**Topic 5c: The Net Manager**

**Objectives**

After reading the contents of this topic you will be able to recognize the importance and functions of the position of Net Manager, as used in both the National Traffic System (NTS) and Amateur Radio Emergency Service (ARES). This topic unit is based on the official job description published by ARRL.

**Student Preparation Required:**

* You should have a basic knowledge of the National Traffic System, Amateur Radio Emergency Service, and the ARRL Field Organization, obtainable by reviewing the ARRL’s *Public Service Communications Manual.*

**The Net Manager (NM)**

**The Net Manager (NM)** has overall responsibility for the planning and operation of one or more nets. Net Managers are used in both the National Traffic System (NTS) and in ARES organizations. This person works with ARES or NTS leadership to define the net’s purpose, sets standards of operation, and communicates that information to net members. In NTS, he or she also handles human resource and training issues, but this may not be true in ARES organizations.

Whether you have one net or a dozen, you need a Net Manager. You might ask, “Could the NCS operator do this job as well?” During an emergency, NCS operators might change every few hours. In addition, both jobs must be done simultaneously.

The NTS Net Manger is a full ARRL member appointed by the Section Manager, usually on the recommendation of the Section Traffic Manager. In ARES, the appointment is recommended to the SM by either the SEC, DEC, or EC, depending on the level of the net.The NM may choose one or more assistants to take over when he or she needs a break, or to handle certain aspects of the net’s operation, such as training. It is also the NM’s responsibility to make sure that the NCS operators on the roster have received the proper training in the way nets should be conducted before appointing them as NCS.

During an emergency, “ad hoc” nets may be created to meet specific needs as they arise. These may either be assigned to an appointed NM, or to a temporary NM for the duration of the need or event. Those in such a position should be prepared in advance should this need arise and be trained in protocol of different types of nets, their purposes and how they should be conducted.

**Organization**

Net Managers may be assigned to handle only one net, or many. The number of NMs appointed might depend on a Section's physical size, the number of nets, how often the nets meet, or factors having to do with the way the Section is organized. In small sections, there may be only one NTS or ARES NM in charge of all section nets. In larger sections there may be several NMs, each having responsibility for a different region, mode, or type of net. Separate NMs should be appointed for ARES and NTS, since the needs and functions of the nets of the two organizations can be quite different.

All ARRL NMs, both NTS and ARES, should work under the Section Traffic Manager (STM) and/or Section Emergency Coordinator (SEC) guided by a coordinated section traffic and ARES Communications Plan.

Some NTS nets cover more than one section but operate within the NTS at the section level. In this case, the NM is selected by agreement among the STMs concerned and their resident SM confirms the appointment. Some NMs are system operators of, or sysop-recommended operators active on, participating NTS or ARES packet bulletin boards or Winlink nets.

**Duties**

The Net Manager’s duties include resource management and quality control. He/she makes certain that a NCS operator and alternate are assigned to each session, and that replacements are available for each shift. This person may also recruit net members for certain types of nets to ensure that delivery of messages is possible everywhere. The NM is also responsible for assigning regular liaison stations to move messages to and from other nets, although the NM may delegate this task to the NCS to handle on an ad hoc basis.

The nature of this job, like other leadership positions, demands excellent people and management skills. At times, the NM will need to work with a group of volunteers performing under stressful conditions. The NM’s own operating and message handling skills should be superior so that the NM can help teach others and ensure that they are all properly trained before giving them an assignment.

**Net Frequency**

In most cases, the Net Manager (NM) will choose the net’s frequency(s). Scheduled and pre- planned nets usually operate on designated frequencies, but temporary nets often choose a frequency based on which bands and frequencies are available. HF nets that operate on a regular schedule will usually have less difficulty getting a clear frequency than those who only operate when needed. Net frequencies on HF should always be listed as “plus or minus 5 kHz” to allow for interference. In some emergencies, it may be necessary for an emergency management official to request an FCC emergency communications declaration (ECD) to clear a particular VHF/UHF frequency; in the MF/HF Amateur Service bands, an ECD may authorize use of 1 or 2 channels in the 60 Meter Amateur Service band, but **not** any other MF or HF band as was done in the past. This policy became effective August 2, 2004.

Section 97.401(b) provides that when a disaster disrupts normal communication systems in a particular area, the FCC may declare a temporary state of communication emergency. The declaration will set forth any special conditions and special rules to be observed by stations during the communication emergency.

One or more alternate frequencies should be chosen in advance, and should be known by all net members. In the case of VHF/UHF nets, alternate frequencies should be chosen for both repeaters as well as simplex operations since in an emergency, many repeaters may be off the air. In the event that interference or band conditions render the primary frequency unusable, net members should automatically switch to the alternate.

FM simplex nets should use a frequency that is seldom used by local hams for day-to-day conversations, and never on a national calling frequency such as 146.52 or 446.000 MHz.   Nets that use repeaters should make prior arrangements with the repeater’s owner. If a net uses a repeater as its primary meeting place, a backup simplex frequency should be chosen and publicized in the event the repeater fails. One way to do this is to give instructions that in the event of repeater failure, the first place to meet is the OUTPUT of the repeater. All NCS operators and responders must know and fully understand how to operate their individual radios so that they can adjust the offset for simplex duty. Another ploy used by some ARES units to provide a backup for their own repeater is to have an agreement with a local radio club to use their repeater in the event that the ARES repeater fails during an emergency. This goes over very well if the ARES unit also invites the radio club to use the ARES repeater, if the radio club’s repeater goes down (during non-emergency periods). This win-win arrangement provides both organizations with a back up machine and fosters good relations.

Internationally, the three IARU regions have reached consensus on three global Center of Activity frequencies for use in the event of emergencies: **14.300, 18.160 and 21.360 MHz.**

**Points To Remember**

**Some points for Net managers to remember are provided here and the following pages:**

* You are responsible for managing the net, but do so with tact and diplomacy. Teach net discipline by setting a good example, and take the net yourself from time to time to do so.
* Ensure that traffic on the net is handled in a timely manner. Do not let the net become too informal and waste time.
* Know your operators’ capabilities, and their locations, especially when you may need to go simplex and what their coverage range is, taking terrain and other factors into account. One way to gather such information is to organize periodic practice nets using simplex, in place of using the repeater. It is often surprising how many net members can be heard and can hear on simplex. Do not assume; you will never know unless you try it. A good practice exercise to keep operators sharp is to take the repeater out of service with no advance warning (just like it might during a true disaster) and find out how well your simplex coverage is.
* Know how and where your net fits into the overall net structure at all times, since the situation may change periodically. Working with SEC’s, DEC’s and EC’s will help produce good results,
* Assign an alternate NCS to stand by in case the primary NCS goes off the air.
* Get all the information you can (type of situation, needed station locations, potential shift lengths, frequencies, agency or agencies involved, etc.) before you put a net into service, but do not delay too long waiting for any single piece of information.
* Provide direction in the routing and handling of various types of messages. Determine the physical location of each served agency site early on to ensure proper routing.
* Monitor the net(s) to be sure proper procedures and message formats are being used.
* Training is crucial to success “when the big one hits.” A varied and interesting training schedule will help keep net members ready to go. The practice net on simplex mentioned previously is an interesting training session.

**References**

For more information on any of the elements presented, please consult the following links:

* *Public Service Communications Manual:*[**www.arrl.org/ares**](javascript:var%20newWnd=ObjLayerActionGoToNewWindow('http://www.arrl.org/ares','Trivantis_','width=785,height=600,scrollbars=1,resizable=1,menubar=1,toolbar=1,location=1,status=1');)
* For more information on the NCS operator’s function, please see the ARRL *Operating Manual,* chapter on emergency communications and traffic handling. See also the ARRL *ARES Field Resources Manual*. To learn more about ARES and NTS net operation, contact your Section Manager (SM), your Section Emergency Coordinator (SEC) or District Emergency Coordinator (DEC).
* [**www.arrl.org/sections**](http://www.arrl.org/sections)
* Also see the ARRL *Net Directory* for a list of ARES and NTS nets operating in your area.

**Review**

The Net Manager has overall responsibility for the operation of a net, including recruiting and training NCS operators, net members, frequency choices, and scheduling. A Net Manager may be appointed permanently for one or more regularly scheduled nets, or temporarily to manage ad hoc nets created for a particular event or disaster.

**Student Activities**

1. Imagine that you have just been appointed the NM for a section-wide ARES tactical net. Your mission is to provide an HF link between local FM nets and the State EOC. Create a simple plan to accomplish this and list the tasks you would need to complete in order to be successful. Be able to explain the impact of propagation, antenna selection, and existing HF nets on your HF link. What are the different considerations you would face if this was to be a recurring net?

**Topic 5 Section C Knowledge Review**

In order to demonstrate mastery of the information presented in the topic, you will be asked a series of un-graded questions. There are approximately 5 questions on the following pages in multiple-choice or true/false format. Feedback will be offered to you based on the answer you provide. In some cases, you may be directed back to the area of the topic where a review might benefit you in order to find the correct answer.

Question 1

What are the requirements and qualifications of the ARRL Net Manager position?

1. There are no specific requirements or qualifications for the position.
2. Amateur Radio license; full ARRL membership; and an appropriate local or Section appointment.
3. An Amateur Extra Class license; and the approval of ARRL Headquarters.
4. The approval of the emergency management agency holding jurisdiction in the area.

Question 2

Which statement best describes the Section Net Manager’s job?

1. Coordinate public information in the Section.
2. Provide technical information to members of ARES and/or NTS.
3. Appoint the local Emergency Coordinators.
4. Coordinate and supervise traffic handling and net activities in the Section.

Question 3

Which factor does not affect the number of Net Managers appointed in each Section?

1. The Section's geographical size.
2. The number of nets operating in the Section.
3. Other factors having to do with the way the Section is organized.
4. The number of ARES operators in the Section.

Question 4

Who appoints the NTS Net Manager?

1. Section Manager.
2. Division Director.
3. ARRL Headquarters staff.
4. Local EC.

Question 5

To whom does the Section Net Manager report?

1. Division Director is responsible for supervising all Field Organization activity.
2. ARRL HQ staff is responsible for supervising all Field Organization activity.
3. Section NMs work under the STM and/or SEC, guided by a coordinated Section traffic or ARES communications plan.
4. Emergency Management personnel.

**Correct Answers**

1 b

2 d

3 d

4 a

5 c