

ALASKA

ARES

PLAN

ARES

EMERGENCY COMMUNICATIONS PLAN ALASKA SECTION

AMATEUR RADIO RELAY LEAGUE

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Amateur Radio Emergency Service Communications Plan 2002

ALASKA Section

American Radio Relay League

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ARES Emergency Communications Plan

Amateur Radio Emergency Service

Communications Plan

The purpose of this plan

is to implement Part 97.1 of the FCC regulations, and Federal and international treaty law applying to Amateur Radio in the Alaska Section of ARRL.

97.1 Basis and purpose.

The rules and regulations in this Part are designed to provide an amateur radio service having a fundamental purpose as expressed in the following principles:

Recognition and enhancement of the value of the amateur service to the public as a voluntary non-commercial communication service, particularly with respect to providing emergency communications...[Emphasis supplied]

This plan provides formal guidelines for the Amateur Radio Emergency Service (ARES) in the Alaska Section. It describes an organization within which Local and District ARES units may function with maximum effectiveness and minimum confusion. It is intended to promote uniform procedures among local, District and Section ARES units, their officials and their operators. The Plan should effectively address the amateur radio communications infrastructure necessary to support Emergency or disaster communications needs both within the Alaska Section (primarily between LEPD districts), as well as interface with outside areas such as Western Canada, the westcoast of the United States, and Hawaii.

These guidelines are not intended as rigid regulations. The senior ARES official in charge may interpret and adapt the plan as reasonably necessary for efficient management of the situation.

The ARES organization has been assigned to parallel the state's Local Emergency Planning District (LEPD) structure. Each of these Districts will have its own particular emergency communications needs, and as such, should be developed by the amateur leadership within each district. The State LEPD map can be found at: <http://www.ak.prepared.com/serc/lepd1.htm>. The Section organization is still evolving and subject to change.

| Table of Contents | Page |
|---|-------------|
| THE PURPOSE OF THIS PLAN | 3 |
| TABLE OF CONTENTS..... | 5 |
| DEFINITIONS..... | 6 |
| POLICIES..... | 8 |
| ARES LEADERSHIP | 9 |
| ALERTING AND NOTIFICATION..... | 10 |
| NET OPERATIONS..... | 11 |
| THE GATEWAY SYSTEM | 14 |
| THE DIGITAL TRAFFIC SYSTEM | 15 |
| MESSAGE HANDLING | 16 |
| SERVING SERVED AGENCIES | 17 |
| SUPPORT FOR DES..... | 18 |
| SITREP REPORTS..... | 19 |
| INCIDENT COMMAND SYSTEM | 20 |
| PLANNING | 20 |
| DRILLS AND TRAINING | 22 |
| APPENDIX A ALASKA HF NETS..... | 23 |
| APPENDIX B ALASKA ARES ON INTERNET..... | 24 |
| APPENDIX C: SITREP STANDARDS..... | 24 |
| APPENDIX D: FCC REGULATIONS PART 97..... | 25 |
| APPENDIX E JUMP TEAMS..... | 25 |
| APPENDIX F: ALASKA ARES COUNTIES BY DISTRICT..... | 27 |
| APPENDIX G: MESSAGE FORMS | 28 |
| BIBLIOGRAPHY..... | 31 |

Definitions

- "ADES" – Alaska Division of Emergency Services
- "AEC" – Asst. Emergency Coordinator
- "APRS" – Automatic Packet Reporting System – A digital system that transmits and displays data on maps on computer screens. Highly effective as a parallel to voice circuits.
- "ARES" – Amateur Radio Emergency Service headed by the Section Emergency Coordinator (SEC); is part of the ARRL field organization. More information can be found at: <http://www.arrl.org/FandES/field/pscm/sec1-ch1.html>
- "ARRL" – American Radio Relay League – National Amateur Radio organization dedicated to implementing Part 97 of the FCC regulations.
- "Blue Alert" – Condition Blue – Alert status allowing ARES officials at their discretion to shut down operations when they complete their emergency-related duties.
- "Borough" - Similar in size to a County
- "Communications emergency" as defined the FCC occurs when normal communications systems are disrupted in a specified area.
- "County" - Any geographical jurisdiction assigned to an EC. For ARES purposes a County can be a Borough , a portion of a Borough, or a combination of Boroughs.
- "DEC" – District Emergency Coordinator, an appointee in charge of ARES activities in an LEPD geographic area comprising a District see: <http://www.arrl.org/FandES/field/org/dec.html>
- "Disaster" – An event causing death or serious injury to humans or a major loss of property.
- "Distress traffic" – Any traffic relating to an acute, immediate threat to human safety or property; i.e. SOS, MAYDAY, or EMERGENCY traffic.
- "District" – correspond to the State LEPD's geographic area, assigned to a DEC.
- "EC" – Emergency Coordinator. An ARES appointee who supervises emergency planning and operations in a specified geographical area. Reports to the DEC. see: <http://www.arrl.org/FandES/field/org/ec.html>
- "EM – Emergency Manager – City or Borough Emergency Manager or Emergency Management
- "Email" – Electronic messages exchanged over the Internet or local computer network.
- "Emergency" – any situation in which human life or property is threatened. The emergency ceases when relief agencies have no further need for our services. (See "Disaster")
- "Emergency Net" – A group of Amateurs using the same frequency and associated side frequencies to support emergency relief measures.
- "EOC" – Emergency Operating Center; an emergency headquarters.
- "ESF" – Emergency Support Function. Each of the 16 ESFs is a group of people in an EOC dealing with specific kinds of problem.
- "FEMA" – Federal Emergency Management Agency see: <http://www.fema.gov>
- "Formal traffic" is written in ARRL message form. It is used when Amateur Radio operators relay information between third parties.
- "GATEway Stations" – Fixed stations providing liaison between two nets.
- "GPS" – Global Positioning Satellite
- "HAZMAT" – Hazardous Materials.
- "ICS" – Incident Command System a management tool being used by State and Federal agencies
- "Informal communications" – Radio exchanges between two people not requiring verbatim relay to any third party. Classified as non-traffic; not handled on emergency nets.

"Jump Team" – A group of experienced Amateur volunteers selected and trained to mobilize on very short notice to meet an emergency.

"Key City" – A strategic city operating a GATEway station within a specific geographic area providing liaison between activated emergency nets or a Served Agency HQ and the SECC .

"LEPD" – Local Emergency Planning District, the basic geographic divisions within the State of Alaska see: <http://www.ak.prepared.com/serc/lepd1.htm>

"LGL" – Local Government Liaison is an appointment made by the State Government Liaison (SGL) for any specific task.

"NM" – Net Manager. see: <http://www.arrl.org/FandES/field/org/nm.html>

"NOAA" – National Oceanic and Atmospheric Administration - Home agency for the National Weather Service

"No alert" – same as Condition Green. Normal operations.

"NTS" – National Traffic system..

"NWS" – National Weather Service see: <http://www.alaska.net/~nwsar/> Alaska Region

"Orange Alert" – Condition Orange ARES members are active at assigned duty posts – not on standby.

"QNC" - QN signal for CW or digital net use meaning "All net member stations please copy."
It indicates that the message to follow is of general interest.

"RACES" – Radio Amateur Civil Emergency Service operate at the Borough level under direct control of the Borough Emergency Management Director.
FEMA an RACES see: <http://www.fema.gov/library/civilpg.htm>

"Red Alert" – Condition Red – Maximum level of ARES activation in the Alaska ARES Plan.

"Section" – ARRL administrative unit headed by elected Section Manager (SM).

"SEC" – Section Emergency Coordinator – Official responsible for all ARES activities within a Section. see: <http://www.arrl.org/FandES/field/org/sec.html>

"SECC" – State Emergency Communications Center located at Ft Richardson
see: <http://www.ak.prepared.com/ctoc/secc.htm>

"Secondary net" – A communications channel associated with the primary emergency net used for traffic handling and other time-consuming net business.

"Service information" – Handling notes attached to a message form.

"Service message" – Radiogram relating to handling of another message.

"SET" – Simulated Emergency Test.

"SGL" – State Government Liaison is an appointment made by the Section Manager. The role is that of interface between amateur radio and all facets of state government.
see: <http://www.arrl.org/FandES/field/org/sgl.html>

"Side Frequency" – Secondary Net.

"SITREP" – Situation Report – message reporting status of emergency-related activities.

"SM" – Section Manager see: <http://www.arrl.org/FandES/field/org/sm.html>

"STM" – Section Traffic Manager

"Tactical traffic" – Spoken instructions or consultation on the air. No third party communication occurs.

"Traffic" – Any exchange of information between two or more Amateur Radio stations.

"Traffic Log" – A list of incoming and outgoing traffic at an Amateur station.

"White Alert" – Condition White – Notice to ARES members to prepare for deployment on very short notice.

POLICIES

Certain policies prevail when Alaska ARES groups conduct emergency operations. When these policies differ from ARRL policy, the Alaska ARES procedures take precedence.

The SEC, DEC and ECs do not assume specific operating duties when their organizations are on Orange or Red Alert. They must remain free to cope with their official duties. When a County or District is not activated, however, this restriction does not apply.

ARES members on duty are directed only by ARES officials. Served-agency officials may not change the ARES volunteer's instructions.

Amateurs who hold professional emergency-response obligations (e.g. police officer or County emergency management) will not be appointed EC or DEC.

ARES operators, while on duty, perform only their assigned ARES duties. If the operator wants to assume other duties he asks the EC to be relieved from ARES duties.

Complete service information will be written on the message form.

Written messages in ARRL format are used whenever third parties are involved.

Every emergency-related message (except MAYDAY or Welfare) should be given a Priority precedence, no matter how routine they may seem.

A reply takes the same precedence as the original; a Priority message gets a Priority reply.

Priority messages addressed to, or originating at the State ECC take precedence over other Priority traffic.

In-coming Welfare inquiry traffic will not be handled on any ARES Emergency Net operating in Condition Orange or Red.

Out-going Welfare "assurance" messages get a W (Welfare) precedence and will not be handled on any net operating on Orange Alert *unless* approved by the Net Manager. They will not be handled at all during Red Alerts.

At their option, ARES officials may use the Emergency Net frequency for consultation and coordination.

Except for MAYDAY situations, business on the Emergency Net frequency must not be allowed to cause delays in listing emergency-related traffic or listening for weak stations.

Message traffic should be dispatched on the Emergency Net but actually transmitted on side frequencies. However, during long periods of inactivity traffic may be handled on the net frequency at the discretion of the Net Manager or Net Control.

Situation permitting, emergency communications use VHF or UHF nets in preference to HF.

When any operation taxes local ARES resources, the EC asks the DEC for support. The DEC may assign ARES units from other counties within the District and/or request additional help through the SEC. The SEC may recruit additional personnel from any available source.

ARES officials may do whatever is legal and reasonably necessary for the orderly conduct of the operation.

UTC in 24-hour format is the preferred time system for all dated ARES messages, documents and schedules. Dates must agree with the time system used.

ARES Leadership

Section Manager (SM)

A Section is the largest administrative unit of the ARRL field organization. Each Section has an SM elected by ARRL members in that Section. The SM has overall responsibility for ARRL activities in the Section and may appoint as many assistant officials as he deems necessary. They serve at the pleasure of the SM. Technically, their appointments end automatically when the SM leaves office, though the new SM may choose to continue any or all of them. All field appointments are made by the SM at the EC level and above.

Section Emergency Coordinator (SEC)

The SEC is directly responsible for emergency planning and operations, and heads the Amateur Radio Emergency Service (ARES), in the Section.

In the event of the SEC's absence or temporary inability to perform his duties, the Section Manager assumes those duties or appoints someone to perform them during the SEC's absence or incapacity.

By delegation of authority from the SM, the SEC appoints all District and County Emergency Coordinators. The SEC may appoint individuals at any time to assist in performance of specifically delegated duties.

Section Traffic Manager (STM)

The STM, also appointed by the SM, coordinates National Traffic System (NTS) activities in the Section. The STM is often helpful when setting up liaison circuits with other Sections or countries for served agencies in Alaska - for example, the Alaska Division of Emergency Services or the Red Cross.

This could also include moving welfare inquiry traffic into Alaska in the late stages of a disaster operation, or routing outgoing welfare traffic through NTS, including the digital systems, for rapid delivery. In such circumstances the STM coordinates the exchange and keeps the SEC and Emergency Net Manager advised of preferred routes and methods. And he works closely with other NTS officials to establish and maintain routes for whatever inter-Sectional traffic is being generated.

District Emergency Coordinator (DEC)

District EC is a major responsibility, demanding a major commitment of time, energy and personal initiative. Alaska is divided into twenty-nine Districts. DEC's are responsible to the SEC for executing the Section ARES plan as it applies to the District.

Emergency Coordinator (EC)

The EC is the chief ARES official in the Borough, and is directly responsible to the DEC. The duties of Emergency Coordinator require a serious commitment of time and effort by the volunteer who accepts it. The EC serves at the pleasure of the SEC or SM, but works closely with the DEC day to day.

The EC's duties in a medium-to-large county are many and complex. No EC can do everything himself. To be effective, he must delegate duties to Assistant ECs (AECs). He/she may appoint as many AECs as needed. AEC appointments do not need approval by any other ARES official. AECs need not be ARRL members, but should be encouraged to join. They serve at the pleasure of the EC and their appointments lapse when the EC resigns or is replaced, though any or all of the same individuals may be re-appointed by the new EC at his/her discretion.

The EC organizes and coordinates Amateur Radio communications in the Borough to accommodate the needs of agencies served.

ALERTING and NOTIFICATION

Levels of Alert

When a disaster strikes or threatens any Alaskan community, affected ECs and DEC's may invoke any of four levels of alert of their ARES organization:

WHITE ALERT (Condition White) notifies ARES members in a specified area (such as a County or District) or functional unit (such as a net) that their services may be needed on short notice in the next 24-48 hours. It is typically issued by the SEC or, occasionally by DEC, or EC. The alert may apply to the entire Section or to specific Districts or Counties. But omission of any area does not prohibit others from taking whatever precautionary steps may be appropriate. The SEC usually does not issue a follow-up order raising the alert level but leaves that step to the ECs or DEC's in the affected areas.

A WHITE Alert declaration signals DEC's that they should alert ECs, "jump team" coordinators, Net Managers, and other key ARES officials to prepare for short-notice calls. All members in the alerted Districts or Counties should monitor ARES net frequencies and keep closely in touch.

Alerted ARES members should prepare to be en route to duty posts within two hours or less of being assigned. Preparations may include updating "ready-kits," arranging to take time off from work, fueling vehicles and power generators, charging batteries, obtaining stocks of expendable batteries and testing emergency-related portable equipment. Nets operating in White Mode customarily run in "free mode," i.e., they are not directed. ARES members and officials should monitor the appropriate frequencies for information and for possible increases in or cancellation of the alert status.

ORANGE ALERT (Condition Orange) is descriptive of operational status. It is usually issued by DEC's or ECs and designates nets, GATEway activation; jump teams, and such, to perform specific tasks. The alert level becomes Orange in a County or District when specific duty posts are staffed and become operational. A net typically "goes Orange" when a net control operator opens the net.

A DEC may place any District or local net or other operating unit (such as a jump team or County EOC ARES staff) in his District on Orange Alert. Most emergencies, even severe ones, can be handled without ever going beyond Orange.

RED ALERT (Condition Red) is the highest possible level of alert in an ARES operation. It is useful for maintaining tight control over HF circuits where heavy traffic and large numbers of stations are causing communication problems. When distress traffic is being handled on any ARES net or frequency, the alert level is automatically Condition Red and remains so until all distress traffic has been cleared.

Red Alert can be invoked at the Section level only by the SEC or SM. It is the only alert level under which the SEC or SM will consider asking the FCC to clear a frequency.

Red Alert is declared by issuance of a Priority bulletin to be transmitted on all active ARES frequencies. It applies solely to nets and geographic areas designated in the formal order. A District EC can put his District on Red Alert by declaration, but he must advise the SEC or SM of his action in advance or, if this is impossible, immediately upon taking the action. The bulletin specifies the date and time Red Alert operation is to begin. It should designate the net or nets and/or the geographic area (County or Counties, District or Districts, Section, etc.) to which it will apply. It will designate Key Cities to be activated, if any. Nets or areas NOT designated in the bulletin will continue in whatever level of alert prevailed before the Red Alert began.

BLUE ALERT (Condition Blue) authorizes DEC's and ECs to begin the stand-down phase of the activation. BLUE is permissive only; it does not *require* that operations be shut down in the specified area. It simply advises the designated DEC's and/or ECs that no apparent reasons exist for continuing operation unless they have local requirements. The DEC and EC then may reduce operating hours, restrict operations or close down designated nets as the emergency passes and traffic loads subside.

Only the SEC (or SM) may invoke a Blue Alert for a Section net, or if more than one District is involved in the emergency operation, because specific DEC's or ECs may not be aware of conditions elsewhere that might require their support. A DEC can invoke a Blue Alert in the District net if the emergency-operation involves only his/her own District and no Section net.

is in operation.

NO ALERT (Condition GREEN) is the normal situation for Amateur communication. No state of alert or emergency exists.

NET OPERATIONS

Many VHF and UHF local or semi-local nets operate in just about every mode authorized by the FCC. These include repeaters which, by their inherent nature, may be defined as nets, though they may be seldom, if ever, subject to net controls. Each of these nets has its own procedures, schedule and operating practices and many of them shift almost automatically from routine, casual operation to emergency mode.

It is not the intent of this plan to prescribe operating functions or procedures for any of these nets unless they are explicitly part of the County, District, or Section ARES program. Individual participation in almost any well conducted net in any mode, on any frequency is strongly recommended as a way to become familiar with nets and how they operate. The discussions below refer to and recommend procedures for ARES-affiliated circuits; however, most of these procedures work quite well in any well-disciplined traffic or emergency net.

Duties of Net Managers during emergency Operation:

- Overall supervision of the net's operation to maintain net discipline and efficiency. A reporting to both the SEC and the Appropriate DEC's if an activated District is not consistently represented in the net by the GATEway stations.
- Suggesting measures to the SEC to improve the existing ARES operation.
- Selecting and assigning Net Control operators to keep the net going for long hours.
- Arranging relief for NCS operators at reasonable intervals.
- Replacing NCS operators who cannot maintain effective control of the net.
- Reporting immediately to the SEC or SM any deliberate interference or persistent destructive interference of any kind.
- Advising the SEC or his designee immediately of any disruption of net operations that the manager can't immediately handle.
- Making sure that NCS operators adhere to guidelines for identifying GATEway stations and use them appropriately.
- Calls of NOS operators and their times on and off duty.
- Net frequency.
- Changes of band conditions and interference levels.
- Number of Priority messages handled by the net during each NCS duty shift.
- Suggestions for further NCS and net member training.
- Suggestions for changes in standing net procedures.
- Writing prompt reports after emergency net operation ceases, using log entries and other available information.

Copies of this report should go by email to the SEC, SM, STM and the other net co-manager as the manager's shift ends. These reports should be used to guide discussions on subsequent sessions of NFAN for training, and for distribution via the Alaska ARES home page on the World Wide Web and via the ARES email list.

Frequencies

Section-wide coverage during an emergency is normally maintained using frequencies on 75- or 40-meter side-band. The Net Control operator on duty will decide whether to keep the net on its current frequency, or to move up or down a few kHz to avoid interference. However, if it becomes desirable to move the net to another band, the Net Manager on duty at the time decides whether to move the net and if so, to what band, frequency, and mode. The manager, after consulting the SEC, may also opt for running simultaneous sessions on two bands at once, or he may set up direct "hot-line" circuits for special purposes. For example, if conditions are unfavorable on 75 and 40 meters, a CW or digital circuit might be set up on an arbitrary frequency, perhaps on 30- or 160-meters, or via other digital modes, thus maintaining contact with critical locations while the net itself continues to operate on one of its normal frequencies.

The Emergency Net may operate simultaneously on both 40-meter and 75 meter, each with its own Net Control and its own set of side frequencies. The "primary net" is where net control is. Frequencies on either side of the primary net used for exchanging traffic, are called "secondary nets" or "side frequencies." The primary frequency and all its secondary frequencies are referred to collectively as "the net."

Secondary Nets

Traffic should not be handled on the primary frequency of the Emergency Net except during periods of light activity. If the net frequency becomes continuously busy, it blocks the listing and dispatching of traffic and the conduct of other business. Mobiles and other weak stations may have trouble being heard. If the net is handling much traffic off-frequency, the NCS or Net Manager should consider designating a separate frequency — a secondary net — for use by stations handling this traffic. And if a waiting line develops on the secondary net additional frequencies may be added to accept the overflow.

If operation is in Condition Red, and if FCC has declared a "voluntary communications emergency" for NFEN operation, these secondary nets should be operated within the channel specified by FCC. Very rarely, it may be necessary to ask FCC to widen the protected channel to make room for the additional net frequencies.

Spontaneous Nets

Under FCC regulations and international law, any person may use any available means at any time to summon help in an emergency. Any person may initiate emergency operations on any frequency. If this occurs in an Amateur band, control of the resulting net will rest with the station at the scene until a fixed-station operator can assume net control. A spontaneous net of this kind is not necessarily an ARES net however. ARES officials should be careful not to intrude if the net is already functional and getting the job done. ARES members should simply monitor the frequency and offer whatever aid is appropriate without disrupting the operations. If an ARES member or ARES official started the net however, or was requested by the station at the distress scene to assume control, the net should adopt standard ARES procedures.

Nets may also be activated by ARES officials on their own initiative or upon request from any agency supported by ARES. Each EC and DEC must have a well-designed plan for alerting local nets and ARES members. The highest ranking Alaska ARES official active in the operation will usually assume over-all control and should designate a temporary net control. Some Amateur Radio nets not affiliated with the ARRL or ARES operate in support of ships at sea, or of missionaries in Third World countries. Individual ARES members are encouraged to monitor these nets and to assist when possible with any distress traffic. However, they should remember that these nets are NOT ARES nets and their leaders may not need or want other parties involved.

Boroughs and Districts may be partially or fully alerted by their ECs and DEC as necessary. Local VHF and UHF repeaters are commonly used for emergency nets and usually require no special alerting.

Any EC or Assistant EC may put a County net on White or Orange status at any time, consistent with the Borough and District emergency plans. If the operation seems likely to continue for more than a few hours, the EC should notify the DEC, briefly describing the nature of the emergency.

The DEC may extend the alert to other Boroughs and Key Cities: in his district at his/her discretion. Any DEC or assistant may put the District net on emergency status at any time, consistent with the District and Section emergency plans. **The DEC will notify the SEC immediately by radiogram, email or telephone of any District operational alert**

Section HF net frequencies may be used in emergency at any time by ARES members or officials consistent with other emergency communications that may then be in progress on the frequency. Use of the net frequency is not the same thing as establishing an emergency net. When a local or District ARES official begins emergency use of an HF circuit, the SEC and Net Manager should be notified immediately by radio or landline. The SEC may (or may not) designate the ad hoc net as an emergency circuit at his/her discretion. The SEC or his designee will promptly notify the Section Manager, Net Manager and STM of any formal activation of the Section Emergency net on an NTS net frequency.

Recruiting and Relief

Once the operation is under way, it may be brief, or it could last for days. Relief operators must usually be recruited for ARES operations that last more than a few hours. Keeping each active operating position filled during a long operation is a necessary but time-consuming task that should not be allowed to interfere with the EC/DEC's other duties. Such recruiting is best conducted by the Administrative AEC — the one who keeps the ARES membership records and sends monthly reports to the DEC. If an EC believes he will exhaust the pool of reserve operators, he should advise the DEC and request reinforcements from other counties. If reserves within the District have been depleted, the DEC must advise the SEC of the need so that other Districts can be tapped for assistance.

Every effort should be made to assign trained, experienced ARES members to critical posts, avoiding "walk-ons" of unknown ability. Any "broadcast" recruiting by public announcements must be authorized by the SEC. Operators recruited by such methods can create more problems than they solve.

Net Control

Net control should not be located in a disaster area, where it could suffer too adverse factors. Rather, NCS should be located so as to hear stations in the impacted area as well as possible.

The Net Manager should select net control operators on the basis of signal quality and strength and operating skills, and should take propagation into account. NCS will appoint relay stations as necessary.

A two-hour emergency-net control shift is the norm, but the NM will adjust this duty cycle as convenience and necessity require. GATEway stations should not be used as NCS, except perhaps during very slow activity hours, or when their GATEway services are not being utilized.

If destructive QRM occurs on an emergency net frequency, the SEC should be notified promptly by telephone or radio (but not on the net frequency). If the NCS is unable to move the troublesome station by polite request, the SM may ask the FCC to intervene.

Monitor Mode

During a WHITE Alert, each regular Section Net continues its accustomed meeting schedules. No NCS is usually assigned when the formal nets are not in session, but ARES members are asked to monitor the frequency as convenient, in case an activation should develop. Chit-chat, long silences and short random QSOs have their usual play on the frequency. That is "Monitor Mode" operation. It saves the energies of NCS operators and others for use when they are needed.

Directed Mode

When NFEN is activated, its alert status changes to ORANGE. At that point, the net shifts to "directed mode" and a Net Control operator designated by the Net Manager assumes control of the frequency in the name of the Alaska Emergency Net. Thereafter, for the duration of the activation, stations wishing to contact other stations through the net must first access Net Control by saying "Net Control" or "Net Control from KG4ZZZ" and waiting for NCS to reply.

During directed operation, NCS calls a roll of GATEway stations in activated Districts at least hourly depending on the level of activity. NCS will ask all stations to listen for weak signals, but net control operators should not maintain a constant chant, even when the frequency would otherwise seem idle because of slow business or quirky conditions. Constant transmissions can interfere with stations trying to contact the net.

In order to keep the primary net frequency as uncluttered as possible, it is used primarily as a dispatch frequency. Stations with Welfare and Priority traffic are normally sent to a side frequency to handle it.

Distress calls made on the primary net frequency, however, are always handled on that frequency and all other net business ceases until the distress traffic is cleared. Net status automatically shifts to Directed Mode, Condition RED, until all distress traffic has cleared.

If the activity level is very low, the net frequency is maintained primarily for formal Priority traffic or tactical traffic (i.e. ARES coordination).

See "Policies and Definitions" section above.

If curious operators ask what's going on, NCS should have a brief, "canned" response ready, such as: "We're supporting the National Weather Service in a weather emergency."

NCS should respond immediately if other stations, not realizing the frequency is occupied, try to begin operation there. A polite but firm request to respect the emergency frequency is usually all that's required. A slight shift in frequency by the emergency net should be made if reasonably necessary. The SM or SEC should be notified if interference becomes destructive and persistent or seems to be intentional. If the NCS is unable to move the troublesome station by polite request, the FCC may be asked to intervene.

The GATEway System

Every GATEway station serves the entire District.

All that's necessary to send a message from a Borough EOC to anywhere outside the Borough is simply to send it from the Borough EOC to a District GATEway station. That station has both a two-meter radio on the District Net and an HF station on AEN. The two-meter operator just hands the message to the HF operator, or vice versa. Within minutes the message has passed to an HF GATEway on AEN and has been delivered by telephone or email.

GATEways may be clustered in or near major urban areas called Key Cities. Or they may be dispersed anywhere in the District within range of the VHF District Net. Either way, the function is the same, with the District Net playing the central role. In a few cases, a DEC may find it necessary to operate the District Net on two different repeaters because of propagation, technical repeater problems, or stubborn geography. In such cases, GATEways might link the repeaters via voice relay on either HF or VHF. All GATEway operations in each District are managed by the DEC through ADECs.

Selecting GATEway Stations

HF GATEway stations are pre-designated Amateur Radio stations. They may use voice or digital modes — or both, depending on the assignment — including APRS, AMTQR/APLINK, PACTOR, packet and CW. They should be capable of high-quality performance, with good signals that under normal conditions cover the entire Section and beyond.

Selection and recruitment of GATEway Stations are responsibilities of the District Emergency Coordinator.

GATEway stations may be located anywhere within range of the VHF District Net in homes, clubhouses or any site where good antennas and 24-hour operation are feasible. They may be located at public sites such as the Borough EOC. No matter where sited, however, the station must serve the whole ARES system — not just its home Borough or District or some specific agency or organization.

In any high-performance station, the antenna is the primary consideration. The best station cannot be effective when driving a poor antenna; yet a modest station with a high-performance antenna can be extremely effective.

A GATEway should have a minimum power output capability of 100 watts, and 500 watts or more is highly desirable under poor propagation conditions. Emergency power is highly desirable to run the station at reasonable output. However, not all GATEways need full-scale auxiliary power if operation can be shifted when necessary to a backup GATEway with either commercial or emergency power.

A GATEway cannot function without VHF links to the Borough EOC and other local points designated by the EC or DEC. ECs are strongly encouraged to use the County and District VHF nets and avoid using HF at all, if possible, for local communications. This reduces congestion and confusion on the HF Emergency Net and expedites all traffic. It also reduces demands on Counties with scarce personnel better used on other assignments.

The Digital Traffic System

The APRS Connection

The Amateur Packet Reporting System — APRS - is a digital technology based in packet radio, but automatically relaying its messages. Unlike conventional packet it thrives in either a VHF, UHF or HF environment virtually in real time, using digipeaters.

APRS displays a map on a computer screen, showing the location of each transmitting station it hears. This can include all kinds of moving stations — land mobiles, boats, aircraft; even the Space Shuttle.

The icon moves across the map as the mobile progresses. If the transmitting station sends a text message, those receiving the signal can read the text by clicking the icon. The map can be "zoomed" to show any desired piece of real estate, from the whole country to a few square blocks in a city or the streets of the smallest towns.

Since the signals are "digipeated" — i.e., automatically passed along to distant digipeaters (digital repeating stations) and other receiving stations — an APRS net can cover large geographic areas. If these areas overlap coverage of, say, an HF emergency net APRS can be a useful back-channel for the net filling gaps caused by the vagaries of HF propagation.

APRS can run in parallel both with regional VHF nets and Section-wide HF nets, covering portions of the same geography at the same time. This allows GATEway operators on NFEN, for example, to communicate directly with each other via APRS without disturbing the HF operation. No net control is required for APRS.

When APRS and voice nets run in parallel (overlapping some of the same geographic coverage), the voice NCS can easily monitor APRS visually at his operating position as the voice net proceeds. If NCS does not have APRS capability, he can designate an APRS-equipped station to relay information to the voice net as appropriate.

APRS is especially useful in real-time severe weather reporting. As each station reports its weather, its icon pops upon the map on the APRS receiver at the National Weather Service, and its weather data can be extracted by the click of a mouse. Wide geographic distribution provides an excellent idea of the extent of the weather being reported.

The Conventional Digital System

Operation of the digital system is nearly invisible to most ARES operators, but it can also handle heavy loads of Routine and Welfare message traffic from NTS without loading the voice and CW nets, and without attracting a crowd of voice operators looking for a direct contact with some station in the devastated area.

HF Digital System

Currently, two known HF digital links are available within the section.

The first is the HF Packet Gateway operated by the Anchorage ARC on 80 meters. It is widely accepted within the amateur community that HF packet is a relatively inefficient mode of communications. While it is noted that multiple connects can be made on the same frequency, throughput on HF packet is marginal at best. Currently, activity on this link is extremely low. It is improbable that more than a single connect would need to be maintained by the Anchorage system at any one time, even during an emergency. The benefits of simultaneous connection can easily be outweighed by the throughput provided by Pactor. It is recommended that if this station is to be maintained, that the mode be switched to either Pactor or Pactor II.

The second HF digital link currently in operation is the WinLink HF Pactor Gateway operated by AL7PI in Anchorage. This station is frequency agile and maintains regular schedules with five stations in the lower – 48. The system automatically selects the best band for communications. Traffic bound for the lower – 48 via the NTS system or for email delivery can be delivered to AL7PI's system via VHF packet. The system will

then auto-connect to one of the five stations in the lower – 48 and forward the traffic. Traffic bound for Alaska from the lower – 48 is also delivered in a similar fashion. It is recommended that key areas within the Alaska section install WinLink HF Pactor Gateways similar to AL7PI's system to effect HF digital communications.

9600 Baud VHF/UHF PacSat

9600 baud PacSat communications has proven its capabilities over the years. A number of satellites support this mode and provide many communications windows each day in which traffic can be moved within and outside the section on a timely basis. In years past, the Anchorage ARC had sponsored such a system. It is recommended that key areas within the Alaska section install PacSat stations to effect communications within and outside the section.

Message Handling

Voice communications take two basic forms in nearly all operations in which ARES plays a part : "Tactical" – Direct (person-to-person), or "Formal – Sent through a third party to reach its intended addressee.

Formal communications must be used when information is passed through any third party to reach its destination. Sometimes it is desirable to use radiogram form just to preserve a record of what information was sent — and received — even when no third party relays it

Tactical ("informal") communications are useful and necessary. They allow an EC to speak directly over the air with ARES members or with the DEC.

Formal radiograms, however, are basic to virtually all ARES assistance to third parties. That's because, when people's lives and property are at stake, any risk of misunderstanding, or of transmitting erroneous information is close to intolerable.

Message Precedence

ARRL prescribes four message precedences: Routine, Welfare, Priority and EMERGENCY (equivalent to SOS or MAYDAY). In every ARRL radiogram, a "precedence" indicator follows the message number in the preamble. Net Controls must observe message precedence when dispatching traffic.

Routine

Nearly all of the day-to-day messages handled on the National Traffic System (NTS) carries a Routine ("R") precedence. Routine traffic is generally handled on any Alaska Net. It is not unusual, however, for inexperienced operators to assign a "Routine" to messages that should, in fact carry a "Priority" label. The NCS should ask if the traffic is related in any way to the emergency situation. If the answer is "yes," the operator holding the traffic should be instructed to reclassify it as "Priority" and offer it again

Welfare messages (incoming or outgoing) carry a "W" precedence, a notch above Routine and a notch below Priority. They may be handled at the discretion of the Net Manager unless Priority traffic is pending, or the net is on Red Alert.

Welfare

Unfortunately, when an emergency net accepts even a few "W" messages, it sends a signal to scores of operators, who have been listening silently, that here is a chance to cram some inquiry traffic into the disaster area, triggering a landslide of welfare message listings. Welfare traffic is not included in the mission statement of a the Alaska Emergency Net. Independent nets often spring up specifically to handle welfare inquiries, and NCS should make a brief announcement about every hour that such nets are operating at such-and-such a frequency.

Additionally, the Alaska Digital traffic system incorporates welfare traffic in its mission statement; it can handle bulk traffic with ease. Welfare traffic listed on NTS nets quickly reaches the Alaska digital system and can sometimes be delivered just as quickly.

People who try to push welfare inquiries close on the heels of a disaster may not realize that even a message that reaches its destination city may not be deliverable. Typically in the wake of a disaster, normal communications within the impact zone are disrupted. What local telephones are still working – including cellars – are invariably saturated with urgent emergency-related traffic. In addition, streets may be blocked, street signs and landmark buildings destroyed, making it extremely hard to deliver messages, even if spare personnel is available to try it.

Welfare messages are not handled while Priority traffic is pending. Emergency nets handle no Routine traffic at all.

Priority

In emergency operations, most of the traffic handled on ARES nets will carry a Priority ("P") precedence, meaning that they are relevant to the existing emergency and therefore should be moved toward their destinations as rapidly as possible. Since virtually all messages listed are designated "Priority", Net Control dispatches them in any convenient order. But "P" traffic volume on some emergency nets can become quite heavy, meaning that some messages must wait in line behind others of (presumably) equal importance. For such situations, Alaska has adopted a fudged version of the Priority category – "SECC Priority" – which presumes that some messages are slightly "more equal" than others. Messages originating at the Alaska Division of Emergency Services or addressed to DES, are handled ahead of other Priority messages. ARES GATEways holding such traffic should list it that way with NCS, but message transmissions in progress will not be interrupted for SECC Priority traffic either coming or going.

All emergency-related messages to or from the SECC carry a Priority precedence. They should be listed with Net Control as "SECC Priority." Such messages are handled ahead of other Priority messages on the net.

NOTE: The practice of using "BREAK" or "BREAK BREAK" to announce distress traffic should be strongly discouraged; it has no universally understood meaning. Always use the international standard "MAYDAY" to announce traffic of life-or-death importance. The standard CW signal is "SOS," sent as a single character – *not* spaced as three letters.

SERVING SERVED AGENCIES

ARES exists for the purpose of providing supplemental communications for government and private organizations involved in emergency and disaster response and mitigation. Our field organization reaches all 50 states, as well as Puerto Rico and other island protectorates, territories. In Alaska, ARES groups serve all of the 29 LEPD's including the other agencies that also serve those LEPD's

When an agency asks Alaska ARES for communications assistance, it gets the full benefit of the entire ARES organization, including its nets, repeaters, mobiles and emergency power sources, as well as members' personally-owned radio equipment. Even more important than the equipment, the organizational structure includes cooperative planning with the agencies to learn their needs, training programs, and the services of scores of operators, few of whom are visible at the disaster site.

ARES has good working relationships with most major disaster response agencies, both government and private. These are our "served agencies." But too often we fail to contact less conspicuous local groups whose needs are at least as great. Small units of city, county, state and federal governments, or volunteer agencies sponsored by churches and other community organizations, are easy to overlook. ARES planning must include consultation with their leaders, but first we must identify them and seek them out

Small town and rural community organizations (volunteer fire and rescue departments, to cite one category), usually have single-channel radio systems – if they have any at all. Frequently they can't cooperate fully with similar agencies from other localities because their radios won't talk to each other! Similar problems tend to afflict sanitation departments, street and traffic-signal departments, school bus systems, hospitals and convalescent centers. ARES is designed to cope with such problems.

The ARES Full-Service Organization

The ARES field organization is designed to support as fully as possible, upon request, any and all emergency response and disaster relief organizations. However, ARES retains its own identity and organizational structure, personnel and physical infrastructure while providing communications support.

When dealing with served agencies we must remember that ARES is a self-contained emergency organization, and retains its own identity. When an ARES operator is assigned to a duty post anywhere, he/she remains an ARES operator for the full length of the ARES assignment. That operator is responsible directly to the EC (and designated assistants) and to no one outside the ARES organization.

The ARES infrastructure includes privately-owned radios, antennas, ARES-dedicated and cooperating repeaters, and accessory equipment. Even more important than the equipment, the organizational structure includes numerous nets, training exercises, and cooperative planning with the agencies to learn their needs.

When officials of any organization request support in Alaska, they get the full benefit of all of this, as well as the personal service of hundreds of volunteer operators, most of whom are not visible in the emergency or disaster area.

When an agency asks ARES for communications assistance, it gets the full benefit of the ARES group's entire organization including its nets, repeaters, mobiles and emergency power sources.

When dealing with served agencies we must remember – and remind the agencies – that ARES is a self-contained emergency organization, and retains its own identity.

We must never allow officials of a served agency to take control of ARES operators assigned to them, or to absorb them into their own organization, though they may some times attempt that. We do not recruit and train operators for other groups to use.

Officials of emergency and disaster response agencies who desire ARES assistance should contact any of the following ARES representatives:

Section Manager

David Stevens KL7EB

Email: adbuildingsvc@customcpu.com

Section Emergency Coordinator

Linda Mullen AD4BL

Email: ad4bl@mosquitonet.com

ARRL headquarters

Rosalie White, K1STO

225 Main St., Newington, CT 06111

Phone: 860-594-0200

FAX 860-594-0259

Email: walsto@arrl.org

One may also contact any District Emergency Coordinator or Borough Emergency Coordinator, whose names addresses and phone numbers can be obtained from ARRL HQ or from local Amateur Radio operators, or from clubs, or radio equipment dealers.

Support for ADES

ARES procedures for support of the State ECC *apply* when the impacted area is any where in Alaska . During major critical situations, the

Alaska Division of Emergency Services activates the State Emergency Operations Center (SECC) at Ft. Richardson.

The State Emergency Communications Center (SECC) at Ft Richardson has an amateur station. While it is a fully-equipped station and can operate on all activated Alaska nets, it expects primarily to receive traffic from and send traffic to the Anchorage GATEway station(s).

Situation Reports

DES staffers deal in what they term "SITREPs" - Situation Reports. These terse messages from disaster agencies are intended to provide the SECC with updates at frequent intervals but they are often delayed. The procedure described below is relatively simple in concept but it serves DES well and keeps the SEC and other ARES members better informed about the situation; relating to the emergency.

SITREPs benefit not only DES and ARES, but our other served agencies as well. ARES officials will gather information about the emergency and transmit it to DES.

SITREP Procedures

First the SEC notifies specific DEC's that SITREPs are expected every so-many hours, and lists the types of data needed. The interval may vary from hourly to daily. DEC's not in the impact area might not be asked for SITREPs at regular intervals, at least at first. The DEC's notify their EC's of the request with specific instructions as to types of data needed.

EC's SITREP duties

ARES operators assigned to the Borough EOC and other Served Agency locations are usually among the first activated. The EC will instruct each operator staffing those points to collect certain information and report it to the EC by radiogram on the County Net by a specific deadline. When the EC has collected the necessary data, he/she reports it to the DEC by the fastest means available

DEC's SITREP duties

Each Borough SITREP and each District SITREP must carry place, date and time so that no confusion arises as to when and where the report originated. Originating operators must sign their SITREP messages to the DEC. The DEC SITREP must retain citations of sources for each reported fact from the Borough SITREPs. Originating operators should retain copies of all SITREPS for a reasonable period in case they are needed for reference later. One year is a desirable minimum.

The DEC combines this information from all Boroughs, and checks with the originating operators to verify anything that looks doubtful or incomplete before sending the composite District SITREP to the SEC and SM by the agreed-upon deadline. Speed - but not haste - is very desirable. SITREPs should not be held up for additional information. DEC's should send what is available at deadline. Supplemental data can be sent along when it is available.

INCIDENT COMMAND SYSTEM

The State Government and many of the Borough Governments are using the Incident Command System.

The ICS has been recognized as the model tool for the command, control, and coordination of resources and personnel at the scene of an emergency. The ICS is a management tool designed to assist anyone who has the responsibility for the successful outcome of an incident. An incident is any planned or unplanned occurrence or event, regardless of the cause, which requires action by emergency service personnel to prevent or minimize loss of life or damage to property and/or natural resources.

The ICS structure begins with the Incident Commander (IC). The person designated IC is responsible for the management of the incident and starts the process by setting incident objectives. This person may do all functions without aid but will usually delegate responsibilities to others in the organization. The IC still has overall responsibility for the incident, regardless of duties delegated.

It is common to have an incident cross a jurisdictional boundary. Unified Command is the ICS process that allows the multiple jurisdictions to develop unified objectives and strategies for the incident. This is accomplished without any loss of authority, responsibility, or accountability.

The Command function consists of those actions that involve directing, ordering, and/or controlling resources by virtue of explicit legal, agency, or delegated authority. The head of the command function is the Incident Commander. Incident Commanders are selected on the basis of who has the Primary Authority for the overall control of the emergency event.

PLANNING

An ARES plan is basically a scheme for making the best use of limited ARES resources to provide maximum communications help to other emergency response organizations when they need it.

The Section ARES Plan

The Section Emergency Coordinator has full responsibility for writing, and revising, the Section Plan, after extensive consultation with the Section Manager, the District ECs, the Manager of the Section ARES Net, and the Section Traffic Manager.

The SEC is also responsible for getting the Section Plan printed and distributed to each DEC and EC, each Section-level ARRL appointee, the Field Services Manager of ARRL, and agencies served by Alaska ARES.

District ARES Plans

Each DEC must develop a written ARES plan for his/her District subject to review by the SEC. The plan should permit the counties to operate independently in small emergencies but allow counties to cooperate smoothly with each other and to intermesh effectively with the District and Section ARES nets.

The District Net serves as the primary on-air ARES coordination and training circuit for the District. During emergencies it handles traffic among member Counties and between them and major agency headquarters (including the state Division of Emergency Services, the National Weather Service, and the Red Cross) outside the District. Traffic coming into the District from outside, or going out of the District, usually passes through the District net GATEway.

The District plan must:

- List the Boroughs within the District.
- Describe procedures to be used by ECs to alert the DEC and other ECs in the District.
- List VHF/UHF frequencies to be used for communications between Boroughs (the District net).
- Describe procedures for liaison with Section HF nets, including the use of GATEway stations.
- List specific locations requiring special attention when involved in emergencies.
- Describe any special measures required at each designated special site (e.g. a portable repeater, or special antenna arrangements). In addition, the District plan must include the following verbatim

portions of the current Section ARES plan:

- Definitions
- Policies
- Emergency Coordinator
- Alerting Procedures
- GATEways

County/Borough ARES Plans

Each Emergency Coordinator (EC) must develop a written ARES plan for his/her County/Borough subject to review by the DEC. The plan should permit the County/Borough to function independently in local events, yet intermesh smoothly with the District and Section plans.

The county plan must:

- List AECs by title (not by name or call) and describe their duties. The EC should appoint an AEC for each major area of the ECs responsibility. Several duties may be combined in a single AEC in counties with few ARES members. These duties include (but are limited to):
 - Administration (keeping records, making reports)
 - Training and recruiting
 - Liaison with each served agency
 - Managing the County ARES Net
- Describe procedures to alert AECs and other ARES members for emergency duty.
- Describe procedures to alert the DEC and other ECs in the District as necessary.
- List Amateur VHF/UHF frequencies to be used within the Borough.
- List Amateur VHF/UHF frequencies to be used between Boroughs (the District net).
- Describe procedures for keeping contact with activated District and Section HF nets.
- List the most likely types of anticipated emergencies and describe suitable responses to each, including evacuation, weather reporting, searches in primitive areas, and HAZMAT spills.
- List specific locations, if any, requiring special attention in certain emergencies. Examples: flood-prone areas, chemical or explosive manufacturing plants.
- Describe the kinds of special attention required at each designated special site (e.g. a portable repeater, special antenna arrangements, boat mobiles or hazmat precautions).
- Provide instructions for GATEway Station operation in support of District activities.

In addition, the County plan must include the following verbatim portions of the Section plan:

- Definitions
- Policies
- Emergency Coordinator
- Alerting Procedures
- GATEway System

Copies of the plan should be widely distributed to members, and specifically to the SEC, the DEC, all Assistant ECs, other ECs in the District, Net Managers, regular net control operators and other ARES members and officials. Copies should also be provided to agencies supported by ARES.

Drills and Training

Nothing is more beneficial for long-term planning than real ARES activations, but since these can't be arranged in advance, the next best planning tool is frequent well-designed training sessions. They should be carried out frequently in each County and District to familiarize

ARES members with the needs and personnel of served agencies and with local emergency plans. Participation by ARES members in regular Section traffic nets is excellent emergency training and should be encouraged by ARES officials at every opportunity.

These simple training exercises, useful and necessary as they are, can do only half the job. The DEC and each EC should design specific test operations to identify weak points in their systems, and then devise ways to eliminate them or work around them.

Each session of any ARES net should be regarded as a training exercise. Frequent "repeater down" drills should be run to familiarize ARES members with hot spots and holes in simplex coverage and to devise work-arounds when the repeater goes off the air.

All ARES-related messages, announcements, and other information from these sessions should be relayed promptly to the EC and/or the DEC as appropriate.

Simulated Emergency Test

Each October, on the third full weekend, ARRL sponsors a nation-wide Simulated Emergency Test (SET) in which ARES organizations can test their nets, personnel, procedures and equipment. SET offers an excellent opportunity for County and District ARES groups to invite direct participation by the agencies served by ARES. The date is elastic; it can be any time between 1 September and 31 October.

The SEC may direct a coordinated Section-wide SET exercise, or DEC's may conduct independent drills specifically designed for local applications within their Districts.

The flexible date allows ARES planners to coordinate joint exercises with and local or regional served agencies. In the event of a major Section-wide emergency operation within a few weeks of the scheduled SET date, the SEC may cancel the exercise and treat the actual operation as the SET, including the formal SET report filed by each EC.

ARRL has formal memoranda of understanding with several national agencies, including: The National Weather Service, Salvation Army, American Red Cross, Federal Emergency Management Agency (FEMA), National Communications System, and Associated Public Safety Officers Inc. Copies of all the MOU's between agencies and ARRL can be found at: <http://www.arrl.org/FandES/field/mou/>

Local Drills and Exercises

At least once each month, each EC should conduct a one or two-hour test of emergency readiness among his members. They can test any phase of the group's capabilities, e.g.:

- Check the range of a portable repeater in a temporary location.
- Install and test a permanent antenna at an agency HQ.
- Survey the County to find dead spots in the ARES repeater coverage.
- Run a local net session exclusively on emergency power or on simplex or both.
- Start and run every emergency generator owned by the ARES group. Repair the defective ones.
- Hold a surprise net session at an unusual time to see how many stations check in.

After every exercise and every actual operation, the ARES officials involved should conduct an intensive debriefing session. Local and District plans should be updated to take advantage of the experience.

Appendix A: Alaska HF Nets

| <i>Net</i> | <i>Time</i> | <i>Frequency</i> |
|---------------------------------|-------------|------------------|
| Alaska Pacific Preparedness Net | 0830 AST | 14.292 MHz |
| Sniper's Net | 1800 AST | 3.920 MHz |
| Bush Net | 2000 AST | 7.093 MHz |
| Motley Group | 2100 AST | 3.933 MHz |

Appendix B: ALASKA ARES on the Internet

Email

Email is an important factor in day-to-day operation of Alaska ARES. Email notifies ARES members and officials of activations, deactivations, drills, and other activities. Email delivers most situation reports (SitREPS) to DES. Scores of ARES members use it to exchange information and friendly chat. An ARES "mailing list developed almost spontaneously, in which members exchange ideas and current information sporadically.

Members who have Email but need information on how to use it in ARES, or who want to be added to the mailing list may send an email message to the SEC with the request and their own Email address. The SEC's is:

Linda Mullen AD4BL email address: ad4bl@mosquitonet.com

ARES on the World Wide Web

Alaska ARES units have several home pages on the World Wide Web. The Alaska Section page is located at:
<http://www.qsl.net/aresalaska/index.html>.

Appendix C: SITREP Standards

It is vitally important that SITREPS contain no rumor or unverified information that is not clearly so identified.

A report of "a tornado at East Podunk," for example, should be amended to read "buildings damaged by high winds at East Podunk," unless the National Weather Service has officially declared it a tornado. It is helpful, however, to pass along certain unverified information if it can be attributed to a specific source: A report similar to the following would be acceptable: "County Road 114 flooded at Goose Creek bridge south of Percyville. Eyewitness report by H. P. Maxwell W1AW. No independent confirmation."

Conflicting information can be reported in the same manner, citing both versions and noting the conflict. Generally, requested SITREP subjects in any given activation might include several of those below, but each situation generates its own requirements. The SEC's requested topics may change from report to report and are not limited to those given here for general guidance only:

- Weather obs - temperature, wind speed and direction, tide, barometer, precipitation.
- Severe weather - funnel clouds, heavy rain, high winds or tides, rising streams, freezing rain....
- Casualties -be very specific about source of this info, but do NOT use names of victims.
- People needing evacuation - nature of threat, numbers and location.
- Any unusual events or matters needing immediate attention, including relief operators for ARES stations. (Jump teams?)
- Areas to be evacuated - and total population of each.
- Number of shelters to be opened, and their combined capacity
- Number of shelters to be staffed by ARES
- Name of agency managing shelters.
- Total number of shelter occupants per county – No names of shelterees. Use official estimates of numbers if no specific figures available.

- Degree of commercial power loss in specific areas. (Usually an estimated number of users. Indicate any critical facilities, such as hospitals, that may be affected.)
- Structural damage to buildings and causes of damage. Give locations (but not street addresses), structural type and use of building (nursing home, store, factory).
- Curfews (who declared, when effective, area affected)
- Polluted water supplies
- Hospitals closed, overloaded, or non-functional

Time and date County EOC was activated
 Number of ARES operators assigned to duty and when activated
 List ARES-Served Agencies activated
 Changes in alert level of ARES nets.
 Changes in activation status of the District and each county.
 Road/street/bridge closings. Be specific about the location.

Appendix D: FCC Regulations Part 97

Subpart E – Providing Emergency Communications

97.401 Operation during a disaster.

- (a) When normal communication systems are overloaded, damaged or disrupted because a disaster has occurred, or is likely to occur, in an
- (b) area where the amateur service is regulated by the FCC, an amateur station may make transmissions necessary to meet essential
- (c) communication needs and facilitate relief actions.

- (b) when normal communication systems are overloaded, damaged or disrupted because a natural disaster has occurred, or is likely to occur, in an area where the amateur service is not regulated by the FCC, a station assisting in meeting essential communication needs and facilitating relief actions may do so only in accord with ITU Resolution No.640 (Geneva, 1979). The 80 m, 75 m, 40 m, 30 m, 20 m, 17 m, 15 m, 12 m, and 2 m bands may be used for these purposes.

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

Radio Amateur Civil Emergency Service (RACES)

RACES is a volunteer communications arm controlled by regional, state and county Emergency Management Agencies.

Appendix E: Jump Teams

Self-supporting mobile teams have been a staple of ARES operations for many years. Jump teams can go quickly to distant locations to help in ARES operations. They can be first responders where no local Amateurs are available.

They can provide relief operators to let exhausted local operators to get some rest. Each Alaska DEC should maintain at least one such team ready to respond to a call within two hours or less of notification. The ideal would be two or three jump teams in each District.

Suggested organization

Each DEC appoints an assistant to recruit a pool of operators from the District train and organize them, and keep them functional. Volunteers are chosen in part for their ability to drop whatever they may be doing and hit the road with their "ready kits" already loaded.

Deployment

Normally, no relief teams are sent to another District unless specifically requested by the DEC in the impacted area.

Nothing, however, prevents volunteers from offering their services. Often, they simply show up in the disaster area uninvited. To be most useful, however, they should coordinate with the ARES team and the local DEC. How and whether to use them is entirely a matter for the DEC or the EC in the impacted location to decide.

When a jump team is activated, the coordinator designates a team leader from among the members on a particular assignment. After the leader is fully briefed, he and his team depart for the assigned site or staging area as quickly as possible.

The coordinator typically remains at his home station to keep in close touch with both the DEC and the team captain. The team leader is the coordinator's contact person for that team's mission. His or her duties include getting all the team members to the correct site, he keeps in touch with them en route and on duty.

Upon arrival, the team should be able to set up a station on emergency power, operate on VHF/UHF and/or HF on designated frequencies, and maintain radio contact with other ARES stations as required.

The coordinator provides a reliable base station link with home for the team members as necessary.

Scheduling operator relief

As soon as local ARES members in the target area begin to report for duty posts, the DEC in the impacted area would notify the SEC that relief crews will be needed to staff various positions in about 24 hours, relieving worn-out local operators.

The notice would specify the number of operators and any special equipment needed, e.g.; emergency power, portable repeaters, special antennas, ATV, AMTOR or APRS, or high-speed CW operators, for example. The SEC then attempts to locate suitable teams. He sends them to a staging point near the impacted area to await further instructions.

The SEC arranges for a second-wave replacement team if necessary, and attempts to keep fresh operators moving into the impact area about every 24 hours until they are no longer needed.

The first jump teams typically should be scheduled to arrive in the target area or staging area about 24 hours after local ARES units go on Orange Alert.

The staging point

At the staging point the leader reports the teams arrival to the coordinator and the host DEC. The host DEC will advise the team how to reach specific duty sites, and on what frequency to check in. On that frequency, the impact-area DEC will direct the team to its specific duty assignments.

Preparedness

The jump team should be self-supporting in transportation, fuel, food, water, emergency power, and sleeping accommodations in addition to their communications equipment.

The ready kit

Each member should prepare his own "ready kit" and keep it in his vehicle or at a specific place where it can be picked up without delay. Due to weather extremes in Alaska, the ready kit contents needs to be tailored to any possible situation and should include items necessary for personal survival.

Typically, the ready kit would include two changes of comfortable old clothing. It should also contain non-perishable personal toiletry items and personal ID's, a durable drinking cup, a small first-aid kit including sun block, insect repellent and a non-prescription analgesic and any prescription medications are also needed.

Each member should have a checklist to be consulted *every time* prior to departure. First on this list would be the ready-kit.

Appendix F: Alaska ARES Districts / LEPD's

| | |
|---------|------------------------------|
| LEPD 1 | North Slope Borough |
| LEPD 2 | Northwest Arctic borough |
| LEPD 3 | Fairbanks North Star Borough |
| LEPD 4 | Denali Borough |
| LEPD 5 | Matanuska-Sustima Borough |
| LEPD 6 | Copper River |
| LEPD 7 | Municipality of Anchorage |
| LEPD 8 | Kenai Peninsula Borough |
| LEPD 9 | Northern Southeast |
| LEPD 10 | City and Borough of Juneau |
| LEPD 11 | Bristol Bay Borough |
| LEPD 12 | City and Borough of Sitka |
| LEPD 13 | Aleutians – Pribilof Islands |
| LEPD 14 | Petersburg – Wrangell |
| LEPD 15 | Kodiak Island Borough |
| LEPD 16 | Southern Southeast |
| LEPD 17 | Ketchikan Gateway Borough |
| LEPD 18 | Aleutians East Borough |
| LEPD 19 | Bering Staits [Nome LEPC] |
| LEPD 20 | Yukon – Koyukuk |
| LEPD 21 | Yukon Flats |
| LEPD 22 | Upper Tanana Basin |
| LEPD 23 | Lower Yukon |
| LEPD 24 | Iditarod Region |
| LEPD 25 | Kuspuk |
| LEPD 26 | Lower Kuskokwim |
| LEPD 27 | Southwest Region |
| LEPD 28 | Lake and Peninsula Borough |
| LEPD 29 | Prince William Sound |

Appendix G FORMS

ICS Modified Form

| | | |
|------------------------|---------------|-------------------------------------|
| GENERAL MESSAGE | TASK # | DATE PREPARED: TIME PREPARED: |
| TASK NAME: | | PREPARED BY (): |

[illegible]

NTS RADIOGRAM MESSAGE FORM

ADDRESS TO:

NAME

ADDRESS

CITY,ST,ZIP

TELEPHONE NO

TEXT

| | | | | |
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SIGNATURE_____

ARES EMERGENCY TRAFFIC FORM

AMATEUR RADIO EMERGENCY SERVICE MESSAGE FORM

NUMBER PRECEDENCE HX STATION OF ORIGIN CHECK PLACE OF ORIGIN TIME DATE

TO _____ AGENCY _____

FROM _____ AGENCY _____

MESSAGE:

REPLY:

SIGNED _____ TITLE _____

VALIDATING PHONE NUMBER _____

TO BE COMPLETED BY RADIO OPERATOR:

TIME SENT _____ LOCAL 24HR/UTC

TIME REPLY RECEIVED _____ LOCAL 24HR/UTC

TIME REPLY DELIVERED _____ LOCAL 24HR/UTC

AMATEUR NAME _____ CALL _____

Bibliography

Every ARES official should be familiar with the District and Section plans. These plans are based on standard procedures recommended by the American Radio Relay League. The following publications, available from ARRL, explain League policies and procedures in detail:

- Public Service Communications Manual
- Guidelines for ARRL District Emergency Coordinators
- Guidelines for ARRL Emergency Coordinators
- The ARRL Operating Manual
- FCC Regulations Part 97 (Amateur Radio)
- ARRL Net Directory (current edition) for info on 3rd party countries and net frequencies and schedules
in various states and Sections
- ARRL Repeater Directory
- ARES Field Resources Manual