



Tom Green County Amateur Radio Emergency Services (ARES)



Plan of Operations Operating Procedures

1. Introduction

- 1.1. The Tom Green County (TGC) Amateur Radio Emergency Service (ARES) operates under the auspices of the American Radio Relay League (ARRL), and is composed of Federal Communications Commission (FCC) licensed Amateur Radio operators who have voluntarily registered their capabilities and equipment for public service communications duty.
- 1.2. Under Federal regulations, Amateur Radio public service communications are furnished without compensation of any kind.
- 1.3. The TGC ARES functions under this Emergency Plan under the direction of the Tom Green County ARES/Skywarn Emergency Coordinator (EC) who is appointed by the ARRL West Texas emergency Coordinator in consultation with the ARRL District Emergency Coordinator.
- 1.4. The TGC ARES and the Tom Green County Radio Amateur Civil Emergency Service (RACES), is a joint working team.
- 1.5. The Tom Green County ARES team functions under this Plan of Operation and under additional plans, as noted, under the direction of the Tom Green County Emergency Coordinator (EC) for ARES/SKYWARN.
- 1.6. The Tom Green County RACES team functions under this Plan of Operation and under additional plans, as noted, under the direction of the RACES Coordinator for Tom Green County.
- 1.7. The county EC may appoint additional assistant Emergency Coordinators or assistant Officers as needed for ARES to function efficiently.

2. Purpose

- 2.1. The purpose of this plan, Standard Operating Procedures (SOPs), Standard Operating Guides (SOGs) and any other listed attachments, is to provide a written guidance containing the information that would possibly be needed to properly prepare for and react to any type of emergency. Because each emergency is different, flexibility is required to provide an adequate response in each situation.
- 2.2. The primary responsibility of the Tom Green County ARES/RACES team is to furnish communications in the event of a disaster or communications emergency when other

communications fail or are inadequate.

- 2.3. All drills, training and instruction shall be carried out to insure readiness to respond quickly and effectively to provide amateur radio emergency communications whenever an occasion may arise.
- 2.4. The following agencies could be served during a communications emergency: Tom Green County government, to include the Sheriff's Office and any county volunteer fire department; the City of San Angelo government, to include the Fire Department and Law Enforcement; the American Red Cross; the Salvation Army; Shannon Regional Hospital; San Angelo Community Hospital; FEMA; other ARES/RACES surrounding county teams requesting support; and any other agencies, organizations and other groups, not listed here, requesting communications assistance support from the ARES.

3. Definitions

3.1. Status Definitions. The following status levels have been defined:

- 3.1.1. *Normal*: Normal is the day-to-day status of the ARES team. ARES members are assumed to be going about their normal activities and activation could take 2 - 4 hours to call up a team. Even during a normal status, members are expected to have their go-kits in a prepared state, although last minute items may not be included.
- 3.1.2. *Ready State*: A go-kit in a ready state is assumed to be packed, or nearly packed, with deep-cycle batteries (where applicable) on the charger. It is also assumed that some last minute items are not included but are on hand.
- 3.1.3. *Stand-by*: Stand-by status is a pre-call up mode. Members are assumed to have all last minute items on hand or already packed; batteries may still be on the charger. A rapid shift to active should be anticipated.
- 3.1.4. *Active*: Tom Green County ARES team is in active call up. Nets are being organized or are active. The EC team is in communications with the associated agency and deployment is imminent or underway. Go-kits are packed, batteries and supplies are loaded. The active state will last through the final demobilization.

3.2. Other Definitions

- 3.2.1. *CERT: Community Emergency Response Team(s)*. The FEMA (DHS) CERT program educates people about disaster preparedness for hazards that may impact their area and trains them in basic disaster response skills, such as fire safety, light search and rescue, team organization, and disaster medical operations. Not to be confused with the CERT® which is the Computer Emergency Response Team, tasked with providing responses to cyber security issues and is associated with Carnegie Mellon University.
- 3.2.2. *DHS: Department of Homeland Security*. Created in reaction to the September 11, 2001 attacks, DHS is the Cabinet-level agency tasked with preventing terrorist attacks within the United States, reducing Americas' vulnerability to terrorism and minimizing the damage from potential attacks and natural disasters.

- 3.2.3. *EC Team*: The EC Team is composed of the Emergency Coordinator and the Assistant Emergency Coordinator(s) (AEC) in Tom Green County. During an emergency, in the absence of the Emergency Coordinator, the AEC designated shall take initial control and establish a rotation of Coordinators to facilitate management of the incident.
- 3.2.4. *ECIC*: The EC-in-Charge. This is the member of the EC Team currently on-duty.
- 3.2.5. *EOC*: Emergency Operations Center. This is usually defined as the city and /or county's EOC. Each hospital in the county also has an EOC as does the local chapter of the Red Cross. These EOCs will be defined where they differ from the county EOC.
- 3.2.6. *FEMA*: *Federal Emergency Management Agency*. Originally the only federal agency tasked with providing support during natural disasters, FEMA is now part of DHS and continues to provide training and programs for managing and coping with disasters.
- 3.2.7. *Home-based*: Those members of ARES that are generally unable to deploy to a location, but have a functioning station at home and are in position to act as liaison, NCS or in some other purpose.
- 3.2.8. *ICP*: *Incident Command Post*. The on-site command post.
- 3.2.9. *ICS*: *Incident Command System*. The ICS is a management system designed to enable effective and efficient domestic incident management by integrating a combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure, designed to enable effective and efficient domestic incident management. A basic premise of ICS is that it is widely applicable. It is used to organize both near-term and long-term field-level operations for a broad spectrum of emergencies, from small to complex incidents, both natural and manmade. ICS is used by all levels of government - Federal, State, local, and tribal - as well as by many private-sector and nongovernmental organizations. ICS is also applicable across disciplines. It is normally structured to facilitate activities in five major functional areas: command, operations, planning, logistics, and finance and administration.
- 3.2.10. *NCS*: *Net Control Station*. During a formal net, the NCS is in charge of all traffic and communications occurring on the net. All traffic is to pass through the NCS station as managed. The NCS is also the chief record keeper in the form of logs of all traffic on the net during the operational period.
- 3.2.11. *NCS Period*: Every effort will be made to keep ARES Net Control operational periods to no more than 4 hours.
- 3.2.12. *NIMS*: *National Incident Management System*. A system to provide a consistent nationwide approach to work effectively and efficiently together to prepare for, prevent, respond to and recover from domestic incidents, regardless of cause, size, or complexity (from Presidential Directive HSPD-5 and the National Incident Management System directive)[posted at:
- http://www.fema.gov/pdf/nims/nims_doc_full.pdf
- 3.2.13. *NTS*: *National Traffic System*. NTS is both a method for passing messages into and out of the area and is used to define the structure of the message. Formal NTS traffic will

follow the guidelines of the ARRL for the standard Radiogram form and the associated Field Service Documents (FSDs). All members of ARES are *expected* to know and understand all aspects of NTS traffic handling.

- 3.2.14. *NRP: National Response Plan.* The NRP is built on the template of the National Incident Management System (NIMS), which provides a consistent doctrinal framework for incident management at all jurisdictional levels, regardless of the cause, size, or complexity of the incident. The activation of the NRP and its coordinating structures and protocols - either partially or fully - for specific Incidents of National Significance provides mechanisms for the coordination and implementation of a wide variety of incident management and emergency assistance activities. Included in these activities are Federal support to State, local, and tribal authorities; interaction with nongovernmental, private donor, and private-sector organizations; and the coordinated, direct exercise of Federal authorities, when appropriate. [Posted at:]

http://www.dhs.gov/dhspublic/interweb/assetlibrary/NRP_FullText.pdf

- 3.2.15. *OES: Official Emergency Station.* Any station that has registered with the ARRL and has met the requirements for an OES as set forth.
- 3.2.16. *ORS: Official Relay Station.* Any station that has registered with the ARRL and has met the requirements for ORS as set forth.
1. Official Emergency Stations and Official Relay Stations are functionally the same, but serve different purposes. OESs are primarily dedicated to ARES functions while ORSs are dedicated to NTS functions. Under ARES, both are recognized as vital to the overall success of the mission and are to be utilized where possible. All members of ARES are encouraged to register as an OES/ORS if they meet the requirements.
- 3.2.17. *Operational Period:* defines this as an operational period of 12 to 24 hours.
- 3.2.18. *Operator Period:* Every effort will be made to keep an ARES operator period to no more than 6 hours.
- 3.2.19. *SET: Simulated Emergency Test.* Every year in October, the ARRL encourages ARES teams to participate in a SET. The purpose is to simulate, as closely as possible the issues and events that might occur during a real emergencies. The SET can be conducted in conjunction with emergency management agencies but does not have to. While it should simulate a real emergency, a SET can be a table top or field exercise.
- 3.2.20. *Skywarn:* The Skywarn network is a team of amateur radio operators who have received special training from the National Weather Service in spotting and reporting severe weather within the local area. All members of ARES are encouraged to become Skywarn spotters.
- 3.2.21. *Traffic:* Traffic refers to amateur radio communications. This can be in either tactical (informal) or written (formal/NTS/ICS-213) form.
- 3.2.22. *Texas Nets:* The Texas Emergency Net(s) are a series of predesignated frequencies to be utilized in the event of state-wide communication emergencies. Each network is dedicated to a specific mission and purpose and identified by an alphabetic letter

following the slant. Most emergency phone operations take place on the net, also known as the Emergency Network (EN). Management of the net is controlled by the Section Emergency Coordinator and the Section Traffic Manager.

4. Activation of the Plans

4.1. - Upon notification from an authorized representative of a served agency, this operations plan will set forth the other required operations plans, SOP's and SOG's as set forth by the Tom Green County ARES group, to be activated. If no notice is given and it is apparent that a disaster or communications emergency is imminent or existing, the EC Team shall contact the served agencies offering ARES support and activate the action plans if a need is indicated.

4.2. - Automatic Activation

4.2.1. - Severe Weather. Because severe weather can strike without warning, automatic activation of this plan and/or plans can occur under the following conditions:

4.2.1.1. - Watches. When the National Weather Service issues a watch for severe thunderstorms, tornados, hurricanes, or ice storms in the local area, ARES members are to check their gear and where needed, pick up any last minute items. No further activity is required.

4.2.1.2. - Warnings. If the National Weather Service issues a warning for severe thunderstorms, tornados, hurricanes, or ice storms, the plan is assumed to be activated and members are to move to a *stand-by* status. Further, because of the potential for loss of normal communications, members are encouraged to tune their radios to either 146.940 – (PL 103.5); 146.880- (No PL) or 444.225+ (PL 162.2).

4.2.1.3. - *Termination*. A termination of the Watch or Warning shall constitute a termination of status, **unless** continuation is warranted as a result of the severe weather, at which time the EC Team will stand down the ARES team at the end of service.

4.2.2. - *Terror Threat Level*. The Department of Homeland Security can adjust the National Terror Threat level without warning. The following threat levels are aligned with the plan as follows:

4.2.2.1 - **Yellow or Lower**: A threat level of *Green*, *Blue* or *Yellow* is considered to be *Normal* and activation of the plan is at the discretion of the EC Team in support of a specific request. Tests of the email alert list will occur monthly as required.

4.2.2.2 - **Orange**: At threat level Orange, the plan is activated in an extended stand-by mode. Batteries should be charged or on the charger, go-kits should be prepared and restocked and last minute items should be acquired. Where possible, ARES members should carry their go-kits with them at all times. The EC Team is expected to have a radio with them at all times (where possible) and should monitor the repeaters. Tests of the email alert list will occur weekly.

4.2.2.3 - **Red**: At threat level Red, the plan is considered activated. All ARES members

shall prepare for immediate call-up once ensuring to the safety of their home and family

- 4.3. Call up of mobilization of members in support of this plan and/or plans shall be by all means available, including but not limited to telephone, email, text messages, and repeater alerting.
- 4.4. An announcement alerting all ARES members shall be made by the TGC-ARES Telephone and E-Mail ALERT system to let everyone know what frequency and/or frequencies in which to monitor for Alerts and/or group information to all members.
 - 4.4.1. ALERTS will address the “TGC-ARES Call Frequencies” listing that all members should have in their “Go Bags or Kits” and/or their “Ready Books” to reference to.
 - 4.4.2. All ALERTS will try and use the primary ARES frequencies, as noted in the ARES Call Frequencies document.
- 4.5. Alternate frequencies and/or repeaters will be passed on during the call up or over the net announcements for backup call channel status operations and for testing, drills as required.
- 4.6. Radios shall be tuned to the required frequencies upon notification. Upon notification, members will check into the net frequency assigned by the EC Team for instructions and/or deployment locations.
- 4.7. A call-up or status change will be issued by the EC Team as indicated in consultation with the served agencies.
- 4.8. **No ARES member is to deploy without explicit instructions to do so.** In the event of activation, manpower needs will be communicated to the Logistics NCS station, located on the repeater furthest from the incident. Every attempt will be made to deploy personnel to a location closest to their location, or to match their training with the need.
- 4.9. The EC will assume net control or delegate another station as the Net Control Station (NCS). Net Control will maintain coordination with the Tom Green County Emergency Operations Center (EOC). Mobile or portable units will be activated and dispatched by the EC as required
- 4.10. The EC Team will assign net control (NCS) duties as required. NCS will be operated from a station secured from the incident, preferably where commercial power is available. NCS stations should be certified as Official Emergency Stations as appropriate. The NCS sole duty shall be controlling the net they are assigned to. Instructions issued by the NCS shall be assumed to originate with the member of the EC Team in Charge (ECIC)
- 4.11. Where practical, the ECIC shall have a *shadow* (operator) to handle radio operations, including the coordinator at the ICP and EOC.

5. Operations

- 5.1. **Duty Period:** Members should be prepared to operate for no less than a six hour period (*operator period*). Depending on the nature of the event, a maximum 12-hour period may be required. Where possible, operators will be released to return to their homes between shifts.
- 5.2. **Liaison Stations:** During any emergency, liaison stations will be required. OES/ORS shall

check in with the logistics net, reporting their status and availability. Stations already in contact with surrounding jurisdictions are also encouraged to check in with the logistics net.

5.2.1. - Liaison shall be established as soon as possible with the following agencies/nets, depending on the status of the incident:

- *Texas Nets*: any of the State of Texas Emergency Nets.
- *Skywarn*: serving the National Weather Service.
- *Surrounding counties*: as needed to provide support and request aid.
- *West Texas Region*: as needed to provide support and request aid.

Liaison stations shall be located in a similar manner as net control stations - as far from the incident as possible.

5.3. - In the event of a formal RACES activation, the state designated area RACES officer will become in charge of all RACES members and will activate the plans and requirements set forth by the FCC, the Federal Government and the state for all radio resources for their use during this time of emergency.

5.4. - The ARES team shall subordinate themselves to the authority RACES officer and support the operations as detailed in the MOU. The ECIC becomes an assistant RACES Officer (if so approved and registered with the state as an RACES member) at that point and may designate a temporary ECIC to manage any ARES needs. The ARES Emergency Manager or designee will work to support all RACES request as detailed in the MOU or under the plans.

5.5. - **Logging:** All ARES personnel shall log significant events, message traffic and other items of interest and import. The *NIMS* standard shall be followed and *ICS* form 214a (Individual log) shall be used unless otherwise directed by the ECIC. Each member shall include at least 5 blank pages in their go-kit at all times. Plain paper may be used for follow-on logging in the event a member exceeds the number of pages carried.

5.5.1. - The ECIC shall maintain a list of significant events on form 214, including the name and call sign of all operators, the beginning and end of each shift, and the duty station of each person.

5.5.2. - All logs are to be turned in at the end of the operation, or as requested. At the conclusion of the incident, all logs shall be turned over to the EC.

5.6. - **Traffic:** All formal traffic shall be logged. Traffic will be transmitted in the form received from the issuing agency. All members shall be proficient in the use of the ARRL radiogram as well as the *ICS* form 213 (General message form) and have at least five of each for reference in their go-kit.

5.6.1. - All formal traffic shall include the signature and title of the sender (where appropriate) who originated it, thus taking responsibility for the message and its contents.

5.7. - All traffic on the net shall give way to EMERGENCY traffic, whether formal or tactical.

5.8. - **ICS Forms:** All ARES members shall be familiar with the following additional *ICS* forms: 205, 205a, 214a. All ECs/NCS shall also be familiar with 201-204, 211, 214a, 216, and 217.

(See attachment xxx for all forms)

5.9. - All ARES members are encouraged to become familiar with *ICS* as represented within *NIMS*.
(See Para. 7.1. for further)

5.10. - **Media Relations:** ARES team members are not to speak to the media. In a coordinated activation, all media inquiries are to be directed to the media relations liaison or public information office (PIO)/joint information center (JIC) of the served agency(s). In activation without a media relations liaison, all media inquiries are to be directed to the ECIC or the EC.

6. Deactivation, Demobilization and Post Operations

6.1. - At the end of each shift and at the end of each ICS Operations Period, each participant shall be debriefed by the ECIC. This debrief may be written or oral and shall include original logs from the shift for record keeping and legal purposes.

6.2. - At the end of each shift and at the end of each ICS Operations Period, the ECIC shall debrief and be debriefed by the served agency as required.

6.3. - Upon notification from a representative of the activating agency or at the request of the ECIC, operations may be deactivated.

6.4. - Notification of deactivation shall come from the ECIC as formal traffic. Notification shall be made to all stations, including liaison stations through whatever communication channels are available. Nets shall be secured in an orderly manner based on reduced need. Confirmation of deactivation shall be routed to the ECIC and the EC.

6.5. - Demobilization may be accomplished by any means available at the time of the deactivation. Dissemination of deactivation shall be commensurate with the communications paths available at the time.

6.6. - It is the responsibility of the ECIC to gather a report of operational details related to their portion of the operation. These details shall include, but are not limited to:

6.6.1. - Description of event or activity.

6.6.2. - A list of participants and their operational locations, shift times, assigned duties, and duties performed.

6.6.3. - An activity log for each location and from each Net Control Station for each net and location. This log shall include:

- A listing of what went well and what needs improvement;
- A discussion of how to correct deficiencies for the next operation;
- A discussion of lessons learned;
- Annotation of ancillary items, as appropriate, including such things as personnel conflicts, accidents involving personal injury, damage or loss of personal property, illness, etc.;
- Notation of any property moved or removed from the operating position to

facilitate communication functions;

6.6.4. - A message log for each location and from each Net Control Station. This may be combined with the activity log.

6.7. - It is the responsibility of the Emergency Coordinator to compile the operational details into a final after action report to be made available to the general membership no more than 72 hours after the cessation of activity. This written report shall be subject to amendment and update as needed. Serious deficiencies and training issues shall be dealt with at the first opportunity.

7. Drills, Tests, and Alerts

7.1. - Required Training

7.1.1. – Federal, state and county regulations require the following certifications by all members of the ARES cadre: *IS-700 National Incident Management System (NIMS)* – (Note: on-line web based training and in-house training) - (See attached Training plans for more detail)

7.1.2. - Additionally, the following certifications are required for all personnel responding to city and/or county facilities: *IS-100 Incident Command System; IS-200 ICS for Single Resources and Initial Action Incidents* – (Note: on-line web based training and in-house training) - (See attached Training plans for more detail)

7.1.3. - Home-based operators, while not required to have IS-100/IS-200 are strongly encouraged to get these certifications, but must have IS-700 completed.

7.1.4. - Members of the leadership team and other identified operators must also possess: *IS-800 National Response Plan*– (Note: on-line web based training and in-house training) - (See attached Training plans for more detail)

7.1.5. – Other NMIS training classes are available, such as IS-300 and IS-400. These classes are in-house training only. Must be pre-approved before you can take the classes. (See attached Training plans for more detail)

7.2. - All team members are required to learn the forms related to the Incident Command System. At the very least, **213 - General Message, 214 - Unit Log, 214a - Individual Log, and 205 - Incident Radio Communications Plan** should be understood and used by all members.

7.3. - All team members are encouraged to practice their skills. Training in the NTS system can be obtained by participating in the Texas Traffic Net (TTN) which is held nightly on 147.300. All members are encouraged to practice sending formal traffic at least 4 times per year. Members are also encouraged to participate in the ARRL Emergency Communications Course (ARECC) and achieve at least Level I certification. Net Control Stations are expected to achieve Level II.

7.4. – Tom Green County ARES will supply public safety communications in conjunction with local events to test the deployment and operational capabilities of its members and to provide a service to the community. This may be in conjunction with any of the local clubs, such as the San Angelo Amateur Radio Club, as required.

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- 7.5. - Four times per year there will be a call up. This call up will be unscheduled and will constitute a test of the communications tree.
- 7.6. - When possible, the Tom Green County ARES group will operate a Field Day station, along with the San Angelo Amateur Radio Club, as part of a yearly test of emergency communications.
- 7.7. – When possible, the Tom Green County ARES/RACES teams will test and operate out of the Emergency Operations Center (EOC) for the City / County, as part of a yearly test of all equipment and emergency communications. This test will occur with the concurrence of the Tom Green County/City of San Angelo Office of Emergency Management (OEM) or designee.
- 7.8. - When possible, Tom Green County ARES will test fixed stations at least yearly.
- 7.9. - An annual simulated emergency test will occur. It may be conducted in October in conjunction with the ARRL Simulated Emergency Test and the SET may be localized or conducted in cooperation with surrounding teams.
- 7.10. - Additional training opportunities may become available as specific needs and personnel interests develop.
- 7.11. - Training shall include classroom study, field exercises and may include audio-visual material developed specifically for such purposes and made available by sponsoring organizations.
- 7.12. - Any relevant training undertaken by members should be reported to the EC for tracking purposes. A list of pre-approved training will be posted at the beginning of each year. Other training may be approved by the EC as required or relevant.

8. Regional Support

- 8.1. – Tom Green County ARES may be called upon to support different event or activities in surrounding jurisdictions. The call for support may be an informal request for help from a neighboring EC, or a formal request from the Section Emergency Coordinator.
- 8.2. - At no time should help be offered to a neighboring jurisdiction that could impact ongoing operations.
- 8.3. - In the event of a regional activation, the EC in affected jurisdiction shall have overall authority for deploying resources. Refer to the following plans for details: Tom Green County / City of San Angelo Emergency Management Plans (Basic and Annexes); State of Texas - State Emergency Management Plans; West Texas ARES plans; and the Operational Plans, Standard Operational Procedures (SOP's), Standard Operational Guides (SOG's) of the Tom Green County ARES group and Tom Green County RACES and other plans not listed at this time.
- 8.4. - *CERT Support.* Tom Green County has a standing Community Emergency Response Teams (CERT). These teams' primary mission is to provide aid and comfort to members of their community and the County at large in times of large scale disasters or other situations that over utilize county emergency resources.
 - 8.4.1. - In the event that normal communication channels are unavailable, CERT members have

been directed to utilize ARES.

8.4.2. - Communications through the ARES system will occur in these ways:

8.4.2.1. - *Indirect.* The *EC Team* will identify those ARES members that are generally *home-based* to act as liaison stations for the CERT Teams. Communications will be by FRS/GMRS radios (with the CERT Teams) or by other method, including face-to-face. Traffic will then be relayed to the appropriate agency through normal ARES channels.

8.4.2.2. - *Direct.* CERT members that are licensed Amateur Radio operators shall be trained in the protocols and operating procedures used by ARES and shall be considered part of the overall system. These CERT members shall not be considered part of ARES activation purposes unless they so choose to register with TGC-ARES.

8.5. - All ARES members shall become familiar with CERT forms, especially the message form and other data transmission forms. Where possible, collected data will be sent by packet.

Comments and questions can be directed to the Emergency Coordinator, Tom Green County ARES®/RACES/SKYWARN.

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This plan is to support the Communications Annex B of the Tom Green County/City of San Angelo Emergency Operations Plan.