

Section 2: The Networks for Messages

Topic 9

The Net Manager

Objectives

Welcome to Topic 9.

After reading this topic, you will be able to comprehend the importance and functions of the position of Net Manager. This topic is based on the official job description published by ARRL.

Student Preparation required:

You should have a basic knowledge of the Amateur Radio Emergency Service® (ARES®) and the ARRL Field Organization, obtainable by reviewing the ARRL's ARES Manual and overview of the ARRL Field Organization.

Introduction

The Net Manager (NM) has overall responsibility for the planning and operation of one or more nets. Net Managers are used in the ARES organizations, as well as many other Amateur Radio emergency communications organizations such as SATERN and the Hurricane Watch Net (HWN). This person works with ARES leadership to define the net's purpose, sets standards of operation, and communicates that information to net members.

Whether you have one net or a dozen, you need a Net Manager. It is often wondered if the Net Control Station (NCS) could also function as Net Manager, however, during an emergency, NCS operators might change every few hours. In addition, the jobs of NCS and Net Manager must be done simultaneously. In order to be done well, they should be staffed by separate individuals.

The Net Manager appointment is recommended to the Section Manager (SM) by either the Section Traffic Manager (STM), Section Emergency Coordinator (SEC), District Emergency Coordinator (DEC), or Emergency Coordinator (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. These may either be

assigned to the permanent NM, or to a temporary NM for the duration of the 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 several. 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 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 should work under the Section Traffic Manager (STM) and/or Section Emergency Coordinator (SEC), guided by a coordinated Section traffic and ARES communications plan.



Duties

The Net Manager's duties include resource management and quality control. He or 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 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.

The Net Frequency

In most cases, the Net Manager will choose the net's frequency or frequencies. 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. If the net will be active on a weekend, when contests are usually under way, the Net Manager may consider moving to bands where contesting is prohibited — 12, 17, 30, and 60 meters. In the MF/HF Amateur Service bands, an emergency communications declaration may be declared keeping one or two channels of the 60-meter band clear for emergency communications. These channels are shared between federal users and the Amateur Radio Service, allowing interoperability between users of different services.

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 frequencies due to the fact that 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 ham radio operators for day-to-day conversations and should never hold a net 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.

Some ARES units provide a backup for their own repeater by striking 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 backup machine and fosters good relations.

Points for Net Managers to Remember

- You are responsible for managing the net; 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/or waste time.
- Know your operators' capabilities, locations, and coverage range, taking terrain and other factors into account. This information is especially valuable at times when you need to use simplex. One way to gather such information is to organize periodic practice nets using simplex instead of the repeater. It is often surprising how many net members can be heard and can hear others on simplex. Do not assume who can and can't hear on simplex; 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 and find out how good your simplex coverage is.
- Know how and where your net fits into the overall net structure at all times, because the situation may change periodically. Working with SECs, DEC, and ECs will help produce good results.
- Assign or identify liaison stations to move traffic from one net to the other(s).
- 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, partners or agencies involved, etc.) before you put a net into service, but do not delay too long in 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 partner's 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 during a true disaster or emergency situation. 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.

Reference Links

ARES Field Resources Manual

www.arrl.org/files/file/Public%20Service/ARES/ARESmanual2015.pdf

ARRL Field Organization Overview
www.arrl.org/field-organization

For more information on the Net Manager function, please see The ARRL Operating Manual chapters on emergency communications and traffic handling.

To learn more about ARES net operation, contact your Section Manager (SM), your Section Emergency Coordinator (SEC), or District Emergency Coordinator (DEC).
www.arrl.org/sections

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.

Activities

1. Describe the importance and functions of the Net Manager.
2. 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. Describe the different considerations you would face if this were to be a recurring net.

Welcome to Topic 9 Knowledge Review

Please review the following questions to improve your understanding of this topic:

Question 1:

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

- a) There are no specific requirements or qualifications for the position.
- b) An Amateur Radio license, full ARRL membership, and any appropriate local or Section qualifications.
- c) An Amateur Extra class license and the approval of ARRL Headquarters.
- d) The approval of the emergency management partner holding jurisdiction in the area.

Question 2:

Which of the following best describes the Section Net Manager's job?

- a) Coordinate public information in the Section.
- b) Provide technical information to members of ARES and/or NTS.
- c) Appoint the local Emergency Coordinators.
- d) 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?

- a) The Section's geographical size.
- b) The number of nets operating in the Section.
- c) Other factors having to do with the way the Section is organized.
- d) The ARRL Emergency Preparedness Manager.

Question 4:

Who appoints the NTS Net Manager?

- a) Section Manager.
- b) Division Director.
- c) ARRL Headquarters staff.
- d) Local Emergency Coordinator.

Question 5:

To whom does the Section Net Manager report?

- a) Division Director is responsible for supervising all Field Organization activity.
- b) ARRL HQ staff is responsible for supervising all Field Organization activity.
- c) Section NMs work under the STM and/or SEC, guided by a coordinated Section traffic or ARES communications plan.
- d) Emergency management personnel.