

Learning Unit 14

Rapid Response Teams (RRTs)

Objectives:

In this unit, we examine the concept of rapidly deployable teams that can provide an immediate communication response to emergencies, and a variety of elements critical to their success. The goal is to help emcomm leaders understand the value of the RRT concept to served agencies, and how a RRT can be incorporated into the emcomm plan.

Student Preparation Required:

None

Information:

The Concept

The Rapid Response Team (RRT) is a flexible and adaptable concept that can provide a timely initial emcomm response to any emergency. The goal is a limited, coordinated, operational response within 30-60 minutes of notification, followed by a more complete response within three to five hours, or whatever timeframe your resources and the served agency's needs dictate.

The RRT concept is used by emcomm groups in many parts of the country, and is known by a variety of names. In Hawaii, it is called a "Quick Response Team." The ARECC courses originally used that term, but its acronym "QRT" caused confusion and was changed to "RRT." (QRT is a well-known CW pro-sign for "going off the air".) Other areas have developed their own names for the RRT.

The information presented here is not a firm set of rules for the operation of a RRT. Rather, it is a set of examples of how the RRT concept can be used to enhance your emcomm response. It can and should be modified to meet local needs.

Organization

RRTs can be organized at the local, District, or Section levels, as needed, and work under the EC, DEC or SEC accordingly. For this reason, we will generally refer to the SEC, DEC, and SEC as the RRT "Leadership" positions in this lesson in order to avoid confusion.

The team may be lead by its own AEC, EC, ADEC or ASEC depending on its position in the local organization. For instance, a Section level RRT might have an ASEC or EC head the team. A local RRT might be headed by an AEC.

Many groups organize their response into "Level I" and "Level II" groups. The Level I (one hour) response is the most important part of the RRT concept, since it provides served agencies and ARES leadership with a reliable means of communication during the often-critical early stages of a disaster response. RRT members should be well trained and experienced emergency communicators, who are prepared and able to leave home or work at a moment's notice. Each member should have his "go-kits" packed and ready at all times.

The Level II response may take several forms. It might be a second level of RRT, designed for a slightly slower deployment, or it could simply be the general ARES response. If it is a second level RRT, the general ARES response becomes a third level of response.

One model might use Level I teams to activate only key fixed locations such as EOCs within one hour, Level II teams for field locations within two to four hours, and a larger general ARES response within six to eight hours. However you design your response plan, it should be based on the needs of the served agency and your resources.

The Response

Emergency activation can be done in a number of ways. For Level I call-ups, ARES leadership is usually contacted by the served agency, who then activate the notification system. RRT Level I teams are usually activated using a telephone and pager notification system designed to quickly reach members at any time of day or night, 365 days a year.

Notification should continue from Level I team members immediately to the Level II teams, informing members to monitor net frequencies for progress and assignments. Moving quickly to the Level II notification ensures a smooth and continuous buildup of resources needed for a 72-hour deployment.

A RRT Level I net is opened on a repeater or simplex VHF or HF frequency. This provides the leadership and team members a means to coordinate the response and allows real-time reporting of progress while team members travel to their assignments. As the EOCs and field stations become operational, the RRT Level I net can transition to the local tactical command, traffic, or resource net, as determined by local procedure or need.

For a given EOC site, separate groups of RRT members may be identified based on their expected location during normal work and home hours (day and evening teams). After initial notification, the assignment of personnel who do not have specific assignments can be coordinated on the RRT net.

Soon after the Level I nets become operational, the Level II teams should be deployed as they become available. Assignments may be done on the air, or as part of the initial activation messages as each situation dictates.

A Level II RRT builds on the response of the Level I team with a broader range of equipment, logistical supplies, and interagency communication capability. Ideally, Level II teams should be on-site and operational within three to five hours of the incident, and may need to be deployed in the field at shelters and temporary command centers. For this reason, Level II responders should respond with both short and long-term go-kits.

Site Preparation for Rapid Response Teams

Emergency Operations Centers (EOCs) with pre-installed radio equipment are key to the success of the RRT concept. Agencies that expect you to be on the air within thirty minutes of notification need to make provisions for a permanent station. Preinstalled antennas and coaxial cables are a minimum requirement. Additional equipment, such as radios, power supplies and accessories will mean that the responding team member would only need to turn on radios and do preliminary checks before becoming operational. This is much faster than carrying in and installing personal equipment. Relying on personally supplied equipment also adds to the risk that a particular adapter or accessory cable may have been omitted, preventing the station from becoming immediately operational.

Sample Team Member Assignments

Key assignments included in both Level I and II responses are listed below. For each position, both primary and backup operators should be assigned. This insures that each function still has coverage if the primary operator is away, ill, or otherwise unavailable.

Leadership -- The EC, DEC, or SEC provides the initial point of contact for activation, depending on your organization's plans. They usually receive word from a served agency that an incident has occurred. In turn, they notify team leadership, who put the notification system into action.

Notification Team -- The Leadership generally activates the notification system and monitors the progress on the RRT net. Various methods exist for reaching team members. The usual methods use a pager and phone list, and/or an activation tone on a repeater network. To be most effective, the Leadership should initially contact only three team members.

For example, one might call the phone list, a second runs through a list of digital pager telephone numbers, keying in the activation code for the net. A third person can make phone calls to key assistants (and the SEC or DEC if this is a local group), to ensure that they have been notified and accounted for. Upon completion, the person contacting the assistants should provide the Leadership and NCS with a list of those who could not be immediately contacted so that other means may be attempted. Each of the three team members and several alternates must have current lists readily available at all times. Do not rely solely on the Internet for either list access or notification, since it may not be operational due to the conditions that precipitated the activation. Even your own computer's database may be inaccessible if the power is out.

RRT Level I NCS (Net Control Station) -- The Leadership informs the team member assigned as NCS of the situation, and the need to begin net operations. In the early stages of the net, the NCS can serve as both a net control station and a bulletin station, providing check-ins with a situation assessment. The NCS may operate initially from home, office, or from a car while enroute to an EOC. Other situations may dictate a temporary NCS operating from wherever he happens to be until the permanent NCS can activate his EOC or other station.

Level I and II Radio Operators -- Once activated, radio operators check into the RRT net and periodically report progress until they are able to activate their EOC or other assigned position.

Level II Team Member Assignments - In addition to the assignments above, a Level II response might also include the following positions:

Public Information Officer (PIO). The PIO dispenses appropriate information to media contacts on the nature and progress of the Amateur Radio response without divulging the contents of the communications or discussing the served agency's response. Two PIOs may be needed to provide sufficient rotation and backup, and to assure continuous monitoring of developments.

An assistant to collect information for the EC on team deployment and the state of emergency communications nets.

Mutual Aid Liaison: If an incident is large enough to invoke mutual aid (ARESMAT) agreements, assistants to the Leadership will be needed to communicate and coordinate with higher or neighboring Leadership to arrange and coordinate their response.

Advance Preparations for RRT Level I Teams

The preparations made by RRT Level I team members are critical to its success. Each member will require significant advance training and practice, a set of primary and secondary assignments, and have appropriate radio equipment and personal gear ready to go at a moment's notice.

Education and Training -- Well in advance of any emergency, all team members should complete the following training:

ARRL ARECC Level I certification.

ARECC Level II certification for anyone acting as a NCS or net manager.

Orientation to local plans, procedures, and served agency missions.

Specific training for both primary and secondary assignments.

Experience in operating equipment at assigned EOCs.

Demonstrated skill as NCS in several regular and drill net sessions.

Practice getting assigned stations operational in the field within thirty minutes.

Participation in a simulated activation designed to test the notification system.

Periodic "refresher" training sessions.

Equipment and Information -- Each team member should have at least the following:

A laminated wallet card containing information on the notification system and key phone numbers and frequencies.

Identification: FCC license, ARES, RACES, and any served agency ID cards.

Seventy-two hour response pack, including water, food, medication, protective clothing/footwear and cash for personal needs.

A vehicle equipped with a two-meter or dual band mobile radio. Amateur Radio license plates and magnetic identification signs for the doors are desirable. Stop and fill the gas tank while responding, if possible.

A handheld two-meter or dual-band radio, with spare rechargeable and alkaline battery backs, rubber duck antenna, telescoping whip, twenty-five foot RG-58 or mini-8 feedline, ribbon j-pole antenna, earphone/headset in fanny pack, shoulder carry bag or backpack.

Two-meter or dual band mobile radio, magnetic mount antenna, fifty feet of coaxial cable and a switching power supply in a portable carrying case or bag. This is important for longer-range communication at shelters and command posts.

Advance Preparations for RRT Level II Teams

Education and Training -- RRT Level II teams should receive the following training:

See RRT Level I team training above, plus...

Training on specific equipment used by the Level II teams.

Familiarization with field operations, including personal health and safety.

Equipment -- The equipment list for the RRT Level II team can vary to meet local needs, but might include a mix of the following:

Seventy-two hour personal packs, including water, food, medication, protective clothing/footwear, and cash for personal needs.

Portable operations center: tents, tables, chairs, generator, and lighting.

Basic food preparation and sanitation equipment.

Team members with more protective clothing, equipment, and supplies.

Long-haul VHF/UHF/microwave stations.

Portable HF station with 40/75m NVIS antennas.

Portable repeater(s) with antennas and supports.

APRS, packet, and PSK31 digital communications stations.

ATV stations.

Long-term power supply (batteries or generator, or both)

Real-World Applications of the RRT Concept

The RRT concept is flexible and can be adapted to suit local needs. In Hawaii, Level I Quick Response Teams are organized at the local level, and are primarily assigned to fixed EOCs and other key locations. The Level II response provides relief to Level I responders and deploys to field locations in the affected areas.

In New Hampshire, RRTs are organized at both the Section and local level. Each local EC is encouraged to create his own local RRT. The Section's RRT is known as the "Rapid Emergency Deployment" or "RED" Team. Their job is to quickly establish section-level communication and fill gaps in the initial response. If a local EC does not have his own RRT or the resources to mobilize on very short notice, the Section RED Team can help him "buy time" until local resources can respond.

The RED Team only responds to a local area when requested by the local EC, through the SEC. The RED Team is led by its own EC, which puts him on a par with the local ECs he is helping. In a situation where the local ARES organization is inadequate or non-existent, they will be dispatched by the SEC. The RED Team can act as the temporary ARES team for that area, and remain in operation for the duration of the emergency. For this reason, the RED Team is equipped to be self-sufficient for up to seventy-two hours. The Level II response then consists of any local resources or an ARESMAT from a neighboring area.

Reference Links:

For more information on ARES, see The ARRL Emergency Coordinator's Manual. For more information on any of the elements presented, please consult the following links:

<http://www.arrl.org/FandES/field/pscm/index.html>

For more general information, please see The ARRL Operating Manual, chapter on emergency communications. See also the ARRL ARES Field Manual. For local information, or to learn more about ARES and NTS net operation in your area, contact your Section Manager (SM) (<http://www.arrl.org/field/org/smlist.html>), your Section Emergency Coordinator (SEC) or District Emergency Coordinator (DEC). See also The ARRL Net Directory for a list of ARES and NTS nets operating in your area.

Now click on the Activities button and proceed with the Student Activities, which are required before moving to the Questions (click on the Question button). Upon completion of these Questions, go to the next Learning Unit.