

(Introduction)

To date, there have been two subjects we haven't covered on any of our training nets that are equally important jobs within the NTS/ARES/RACES Traffic Networks especially during emergencies and or disasters, and those are the duties of Net Liaisons and Official Relay Stations.

Beginning this evening and completing Wednesday evening I will attempt to share with you information covering these two duties. All ARES members are encouraged to acquaint themselves with and train in our National Traffic System using Radiogram formal messages, in addition to our ARES/RACES tactical traffic handling.

Our ARES Nets need NTS liaisons and Official Relay Station operators. Those of you who wish to learn these special and needed skills, I urge you to attend any Fifth Region, Arkansas Section, Independent Traffic and local nets to practice your skills with routine Radiogram traffic.

(PART ONE)

“Traffic Liaisons and Official Relay Stations”

In order to provide a discipline to facilitate passing traffic among larger numbers of stations an additional layer of skills and organization is required; this is the responsibility of the Net Liaison and Official Relay Stations.

The ARRL National Traffic System is composed of nets operating at different levels as a function of area covered.

They are linked for traffic flowing in both directions by assigned liaison stations, and scheduled to operate sequentially to permit traffic to flow throughout the country.

The purpose of all traffic nets is to provide a controlled meeting of stations having business to conduct. The net is directed by a net control station which controls everything that goes on during the net meeting and if the net control does his or her job properly, all stations having traffic to pass will get their chance in an orderly fashion.

The key to successful net operation is order and discipline. The net control bears a large responsibility in this regard, but the individual station checking into the net must know the correct operating methods in order for the net control to maintain a smooth operation. An operator not familiar with normal net operation methods can disrupt the net and flow.

These nets operate on a variety of bands and modes although most HF operation is on 80 or 40 meters. The NTSD, the digital branch of the NTS, operates in parallel with the voice and CW nets providing manned and monitored digital message forwarding between Regions and/or Areas using HF Pactor, APRS or other digital modes.

New amateurs will find it quite amazing that they can check into a local net, pass a radiogram to a local station, and find out that the message may be delivered anywhere

in the country that night or the next day by this magical system of liaisons and nets.

During disasters, special public welfare nets may be set up in your area to facilitate the movement or archiving of large amounts of public traffic related to an emergency. These nets may/will work closely with the regular NTS nets, and operate using the protocols presented in the NTS/MPG manual. Traffic is usually, but not always, in formal ARRL format.

Also during disasters, our local ARES/RACES groups will run nets to facilitate the movement of traffic for their served agencies and for handling public welfare traffic. These nets are managed by Section and Local ARES/RACES officials and also operate using the protocols presented in the NTS/MPG manual; this is done to keep all of us on the same page when passing traffic. These nets may use special message forms and numerous ad hoc structures to meet the local needs but when moving to a NTS net the standard NTS/MPG protocols must be used. Public welfare traffic is handled in formal ARRL format. Traffic may be written formal traffic or tactical communications as required by the situation and served agency needs.

ARES/RACES may, from time to time, set up nets devoted to serving one or a small number of specific served agencies in order to accommodate the needs of

those agencies. Liaison with other ARES/RACES or NTS nets is arranged by the local ARES Emergency Coordinators or RACES Officers. These nets also use the NTS/MPG protocols. Protocols are used to hold down confusion and so we will all be speaking the same language.

In addition, local ARES/RACES or other amateur groups may evoke special nets for other special purposes. Generally they all use the standard net protocols, making only minor changes to suit the special purposes. These may use formal written traffic as well as tactical traffic as needed.

The Net Manager designs the format for the net, establishes the schedule of operations, days and times, makes sure the format is consistent with the NTS structure and guidelines; maintains manning assignments, establishes liaison assignments and agreements, and supports day to day operations. As an example of this, Randy..... 39 NCS's

Liaison stations are assigned to carry messages between nets. In the NTS, each Region and lower net Net Manager is responsible for assigning liaison stations going to and from higher level nets, and for stations going to and from other NTS cycles of operation at the Section level. Liaison stations always check into nets giving their liaison assignment so that the net control will know that all

representation is present and accounted for. Unscheduled liaisons from higher nets or the TCC should be handled by the NCS with priority. Traffic from or to these stations should be dispatched promptly for delivery or holding for later outlets.

LIAISON ASSIGNMENTS are also specifically assigned to stations by the NCS stations when needed. They are not used simply to indicate a net visited by a station prior to checking in, but to indicate that their station has been designated as an official representative from or to a net.

On ARES/RACES traffic nets responsible for specific pre-determined liaison responsibilities are assigned by the presiding Emergency Coordinator or District Emergency Coordinator. Examples are: Maintaining contact with assigned served agencies; Maintaining liaison with specified NTS nets; Maintaining liaison with ARES officials in adjacent jurisdictions; Liaison with mutual assistance or "jump" teams.

Liaison stations must check in promptly to their assigned nets. This permits efficient net operation and assures the continuity of the entire system.

Liaisons must know how to group their traffic for delivery on their respective target destination nets, and how to re-book or un-book traffic accordingly because the outlets are different at Local, Section, Region, and Area nets.

Stations do not have to wait for the Net Manager to solicit them to perform the various jobs on the net. When a station has learned the basic traffic handling and net skills, and becomes familiar with the specific assignments, it may express the interest in accepting a job, or volunteer to fill a vacancy, temporary or permanent, as the situations present themselves. Many amateurs have been baptized by fire by volunteering for liaison or NCS duties when a station was not present on the net, and afterwards have become regulars at the task. Other experienced stations on the net are always willing to answer questions or train newcomers in the various jobs.

All stations are welcome and encouraged to learn and move up in our traffic handling systems.

(part two)

Generally, liaisons are called for after the net preamble, before traffic dispatching starts, and before stations with or without traffic are checked in. Stations are often excused as soon as there is no more business for them, except for liaisons on lower nets which may be held to accommodate late checking stations, but only until it is time for them to leave for their assigned destination nets. The NTS system relies upon scheduled nets and reliable liaison between those nets.

Traffic is automatically assigned to the receive liaisons by default. On these nets traffic is normally dispatched off net frequency to permit ongoing net business. The NCS continues checking in new stations until all the expected liaisons are accounted for, and then continues the net until all listed business is cleared.

A station arriving late should check in as other stations do in response to an open or specific net call, getting NCS attention first, using the check in method appropriate for the mode and type of net call. Excuses for being late are not required or expected, but as friendly amateurs the expression “sorry late” is often used. Late liaisons should be informed if volunteers have taken their assignment or if they will still have the job. A swap or auxiliary assignment may be made. The NCS should determine if the new station can handle any of the pending business. This may be done through specific requests to the station, or by calling the net’s unassigned traffic list to inform all newcomers of pending business.

ROVING LIAISONS

During disaster services many nets may be operating continuously in a given area. Liaisons roving between these nets to carry traffic should always check out of the net they are leaving and into the destination net. Stations should never leave a net without first informing the NCS. Trying to work two nets at the same time sooner or later will cause inconvenience to one or both. A non-

responding station will often cause wasted net time, delay other stations, or trigger the NCS to assign traffic to other handlers. This can disrupt the effectiveness of net routing during such situations so always let the NCS know you are leaving.

When leaving temporarily the NCS will hold the station's traffic listed until it returns. The NCS may ask if or when the station will return, and if listed business should be held.

EXCUSING STATIONS INDIVIDUALLY

Many traffic nets excuse each station individually as the net business for that station is concluded. The choice of method is often determined by the format of the net. On Area/Region Nets, where most stations are liaisons, stations are excused when there is no further business pending for that station. On Area Nets a TX rep may be held in case help is needed until the RX rep from that Region checks into the net.

RELEASING LIAISONS ON TIME

Liaisons must be excused in time to meet their next net scheduled time, even if all their business is not concluded. The NCS should ask in such cases if the stations involved might be able to make a schedule to meet at another time to clear their traffic, or suggest alternatives if possible. Subsequent NTS scheduled nets rely upon liaisons arriving on time.

UNFINISHED BUSINESS NO OUTLET:

There may be no outlet for some traffic during a net session. The NCS will make every attempt to find an outlet, seek alternate routing, ask another station to hold and/or forward it later, or assign a special liaison to carry it to another net.

The NCS may ask the holding station if it wishes to cancel the message. A request to cancel (or “hold”) traffic is done as a courtesy to the holding station.

CLOSE OF THE NET, CLOSING STATEMENT, NCS ADHERE TO THE NET SCHEDULE for closing time: Other nets may need the frequency. Liaison stations and others may have other nets or schedules to meet, in every 24 hour period there are 60 NTS AREA/REGIONAL nets in session. If all business is not concluded at closing time, stations are usually ask to hold traffic for later nets, or ask stations to meet after the net and finish up on another frequency if necessary, or assign auxiliary help.

CLOSING EARLY: Terminating the net early is permissible under certain circumstances. The NCS may close the net after the last traffic is dispatched, and will usually monitor and confirm that all tasks are completed, or at least have reasonable certainty that the traffic in progress will be completed.

The National Traffic System consists of ARRL affiliated and Independent amateur radio nets which pass non-commercial messages on behalf of third parties as a public service on VHF/UHF/HF nets. That's it in a nutshell.

Folks our Section needs NTS/ARES traffic handling Liaisons and Official Relay Stations. In the event of a large area disaster, all of our local VHF/UHF nets that have liaison with the Arkansas Section ARES HF Nets and Independent Nets will have a greatly increased capability of passing formal messages in and out of the disaster area should the need arise. A Liaison station is assigned to act as the contact or connection between nets or Served Agencies in order to ensure concerted action, cooperation and resources.

Liaison stations usually provide a communications link between two nets. They will generally be limited to two nets so they can maintain good communications between the nets, however they may find themselves going between several nets during the course of disasters.

Liaison stations are usually appointed by Net Managers, NCS's, Section Managers, Section Emergency Coordinators, Section Traffic Managers or ARES/RACES leadership.

Typical duties of Liaisons and Official Relay Stations are to:

- Maintain contact with assigned nets.
- Stay fully aware of developments
- Relay traffic or reports to and from those contacts.
- Log everything.
- If you can't deliver the traffic or report right away, advise net control, attempt alternatives.

Official ARRL Field Organization Appointment Description: Official Relay Station

Online Application

This is a traffic-handling appointment that is open to all classes of license. This appointment applies equally to all modes and all parts of the spectrum. It is for traffic-handlers, regardless of mode employed or part of the spectrum used.

The potential value of the skilled operator with traffic know-how to his country and community is enhanced by his ability and the readiness of his station to function in the community interest in case of emergency. Traffic awareness and experience are often the signs by which mature amateurs may be distinguished.

Traditionally, there have been considerable differences between procedures for traffic handling by cw, phone, RTTY, packet and other modes. Appointment requirements for ORS do not deal with these, but with factors equally applicable to all modes. The appointed

ORS may confine activities to one mode or one part of the spectrum if he wishes. There is no versatility requirement, although versatility does indeed make it possible for anyone to perform a more complete public service. There is, however, the expectation that the ORS will set the example in traffic handling however it is done. Here are the basic requirements:

1. Full ARRL membership and Technician Class license or higher.
2. Code, digital and/or voice transmission capability.
3. Transmissions, by whatever mode, must be of the highest quality, both technically and operationally. For example, cw signals must be pure, chirpless, clickless, code sending must be well spaced and properly formed. Voice transmission must be of proper modulation percentage or deviation, precisely enunciated with minimum distortion.
4. All ORS are expected to follow standard ARRL operating practices (message form, ending signals, abbreviations or prowords, etc.).
5. Regular participation in traffic activities, either independent or ARRL-sponsored.
6. Handle all record communications speedily and reliably and set the example in efficient operating procedures. All traffic is relayed or delivered promptly after receipt.

Report monthly to the STM, including a breakdown of traffic handled during the past calendar month.

Recruitment of new hams and League members is an integral part of the job of every League appointee. Appointees should take advantage of every opportunity to recruit a new ham or member to foster growth of Field Organization programs, and our abilities to serve the public.

If any of you would like to become a Liaison or Official Relay station, please contact you're EC, DEC, NM, SM or STM to volunteer.