**Topic 4b: ARES Management and Incident Command System: Managing the Response**

**Objectives**

This unit will help prepare emcomm leadership to manage the complete emcomm response, from preparation and deployment to stand-down and review.

**Required supplemental courses for this section:**

1. FEMA IS-240, Leadership & Influence
2. FEMA IS-241, Decision Making & Problem Solving

FEMA IS-250, *Emergency Support Function 15 (ESF15), External Affairs:  A New Approach to*

*Emergency Communication and Information Distribution*also provides helpful information on this

topic.

**IS-240 Leadership & Influence - Course Overview**

Being able to lead others - to motivate them to commit their energies and expertise to achieving the shared mission and goals of the emergency management system - is a necessary and vital part of the job for every emergency manager, planner, and responder. This course is designed to improve your leadership and influence skills. It addresses:

* Leadership from within.
* How to facilitate change.
* How to build and rebuild trust.
* Using personal influence and political savvy.
* Fostering an environment for leadership and development.

**IS-241 Decision Making And Problem Solving - Course Overview**

Being able to make decisions and solve problems effectively is a necessary and vital part of the job for every emergency manager, planner, and responder. This course is designed to improve your decision-making skills. It addresses:

* The decision-making process.
* Decision-making styles.
* Attributes of an effective decision maker.
* Ethical decision making and problem solving.

**IS-250 Emergency Support Function 15 (ESF 15) External Affairs: A New Approach To Emergency Communication And Information Distribution**

The goal of this course is to provide basic training on the concept and practical application of the ESF 15 Standard Operating Procedures to all FEMA External Affairs staff, regardless of duty station, as well as to staff in all other agency divisions and federal, tribal, state, local, private sector, military and Voluntary Organizations Active in Disaster (VOAD) partners. This course is offered as an Independent Study course, with an optional conference call session available to students who have additional questions. Students view videos online in conjunction with using the IS-250 student manual and web-based resources to complete the final exam online.

**Planning For Deployment**

Your response to a call for communications support will only be effective if you and your group put time and effort into preparation. Potential needs should be identified, specific plans made to meet them, and necessary resources put in place. Your plan should be detailed enough to permit anyone reading it to know what to do, but not so specific as to restrict flexibility. Physical and human resources, and a means of accessing and tracking them, must be identified. Networks should be outlined. One of the most important resources is an adequate pool of trained operators. If you are not prepared, the effectiveness of your response will be greatly reduced.

**Emcomm TimeLine**

For every disaster, there is a fairly predictable progression of events that involve emcomm volunteers. The duration of each phase will depend upon the type of disaster – hurricanes last longer than tornadoes. For each potential disaster your area could reasonably face, develop a time line and the actions that must be taken by your team during each phase. Also note that not every disaster has all phases.

**Preparedness - Standby - Warning Response - Recovery - Stand-Down**

The preparedness phase takes place in the months and years before a disaster occurs. Plans are written and tested, resource lists developed, equipment installed, and members trained and exercised.

The standby phase may occur before the event has occurred, such as with a storm whose precise track is uncertain, or during the period immediately afterward, as would happen with a chemical incident or terrorist attack. During this phase, emcomm leadership should assess the likelihood that they will be called upon to help. If appropriate, team members should be put on alert and asked to make preparations. The standby phase might not exist at all in some sudden emergencies.

During the warning phase, the community takes action to reduce the potential impact of the impending disaster. In a hurricane, boarding up windows and shoreline evacuations would take place. During this phase, emcomm groups are moving in and setting up. In sudden events (earthquakes, tornadoes), this phase would barely exist, and emcomm set up would occur in either the response or recovery phase. In weather events, SKYWARN™ activation probably is happening.

In the four phases of emergency management (mitigation, preparedness,   
response, and recovery), our peak operational period corresponds to the   
"response" and "recovery" phases.

“Response” includes actions taken to save lives and prevent further property damage in an emergency situation. “Recovery” includes actions taken to return to a normal or an even safer situation following an emergency. Response-phase messages may have greater urgency; recovery-phase messages may be of greater volume.

During the response and recovery phases, emcomm teams do their best to meet the needs of the served agency and keep themselves safe. Once the event has passed and the cleanup and recovery begins, the emcomm team’s job does not always end because it may take a while for primary communication systems to recover. Telephone and power could remain out of service for some time, and served agencies will continue to assist the public. If this phase lasts for any significant period of time, additional resources may be needed to take over from exhausted volunteers. Recovery efforts by the served agency may begin during the event itself, but for our purposes, operational needs may change significantly once the event itself is over.

The stand-down phase begins as conventional communication facilities resume normal operation and the served agencies no longer require your services. Stations and networks are gradually closed and the teams begin to head home as they are released.

**Mobilization**

Every response begins with a call from the served agency, or with an event that calls for an automatic response in your plan, such as a tornado. Your served agency should have multiple points of contact for your group and several ways to reach each person on the list. In the case of an automatic response, emcomm leadership should make every effort to notify their contact at the served agency that your teams are responding automatically as per the plan.

You will need a plan to get your team members ready for deployment in a short time after getting the call from the served agency. It begins with a call-up plan, using a combination of means that increases the chances of alerting as many members as possible in the shortest time with the least effort. You can use commercial pagers, landline and cell phones, paging on Amateur Radio repeaters, email, packet radio, or any combination. Monitoring of predetermined frequencies in your area is essential and radios need to be programmed for this purpose well in advance. Members should know what to do if they become aware of an incident or situation that may result in a call-up. This usually means monitoring one or more standard net frequencies.

Once alerted, each team member will need to know what they are to do next. It may be checking into a particular net for further instructions, or responding directly to a particular EOC or other facility. This information should be in your communications plan, and everyone should know their pre-planned assignments.

For those without specific assignments, provide a resource net or staging area. The initial resource net might be on the same frequency as the primary operations net, but if it is busy it should be moved to another frequency as soon as resources allow. Again this is why a predetermined frequency plan for your area is essential.

**Section ARES Operations Center**

Any time activation occurs, the SEC and their staff should consider opening an ARES Operations Center (AOC) to coordinate and oversee the response, hopefully outside the affected area. Depending on the needs of the event, this could mean the SEC working from home, or for larger events, establishing a temporary AOC facility at a club station, school classroom, served agency office, or other suitable location. The AOC must be able to monitor network operations and be in contact with ECs, served agency officials at the Section level, and with ARRL HQ. This means telephone, fax, email, copier, and radio contact should be available. Around the clock staffing for this center should be considered as well as logistical support including food and water, rest facilities, batteries and generator fuel, and general supplies.

**Networks**



At one of the Gulf Coast Emergency Operations Centers staffed by ham

volunteers, a radar map showing Hurricane Katrina provides a chilling backdrop.

Many considerations go into designing a network. Foremost are the communication needs of the served agency. What types of messages do they need to send, and where? Are they long, detailed, text messages, or short tactical ones? Which modes are currently available to you, and which will best suit the types of messages? How many nets or stations will you need to handle the expected message load?

Depending on local needs and circumstances, you may decide to have a complete network design ready to go in your operations plan, or only the initial check-in net, from which you can build as needs become clearer. Network plans should be kept as flexible as possible so as to better cope with varying conditions. No single mode or band should be relied upon in your plans. If propagation, or a repeater or node failure renders one path unavailable, the plan should offer alternatives. These alternative net modes should be planned and trained for well in advance.

**C&C Nets**

A Command and Coordination net can be used to organize other nets and manage the flow of messages. It may be combined with the Resource net (see below) for greater efficiency and in smaller events. It can also be used to alert stations to packet messages that have been posted to a bulletin board and are ready for retrieval.

This is what an American Red Cross Resource Center looks like. This video was recorded in Montgomery, Alabama during the Katrina response. [Click here](http://www.arrl.org/files/media/EC-016/CLIP0005.AVI) to download and play the video.

**Resource Nets And Staging Areas**

All but the smallest incidents should have a separate resource net. This net allows emcomm managers to register and track incoming volunteers, direct them to staging areas, and coordinate replacement operators, supplies, and equipment repairs without disrupting tactical and traffic nets.

**Support Logistics**

While your members’ “go-kits” should allow each operator to be completely self-sufficient for 24-72 hours, at some point you may need to make sure they have the resources necessary to stay in service, i.e. food, water, sanitation, shelter, fuel, batteries, etc. Depending on your local resources, the plan may call for each operator to be completely self-sufficient and not to expect resupply from outside. If you have the resources, and the type of emergencies you are likely to encounter demand it, you may have one or more support personnel helping to re- supply the field stations. In some cases, served agencies may provide some supplies, but radio-related items may still be needed. In the case of the Red Cross, you will be expected to be self-sufficient for at least the first 72 hours so that they may concentrate on serving the victims of the disaster and not their volunteers. If your organization will be expected to provide direct logistical support to your volunteers, you will also need to consider (in advance) who will pay for and deliver supplies.

**Organizing Shifts**

How long should any one operator remain on-duty? The answer varies with the person and event, but in most cases it should be ideally six or fewer and certainly no more than twelve hours. Keeping a ready reserve of fresh operators is the single most important and difficult job an emcomm leader can face during a long event. Make sure everyone has a chance to take care of personal needs on a regular basis, and gets regular meals and rest breaks. Exhausted operators become inefficient and can make costly mistakes, perhaps endangering their own or other’s lives.

**Resource Tracking**

A system must be in place to track all volunteers, equipment, and other resources. This may be as simple as assigning a station to participate in the resource net as a “recording secretary” to log the present location and status of operators, equipment, and supplies. Without tracking, injured or missing operators might be missed until it’s too late, badly needed supplies could sit unused, and available operators with needed skills might be waiting for assignments forever. Consider creating paper log sheets or computer spreadsheet or database for the purpose. Use resource tracking in your drills because prior training in resource tracking will be required for it to be effective.

**ICS-Style Job Titles**

When the EC goes off duty for rest, how do the others know who is in charge? Some groups use a special club call-sign for the EC, and others use an ICS-style job title to identify the guy in charge. While ARES has no official standardized titles for the purpose, some were suggested in the ICS units preliminary to this section.

If you are part of an expanded ICS operation as a provider of resources, chances are that your regular ARES leadership will only be involved in resource and net management. Staff in the Communications Unit of the ICS organization will make all command decisions and should handle most support issues.

**Demobilization**

While most plans cover the mobilization and operational aspects of a response pretty well, an orderly means of reducing and eventually ending services is often overlooked. As an incident (or exercise) winds down, so will the communication needs of your served agency. This transition must be as smooth as possible so that it does not interfere with any ongoing operations.

Begin at least one, but not more than two, shifts, before your anticipated or scheduled release. Set up the last shift, and possibly a “contingency” shift (the situation might go down-hill again), to be available if needed. Disseminate this information as far and fast as possible. Use the telephone first, and then radio voice or packet to accomplish this. Try to use your own, local personnel for the last “mop-up” shifts so that you can release assisting or mutual aid (ARESMAT) personnel first.

**Emcomm Manager's Demobilization Checklist**

Make a list of any information or instructions that operators need to have before shutting down, including what to do with official station logs, undelivered messages, borrowed equipment, host site restoration, etc. Be sure this information is sent to all stations early during their final shift so that they have time to prepare.

* Contact any excess standby resources and let them stand-down, but try not to completely deplete your reserves until the last shift ends.
* Release mutual-aid resources first, then those who have been out longest or who have urgent personal needs and families to attend to.
* Consolidate nets as the traffic load diminishes and return vacated repeaters and nodes to normal operation. Don’t forget to thank everyone connected with the operation.
* Suggest that everyone going off-duty make a list of items for discussion, both positive and negative. Shortly after the incident, hold a debriefing for all personnel.

**Debriefings**

Post-event debriefings and discussions are essential to the health of your organization, and to the effectiveness of the support you provide to your served agency. They are a chance to learn about the things that went well, and those that need a different approach next time. The time to plan for a post-event debriefing and discussion is before the event even happens – it should be in your operations plan so that everyone expects it.

Your debriefing plan should include prerelease instructions for all operators. If their logs are to be turned in to the served agency, you might suggest they keep a separate set of notes to use as a memory aid for the debriefing. Ask them to keep a list of any problems, or methods and systems that worked especially well. Try to keep the group discussions on a non-personal level. Problems between individuals should be dealt with privately. Group discussions should be about procedures, and what was done, but not who did it.

For a small event with few contentious issues, it may be appropriate to hold the discussion on the air, at the conclusion of the net. For larger or more problematic events, a face-to-face meeting a few days later is a better choice. The delay allows everyone to get some rest, think about events and issues, and organize their thoughts. As a last resort, consider sharing comments via an email group.

Once the debriefing is over, and all the information is analyzed and collated, any relevant or useful findings should be shared with the group. Lessons learned that have wide applicability should be shared with staff at ARRL HQ, published in a newsletter or even in QST so that others may learn. Debrief sessions with served agencies will not only help your group to become more efficient, but the served agency will have a better understanding for what your group was able to accomplish on their behalf.

**References**

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

* ARRL 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');)

**Review**

An emergency operation will seldom be successful without adequate planning. This is especially true for the administrative aspects of an emcomm operation. ARES leadership cannot be effective unless they know where they are going, and how they will get there before any event occurs. Operational management begins with planning for a disaster, knowing the agency’s needs, and training your volunteers well in advance. Through each phase of a disaster, your plan should provide adequate guidance for implementation. Support systems must be put in place to keep operators going, provide relief, repair or replace equipment, and track resources. When the event is ending, a plan for orderly demobilization will prevent last- minute needs from being unmet while assuring that those who are no longer needed may return home quickly.

**Student Activities**

1. Develop a three-level mobilization plan for a small town ARES team. The town is located in a mountainous region with numerous deep valleys. 10 team members live within 25 miles of the town. The assembly point is at the town hall.
2. Develop a net plan for the small-town described above. The served agency in this case is the town emergency services department. Ordinarily the served agency operates from the town hall with additional operations at two fire stations and a relief center at the local high school. The office of the county’s emergency coordinator is located 50 miles away.
3. Develop a list of topics or questions you would use to guide the post-emergency debriefing.

While no battle plan survives first contact intact, the failure to plan is a definite plan to fail.

In a crisis you can always adapt plans - but rarely create them!

**Topic 4 Section B 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:

In a tornado, when are Emcomm set-up activities most likely to occur?

1. Not at all.
2. During the Response or the Recovery Phase.
3. During either the Watch Phase or the Stand-Down Phase.
4. During the Preparedness Phase.

Question 2:

Regarding mobilization, which of the following statements is false?

1. The served agency should have multiple points of contact for the local Emcomm group.
2. It is important to have a deployment plan ready shortly after receiving a mobilization call from a served agency.
3. A call-up plan can involve many modalities such as pagers, landline & cell phones, e-mail or packet.
4. The initial resource net must be on the same frequency as the primary operations net.

Question 3:

Which of the following is not an important consideration when designing an emergency network?

1. The needs of the served agency.
2. The types of messages to be sent and received.
3. Coordinating the message type and appropriate modalities.
4. Committing to a single mode and band.

Question 4:

Which of the following best describes a C&C Net?

1. It is used to organize other nets and to manage the flow of messages.
2. It is used exclusively for NTS traffic.
3. It is used exclusively for tactical traffic.
4. It is used to disseminate information to the public.

Question 5:

When should the transition to demobilization begin?

1. At the outset of the event.
2. During the Warning Phase.
3. Beginning at least one, but not more than two shifts before the anticipated release.
4. Immediately after the debriefing.

**Correct Answers**

1 b

2 d

3 d

4 a

5 c