepared for a disaster (Editor's note: This is a concept similar to the "RRI Message Center")

The Field Day radiograms were the start of an initiative to develop a formal system to send "I Am Safe" messages out of a disaster area to loved ones. For this, the hubs allied with the Seattle Auxiliary Communications Service (ACS) and the NW Washington chapter of the American Red Cross. The ultimate goal was to have a well-established process that could collect information, format a high volume of messages and then transmit them via the traffic system to destinations around North America.

Within a couple of weeks after Field Day, Cindi formalized a team consisting of the author and the Washington contingent. Core Seattle area members included Dave Wilma KG7LEA and Bill Thomassen N6NBN (Seattle ACS), Ann Forrest (Seattle Hubs), Monte Simpson W7FF (Section Manager, WWA) and Doug Oatman AD7AV (Tacoma Radio Club).

Among the first decisions was to produce a dedicated welfare radiogram template for Winlink Express along with an off-line equivalent. The forms writers on the Winlink Development Team (WDT) Oliver Dully K6OLI and Greg Kruckewitt KG6SJT obliged by creating the pair of templates. It was agreed that the off-line template would not be hosted within Winlink Express but would be available on the RRI web site.



Members of the Seattle Hubs/ACS team during an exercise. Bill Thomassen N6NBN (Seattle ACS) is in the blue shirt. Photograph courtesy of Cindi Barker.

The off-line template, which is intended to be run on a thumb drive, can be populated by a volunteer with basic-computer skills and minimal training. The data entry volunteer need not be a radio amateur. The resulting properly formatted radiogram file can then be delivered to a smaller group of radio operators who simply copy and paste the file into the Winlink Express new message pane for sending. The file can then be sent to Winlink-RRI Regional Liaison stations or directly inserted in traffic hubs in the RRI Digital Traffic Network.

A key feature of the welfare templates is a set of short message texts. Fourteen of these were developed by the NW Washington ARC and are based on the message texts in the now dormant ARC Safe & Well information form. The group felt that, in times of stress, having a client pick two or three prepared texts would facilitate the composition of a brief but meaningful message.

These texts are part of the new "RRC" numbered texts which include but expand the traditional ARL codes. For the welfare messages, unlike the ARL codes, the entire text is inserted into the message so no "translation" is required. This is critical for cases where a message is sent directly to the addressee. The radiogram messages permit these short texts plus a limited amount of free text. Examples of these short texts include "HOUSEHOLD SAFE AND WELL" and "AT HOME AND PLAN TO REMAIN HERE."

Feeding all of this is the I Am Safe intake form. This is a half-page form with the short texts on the back. The client fills out as much information about the addressee as possible, enters the numbers for up to 3 short texts plus a limited amount of free text.

"I Am Safe" message / YOUR Name: Entered

Who would you like to contact?	
Email address?	
Phone number?	
Circle one: Cell phone Landline If cell phone, do you know their carrier?	
Street address:	
City, State, Zip code	

Number(s): _____ (see back side) 25 total word limit for entire message

Additional text _____

Jan 2023

If the client has an email address or a mobile number **plus** cell carrier information, it is then possible to send the message through Winlink direct to email or SMS/MMS text. After a mid-summer exercise, we decided that the radiogram format isn't appropriate to use for texting - there's too much information that resides in a format that is unfamiliar to non-hams (and, unfortunately, many hams as well).

It just so turned out that there was a "Quick Welfare" template in Winlink Express. However, it was designed for email, not texting. However, lurking in the Winlink General Templates page is a template called "Send SMS Message." If you have a mobile phone number and the carrier you can convert that to a text address that can be sent via radio-email. For example, 2075551212 with Verizon as the carrier would result in an MMS address of 2075551212@vzwpx.com.

We asked the WDT if they could produce a version of the Quick Welfare template with text capabilities. The answer was a polite "no" because of the maintenance requirements of the carrier to SMS/MMS addressing, but they did agree to an off-line template version of the standard "Quick Welfare" template which would include the short message texts and we (RRI) could maintain the carrier information. The file generated by this off-line template could then be imported into the standard Winlink template. As with the Radiogram off-line template, this one would also reside on the RRI site.

Below is a capture of the Off-Line Quick Welfare Message Template with client information added. Note that this message is going as a MMS text message. The carrier is Sprint and the email address for the text is <phone number>@pm.sprint.com. The message includes two short texts and some free text.

RRI Off-Line Quick Health & Welfare - Status or Information Message Vers 2.01

This form is used to send information or a status report to family members or friends.
Suggest more than one E-Mail address to increase the chances that someone will get this message.

>> NO REPLY is expected, nor can one be processed. The requester needs to be informed this is a ONE WAY outbound message. <<

[Operator Info - Read Please](#)

[Load H&W Data](#)

From Name **Date / Time (Local)**

To Email (s)

Add a Cell phone number: [Click to Enter Cell Number and Text Address in To Line](#)

Incident / Event Location or Region / Area Name

Message [Click here to insert short prepared messages.](#)

Household safe and well. Share this message with others. Brother and family are also fine.

[Save H&W Data](#) [Email Welfare Message](#) [Reset Form](#)

The message is formatted as plain text in the body of the sent email, and easy to read by the recipient (s).
 For questions, comments or suggestions about this form contact KB1TCE via Winlink.

Once the output file is loaded into Winlink Express, this shows what is actually transmitted. Note the restriction on replying since the radio circuits will be busy with outbound traffic.

To:

Cc:

Subject:

Attach:

Radio Email is From: Gladys Mumford

It Was Sent From: Seattle, WA

Sent at 2023-1-23 09:38 (Local)

[This below status message is from a family member or friend]

Household safe and well. Share this message with others. Brother and family are also fine.

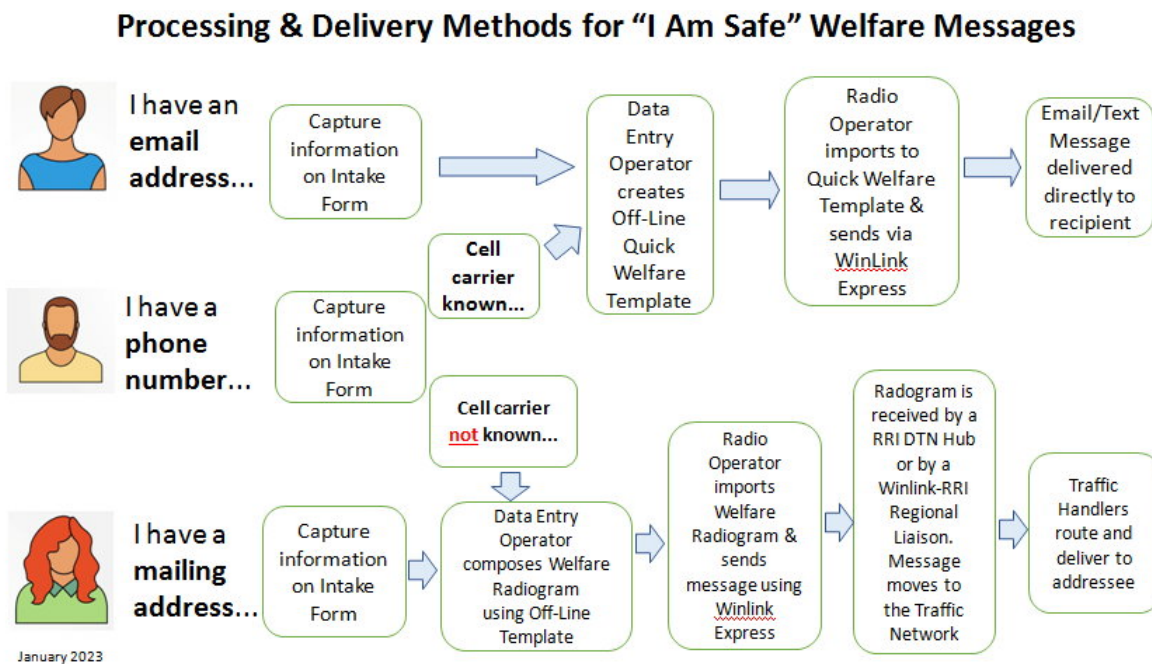
[ONE WAY MESSAGE ONLY. DO NOT RESPOND!]

This is a ONE WAY email sent by Amateur Radio Operator: [xx7xxx]
 via the Winlink Radio System. www.winlink.org

Sent from the above location, to provide information about the above named party(s).

The bottom line here is that, based on the available addressing information that is presented in the Intake Form, a decision may be made as to whether the message would be better sent using a radiogram (e.g. more or less complete address and/or phone number) or as an email or text message using the Quick Message template. Understandably, some hams may ask why is an organization that promotes radiograms doing a template for simple plain text email/SMS? It's important to remember that when assisting with emergencies, the ham operators are “communicators” and as such, should be prepared to use all available communications channels to best send the messages.

The figure below shows the process flow that we developed. It was designed to be generic so any similar emergency communications team could use the same process.



We will be conducting another national exercise in March. Part of this project is not just focused on establishing the process, but also creating capacity to use the process. The exercise will be an open call to the various radio clubs in Seattle and Tacoma to come participate, and there will be Elmers there to help the folks new to Winlink.

Also in the works is a translation of the off-line templates and instructions into Spanish.

Full documentation plus the off-line templates are available on the Radio Relay International site at <https://radiorelay.org/i-am-safe-program-1>

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The “I Am Safe” program described above can be deployed in any area subject to significant natural disasters. This concept as currently developed brings to fruition a long-standing RRI recommendation that local EmComm organizations or partnering local radio clubs develop “message center” teams, which can provide connectivity to local emergency services, information on available disaster assistance, and originate welfare messages on behalf of disaster victims.

SOME THOUGHTS ON RADIO CLUBS

By James Wades (WB8SIW)

Reviving the Local Radio Club

Having spent a good number of years traveling around the United States and Canada, I feel rather well qualified to declare “repeaters are dead.”

VHF repeaters were once the “social network” of radio clubs. Before everyone had a cellular phone in the vehicle, VHF repeaters were alive with activity throughout the day. Prime drive time (rush hour) found repeaters alive with activity, sometimes to the point where it seemed one couldn’t get a word in edgewise, at least in the larger metropolitan areas...but today, most VHF or UHF repeaters are mostly DEAD. One can monitor for days and never hear any form of communications.

Travel also reveals a certain insularity in the Amateur Radio Service. Many of today’s radio amateurs won’t respond to an unfamiliar call sign. Perhaps this is just a reflection of the growing resistance to direct social interaction in society. An entire generation has been conditioned to hide behind the perceived security barrier created by text messaging and apps. This semi-isolation offers a perceived security barrier, but it also discourages interaction with those outside an immediate social circle. Regardless of the cause, however, such insularity hardly lays out a “welcome mat” for the new radio amateur.

With the technician class license now the entry level class in the Amateur Radio Service, most new radio amateurs start with VHF and UHF privileges. Therefore, let’s ask that all important, rhetorical question:

How would you feel if your first experience or two on-air was either no activity or the failure of local radio amateurs to respond to your call?

Radio clubs don’t seem to function better. If one wants to run a “sociological experiment,” attend a few radio club meetings while out-of-town. Try being the stranger who shows up at a meeting. The odds are quite good that NO ONE will greet you or make you feel welcome.

The meeting itself will likely also be uninspiring. Many radio club meetings start with a business meeting, such as a “treasurer’s report,” perhaps an EC report, and similar club business. However, if one is not yet involved in the club, such information is quite uninteresting. Now and then, a club member will present a talk on an interesting topic, but sometimes, the speaker, if there is one, is minimally competent or uninspiring.

Hams squeal a lot about the lack of interest and participation in the hobby. They look around a room and see dozens of gray heads, but little fresh blood. Many are at an age where it is hard to muster the enthusiasm needed to take the initiative, organize projects, or test new ideas. Such is the nature of aging, and such is the nature of organizations, which lack any form of relatively youthful input.

When it comes to public service communications, things are not much better. Many established hams fall into the same trap as their unlicensed fellows. For example, why organize a project to collect weather data or provide spotter services using our own networks when the Internet is just so easy to use? Why seek out new ways to use our frequencies and nets to serve the public or community volunteer organizations when everyone has a cell phone? Why maintain a watch on the local repeater or simplex calling frequency when that new god of the 21st century, the cell phone, may demand an audience? Of course, if this is really the case, why not just turn our frequencies over to the commercial wireless carriers so they can provide the community service? While the obvious answer is that cellular data networks and the Internet may fail in an emergency, the grim reality is that when we fail to develop infrastructure and exercise that infrastructure with purposeful activity in advance of a disaster, we will be ill-equipped to do so when the you-know-what hits the fan!

Our national societies, which could set the tone for new member recruitment and retention often seem equally out-of-touch. Many have devolved into a club for “big boys with big toys,” a clique dominated by the contest element or a similar special interest. For

these special interests, radio is a “sport” and status is determined by contest performance, the amount of disposable one is willing to spend on a station or some other artificial measure. Of course, there is nothing wrong with contesting or building a “super station” when kept in balance with other operating interests, but one has to ask that other important rhetorical question:

How many NEW hams get into the hobby to contest or work DX?

Then, there’s the “ham-in-a-day” element. One shows up at a class that lasts just a few hours, he or she is spoon fed just enough information to pass the exam, but there is no further information or investment in inculcating the operating standards, traditions, or culture of the Amateur Radio Service. Some are even getting licenses only for prepping or emergency response. ARRL Director Norton recently mentioned in a speech that a large emergency services organization out west had 200 members obtain Amateur Radio licenses. He asked that important rhetorical question:

What are the odds any of these new licensees will join the ARRL? For that matter, what are the odds they will join and support the radio club or be active on-air?

It seems ham radio is also lacking an environment in which it encourages the *purposeful use of two-way radio*. Because ham radio operators are not isolated from the broader culture they are, like most Americans, drug addicts, and their drug of choice is the instant gratification provided by cellular data networks and the web, both of which are saturated in rich, primary colors, pseudo-social simulation requiring a short attention span, and continuous, almost infantile gratification. Society is now dominated by “entertainment addicts,” who rely on others to do our creating and imagining for us. For many, there is no need to learn a new skill, challenge oneself intellectually, or delay gratification long enough to achieve a satisfying pay-off in the form of new knowledge and skills. It’s simply easier to get high on the media drug. The idea of developing the knowledge base and skills needed to practice the art of effective radio communications or explore the world of RF technology is simply too much effort for a generation conditioned to 30 second Tik-Tok videos, Instagram, and superficial memes that satisfy ones own hedonism, prejudices, or political bias.

It doesn’t matter if one agrees with this assessment or not. What is important is the answer to this question:

How do we make the Amateur Radio Service relevant, welcoming and rewarding for the few, the proud, the genuinely curious who still have the capacity for delayed gratification and self-education?

This is a question that cannot be answered in an essay, but it is a question that can encourage us to start the first steps toward a vision of the future. Here are a few ideas, which the author has recommended over the past two decades, but which have fallen entirely on deaf ears with those who have “always done it that way:”

- Does your radio club operate one or more repeaters? Set up a “duty roster” through which members monitor the local repeater and invite conversation now and then during their “watch period.” Special emphasis should be responding to new or unfamiliar call signs.
- Create an outreach program to encourage club members (and all local radio amateurs) to install a basic VHF-FM two-way radio in their car. Furthermore, encourage them to monitor the local repeater while traveling around town. With available on-line databases, one can create and mail a brochure encouraging the development of this capability to every licensed radio amateur in the area. Find a suitable facility and set up a “mobile radio installation day” at which club members assist new hams or returning hams with the installation of a VHF or HF radio in their vehicle.
- Find ways to create activity on the local repeater. Set up a voice net to collect weather data. Start a community or neighborhood watch program. Using the RRI “Neighborhood Radio Watch” program, adopt local volunteer organizations active in disaster response and train them in proper voice communications techniques, help them build out a GMRS network, and establish the gateway function to ARES® and similar EmComm networks.
- Start a local traffic network. VHF repeaters are an ideal resource for local radiogram traffic origination and delivery. RRI has modern message forms available on its website, which can be used for personal or on-line message delivery. These forms explain the public service mission of ham radio as well.

- Do you have two repeaters that serve the same area? Use one as a “calling channel” and the other repeater as a “working channel.” Hams establish contact on the “calling repeater” and move to an alternate “working repeater” or simplex frequency to converse, thereby discouraging those monitoring the “calling channel” from turning-down the volume control during extended conversations.
- **Work with other radio clubs in your region or state to develop an on-line “speaker’s bureau.”** This would be an ideal addition to an ARRL Section web page. It increases the pool of “presentation talent” available to clubs and ensures that at least some club and local EmComm meetings have a talented speaker presenting an effective or entertaining talk.
- Assign an active, personable club member to greet newcomers at your club meetings. Move the business part of the meeting to a committee function, holding that open committee meeting AFTER introductions and the club presentation or other primary purpose for meeting. Using local media resources, advertise your club meeting when possible.
- Expand the club activities. How about a club breakfast or “coffee break” once per month? How about a monthly outdoor, portable operating demonstration during the warm weather months at a local park or similar open area?
- How about a partnership between the radio club and the local scout group. Implement the RRI “Boy Scout Radio Watch” program using FRS and GMRS assets. Train scouts on communications procedures and emergency communications. Transition the more interested scouts and parents into ham radio.
- Integrate ham radio into STEM programs and “maker” organizations. Partner with other clubs to access the talent needed to do so effectively.
- USE YOUR IMAGINATION.

The author will say what no one wants to say:

Ham radio is aging fast, and we will not live forever. Let’s deal with the “age bomb” issue now. Dedicate a radio club meeting night to an open conversation about how the group can restore relevancy, create programs that encourage the purposeful use of two-way radio, and appeal to new members. Let’s see what kind of ideas arise! Let’s share information and develop a forum in which successes and failures are shared so that good ideas can percolate to the surface and become “best practices.”

Let’s preserve ham radio for future generations.

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Responsibility By James Wades (WB8SIW)

If there is one problem that continues to haunt the traffic system, it is the failure to deliver radiograms. It has been reported by one ARRL official that a large percentage of Christmas radiograms he originated were never delivered. While a few rumors have surfaced that some were not delivered because the local operator refused to use an RRI radiogram form, most simply vanished into the “black hole.” **This is not a new problem.** It has been going on for many years and it must stop.

So, let’s start dealing with this problem by examining some realities and possible solutions:

Phone calls:

Absolutely no one answers an unfamiliar number anymore. They just don’t. There are so many scammers and telemarketers active now that no one trusts an unfamiliar number. Our government is so corrupt and so awash in corporate bribery that they refuse to regulate these abuses. The result is that everyone’s cell phone is locked down. Outside of leaving a voice-mail message, telephone delivery is an obvious point of failure. Requiring the inclusion of an email address (if available) along with postal address and phone number would ensure that alternate delivery options are available if telephone delivery proves impractical. If all else fails, postal delivery or in-person delivery can be provided.

Lack of outlets:

Another intractable problem is the lack of traffic outlets. Ironically, at a time when nationwide calling is totally free, we find traffic operators who are afraid to deliver a message to the next town over. There are two possible solutions to the lack of outlets:

- Traffic could be listed with an expiration date. For routine traffic, this might be 72 hours after date of origination. For example, if a routine radiogram is originated on the 10th, it would “expire” on the 13th. When listing radiograms, one could add the expiration day to the listing. For example: City/Quantity/Expire Date. If one is holding one routine radiogram for Detroit and it’s date of origin is March 10, it would be listed as “QTC Detroit 1/13.” If an outlet is not available by the close of radio day on the 13th, anyone on the state/section net could take it and deliver it from anywhere in the state. **AT LEAST IT WOULD BE DELIVERED.**
- Add a “dead letter” liaison function to state/section nets. For example, along with the usual liaison stations to region or infrastructure networks (DTN, etc.) assign a volunteer to serve as “dead letter rep.” These volunteers would be responsible for the timely delivery of routine messages that have exceeded the 48-hour deadline should no local outlet yet be available.
- Create an online radiogram confirmation database. Those originating radiograms would enter their call and message number into the database. When the message is delivered, the operator doing so would confirm delivery via the web page. The Internet would perform no traffic handling function, but it would facilitate ensuring that all routine radiograms are delivered. Such an on-line confirmation method would be rather easy to create, and it would eliminate the long-standing “black hole” created by irresponsible operators.

Training:

Radio Relay International presents regular traffic training courses, but few section nets publicize them or take advantage of them. Some of this is driven by the bias of some rabid ARRL supporters who place their prejudice against Radio Relay International before the more important mission of improving the traffic system and the Amateur Radio Service. We won’t digress further into that discussion other than to say that the failure to take advantage of these training courses by publicizing them on your state/section nets is a bit like “cutting off your nose to spite your face.”

Radio Relay International was NOT created as an anti-ARRL organization. It was created as an advocacy organization designed to

improve and promote traffic handling as an art form, an enjoyable operating activity, and a viable emergency communications resource. Goals that the ARRL simply ignored for several decades.

Look around you!

The Amateur Radio Service is aging dramatically. We are not replenishing our ranks. The traffic handling community is in worse shape than the general population of radio amateurs. We can complain. We can bicker at each other. We can engage in Machiavellian intrigue, like the two ARRL Directors, one of whom casts aspersions about the character of RRI volunteers and the other who insists “there can be only one traffic handling agency,” or we can try to work together to improve both the Amateur Radio Service and traffic handling.

We should NOT be afraid to change.

Many once great companies are no longer with us because they failed to evolve and change, or they failed to change in the right way. Have any of our readers purchased a Packard automobile lately (one of the founders was a ham radio operator, by the way)? Has anyone obtained Internet service from the once dominant Western Union? When was the last time you purchased a Remington or Royal computer? You get the drift! The fundamentals of traffic handling are fine, but we lack initiative in some key areas:

- Section Traffic Managers who fail to engage in recruiting.
- Traffic nets that fail to partner with other organizations to promote and utilize existing training tools.
- Traffic operators who are afraid of even minor changes because “it’s the way we’ve always done things.”

While others talk about change, RRI volunteers are out there doing the hard work. You’ve probably read about our expansion of DTN to Puerto Rico or our implementation of VARA access for digital traffic. Perhaps you’ve read about the “I Am Safe” initiative. Perhaps you’ve seen our training videos or attended one of our live on-line training courses. Perhaps you’ve participated in one of our regular disaster communications exercises. **Why not meet us halfway by implementing some of our recommendations, participating in our initiatives, and encouraging your fellow radio amateurs to register with RRI?**

Change, death, and taxes are the only certainties in life. Let’s keep the good traditions while implementing the necessary changes needed to remain relevant. We can have fun doing so in the process with the right mindset, altruistic motivations and a healthy distaste for petty politics and infighting.

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Radio Relay International would like to welcome Tom Hellem (K0SN) to his new position as RRI Database Manager. Tom will be responsible for processing new RRI Registered Radio Operators into our system, preparing and mailing “welcome packages,” and updating our master database.

This is a rather big job, and Tom’s willingness to volunteer will free up RRI Board Members to pursue a variety of initiatives designed to improve not just the traffic system, but emergency communications preparedness in general.

RRI has created a new website page entitled “Registration.” This page provides the necessary forms to register as an RRI radio operator, register your net, and access the latest net directory. Please use the form provided to make Tom’s job a bit easier as we continue our process of rapid growth and development.

“Sparks” on the Great Lakes By Ralph C. Folkman (W8AF-SK)

According to an old logbook that I have maintained throughout the years, I heard my first “wireless signals” on Christmas Eve, 1916. On that memorable night, I put the finishing touches on a homemade receiver and, using a bedspring for an antenna, tuned in NAA at Arlington, Virginia sending time signals and press dispatches. For the remainder of that winter, I heard dozens of ships at sea, and in the spring of 1917, listened in on ships of the Great Lakes as they tuned-up their spark transmitters for the coming season.

Attending East Technical High School at the time, I naturally became an ardent member of the school’s wireless club. One day, while listening on the marine frequency in the club’s “shack,” I happened onto WCS, the *SS Alpena* handling message traffic with VBE, Sarnia, Ontario. A close friend of mine was operator on that vessel and this incident inspired me to become a ship operator. Subsequently, I studied hard, acquired the necessary commercial license, and was assigned to the freighter *Peter Reiss*. I felt a tinge of importance as I scrambled up her ladder, having been told that my arrival would trigger their sailing (they couldn’t depart without a wireless operator). From that day on, I was called “Sparks.”

As we left Buffalo bound for Green Bay, Wisconsin, I got my first look at the shipboard installation, awe-inspiring to the novice, with its switches, push buttons and gadgets that I’d have to become acquainted with. For some days, we plowed northward, with me practicing message-handling procedure - all this, of course, with the vessel’s antenna disconnected so that my synthetic messages would not actually get on the air for other stations to hear.

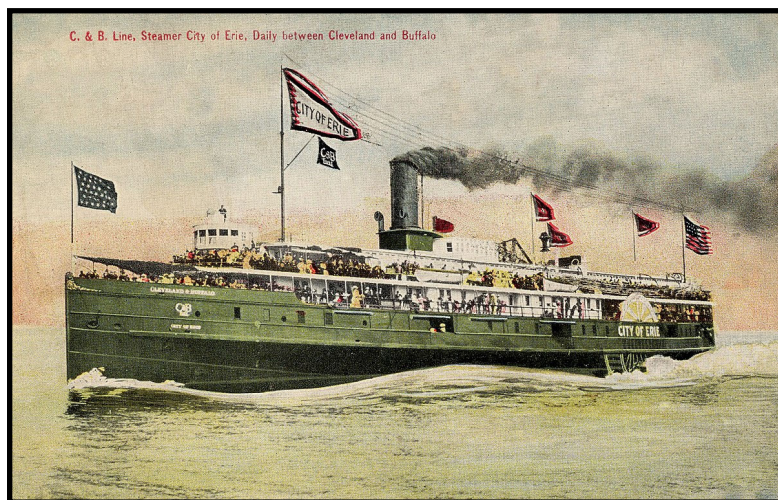
I had been warned to “count to five” after starting the transmitter to permit the rotary spark gap to reach full speed before I pressed the key. “You’ll be sorry, they had said, “if the gap is running too slow, it will do damage and probably blow the Leyden Jar condensers (*Editor. “capacitors” is the modern term.*)” I forgot to count to five and, you guessed it, the shack was rent with an earsplitting crash and filled with blue smoke! I was off the air until repairs and replacements could be made. The delay in finally handling that first message took the wind out of my sails and put a dent in my pride as the *Peter Reiss* operator.

Later that season, I found myself aboard the *SS City of Erie* passenger ship plying between Cleveland and Buffalo. This was a far cry from the freight job and necessitated a natty blue uniform instead of overalls. Experiences too numerous to relate happened on the *Erie*. The *SS City of Buffalo* ran exactly opposite to us, passing our ship each morning at two AM, at which moment we two operators would “hit the key” in friendly salute.

I had noticed that when the *Buffalo’s* operator pressed his wireless key, a section of lights on their freight deck brightened considerably. I told the operator about this strange phenomenon, and he said he would check it. Later, he revealed that the ship’s electrician had put a voltmeter on the freight deck lights and found, when the transmitter key was pressed, those lights went up seven



Ralph C. Folkman (W8AF-SK)



The *SS City of Erie*

volts above the normal voltage! Apparently, this circuit was somehow tuned to accept the ship's transmitter frequency and was receiving the additional voltage by "wireless." Nothing serious came of this except for the fact that the bulb burnouts were more frequent in that part of the *Buffalo's* lighting system.

One season followed another and each spring found me sitting in the rooms of RCA, Intercity Radio, and other offices where operators awaited assignments to ships. Eventually, I racked up a second stint on the *City of Erie*, two tricks on the *Seeandbee*, the *Goodtime*, and the *Tionesta*, then back to freighter life aboard the *Cletus Schneider*, *Angeline*, *Frontenac*, *G.A. Tomlinson* and the *William G. Mather*.

While on the *Seeandbee*, I saw the transition from the original spark transmitters to tube equipment, the latter permitting radiotelephone conversations with other ship and shore stations, as well as code. Along with this modernization in marine communications, the crystal detectors (with their famous "cat's whiskers") disappeared as more sophisticated receivers took over.

I never had to send an SOS, but served as "traffic cop" in connection with one. In 1925, I was summoned ashore from a ship assignment to work the night shift at WTK, Lower Lakes link with shipping, located on the tenth floor of the Cleveland Hotel. My first night on watch (first hour in fact) there was a faint SOS on the air. Mechanically, I kicked in the big generator for the first time and piped down all ship activity in my area after learning that the vessel in distress was off the Virginia coast. Couldn't afford any unnecessary interference at a time like this. I kept curious lake operators muffled, policing the air under my jurisdiction until some hours later when the distress was cleared. I had kept a complete log of my activity.

Incidentally, my chief operator, Hank Grossman, was the individual who, aboard the *Alpena* about seven years before, had inspired me to become an operator. He relieved me after the exciting night shift and asked to see the log. His eyes bugged as he demanded "all right, now let's see the real log." When he finally realized that I had been involved in this distress emergency, he blurted out, "Wow! First hour on watch in his first coastal job-and he hits the jackpot!"

But shore-station operating somehow lacked those elements I had enjoyed so much aboard ship. It wasn't too long before I was again underway, breathing fresh air and seeing a different port every few days. Looking back, a number of incidents stand out in my mind, like the time when a devastating tornado swept through Lorain, Ohio, and it fell to me to serve as relay link between the freighter *Grand Island*, pinned behind the twisted bridge in that city, and the outside world. With no wire service out of the crippled city, the *Grand Island* operator fed his messages to me on low power, and our freighter, off Cleveland at the time, passed the information on to the Red Cross and others.

Another thing I well remember is the unexpected run of jumbo perch off the dock in Little Current, Ontario, where I tied into 270 of them. Our crew ate fish for about a week. I remember numerous times we carried ore from the Upper Lakes to the hungry furnaces of the Ford Motor Company at River Rouge, near Detroit. We proved to be an important factor in Ford's lofty aim of a new car every fifty-five seconds.

I'll never forget July 4, 1924, churning southward across Lake Superior from Fort William to Marquette, Michigan. A sudden drop in temperature and a heavy snowstorm coated us with thick ice. I repeat, this was on the Fourth of July!

Not to be forgotten is the time I slipped into the ship's refrigerator, tiptoeing past a sleeping cook in search of a between-meal snack. The big door slammed close behind me and the light went out, leaving me to shiver for what seemed like an eternity until I was "rescued." I almost got pneumonia from that deal. On June 12, 1924, about 2:00 AM, my ship, WFS, was called by WSBN. "What ship is that and where are you bound, the operator asked.

"This is the great ship *Seeandbee* and our destination is Buffalo," I pounded on the key. Thumbing through the ship dictionary, I found WSBN to be the *SS Leviathan*, who by now, was asking for a repeat. "The great what?" the operator sarcastically keyed. "Forget it," I came back. After all, who's going to boast to the largest ship afloat about being *great*."

Very few employees of the C&B Lines were ever summoned to appear before T.F. Newman, general manager, unless they were in some kind of trouble, but when this radio operator got the summons, it proved quite different. "You've been with us for a few years now," said Newman, "and although your ships have been noted for carrying newlyweds to Niagara Falls, you yourself didn't make it

to the falls on your honeymoon.” With that, he presented me with a pair of tickets, all expense in scope, for me and my comparatively new wife to visit Niagara Falls in style. “Everything on the house,” he beamed. Most of those sailing the C&B Lines had him pegged as a “whip cracker.” I found that he had a heart of gold.

Radio operating aboard the *Goodtime* proved to be a paid vacation. Federal law stated that this ship had to carry wireless for the safety of its passengers on pleasure trips to Cedar Point, Put-In-Bay, and on moonlight rides out of Cleveland. Very few messages were handled.

The acquiring of the vessel by the C&B Lines permitted the busy *City of Erie* to again return to its Cleveland-Buffalo night run. The *Goodtime* had call letters WCP, which someone said meant “Wireless Cedar Point.” She carried a 500-watt quenched gap spark transmitter, not unlike the *Erie* and the *Buffalo*. The operator was also responsible for a PA system that picked up the band on the forward dance floor and blared with big bull horns toward the pier when the *Goodtime* was departing or arriving.

But finally, I succumbed to becoming a landlubber, writing for the *Cleveland Plain Dealer newspaper*, as associate radio editor, and serving as operator at Station WHK, which was owned primarily by the newspaper. At the time, the city was dicking with WHK to devise a police radio system for Cleveland (*Editor. Detroit deployed the first successful police radio system*). Singled-out for this task, I worked through the summer of 1929, designing such a project. In September of that year, the fruits of my labor were installed at Central Police Station – with six radio cars on the road. I officially moved from the WHK control room to the new one just installed by the police department, staying on after joining the department for a lengthy career. Along with “calling all cars,” the system eventually added radiotelegraph for communications with other police departments in most major cities of the US, bringing together on this net numerous ex-ship operators. I personally found a few of my shipmates pounding brass for the police across the country.



The SS South American

Then, in 1965, with but three more years to go for police retirement, I was bit by the old “sailing bug,” and requested a leave of absence from the department.

Shortly, I was serving as operator on the *SS South American*, luxury cruise ship. Once on board, I found that what had been “wireless” had changed to sophisticated “radio.” From spark transmitters and crystal detectors it had progressed to RADAR, ship-to-shore radiophone, direction finders, a PA system that utilized thirty-two loudspeakers, and many other innovations too numerous to mention. It was like learning the radio operating profession all over again, and at my age, it wasn’t easy!

At the beginning of the season, we carried high school seniors on three, four and five-day cruises. One of these trips catered to exchange students from Mexico, Brazil, Uruguay, Chili, and Peru. Plenty of guitars came on board with these southern kids and, needless to say, the talent shows held nightly were glorified by them.

A whole book could be written on just the exciting experiences of the last Great Lakes cruise ship. The *South American* was an excellent feeder. Once the ship was the recipient of a national award for the best food-ashore or afloat! Waitresses, galley help, bus boys, in fact most of the crew consisted of college students working their way through school, and all were required, when they were employed, to have some special talent that could contribute to the ship’s entertainment of passengers. The young fellow that saw to it that I had fresh ice water and warm biscuits at dinner proved to be another Fred Astaire on the ship stage. A dishwasher in the galley, who I later learned was a graduate of the Detroit Institute of Technology, looked and danced like Bill Robinson. The *South American* was loaded with such surprises.

One of my closest “brass pounding” buddies passed and I became heir to his Vibroplex telegraph key. Ellis Smith had more than once expressed a desire to serve as operator on the *South American* but never made it. His key did, however, because I carried it aboard with me to use while handling message traffic. I’m sure he would have liked that.

I soon learned that the present day radio officer was treated as just that - an officer and a gentleman. Whoever made up the crew roster certainly had both ends of my welfare in mind. They had me eating in the dining room with the ship chaplain, and abandoning ship, if need be, with the bartender. One who became a buddy to me was the vessel’s photographer, Harry Wolf, who would amble about the decks, snapping candid shots of passengers, everyone of which came out a masterpiece. Many of his photos filled my files, awaiting those days when I would mull over the old experiences.

I won’t forget the “big-shot” passenger who made a \$9.95 phone call from the ship to his office in Detroit. He later made the grueling climb back to the radio shack to get change he had coming - I think it was a nickel. In the last hour aboard before flying back to Cleveland and my old police job, I went to the pilothouse for the captain’s signature on my license, attesting to my service on board. I got the signature all right, and a fringe benefit too. “A pleasure to have had you aboard, Sparks,” from Captain Barney Olson.

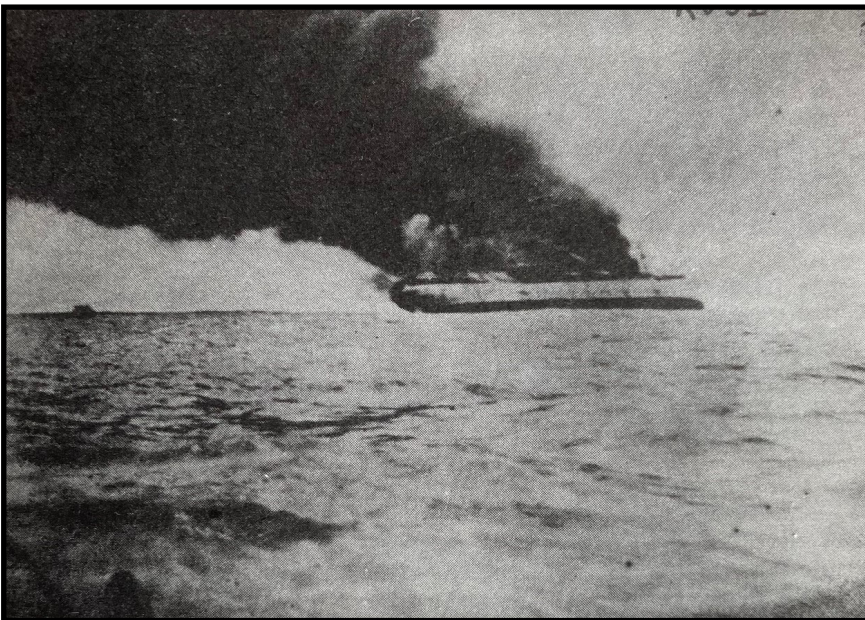
I got in the required three years to complete my time at the Cleveland Police Department before retiring. With ship operating and thirty-eight years of police radio behind me, I spent my time watching the mailman, reading newspapers, working my ham station W8AF, and doing a bit of cartooning. I forgot to mention that my cartoons were part of the Fraternal Order of Police publications from 1944 through the late 1970s, and later, I would draw for the Society of Wireless Pioneers publication, the group having been a worldwide organization of old-time operators, mostly shipboard, who have saltwater in their veins. In my case, however, it was freshwater from the Great Lakes!

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Can you help?

The RRI Digital Traffic Network needs more infrastructure (hub operators) and DTS stations. This allows us to build circuit capacity to better prepare for emergency operations. Please let us know if you can help. A computer equipped with VARA and a common transceiver is sufficient .

RRI also needs at least two, preferably three Region 10 RRI-Winlink gateway operators. Shared duties include routine download of incoming traffic and transfer to the best network to expedite traffic flow, whether voice, CW, or digital.



Fire at sea is one of the greatest fears of any mariner.

On October 12, 1922, the *SS City of Honolulu* (call KUSD) caught fire. Operators on board were W.P. Bell (Chief), H.D. “Duke” Hancock (2nd), and Norris C. Kumler (3rd.), the latter being on watch when the fire was discovered. Thanks to wireless, 262 lives were saved. The *SS West Farallone* picked up all survivors and transferred them to the *USAT Thomas*. Thanks to the late Ed Marriner for this picture taken on October 13 of that year from the deck of the *SS West Farallone* (call KDSX).

8 February 2023



To: All traffic operators and emergency communications organizations.

Fm: Radio Relay International

Re: RRI Digital Traffic Network and the RRI-Winlink Gateway System Interoperability Requirements

RRI Operating Directive

It has come to the attention of Radio Relay International that a number of radio amateurs are originating radiogram-ICS213 messages that are formatted in a manner contrary to RRI interoperability standards.

“Interoperability” is defined as the ability of communications traffic to move between modes and networks intact and with minimal delay or error. Effective interoperability is predicated on the use of standard protocols that can be applied to all networks. This harmonization of procedures limits delays and prevents errors in record message traffic.

For example, one may originate a radiogram or radiogram-ICS213 message via the *RRI Digital Traffic Network*, in mixed case with complex abbreviations and punctuation. However, if that message must be transferred to a voice, CW or non-amateur network (i.e. a public safety talk group or emergency services dispatch channel) to achieve last-mile delivery, those conveying the message may not be trained or equipped to transfer the content accurately.

RRI standards require that all radiogram or radiogram-ICS213 messages must be originated in upper case (all-capitals), and the punctuation utilized must also conform to RRI guidelines. If one must include non-standard punctuation, it should be spelled-out.

Effective immediately, messages originated via the RRI Digital Traffic Network or the RRI-Winlink gateways that do not conform to RRI interoperability standard may be serviced back to the originator if it is determined that the format or content may result in disruptions to net operations or problematic errors during the delivery process. While we regret any inconvenience this may cause, the overarching imperative is the preservation of network efficiency and interoperability.

All traffic and EmComm operators are invited to visit the Radio Relay International web page to better understand our protocols and guidelines. Our “publications” section contains not just training documents and field manuals, but also training videos that explain these concepts. Please visit **www.radiorelay.org**

Organizations wishing to experiment with unique message formats or specialized procedures should contact Radio Relay International in advance so appropriate arrangements can be made to facilitate the process without disrupting routine net operations. Please contact Steve Hansen (KB1TCE), the RRI Affiliated Programs Manager, or James Wades (WB8SIW) RRI Emergency Management Director and Board Chair, to make the necessary arrangements.

Thank you for your attention to this matter.

73,

Radio Relay International

www.radiorelay.org

The Proven RRI Radiogram-ICS213

By James Wades (WB8SIW)

Several years ago, Radio Relay International developed a cohesive methodology designed to facilitate the transmission of ICS213 messages via the traffic system. The goal was to develop a process through which an ICS-213 message could be originated via the traffic system, pass through digital or manual-mode networks seamlessly, and emerge at the point of delivery with the necessary accountability information presented in the sequence familiar to those active in the NIMS process. **The result was the RRI Radiogram-ICS213 message.**

The RRI Radiogram-ICS213 was not developed in a vacuum. The protocols were developed from samples of harmonized radiogram-ICS213 messages submitted by ARES and other emergency communications organizations throughout North America. Best practices were identified and an official version was developed based on the requirement that those operators responsible for the relay of messages could do so without the need to adopt unfamiliar procedures or techniques. Public comment was requested and considered as well, with a significant period of public comment incorporated into the final product. The end result is a protocol that ensures interoperability, minimize demand on circuit capacity, and facilitates the relay and transfer of radiogram-ICS213 messages through all net layers in a manner that is seamless and consistent with standard radiogram relay methods.

RRI also worked with the Winlink Development Team to develop a template that walks inexperienced traffic operators through the process of creating a properly serviced, consistent radiogram-ICS213 message. In addition, RRI worked with the Winlink team to develop a series of regional gateway stations that not only facilitate the transfer of radiograms and radiogram-ICS213 messages between the two networks, but which also incorporate sufficient flexibility that a welfare, priority, or emergency message can be routed to the network that provides the most expedient message transfer in time of emergency.

For those unfamiliar with the RRI protocols, we strongly recommend viewing this training video:

<https://youtu.be/wzmYc2i4YTQ>

This written document also explains the RRI protocols and methodology:

<https://img1.wsimg.com/blobby/go/a7c9f25d-31a7-4462-ba9c-709656c16385/downloads/Instructions-for-Radiogram-ICS213-Relay-and-De.pdf?ver=1675834844269>

Furthermore, the RRI web page has several fillable Radiogram-ICS213 message forms ready for use on its “publications” page:

<https://radiorelay.org/publications>

If your emergency communications organization needs to address the issue of transferring ICS213 messages via the traffic system, it is important to understand that a complete, integrated solution is available, which features interoperability and universal access using all modes and methods.

If you have questions regarding the RRI Radiogram-ICS213, please contact RRI.



QNI NEWSLETTER

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A Traffic Operator's Newsletter

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Portable Operation

The “Parks on the Air” program has become very popular in the Amateur Radio world. The sudden popularity of this program is actually rather surprising. Radio Amateurs have been deploying portable stations to the field for years. RRI has even conducted some emergency communications exercises featuring portable operation.

So, what makes this program so popular compared to other initiatives to get radio amateurs out in the field? It appears hams like contests and “wall paper.” They like the idea of chasing an operating goal of some type. Perhaps they want to see if they can work more POTA stations than their fellows.

Perhaps RRI needs to change its approach to those emergency drills that feature portable operation. Perhaps we need to integrate a “contest” or “operating award” element. We tried this recently with some success, even awarding a prize to the members of an EmComm team in New Jersey that scored the highest number of points.

Instead of collecting signal reports, perhaps we need to create an operating award for portable operators who not only deploy a portable station, but successfully originate a radiogram from their “park” location. This may add an additional dimension to POTA and encourage greater familiarity with the radiogram format and net procedures, at least for those select, elite operators who take on the challenge!

Digital Traffic Network

One of the “big, hairy, audacious goals “ of RRI during 2023 is to greatly expand the RRI Digital Traffic Network. Goals include:

- Establishing a greater diversity of “infrastructure” stations in the form of area and region hub operators.
- Increasing the number of RRI “Digital Traffic Stations” throughout the United States, thereby ensuring improved liaison to local and state (section) nets ,while also ensuring that the necessary staffing is available to expedite 24-hour message transfer in time of emergency.
- Encouraging new methodologies to bring digital traffic down to the local level while avoiding the problems of diffusion of responsibility that often resulted in the delivery failures that were common to the old BBS systems.
- Improving connectivity to our overseas networks, ensuring a more robust connectivity with greater immunity to propagation anomalies and the like.

Why not learn how to get involved in DTN! Contact RRI for more information.