

## THE “SECRET SOUNDER”

Few would argue that Franklin D Roosevelt was one of the most influential presidents of the 20th Century. It may take several generations before historians are sufficiently devoid of political bias to truly measure the success of his policies, but it seems likely that most will conclude that he knew how to influence the public.

Historians tend to concentrate on the success of his “Fireside Chats” distributed by network radio. However, FDR also made excellent use of the traditional media and wire services. Much of his press was distributed by telegraph. In addition, the telegraph was a constant presence at the White House and at his retreat at Warm Springs, Georgia. A special “telegraphers shack” once stood at his retreat.



*A FDR speech shows a number of Western Union operators equipped with the “Secret Sounder” special event set.*

This photo, taken by Arthur Grumbine, shows a speech by FDR at Harrisburg, PA in 1936. Grumbine was a press telegrapher regularly assigned to FDR. His Western Union special event set can be seen in the foreground of the photograph.

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## QNI MISSION STATEMENT

QNI is an independent newsletter dedicated to promoting NTS and 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 the ARRL, the National Association for Amateur Radio, nor those of any particular NTS net or emergency communications organization.

Our mission is to provide a forum for NTS 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.

## FDR and the Telegraph

The “special event set” seen below, was called the “secret sounder” by Western Union. Instead of the traditional telegraph sounder, this device used a simple “RC” network to simulate the report of a telegraph sounder in an earphone. By doing so, a group of press telegraphers would not disturb an important event, such as a speech, an opera, or other event, which required press coverage.

Few today give thought to the role of the many telegraphers who were privileged to have a front row seat at events, which shaped our history. The competent press telegrapher often served as more than a conduit for information. Reporters came to rely on a trusted press telegrapher as a “primary editor,” who could identify grammatical errors, offer suggestions for improved copy or, if necessary, hold up his end of a card game while simultaneously transmitting a story in Phillips Code to the newspaper. They were undoubtedly an impressive lot!



*A Western Union “Secret Sounder” from the Washington, DC Western Union Office. Formerly in the collection of Jim Wades, WB8SIW and now part of the Morse Telegraph Club museum archive.*

## The Service Message

One of the advantages of NTS methods is accountability. Whereas ARES groups and similar organizations often tend to fall into the "easy rut" of informal methods, which give the *illusion* of greater efficiency, NTS and its associated radiogram format facilitate a high level of accountability. One phase of this accountability is the ability to conveniently "service" a message.

Perhaps the most common "service message" is a radiogram in which the delivering operator reports a delivery problem. Examples include:

- Reporting that an address and/or telephone number are no longer valid.
- Reporting that an addressee is deceased or otherwise unavailable.
- Reporting the date and time of delivery of specified messages ("HXC," etc.).
- Requesting clarification ("give better address").

The most important data for the service process is the message serial number and station of origin contained in the problematic message. As discussed in previous articles, when the station of origin assigns a serial number to a message, he associates its content with an easy to reference identification number. For example, imagine originating a few hundred messages from an Emergency Operations Center during a major disaster. If delivery problems arise, or a unique delivery situation must be reported back to the station of origin, all that the delivering station needs to do is reference a specific message serial number in his reply or service message. He also knows to which station he should route the service message. This allows the operators at the station of origin to quickly locate the original message and take appropriate steps. For example, in an EOC environment, the station of origin may:

- Notify the originator (agency official who signed the message) that the message is delayed.
- If the service message indicates that the original addressee is unavailable, the station of origin may ask the originator for an alternate addressee or alternate official to whom it can be delivered.
- The service message may trigger sufficient research to locate a better address, which will then be reported back to the delivering station to effect improved future delivery.

When informal methods are used, such delivery problems are likely to "fall through the cracks." The originating station may *assume* that the message was delivered simply because the administrative process is NOT in place to report problems. Even if the delivering station reports problems, a degree of confusion may result when the operator at the station of origin struggles to figure out whose message wasn't delivered! This could result in a major mission failure for a served agency!

As stated in the past, those who argue that the radiogram format, which assigns responsibility and network tracking information to third party traffic is not needed, are exhibiting a degree of inexperience or ignorance. The ability to report delivery problems, delays, or similar issues specific to a unique message via the service process is a critical component in network

operations. This requires knowledge of a message serial number, station of origin and place of origin (components not always included in the IC-213 and similar "internal" message formats).

Of course, routine NTS operations also require service messages. After all, one responds to a communications emergency in the same manner in which he trains for such emergencies. Therefore, NTS volunteers should live by some fundamental principles:

- When one accepts a radiogram on a net, he also accepts responsibility for delivery. He should do his best to deliver the radiogram in a timely manner.
- Before reporting an address or phone number are incorrect, he should do his best to locate a correct number to facilitate timely delivery. He can then report the correct address, agency, or phone number back to the originating station.
- A service message requesting a better address or reporting "QTA" should never be originated until local research and corrective options are exhausted.
- Handling Instructions in the message preamble should always be respected. For example, if an operator indicates "HXC," then one has an obligation to respond with a service message reporting the date and time of delivery.

So how does one format a service message? There is no ideal method for doing so. However, a variety of conventions have been imported from the commercial telegraph companies, which exercised great economy to preserve circuit capacity (service messages were non-revenue activities). Here are some examples of efficient service messages one might transmit via NTS:

1 R WB8SIW 16 MARION IL NOV 11

K8QMN

DEARBORN MI 48121

REF MSG 22 JONES 313 555 1345 INCORRECT X NEW TEL UNLISTED PLEASE GBA X 73

WADES

This message may also be formatted using the ARL Numbered Radiogram "ARL Sixty Seven:"

1 R WB8SIW ARL6 MARION IL NOV 11

K8QMN

DEARBORN MI 48121

ARL SIXTY SEVEN 22 TEL UNLISTED

WADES

From this example, one can determine the following:

- The service message is in reference to message number 22 originated by K8QMN.
- In the first example, the last name and phone number associated with the original address is reported back to K8QMN to ensure it was not garbled in the original message.
- In the first message, the text indicates that an attempt was made to locate the correct telephone number locally but it was found to be unlisted.
- The delivering station requests a better address, "GBA" translating to "give better address," whereas in the second version, the ARL Numbered Radiogram Text asks "please advise."

When transmitting a service message containing a telephone number, it is good operating practice to repeat the telephone number during transmission/relay. This ensures the number won't be garbled during relay through NTS. Likewise, when using ARL Numbered Radiogram ARL Sixty Seven, it is wise to repeat the message number due to the lack of other confirming data.

2 R WB8SIW 8 MARION IL NOV 11

K8QMN

DEARBORN MI 48121

REF MSG 33 JONES DELIVERED 2230Z NOV 11

WADES

A similar version of this message can be transmitted using the ARL Numbered Radiogram "ARL Forty Seven:"

2 R WB8SIW ARL8 MARION IL NOV 11

K8QMN

DEARBORN MI 48121

ARL FORTY SEVEN 33 JONES NOV 11 2230Z

WADES

In this example, we know the following:

- The service message references message 33 originated by K8QMN.
- The addressee's surname is Jones. This provides clarification in case there is an error in the message number referred to (for example, someone might copy "34" instead of "33," etc.).
- The date and time of delivery are both in UTC (zulu). Remember, the new radio day starts at midnight, UTC.
- A last name in the signature is important in environments where an Amateur Radio Station is staffed by more than one operator, such as an EOC, Incident Command Post, etc.

3 R WB8SIW 9 MARION IL NOV 11

K8QMN

DEARBORN, MI 48121

REF MSG 45 JONES DELIVERED VIA USPS NOV 11

WADES

In this example, the delivering station is reporting the following:

- The message was delivered via USPS (postal service).
- The date on which the message was mailed is indicated.
- No time is necessary because it is irrelevant if a "hard copy" radiogram is mailed to the addressee.

Sometimes, a reply message may appear similar to be a service message and utilize some of the same network data. For example, referring back to our example of an Emergency Operations Center, let's consider a directive originated by a served agency official:

4 P WB8SIW 26 SPRINGFILED IL 1345Z NOV 15

LT MARK WALKER

MARION POLICE DEPARTMENT

MARION IL 62959

STATE MEDICAL EXAMINER REQUIRES TEMPORARY MORGUE TO ACCOMMODATE ONE HUNDRED VICTIMS BEFORE TRANSFER TO OTHER FACILITIES X PLEASE ADVISE PROPOSED LOCATION AND ANY SPECIAL ACCESS INSTRUCTIONS

CAPT STEVE JOHNSON

ILLINOIS EMERGENCY MANAGEMENT AGENCY

An initial reply may have some of the characteristics of a service message:

34 P W9ABC 19 MARION IL 1357Z NOV 15

WB8SIW

ILLINOIS EMERGENCY MANAGEMENT AGENCY

REF MSG 4 AT REQUEST OF LT MARK WALKER MSG DELIVERED TO DR FRANK MEYERS WILLIAMSON COUNTY MEDICAL EXAMINER

CLINTON

This latter service message reports a change in delivery that should be reported back to the originator (Capt. Steve Johnson). In this case, the operator at the State EOC would notify Capt. Johnson of the fact that the message was re-directed to the Williamson County Medical Examiner. This accomplishes the following:

- It prevents delays should Capt. Johnson attempt to originate further messages about the temporary morgue or the logistics associated with it. He will now know that subsequent messages should be addressed to Dr. Frank Meyers, the Williamson County ME.

## E-Mail Delivery of Radiograms By James Wades, WB8SIW

- The chain of responsibility (custody) is preserved. Both the originating station operators and the served agency official at the State EOC know to whom the message was redirected. The responsibility for action and any associated reply now rests with Dr. Meyers.

Can one now see the importance of having all of the necessary message service data contained within a radiogram preamble? It is not enough to have a time, address and signature, nor is a "subject" line particularly helpful. Rather, the ability to know how to route and reference specific messages proves to be the big time saver and a significant liability shield in time of emergency. It should also be noted that IC-213 and other message formats are NOT designed to facilitate network routing and should therefore be considered a *minimum* standard, which is unsuitable for ARES operation beyond basic operations internal to the EOC or similar facility.

It is also important to understand that the way in which one drills will drive how one will respond in time of emergency. Some disaster response missions ask for technical solutions. Some call for simple tactical communications in which radio amateurs generally facilitate only their own movements as they perform tasks that are not specifically communications related. However, when one moves into a role in which he must transmit message traffic of *genuine importance* to facilitate agency operations, basic organizational and administrative skills become incredibly important.

Some will, of course, argue that the time in which Amateur Radio was required for such a role have long passed, superseded by satellite phones, the Internet and cellular mobile data networks. Yet, a case can be made that the worst case scenario may very well require our ability to convey mission critical third party traffic. A devastating natural or technological disaster is unlikely but not out of the realm of possibility. Like government, non-government organizations active in disaster planning also have a responsibility to plan for the worst case scenario. NTS and its methods at the minimum offer excellent training in network operations and, should the worst case event happen, NTS offers a survivable communications network with some real advantages over "informal" methods. Perhaps most importantly, the ability to catalog, track and reference messages against a time-line is an important "value added" capability that Amateur Radio can offer an emergency services agency, whether that information is conveyed by carrier pigeon or satellite telephone.

Finally, if we treat each NTS message like it is important, and we take the necessary steps to properly manage the network by efficiently utilizing such techniques as service messages, we are properly training radio amateurs for an important role in time of a major emergency. Let's do things right every day so that our actions will be automatic and efficient should the worst happen.

I recently received two radiograms addressed to the Illinois Section Emergency Coordinator, Brad Pioveson, W9FX. Because I had an up-to-date e-mail address for him, I decided to deliver them via e-mail. At the time, he was on vacation in Texas and the e-mail delivery process turned out to be a good solution.

In recent years, I have advocated for e-mail delivery as an *option* for radiogram traffic. The proposal has been met with a range of responses from outright hostility to occasional sarcasm and, interspersed with this, a degree of positive support for the idea. I believe the negative responses are largely based on a misunderstanding of my proposal.

In other QNI articles, a number of authors have discussed the increasing problems associated with telephone delivery. These can be summarized as follows:

- Fewer current published numbers are available in either print or on-line databases.
- People move more often, therefore long-term, stable telephone numbers are rarely associated with an individual.
- Caller-ID encourages individuals to not answer calls from unfamiliar numbers.
- People today consider calls from strangers, even with the best intentions, as an invasion of privacy.

Simply put, the ability to "reach out and touch someone" via telephone is going the way of the proverbial buggy whip. Everyone is "connected," but they jealously guard their network of friends and associates, limiting the intrusions by strangers, including well-intentioned hams attempting to deliver a radiogram.

E-mail offers an additional tool for radiogram delivery, which can bypass many of these problems. It also affords several benefits:

- The addressee gets a "hard copy" of the message traffic, which he can review at his own leisure.
- The delivering station can include an explanation of the purpose of the radiogram and the network that supports it.
- E-mail allows anyone, anywhere, to deliver an "expired" message (greater than 48-hours old) for which an outlet is unavailable.
- One can include one or more links via which the addressee can learn about ham radio, public service communications, the local radio club or the NTS net web page.

In the past, I have proposed the creation of a HTML radiogram form. No one has stepped forward to create one. However, this does not prevent someone from delivering a radiogram via e-mail. One can have a prepared text saved as a word file, and simply "copy and paste" the radiogram to be delivered into the body of an e-mail. This creates a standard template into which one need only quickly insert the radiogram, thereby saving considerable time.

Ideally, as delivered, the radiogram would include information about Amateur Radio, our public service communications mission, the NTS networks and links to appropriate web content through which the addressee can learn more about Amateur Radio.

E-mail delivery could also be an excellent follow-up to telephone delivery. After initial contact with the addressee, one can send a copy of the message via e-mail, along with the associated content explaining and promoting ham radio.

In a sense, the delivery of radiograms via e-mail can do much to create good public relations for Amateur Radio. It can make the public aware of our on-going emergency preparedness mission and perhaps spark an interest in NTS amongst existing radio amateurs. Such methods might even encourage the occasional individual to become a radio amateur.

Using a very basic text-based template I put together for the purpose of radiogram delivery, I sent a sample radiogram delivery to myself in order to illustrate the concept for "QNI." I then opened the e-mail and printed it as displayed by "Gmail." This provides a sample of what the addressee receiving the radiogram might see during a typical delivery. If someone would like my Microsoft Word file as a template to facilitate their own e-mail delivery option, feel free to contact me directly and I will send you the file.

It is also important to add that NTS members must exercise caution to ensure that e-mail delivery options are not used as a way to bypass the network system. The purpose of radiogram traffic is to exercise the entire layered network concept. This means that the typical *routine* message should, ideally, stay on NTS to a point near the addressee in order to exercise the system, with e-mail delivery providing only the "last mile" of connectivity. Nonetheless, there are times when getting a message delivered on-time is more important than exercising the network. This includes those times when an outlet simply isn't available on the section or local net for a message.

It is also important to caution users of this technique that simply hitting the "send" button does not ensure a message arrives in the addressee's "in-box." It is always wise to ask for a confirmation message from the addressee if one is relying on e-mail delivery exclusively. Furthermore, the use of the e-mail delivery option assumes the message was originated with a valid e-mail address (current convention is to include it after the phone number in the preamble). An e-mail can be harder to locate than a phone number and even those of radio amateurs that are published on web sites such as "QRZ.com" are often terribly out-of-date. **In the case of served agency traffic, never ASSUME that a message delivered by e-mail has been read! In such cases, either a confirmation e-mail must be requested, or a telephone call should be made in association with the radiogram delivery.**

E-mail delivery allows us to use our own networks to promote Amateur Radio and NTS. Such methods can create much-needed visibility for NTS and traffic networks. A standardized template and consistent presentation within e-mail delivery methods can also enhance message delivery to served agencies, which have necessarily high expectations for any volunteer service upon which they must rely.

12/20/2014

Gmail - Radiogram Delivery



James Wades <jameswades@gmail.com>

### Radiogram Delivery

James Wades <jameswades@gmail.com>  
To: James Wades <jameswades@gmail.com>

Sat, Dec 20, 2014 at 10:27 PM

Hello:

The following radio-telegram ("radiogram") was received at a local FCC Licensed Amateur Radio Station for delivery to you. More information is included below:

221 R K8QMN 12 LANSING MI DEC 24  
JOE HAMM  
2235 OLIVER ST  
CARBONDALE IL 62901  
618-555-1234

BEST WISHES FOR A MERRY CHRISTMAS AND HAPPY NEW YEAR X 73

SAM

This message was received at the Amateur Radio Station of James Wades, WB8SIW at the following time:

#### Frequently Asked Questions:

What is a radiogram? A radiogram is simply a telegram message transmitted via an emergency communications network maintained by volunteer radio amateurs. This network, called the "National Traffic System" ("NTS") operates 365 days per year, 24-hours per day using a variety of communications modes, from radiotelegraphy to the latest digital methods.

What is the National Traffic System (NTS)? NTS is a decentralized, survivable communications network that is always available for public service communications in time of emergency. Unlike cellular data networks or the Internet, NTS does not rely on communications towers, fiber optic cables, or central offices, which are vulnerable to disaster. Because of this, NTS is always available for emergency communications regardless of disaster conditions.

Why would someone use the NTS when there is no emergency in progress? Radiograms are originated via NTS throughout the year to exercise the network, train operators and maintain the network facilities. Any message of a non-business nature, which does not violate FCC Regulations, is permitted.

How does it work? A message can enter the network from any location in the World (subject to FCC regulations and international agreements). It is then routed through the NTS networks to the volunteer radio amateur nearest the addressee who is then responsible for its delivery.

How are messages delivered? Routine messages may be delivered via telephone call, e-mail, post office or personal delivery. Higher priority messages are typically delivered via telephone call or in person. Within an emergency services environment, such as police, fire or emergency management operations, hard copy or electronic delivery is common.

Why use NTS when one can simply e-mail the message directly? Remember, the idea is to exercise a survivable communications system that will continue to operate even when local telephone and internet service is unavailable due to natural disaster, technological disaster or a coordinated terrorist attack. Therefore, the routine message must pass entirely through the NTS system to exercise the system before delivery to the addressee can be made.

Is there a charge for this service? No charge is made for the transmission of radiograms. This is a volunteer public service provided by the Amateur Radio Service.

Why is the radiogram in "all capitals"? No one is "shouting." Rather, radiograms, like telegrams, are transcribed in all capitals because some communications modes do not distinguish between upper and lower case

Where can I learn more about Amateur Radio? In order to learn more about Amateur Radio or the National Traffic System, please visit the following web pages:

What is Amateur Radio: <http://www.arf.org/what-is-ham-radio>

Amateur Radio Public Service: <http://www.arf.org/public-service>

The National Traffic System: <http://www.arf.org/nts>

The Michigan Net, QMN: [www.michigannet.org](http://www.michigannet.org)

Information regarding the local Amateur Radio Club can be found at: [www.localhamradioclub.org](http://www.localhamradioclub.org)

# Some Thoughts on Simulated Emergency Test

By James Wades, WB8SIW

Yet another ARRL Simulated Emergency Test has come and gone. Undoubtedly, many ARES groups put some genuine effort into this year's event.....however....

As each year goes by, it seems SET becomes less relevant. In some areas, ARES groups simply don't participate, either due to a lack of interest or because they have found it necessary to combine their ARES SET with an emergency exercise sponsored by a local emergency services organization on an alternate date.

While there is certainly no problem with scheduling SET for an alternate date to coincide with a served agency exercise cycle, such decisions at the local or section-level tend to undermine the capacity of ARES to test interoperability and mutual aid between surrounding multiple groups. Logic would dictate that an ARES group that may not be activating locally should at least activate those components dedicated to providing liaison to surrounding ARES groups. This would include assigning a few volunteers to facilitate delivery of any incoming traffic from those ARES groups that choose to participate on the scheduled national date.

Another problem with SET involves the "once-per-year participants." From a NTS standpoint, the quality of these once-per-year participants seems to degrade with each passing year. This may be a reflection of the ever diminishing emphasis placed on traffic handling skills by local ECs and similar leadership officials or perhaps it is a reflection of a more widespread belief amongst Amateur Radio operators that cellular data networks and the Internet have diminished the value of their emergency communications service. Regardless of the root cause, dropping such untrained individuals into a NTS net is the equivalent of dropping sand into the proverbial well-oiled machine. In reality, SET is neither the time nor place to learn how to handle traffic. Yet, many ECs treat it that way. During SET, net efficiency is sometimes degraded to the point where the process does not realistically test the ability of the experienced net members to support an emergency operation.

The on-going trend of independent SET dates and poor net liaison has led us to a disjointed, incomplete SET that does little to test anything beyond local communications capabilities. One might even argue that this Swiss-cheese operation brings into serious question the very relevance of SET. Perhaps the time has come to look at ways to revamp SET to ensure that it effectively tests our emergency communications capabilities at ALL levels. Some ideas, which might be worth considering include:

*Option One: Eliminate SET entirely*

Arguing from a mostly negative perspective, one might be able to

make a case that SET is now little more than a charade. Over the past several decades, SET participation has declined. The scheduling of the event on a weekend date improves volunteer participation but significantly limits real-time interface with many served agencies. The lack of interface with both local agencies (EOC, ICS, etc.) at the ARES level and the lack of NTS liaison at the section level results in an event that does little to genuinely simulate a real "emergency situation." While a creative EC and his team can certainly design a meaningful stand-alone local SET scenario that actually provides training benefit, many do not. Therefore, one might ask "what is the benefit of this activity?"

Instead of conducting a SET, perhaps it would be more realistic to simply require each ARES group to conduct one full-scale exercise involving field deployment once per year. This would at least allow volunteers to practice portable operation while also activating some key stations to push a few local messages around in association with a served agency exercise.

*Option Two: Develop a separate SET for NTS*

A STM and section/local net managers are certainly capable of developing a suitable stand-alone exercise of their own design. By definition, it would be a "drill" in that it tests only a single emergency communications response function. Nonetheless, it would allow NTS to test, critique and improve its capabilities in a pro-active manner as opposed to being forced to behave a bit like the beggar, hat-in-hand on the street corner asking for alms, hoping that local ARES groups will be nice enough to include NTS in their local exercises. Realistic message traffic could be obtained from a variety of served agencies and scheduled for origination during the drill. It could then be tracked through the system, with the served agencies reporting time/date of delivery, thereby providing measurable such as system dwell time, percentage of delivery within target period and accuracy. Such measurable data can then be used to target system deficiencies through member recruiting, improved liaison with ARES, RACES and similar resources and the like.

*Option Three: Make NTS and District Liaison a requirement for all ECs on the official SET date.*

The League has traditionally avoided setting specific standards for local ARES groups. One should be careful not to be too critical of the League's *laissez faire* approach. As many of us have learned over the years, there are plenty of political landmines buried within volunteer programs in which leadership (supervision) does not have the leverage of a salary and employment to ensure subordination. The League and its field organization leadership officials may be able to lead the proverbial horse to water, but it has few tools to make that horse drink. However, despite political realities, it seems the League, as well as many SECs, could do more to *encourage* better conformity. At the very least, an EC could be expected to activate a skeleton crew of several volunteers to ensure that traffic from nearby ARES groups or traffic originated via NTS

or other wide-area networks finds an outlet in their area. Are we really so afraid to set standards that such a request is considered divisive? Is it possible that ARES leadership sees so little value in NTS that they simply don't consider such an option?

*Is SET still relevant?*

Perhaps the big question is this: "Is SET still relevant?"

With each passing year, the need for Amateur Radio emergency communications diminishes. This is particularly true of the smaller events. In some cases, ARES has been reduced to emergency volunteers who just happen to bring their own radio. More often than not, the ARES volunteer is seen as additional staff to monitor roadblocks, engage in SAR activities, or a warm body to distribute sandwiches and donuts. Yet, the potential for the "big one" still exists, and just as government must plan for the worst-case scenario, so must ARES and NTS plan for a worst case scenario communications emergency during which only the most survival methods prove viable.

ARES and NTS both face an interesting dilemma. The local emergencies, which used to require Amateur Radio services, are now being handled by improved public safety and commercial common-carrier resources. This has led many radio amateurs and much of the public to believe that emergency communications preparedness is no longer important. For some, the "big-one" scenario seems as far-fetched as the latest science fiction thriller. Such denial creates a gulf between training and preparedness for a potential catastrophic disaster that is simply too large for many to cross. Toss in a bit of politics and the occasional unwise use of volunteer resources, and it's very easy for many to ask "why bother."

Yet, a properly planned and executed annual SET could be very relevant should we ever find ourselves confronted with a major disaster during which our ability to *communicate effectively* is really needed. At the very least, the skills learned during such exercises have applicability to the routine public service events we often participate in; even if those events are nothing more than the occasional parade or walk-a-thon.

-30-

## Some Thoughts on Our Traffic

By Kate Hutton, K6HTN

Some readers may be surprised to see me writing this, but ... I think NTS is coming up to a transitional period, where we must get more varied and interesting traffic to replace the pervasive bulk traffic, that constitutes the vast majority of what we pass.

In my mind, bulk radiogram traffic currently serves two purposes: 1) it keeps the NTS well oiled, at least in some geographic areas, and 2) it exposes a percentage of hams, especially new ones, to

the existence of the NTS.

However, trends in the public attitude toward their telephones may leave us without any source for addressee information. At some unknown time in the future, we'll need a replacement source for generating traffic that is preferably more individualized (small quantity of book traffic will remain reasonable), which is similar in volume to what we have now, and which reaches a large segment of the ham community.

I place the blame for these telephone trends squarely on the telemarketing industry, as well as similar fund-raising and vote-raising industries. For my own part, I don't even answer my own landline unless I recognize the number or if the caller starts to leave a message that interests me. I generally get at least a half dozen telephone solicitations every day. If I answered them, I would probably hold the same negative attitude, or worse, that we NTS delivery stations sometimes encounter.

In addition to the above, there appears to be a mass movement away from landline telephones to cell-only households. Because of the telemarketing and the original per-call or per-minute pricing structure, cell phone numbers tend to be unlisted. Email addresses are also closely guarded.

My success rate in finding a telephone number for a new ham is about 40%. However, the results are very geographically dependent and, if the ancillary information provided by 411.com is correct, demographically dependent, as well. More phone numbers seem to be listed for older addressees, addressees in the Eastern Area, and those without apartment numbers in their addresses. There is also somewhat of a tendency for addressees in major college towns and with foreign-seeming names to lack listed landline numbers.

I see by my returned service messages, and also from looking up myself and many of my friends, that the telephone look-up services, such as 411.com and whitepages.com, are out of date. I'm not sure how out of date they are, but I would guess at least a year.

So, in short, we may someday find ourselves with nobody in the general ham community to send messages to.

If all of us traffic handlers were put our energy into sending personal messages, or messages based on previous ham contacts, articles read, etc. ... use your imagination! ... which were varied in content, we should be able to replace the expected future decline in bulk traffic. From what I am told, there are some traffic handlers out there who would be overjoyed to see this!

Why don't we? I suspect there are several reasons. For one, email and cell-phone calling or texting are just too easy, quick, and spur of the moment. Sending a radiogram greeting for an occasion, such as a birthday or holiday, requires planning ahead to offset the inherent delay in the system. It requires thought to cram our intent into 25 words, etc. We are required to step out

of our routine of handling someone else's traffic, into the wide world of composing our own.

Also, I hate to say it, but I'm afraid that another reason we don't compose more traffic is because the chances are fairly high that the traffic will not be delivered (or serviced). In other words, it may disappear, be lost, or fall into the nearest black hole. A certain attrition rate is acceptable for bulk traffic, although it is contrary to our MPG training! But attrition causes MUCH more of a problem with chess games, personal conversations, etc.

I don't know how many times a ham, new to ARES or ham radio in general, has asked me to send a sample message to their out-of-state disaster contact: "THIS IS ONE WAY I MIGHT CONTACT YOU AFTER A DISASTER, etc." The message goes out and then nothing happens. If I am very lucky, I may get a NO OUTLET service message. This outcome is very discouraging to all, but especially for the newcomer who may be a potential NTS recruit! It also does not go over very well with ARES, our main public service client. It doesn't give the NTS ops on the other side of the black hole much practice or traffic to handle, either.

We have GOT to get past the non-delivery problem if we ever hope to get personalized traffic from our own participants, or anyone else for that matter.

It may be useful for us (individual and collectively) to review why we are involved in NTS. Reasons that we traffic handlers get/stay involved are varied, of course, but in my mind the ranking is something like this:

- NTS could be useful someday WTSHTF
- NTS operating trains hams for accurate relay
- NTS operating trains hams to work in complex directed nets
- We get a lot of experience with our gear, propagation, modes, etc.
- It's fun & we like doing it.

I do not think I could justify it for myself, if we put the list in reverse order. As far as I know, we are the only amateur service that drills every day, or has drilling opportunities every day. How we practice is how we will operate when it counts. At that time, we will have to "get the message through."

Why not start now? Please send me comments if you are so inclined, via radiogram, of course!

KATE HUTTON K6HTN LAX STM  
PO BOX 60212  
PASADENDA CA 91116  
OP NOTE ROUTE VIA RN6  
or  
K6HTN ATSIGN WINLINK DOT ORG  
K6HTN ATSIGN ARRL DOT NET

## What Response Can I Expect?

By James Wades, WB8SIW

ARES leadership officials often make commitments to served agencies based on the number of registered or active members within their ARES group. The assumption is that a major disaster will motivate the vast majority of members to mobilize in time of emergency.

The assumption is probably correct in one respect; members may very well be motivated to play a role in response to a major disaster. Whether they can do so or not is quite another question. Consider the following points:

- Plan on about 30 to 40 percent of your members being either directly or indirectly impacted by the disaster. They, or their families, friends or relatives will likely be a priority in the initial hours following the disaster when ham radio support is needed most.
- A significant percentage of members will have critical, on-call responsibilities at their place of employment. Consider telephone company employees, broadcast engineers, rail and transit personnel, medical professionals and so forth. These individuals will likely be too busy restoring critical systems or supporting other response functions to be of significant use in an ARES communications role.
- A small percentage will be insufficiently healthy to play a role. Individuals with heart conditions or serious illness may be limited in their capacity to help, even if they have supported ARES by attending meetings and training.

The Emergency Coordinator and his staff should take these issues into account during planning. When individuals join ARES, it can be very helpful to provide them with a questionnaire asking questions about their employment and on-call responsibilities, health status and the like. This can be done without asking for details, which violate their privacy. By doing so, one can collect the raw, bulk data needed to anticipate a realistic staffing level in time of emergency.

Another point to consider is the impact of a 24-hour operation. People can't work continuously. If one attempts it, mistakes will occur. Therefore, one must anticipate available staff based on shifts. If hazard and vulnerability analysis and subsequent planning points to a minimum requirement for 30 operators positions to be filled, then one must have a membership base of 90 active, properly trained members assuming 8-hour shifts or at least 60 operators for 12-hour shifts.

**QNI  
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NEWSLETTER**

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Buchanan, MI. 49107

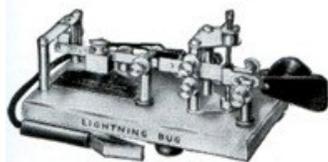
Editor: James Wades  
(WB8SIW)  
Email: jameswades@gmail.com  
Tel: 269-548-8219

Assistant Editor: Kate Hutton  
(K6HTN)  
Email: katehutton@gmail.com

***An Independent  
NTS Newsletter***

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teur Radio Community.



**What Response Can I Ex-  
pect?**

**Continued from page 9**

Because of these staffing requirements, the competent EC must be prepared to summon mutual aid. This requires a prior working relationship with surrounding ARES groups. It also requires that all ARES groups “sing from the same hymnal.”

Consider within this scenario, the following questions:

- What happens if one ARES group trains only with IC-213, but the other ARES group trains with both radio-gram format and IC-213?
- What if one ARES group concentrates critical network infrastructure on D-Star whereas another favors the universal, common denominator of VHF-FM.

One could go on with similar examples.

A couple of take-home points might be:

- Take advantage of all available volunteer resources. For example, use NTS volunteers for inter-county communications instead of trying to staff such a circuit with local hams.
- Use common denominator systems, that the typical ham can use (VHF and UHF-FM works everywhere), etc.

Finally, ask “what if?” Consider how disaster will impact staffing levels and equipment requirements and plan accordingly!

**What Happened to the Sep-  
tember Issue of QNI?**

*Some subscribers have inquired about the “missing” September issue of “QNI.” Unfortunately, a number of personal issues arose that prevented your editor from putting together a September issue. I offer my sincere apologies for any inconvenience caused by the “missing” issue.*

**COMMON DENOMINATOR MODES?**

Consider the lowly two meter FM hand-held radio.” The VHF-FM transceiver is something we all take for granted, but it’s really an amazing device, as is the volunteer-built infrastructure or repeaters, which supports it.

In time of emergency, I can take a portable VHF-FM hand-held radio to nearly any place in the North America and assist in time of emergency. Add a mag-mount antenna, a cigarette lighter adapter, and maybe a few other items, such as a gel-cell pack and “roll-up” J-Pole antenna, and I can establish reliable connectivity to local ARES nets from almost any location.

Universal common-denominator modes like two-meter FM remain one of the great strengths of Amateur Radio. Few other radio services offer this universal capability nor the

frequency flexibility of our two-meter band.

As ARES groups consider implementing such modes as D-Star and other digital protocols, it might be wise to do so in such a way that the value of universal, common denominators modes is not diminished. Consider the coverage and importance of a FM repeater to be decommissioned in favor of digital methods, for example, or consider an alternate band for new capabilities. UHF bands, such as 440-MHz are often underutilized, making them an excellent choice for deploying newer digital voice and data technologies without doing so at the expense of our universal common-denominator systems.

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—HAPPY HOLIDAYS TO EVERYONE!—