

Amateur Radio Emergency Service

Emergency Plan for the West Texas Section

1. INTRODUCTION

- 1.1 The West Texas Section 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 West Texas Section ARES functions under this Emergency Plan under the direction of the West Texas Section Emergency Coordinator (SEC) who is appointed by the ARRL West Texas Section Manager.
- 1.4 The SEC shall appoint Emergency Coordinators (ECs) in each county in the West Texas Section and District Emergency Coordinators (DECs) as needed for the ARES to function efficiently.

2. PURPOSE

- 2.1 The purpose of this plan is to provide a written guide containing the minimum information needed in an emergency. Each emergency is different and flexibility to provide an adequate response to each is a necessity.
- 2.2 The primary responsibility of the West Texas Section ARES is to furnish communications in the event of a natural disaster or national or local emergency when regular communications fail or are inadequate.
- 2.3 All drills, training, and instruction shall be carried out to insure readiness to respond quickly in providing effective amateur emergency communications whenever an emergency may arise.
- 2.4 Agencies with which the ARRL has a memorandum of understanding shall be served during a communications emergency in addition to local public safety agencies and any other agencies requesting assistance from the ARES.

3. ACTIVATING THE PLAN

- 3.1 Any member of the West Texas Section ARES who for any reason suspects a communications emergency exists should monitor the assigned Texas State ARES nets of 3.873 MHz or 7.243 MHz (day time) for activity.
- 3.2 If local telephone service is available, the SEC and/or appropriate EC or DEC will be notified by telephone.
- 3.3 In order to alert Amateur Radio Operators, any city, Red Cross, Civil Preparedness, or similar official may notify the appropriate county Emergency Coordinator of an emergency where Amateur Radio might serve the involved community.

4. ARES MOBILIZATION PROCEDURE

- 4.1 An announcement alerting all ARES members will be made on the state ARES net frequencies.
- 4.2 If possible, local broadcast stations will be contacted by the SEC, DEC or EC for spot announcements to alert ARES members.
- 4.3 If telephone service is available, area ECs in proximity to the affected area will be notified by the appropriate DEC or SEC.
- 4.4 Mobile units will be activated and dispatched by the appropriate EC, if needed.
- 4.5 The SEC will assume net control or delegate another station as Net Control Station (NCS). Net Control will maintain coordination with the Texas State Emergency Operating Center (EOC).
- 4.6 Net Control is designated as a "Key Station" and will be extensively utilized during a communications emergency. Key Stations will have full emergency power capability with relief operators assigned to ensure continuous operation.

5. DUTIES OF NCS

- 5.1 The Texas State ARES Net will be called to order by the NCS.
- 5.2 Members of the West Texas Section ARES will check into the net from their mobile and home stations to await further instructions.

- 5.3 Liaison stations to the National Traffic System and Radio Amateur Civil Emergency Service (RACES) nets will be assigned.
- 5.4 Mobile units will be dispatched to the agencies being assisted as needed.
- 5.5 Operators of home stations not on emergency power will be coordinated to effectively operate or support the "Key Stations" or assist in mobile and Net Control Station operations as noted in Section 4.6 above as needed.

6. OPERATIONS

- 6.1 All formal messages must be written traffic in standard ARRL form.
- 6.2 All formal messages must be signed by the official who originates them and is taking responsibility for their content. His title must be included with his signature.
- 6.3 Message procedures of EMERGENCY, Priority, Welfare and Routine, as defined on ARRL form FSD-3, shall be used on all messages.
- 6.4 Stations will not transmit unless invited to do so by net control. The only exception to this is a station having EMERGENCY traffic.
- 6.5 All stations should keep a log of both formal and tactical messages, if time permits.

7. DRILLS, TESTS, AND ALERTS

- 7.1 Each county or community should conduct an annual test in October in conjunction with the nationwide ARRL Simulated Emergency Test.
- 7.2 To test the effectiveness of emergency operations, the West Texas Section ARES units are encouraged to supply public safety communications in conjunction with local events.
- 7.3 The Texas State ARES net meets Monday of each week at 1930 hours local time on 3.873 MHz.
- 7.4 Local ECs are encouraged to conduct weekly local hf and/or vhf nets.

8. REPORTING

- 8.1 All local ARES activities, including training sessions and public service events, should be reported to the SEC by the 10th day of each month. These reports will be consolidated by the SEC and reported to ARRL Headquarters.

- 8.2 Each EC shall develop a County or community Emergency Plan to provide local guidance in an emergency situation. A copy of the local Emergency Plan should be sent to the SEC for inclusion as an addendum to the West Texas Section Emergency Plan.

Appendices

County Emergency Plans



BIG BEND AMATEUR RADIO CLUB
1402 N. FIFTH
ALPINE, TEXAS 79830

Amateur Radio Emergency Service

Emergency Plan for the Big Bend of West Texas

1. INTRODUCTION

- a. The Big Bend 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.
- b. Under Federal regulations, Amateur Radio public service communications are furnished without compensation of any kind.
- c. The Big Bend ARES functions under this Emergency Plan under the direction of the Brewster County Emergency Coordinator (EC) who is appointed by the ARRL West Texas Emergency Coordinator in consultation with the ARRL District Emergency Coordinator.
- d. The EC may appoint assistant ECs as needed for the ARES to function efficiently.

2. PURPOSE

- a. The purpose of this plan is to provide a written guide containing the minimum information needed in an emergency. Each emergency is different and flexibility to provide an adequate response to each is a necessity.
- b. The primary responsibility of the Big Bend ARES is to furnish communications in the event of a natural disaster or national or local emergency when regular communications fail or are inadequate.

- c. All drills, training, and instruction shall be carried out to insure readiness to respond quickly in providing effective amateur emergency communications whenever an emergency may arise.
- d. The following agencies could be served during a communications emergency: Permian Basin Chapter, American Red Cross; Big Bend Regional Medical Center/Hospital; Civil Preparedness; City Hall; Fire Department; Police Department; Salvation Army; Sul Ross State University and any other agencies requesting assistance from the ARES.

3. ACTIVATING THE PLAN

- a. Any member of the Big Bend ARES who for any reason suspects a communications emergency exists should monitor the assigned nets of 146.72 MHz, 3.922 MHz, 3.873 MHz, or 7.243 MHz (day time) for activity.
- b. If local telephone service is available, the EC and/or assistant ECs will be notified by telephone.
- c. In order to alert Amateur Radio Operators, any city, Red Cross, Civil Preparedness, or similar official may notify the Emergency Coordinator of an emergency where Amateur Radio might serve the community.

4. ARES MOBILIZATION PROCEDURE

- a. An announcement alerting all ARES members will be made on the Big Bend Amateur Radio Club's (BBARC) voice repeaters.
- b. If possible, local broadcast stations KVLFF and KALP will be contacted by the EC or his representative for spot announcements to alert ARES members.
- c. If telephone service is available, the telephone tree will be activated.
- d. Upon receiving notification that a communication emergency exists, members of the Big Bend ARES will monitor the Big Bend Amateur Radio Club repeater system. If high frequency communication is required, the Big Bend Emergency Net on 3.922 MHz will also be activated.
- e. Mobile units will be activated and dispatched.

- f. The EC will assume net control or delegate another station as Net Control Station (NCS). Net Control will maintain coordination with the Big Bend Civil Preparedness Emergency Operating Center (EOC) or emergency communications van/trailer.
- g. Net Control is designated as a "Key Station" and will be extensively utilized during a communications emergency. Key Stations will have full emergency power capability with relief operators assigned to ensure continuous operation.

5. DUTIES OF NCS

- a. The Big Bend Emergency Net will be called to order by the NCS.
- b. Members of the Big Bend ARES will be checked into the net from their mobile and home stations to await further instructions.
- c. Liaison stations to the National Traffic System and Radio Amateur Civil Emergency Service (RACES) nets will be assigned.
- d. Mobile units will be dispatched to the agencies being assisted as needed. A mobile station will be dispatched to radio stations KVLFF and KALP.
- e. Operators of home stations not on emergency power will be coordinated to effectively operate or support the "Key Stations" or assist in mobile and Net Control Station operations under 4.4 above as needed.

6. OPERATIONS

- a. All formal messages must be written traffic in standard ARRL form.
- b. All formal messages must be signed by the official who originates them and is taking responsibility for their content. His title must be included with his signature.
- c. Message procedures of EMERGENCY, Priority, Welfare and Routine, as defined on ARRL form FSD-3, shall be used on all messages.

- d. Stations will not transmit unless invited to do so by net control. The only exception to this is a station having EMERGENCY traffic.

7. DRILLS, TESTS, AND ALERTS

- a. An annual test will be conducted in October in conjunction with the nationwide ARRL Simulated Emergency Test.
- b. To test the effectiveness of the operation, the Big Bend ARES will regularly supply public safety communications in conjunction with local events.
- c. The Big Bend Emergency Net meets each Sunday at 0830 central time on 3.922 MHz.
- d. The Texas State ARES net meets Monday of each week at 1930 hours local time on 3.873 MHz.
- e. At the discretion of the EC, the ARES will be activated unannounced via the telephone tree and 146.720 MHz repeater at least once per year.

El Paso County Emergency Plan

ARES INDEX

1. NET PROTOCOL

- Ares Net Frequencies
- Emergency
- Training
- Resource

2. ACTIVATION

- Activation Guidelines
- Initial Action Checklist

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4. BLANK

5. ARES ASSIGNMENT LOG

6. MESSAGE HANDLING

- Logs/Records
- ARES Logging Requirements
- ARES Traffic Logs
- Prowords
- MARS Message Format

7. MISCELLANEOUS

- Purpose/Definitions
- Confidentiality
- Training
- Standard Operating Procedures
- Identification Cards
- ARES/RACES Repeaters
- Know Your Area
- Liability
- Membership
- Survival Bags
- El Paso Standard Power Connector
- EMP Protection
- Beaufort Wind Scale
- NWS El Paso (Spotter Call-in Criteria)
- Individual Public Service Activity Report Worksheet
 - Handling Formal Messages (Radiograms) Via Any Mode
 - Short-Term Public Service Event

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9. READY REFERENCE ANNEX

- Basic Communications Skills
- Local Repeater Data
 - Input/output, PL Tones Required, etc...
- Radio Operators Notes:
 - (Data for your personal brand of equipment)
 - setting/clearing memory

setting/changing PL tones
any other information peculiar to your radio(s)

1. NET PROTOCOL

ARES FREQUENCIES

The local ARES Information Net (Open Net) is 146.52 MHz (simplex). The first person to check into the frequency will assume NCS until the Emergency Coordinator or the Assistant Emergency Coordinator checks in.

The local ARES Resource Net is on the 146.70 repeater. If the repeater is down the Resource Net will be on 146.70 simplex. This will be announced in the preamble.

rev 11/2003

TRAINING

Training for Amateur Radio Emergency Service (ARES) members shall be coordinated under the direction of the ARES Emergency Coordinator.

ARES members will participate in the locally sponsored or endorsed drills or exercises under the direction of the Emergency Coordinator. ARES members should be thoroughly familiar with the Areas assigned to them and for assuming primary responsibility concerning that Area and all related topics.

El Paso ARES training nets will be held when needed on _____mHz. Training meetings will be held monthly unless substituted by a training net/exercise/emergency. Members will participate in local SET-type emergency drills. Net Control will rotate and be handled by a roster. The roster will list a primary and an alternate Net Control. Additional activities, both independent and in support of relief and response agencies, are highly encouraged.

All ARES operators will operate strictly in accordance with current FCC Rules and Regulations. Local practices, procedures, and traditions will be observed (unless otherwise overridden by FCC, DEM, or OEM) whether written or not. Non-standard practices are not allowed (except when such practices are *absolutely* required by an overwhelming urgency such that otherwise standard practices must be disregarded).

rev 10/2002

2. Activation

ACTIVATION GUIDELINES

There are four levels of ARES activation. They correspond with FEMA, DEM, and local Emergency Management policies. From the lowest to highest, these are:

Condition 4. Used to indicate civil unrest, tensions increasing (as defined by the Chief of Police), or any other advisory that should be brought to the attention of on-duty personnel. Review and follow the INITIAL ACTION CHECKLIST in the Emergency Plan. Wilderness Protocol is established at this time. Monitor 146.52 MHz simplex beginning at 0700, 1000, 1300, 1600, 2100, and 2200 hours local for five minutes. All messages will begin with a LiTZ signal (Long Tone Zero). Top off all batteries with a fresh charge. Continue with daily routines, but be aware.

Condition 3. Includes a civil unrest risk (as defined by the Chief of Police). The Emergency Coordinator or the Assistant Emergency Coordinator will establish an open net on the ARES Information Net frequency. All communications, support equipment, and facilities should be put in a “pend ing-use” mode. Upgrade awareness.

Condition 2. Includes civil disorder (large-scale localized violence and law-breaking begins), Strategic Warning as issued by the President, other official activation. The Emergency Coordinator or the Assistant Emergency Coordinator will establish a formal net (directed net) on the local 2-meter Tactical frequency. A Resource Net will be established (if required). First shift personnel will be put on 24-hour standby status, mobile equipment and supplies are loaded, full preparation for deployment. This is a significantly elevated condition of alert.

Condition 1. Includes flooding occurrence, civil disorder reaches riot proportions, a major accident, or natural disaster occurrence without warning (i.e. train wreck, large gas leakage, explosion, or major fire). EOC fully operational, liaison functions established. ARES operators are dedicated to the Emergency Management organization for specific response and recovery functions. All nets are directed nets. ARES operators simultaneously prepare for extended operations such as Disaster Control, Shelter Operations, Damage Assessment, Emergency Recovery, as appropriate or as directed. All actions are organizational, not independent.

rev 12/2003

INITIAL ACTION CHECKLIST

Before responding for duty as an ARES volunteer the following conditions must be met:

1. Be sure you and your family are safe and secure.
2. Be sure your property is secure.
3. Monitor NOAA Weather Radio, and/or KFOX Channel 14 (Cable Channel 8) for Emergency information from Emergency Management.
4. Tune to ARES Information Net frequency (See ARES Frequencies), and obtain instructions from the NCS.
5. Determine the level of activation and get to that level as soon as possible. (See Activation Guidelines)

When ready for deployment get additional instructions from NCS.

1. Obtain assignment and tactical call sign.
2. Get tactical net frequencies. Check in with served agency with "Survival Bag". (See Survival Bag)
3. Initiate an "ARES Traffic Log". (See ARES Traffic Log)
4. Use the "ARES Traffic Log" to record messages handled.
5. Use an ARRL formal message form (FSD-244) when precise records are required. Be sure all messages are signed properly from served agency.
6. Use tactical call sign for your assignment location. However, observe the FCC rules for station ID.
7. Monitor your assigned frequency **AT ALL TIMES**.

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3. Blank

4. Blank

LOGGING REQUIREMENTS for ARES OPERATIONS: [LVL 1, LU 8]

1. All Message Traffic, Formal and Informal must be entered into the ARES Logs.

2. LOGGING TRANSMITTED FORMAL MESSAGES:

The station entering the message into the Net will proceed with logging as follows:

- a. Enter the MESSAGE NUMBER
- b. Enter the DATE/TIME message received from Authorized Official
- c. Enter the DATE/TIME message transmitted
- d. Enter the ADDRESSEE
- e. Enter the SENDER (author of message)
- f. Enter TACTICAL CALL of station the message was sent to
- g. MAINTAIN all Original Messages in a folder in Numerical Sequence

3. LOGGING RECEIVED FORMAL MESSAGES:

The station receiving the message will proceed as follows:

- a. Enter the MESSAGE NUMBER
- b. Enter the DATE/TIME the message was received
- c. Enter the DATE/TIME the message was delivered
- d. Enter the NAME of individual to whom the message was delivered
- e. Enter the FCC Call of the Operator receiving and delivering the message

4. LOGGING INFORMAL TRAFFIC

Each station handling INFORMAL (unwritten) traffic will proceed as follows:

- a. For CRITICAL RESPONDERS:
 1. Enter the DATE/TIME of the message traffic
 2. Enter the NAME of the individual speaking over your radio
 3. Enter the TACTICAL CALL of the station contacted
- b. For ALL OTHER informal messages:
 1. Enter the DATE/TIME of the message
 2. Enter the TACTICAL CALL of the called station
 3. Enter the SUBJECT of the call

5. OPENING/CLOSING and MAINTAINING an ARES LOG:

- a. The Operator(s) opening/closing and/or maintaining the Log should:
 1. Record their FCC CALL and NAME (Control Operator)
 2. Enter the DATE/TIME into the Log
 3. Enter IMPORTANT EVENTS that take place
 - a. Lunch breaks, Relief breaks
 - b. Power failures, Equipment failures
 - c. Need to relocate your equipment
 - d. Any other significant event that could impact operations

6. Keeping an ARES LOG:

Since the data to be logged is so varied in nature, it is best to use a Free Form of Logging. That is to say, that Logs kept on ruled paper in a 3-ring binder will better serve than a series of forms. This is how Ships Logs are maintained. Ship's Logs are legal documents.

PROWORDS

Prowords are pronounceable words or phrases that have been assigned standard meanings for the purpose of expediting message handling. ARRL publications describe a wide variety of such words. Operators should familiarize themselves with

the ARRL terms and every effort should be made for clarity and uniformity of transmissions. Common terms are listed here for convenience.

<u>Proword</u>	<u>Explanation</u>
ALL AFTER	The part of the message to which I have reference is all that which follows _____.
ALL BEFORE	The part of the message to which I have reference is all that which precedes _____.
BREAK	I hereby indicate the separation of the text from other parts of the message.
CORRECTION	An error has been made in this transmission. The correct version follows.
DISREGARD	This transmission is in error. Disregard it.
FIGURES	Numerals follow.
FLASH	Ahead of all other messages. Interrupt messages with lower precedence.
I SAY AGAIN	I am repeating transmission or part.
I SPELL	I shall spell phonetically the next part.
OUT	This is the end of my transmission to you and no answer is required or expected.
OVER	This is the end of my transmission to you and a response is required or expected.
RELAY	Transmit this message to those addressed.
ROGER	I have received your last transmission satisfactorily. The CW equivalent is QSL.
SAY AGAIN	Repeat all of your last transmission.
SILENCE, SILENCE, SILENCE	Cease transmission immediately. Silence will be maintained until instructed to resume
SILENCE LIFTED	Resume normal transmission. Silence can be lifted only by the station imposing it or higher authority.
SPEAK SLOWER	Your transmission is at too fast. Reduce speed of transmission.
CORRECT	You are correct or what you have transmitted is correct.
WORDS TWICE	Communication is difficult. Transmit (ting) each phrase (words or code group) twice.

MARS MESSAGE FORMAT

When a message involving the Military Amateur Radio Service (MARS) is required the format will be as follows:

8. From:
 9. To:
 10. ACTUAL INCIDENT or EXERCISE
 11. Subject:
 12. Reference: Event identifier/State
 - a. Incident/Location/Time
 - b. Emergency Medical Facility Status
 - c. Local Transportation Status
 - d. General Damage Characteristics
 - e. Area Utilities Status
 - f. Communications Status
 - g. Information Source/Date & Time
- ACTUAL INCIDENT or EXERCISE

Indicate whether giving information, asking for information, asking for supplies or materials.

rev 5/2002

7. MISCELLANEOUS

PURPOSE/DEFINITION

The primary objective shall be to provide backup emergency communications services to Public Safety, Emergency Management, and relief agencies when required to do so in the absence of the primary communications infrastructure. The secondary objective shall be accurate and complete communications. Underlying consideration is given to operation under adverse conditions and for extended duration. These objectives will be advanced through organized training and preparedness.

Operators in the Amateur Radio Emergency Service (ARES) function as part of an organization. ARES operators will be given priority consideration and recognition over untrained and/or non-member operators in emergency situations. *ARES members must remember at all times that they individually appear to be the public face of these operations and/or amateur radio in general. The highest standards will be regarded as the basic foundation of operations.* ARES operators will provide the working backbone of El Paso emergency communications. During disaster situations ARES will operate under the guidance and direction of the District Officers of the Radio Amateur Civil Emergency Service (RACES).

A communications emergency is a situation in which a potential, immediate, or sustained harm to human life or property could be prevented, mitigated, or relieved through the efficient use of the facilities and expertise of amateur radio operators. Such expertise may be in addition to or in place of "normal" or "official" means of communications. Operators may work independently, or in co-operation with or support of local government or relief agencies. ARES responsibility is limited solely to providing communications but that shall neither enhance nor diminish obligations or privileges of members as citizens.

rev 6/2002

CONFIDENTIALITY

Amateur Radio Emergency Service (ARES) members should at all times consider their communication service confidential. Operators do not perform their missions in hope of obtaining publicity, special privileges, or reward. Additionally, served agencies have not given explicit permission for outside use of information necessary to achieve there assigned duties. A radio operator may not divulge personal information concerning victims or potential victims.

REFER ALL PUBLIC INFORMATION INQUIRIES TO THE DESIGNATED PUBLIC AFFAIRS CONTACT and be aware that even “friendly, off-the-record” comments are unauthorized. Radio operators serve at the request and pleasure of the served agency and must always appear as a competent professional. No special powers or privileges are granted by virtue of providing radio communication capabilities.

rev 4/2002

TRAINING

Training for Amateur Radio Emergency Service (ARES) members shall be coordinated under the direction of the ARES Emergency Coordinator.

ARES members will participate in the locally sponsored or endorsed drills or exercises under the direction of the Emergency Coordinator. ARES members should be thoroughly familiar with the Areas assigned to them and for assuming primary responsibility concerning that Area and all related topics.

El Paso ARES training nets will be held when needed on _____mHz. Training meetings will be held monthly unless substituted by a training net/exercise/emergency. Members will participate in local SET-type emergency drills. Net Control will rotate and be handled by a roster. The roster will list a primary and an alternate Net Control. Additional activities, both independent and in support of relief and response agencies, are highly encouraged.

All ARES operators will operate strictly in accordance with current FCC Rules and Regulations. Local practices, procedures, and traditions will be observed (unless otherwise overridden by FCC, DEM, or OEM) whether written or not. Non-standard practices are not allowed (except when such practices are *absolutely* required by an overwhelming urgency such that otherwise standard practices must be disregarded).

rev 10/2002

STANDARD OPERATING PROCEDURES

Standard operating procedures are not a specific, finite set of rules and practices but rather the opposite of *non*-standard procedures. The term also includes the concept of *standardized* procedures. Universally understood, routine practices facilitate communication in an efficient and orderly manner and do not require “re-translation” by the transmitting or receiving station.

Generally, concepts printed in the *ARRL Operating Manual* serve as the basic foundation for Standard Operating Procedures. Items of special interest include:

13. Use only current IUT phonetics at all times.
14. Allow some lag time between conversations for break-in traffic (on repeaters, this generally means waiting for the “courtesy beep”).
15. Keep all transmissions short, accurate and precise – eliminate unnecessary transmissions entirely.
16. Use good microphone techniques (speak *across* the mic – not directly into it) and good diction and enunciation to avoid distortions and misinterpretations.
17. Complete the mission – are you sure the message got through as intended?

Perhaps most important:

18. ***THINK*** – before, during, and after transmission.
19. ***THINK*** – before, during, and after reception.

A proficient operator will always use these techniques under disaster/emergency conditions. By routinely using the same procedures during common communication, a habit will be established and training re-enforced. Switching between disaster/emergency rules and daily rules is effectively requiring the unnecessary learning of two different (but related) languages – and then having to decide when to use each.

rev 4/2002

IDENTIFICATION CARDS

Amateur Radio Emergency Service (ARES) identification cards (FSD224) will be issued to each individual when they complete the Registration Form (FSD 98), and attend their first meeting. Members will have a laminated FSD224 with a picture. All FSD224 cards will bear the members name, call sign, and the Emergency Coordinators signature on the front side. The member will sign on the reverse side. All cards will have an expiration date, and all will expire on the same date.

The Emergency Coordinator will be responsible for maintaining membership qualifications. The FSD224 cards may be revoked at any time and must be surrendered upon termination of participation.

Volunteer Operators will be issued a Temporary Identification Card (FSD224) when they are processed through the Staging Area. The Identification Cards will be marked "Temporary" where the name is. It will have a "N umber" in the space where the picture goes. The Identification Cards will expire at the end of their assignment, and must be surrendered to any ARES member or the Emergency Coordinator.

All cards and materials are for identification and operating purposes only. Possession or use neither expands nor restricts operators' rights as citizens. All operators must conform to radio privileges (implied or expressed) of membership as stated in current FCC or local procedures.

rev 3/2003

ARES/RACES REPEATERS

The El Paso ARES/RACES repeaters are special purpose repeaters established to provide a supplementary means of VHF/UHF communications during emergency or disaster situations. Only emergency or disaster traffic should be conducted on these repeaters. Routine conversations should be conducted via simplex or other available means. Control Operators are Texas RACES Officers.

El Paso ARES is a voluntary amateur radio organization designed to support emergency and disaster relief and response agencies. All facilities of the organization are maintained solely to enhance that mission.

rev 4/2002

KNOW YOUR AREA

ARES members are responsible for planning and developing the disaster communications capabilities of their assigned Areas (generally, their home ZIP codes). Implementation of such planning should be based on RACES and ARES resources and coordinated with District and served-Agency plans.

The Planning process includes a hazard, needs, and existing-capabilities assessment analyzed according to the potential impact of the risk. Use of the FEMA HICA-MYDP (CHIPS) format is generally helpful. Actual, first-hand, visual familiarity with existing and changing conditions in the assigned Areas is necessary to meaningfully plan communications needs.

Initial responsibility is in the assigned Area. Perspectives should include contiguous Areas, impacting, and affected Areas. Thorough understanding of District-wide operations is developed through co-operative interchange of Plans and ideas. Operators should prepare for service in their Areas but remain flexible for reassignment and support use. Regular participation in the routine ARES net is the expected beginning of the interchange cycle.

OPERATORS SHOULD NOT SPONTANEOUSLY RELOCATE OR "ROAM" unless specifically requested to do so or do so for immediate personal safety reasons. District and served-Agency responses are based on all foundation-levels providing information and service in a predictable manner from, to, and as expected in their assigned Areas according to established Plans.

Inefficient duplication of efforts and unanticipated gaps are created if operators do not function within the concept of Areas and border-based Plans. Mitigation, response/relief, and recovery efforts require utilization of co-operative expectations.

Geographic dispersal and personal knowledge of community realities form a foundation for trustworthy and meaningful understanding of emergency/disaster conditions. Essentially, operators should think and function under a concept of "KNOW YOUR AREA".

rev 4/2002

LIABILITY

Operators should be prepared to accept the consequences of their actions both as to commissions and omissions. Accuracy and reliability must remain foremost in organizational concepts.

Operators are considered volunteers donating their efforts and expertise at their own risk. Served agencies assume no liability for loss or injury to the operator or his/her property or equipment. No special powers are inferred, implied, or granted by virtue of membership or activation except as stated in the Plan. Under no circumstances should an operator conduct ARES affairs in contradiction of good judgment, good citizenship, and standard radio practices.

ARES members must not maintain ARES patches in conjunction with club, contest, or other amateur radio insignias. Only authorized ARRL, or Skywarn insignias should be associated with the ARES designations.

In order to ensure efficient and proper organizational interface, an obvious and appropriate chain-of-command will be made apparent to all served agencies during any operation. Command structure will be maintained only through this chain.

A clear philosophy of jurisdiction must be presented to served agencies.

Member "jumping the chain-of-command", exceeding authority, acting as response units without served agencies requests, using ARES to promote personal interest, or in any other way weakening the Program, will be subject to membership termination and permanent exclusion from ARES activities solely and finally at the discretion of the ARES District Emergency Coordinator (DEC), as appropriate to the organization. A former member must return all ARES materials to the DEC promptly.

Presenting oneself as a member of ARES generally obligates the operator to a significantly higher standard of performance than otherwise expected by licensees.

MEMBERSHIP

ARES members are expected to actively and routinely participate in meetings and nets/exercises/emergencies. An “active” level is judged with a value of approximately 80% assigned to attending ARES meetings and 20% assigned from nets/exercise/emergency participation (each primarily on a quantitative basis).

All membership cards in the jurisdiction expire at the same time and never issued for more than two years. No operating privileges are inherent in ARES membership alone, such privileges are derived only from the amateur license. Membership is valid only in the jurisdiction of the signing Emergency Coordinator, though reciprocity and exchange may be accepted, especially during emergency situations.

The ARES Emergency Coordinator must assure that mission assignments are fulfilled. Members who are disruptive of the organization effort or who willfully do not conform to training or operating guidelines will be terminated from ARES at the discretion of the Emergency Coordinator. All members must constantly strive for the highest ideals of cooperative organizational effort.

rev 10/2002

SURVIVAL BAGS

Personal safety, comfort, and survival must be provided for before service to the community or agencies can be considered. Normal services and routines—with their support functions—will, by definition, be limited or entirely unavailable for a period after a disaster. Additionally, communications operators may be asked to provide service from locations other than their normal site. A psychological stress will be created if the operator is also concerned about the status of family or other concerns.

Three categories of Survival Bags should be prepared in advance and tailored to individual needs and desires. First, a 72-hour bag of basic survival items should be available. Remember the family pets also. A radio bag should include required items to setup and operate a station. The third bag is a heavy equipment bag. Refer to the Emergency Communications chapter in the ARRL Operators Manual for items needed in the bags. All units should be prepackaged and individually portable without assistance.

Store the bags in diverse locations and keep some materials pre-loaded in your vehicles. Keep contents in tact but rotate items that may deteriorate or spoil.

rev 8/2002

EL PASO STANDARD POWER CONNECTOR

Anderson Powerpole PP30 series connectors (Part # Black 1330G4, Red 1330) for use in promoting compatibility and interchangeability among personal UHF/VHF radio equipment at disaster sites. Polarity should always be verified prior to connecting to radios and power supplies.

rev 4/2002

EMP PROTECTION

Most authorities currently believe that an initial enemy attack would be aimed to disrupt communications facilities by exploding a nuclear device in the upper atmosphere (approximately 200 miles above the earth). This would produce an Electro-Magnetic Pulse (EMP) that would affect all forms of electrical and electronic mechanisms but not result in any radiation danger to the population. The exact effects are not yet fully known or predictable.

In anticipation of that initial communications disruption, these actions should be taken to afford some protection from Electro-Magnetic Pulse:

A. Radio transmitters and/or receivers

20. Disconnect power cords, tightly roll, and wrap with aluminum foil.
21. Disconnect antenna lead-ins at the set and isolate the loose ends as far away from metallic objects as possible to prevent arcing.

B. All transistorized equipment

22. Disconnect from external power source, tightly roll cord, and wrap with aluminum foil.
23. Reduce antenna length to minimum length (generally, less than 30 inches) or disconnect it.

C. Computers

Disconnect all external lines, tightly roll, and wrap with aluminum foil.

D. Telephones

1. Disconnect all but one phone from the main line.
2. Roll disconnected cords into a small, and wrap with aluminum foil.

E. Televisions and CRT equipment

1. Disconnect power cords, tightly roll, and wrap with aluminum foil.
2. Disconnect antenna lead-ins at the set and isolate the loose ends as far away from metallic objects as possible to prevent arcing.

rev 5/2002

BEAUFORT SCALE

<u>SCALE</u>	<u>NAME</u>	<u>MPH</u>	<u>DESCRIPTION</u>
0	calm	<1	smoke rises vertically
1	light air	1-3	direction of smoke, not vanes
2	light breeze	4-7	felt on face, leaves rustle, vanes move
3	gentle breeze	8-12	leaves & twigs in constant motion; extends light flag
4	moderate breeze	13-18 move	raises dust & small paper; small branches
5	fresh breeze	19-24	small trees in leaf sway; crested wavelets on inland lakes
6	strong breeze	25-31	large branches in motion; wires whistle; umbrellas difficult
7	near gale	32-38	whole trees in motion; walking difficult
8	(fresh) gale	39-46	breaks twigs; impedes progress
9	strong gale	47-54	slight structural damage; shingles removed
10	whole gale	55-63	trees uprooted; considerable structural damage
11	(violent) gale	64-72	rare; widespread damage
12	hurricane	73-136	devastation

NATIONAL WEATHER SERVICE EL PASO
Spotter Call-in Criteria (guidelines, not absolute law)
(800) 874-6755

Flash Flooding:

Is described as any potentially dangerous flooding of arroyos or low water crossings.

Heavy Rain:

Report half inch within 30 minutes.
 Report any significant ponding or flowing of water.

Hail:

Report hail stones half inch in diameter (see estimation table below).

Tornado, funnel cloud, or rotating wall cloud:

Report time, location, and movement.

Winds:

Report estimated 40 mph or more (use Beaufort Scale).
 Report distinct downburst (descending “bullet” or “rain/dust foot”).

Visibilities ¼ mile or less:

Report when due to fog, blowing dust, or heavy precipitation.

Snow:

Desert: Report when accumulation begins.
 Mountains: Report when greater than 2 inches accumulates.

Freezing Rain:

Report when freezes on contact with outdoor surfaces.

Estimating Hail Sizes

¼ inch:	pea	1.25 inch:	half dollar	2.75 inch:	baseball
¾ inch	penny	1.75 inch:	golf ball	4 inch	grapefruit
One inch	quarter	2.50 inch:	tennis ball	4.50 inch:	softball

INDIVIDUAL PUBLIC SERVICE ACTIVITY REPORT WORKSHEET
Handling formal messages (radiograms) via any mode

1 point for each message handled. (See ARRL’s *Public Service Communications Manual*; NTS Section for explanation of how to count your individual messages.)

Originated:

05/13/04

Sent:

Received:

Delivered:

Total number of messages handled:

Number of amateurs participating:

Event start date/time:

Event end date/time:

Duration of event (hours):

Total Man-hours:

Was repeaters used?

How many?

Repeater Call sign:

Types of Net(s) used.

Frequency(s) used.

Names of agencies receiving communications support:

Other comments (Attach photos, newspaper clippings etc.):

(Callsign)

(Print Name)

(Signature)

PUBLIC SERVICE ACTIVITY REPORT WORKSHEET
Short-Term Public Service Events

5 point per hour (or any portion thereof) of time in either coordinating and/or operating in public service event; no limit.

Air Show:

Parade:

Simulated Emergency Test:

SKYWARN:

Training drills or exercise (specify):

Transmountain Run:

Other (Specify):

Total number of messages handled:

05/13/04

Event start date/time:

Event end date/time:

Duration of event (hours):

Total Man-hours:

Type of Communications Equipment Used:

Base Station:

Mobile Station:

Portable:

Digital Modes:

Was repeaters used?

How many?

Repeater Call sign:

Types of Net(s).

Frequency(s).

Traffic Net:

Tactical Net:

Resource Net:

Information Net:

Name(s) of agency(s) receiving communications support:

Other comments (Attach photos, newspaper clippings etc.):

Call Signs, Names, and types of equipment used by amateurs participating. Also estimate the cost of the equipment used by amateurs:

(Call Sign)

(Print Name)

(Signature)

8. BLANK

9. READY REFERENCE ANNEX

BASIC COMMUNICATION SKILLS FOR ARES

INTRODUCTION: EMCOMM

NOTE: INFORMATION FOR THIS SERIES OF INSTRUCTION IS TAKEN FROM THE ARRL PUBLICATIONS THAT DEAL WITH EMERGENCY COMMUNICATIONS (EMCOMM), AS FOLLOWS:

Amateur Radio Emergency Communications Course, LEVELS I, II, and III

ARES Field Resources Manual

ARRL Public Service Communications Manual

These methods and skills are the result of "Trial-by-Fire", in that they have been developed, tested, retested, modified and tested again, repeatedly.

These methods and skills have proven effective in Floods, Fires, Earthquakes,

Tornadoes, Hurricanes and just about every other type of disaster that Humans can be exposed to, including disasters involving Motor Vehicles, Airplanes and

Trains. We are not reinventing EMCOMM. Emcomm is the ARRL acronym for EMERGENCY COMMUNICATIONS.

To Be Effective in our Efforts to be of Assistance in Emergencies:

We must work to develop Skills and Techniques that will complement our willingness to serve. As Licensed Operators, we are very familiar with the

Casual Chats and Banter that is carried on Daily on the Local Repeaters.

This type of Operating IS NOT conducive to the Rapid transfer of vital information in an Emergency Situation.

Having a thorough knowledge of all of your radio's functions is essential for efficient operation under stress.

Much more is needed than just changing frequencies and talking. This Training effort, and material, is intended to give a good head start in satisfying the requirements for EMCOMM

1. WHY EMERGENCY COMMUNICATION SKILLS ARE DIFFERENT

- a. Messages can mean the difference between LIFE and DEATH
- b. Emergency communications are PURELY PROFESSIONAL
NO chatter, Rumors or Speculation
- c. No broadcasting is permitted, no personal opinions
- d. Official authorized messages only

2. BASIC COMMUNICATION SKILLS

- a. Messages must get through to intended recipient
 1. Clear and concise
 2. Easily understood
 3. Must be passed quickly
 4. May mean the difference between loss of life (or property)
- b. Listening
 1. Cannot hear if you are talking

2. Focus on your assignment
 3. Headphones may be needed in a noisy location
 4. Important information/data may be missed (or misunderstood)
- c. Microphone techniques
1. Must be used correctly
 2. Talk across the mic element, not directly into it
 3. Hold microphone close to your cheek
 4. Speak at a normal rhythm
 - if you normally speak rapidly, slow down
 - speak in normal tones: do not whisper or shout
 5. Enunciate clearly
 6. Do not use VOX
 7. Pause prior to keying the microphone
 - another station may have emergency traffic, and this gives them a chance to be heard
- d. Brevity and Clarity
1. Each transmission should only contain the words necessary to pass the message
 2. No chitchat or broadcasting
 3. No non-essential chatter/ no speculation/ no rumors
 4. Think before you speak
 5. Say exactly what you mean
 6. Complete one subject at a time. Do not mix messages
- e. Plain language must be used on Voice
1. No HAM jargon, no "Q" signals and no "10-Codes"
 2. Use Pro-words
 3. No such thing as "common spelling"
- f. Phonetics
1. Use ONLY the ITU phonetic alphabet
 2. No humorous or cute phonetics
 3. Numbers (figures) are pronounced individually
- g. Pro-Words
1. Clear, over, go-ahead, stand-by, roger
 2. For Fills, "say again all before/after....."
- h. Tactical Call Signs
1. Will be assigned for each station
 1. Must be used
 2. Will immediately identify your station and the station that your traffic is destined for
- i. Calling with Tactical Call Signs
1. use tactical call of called station first, followed by your tactical call
 - EX: Net, Aid3 this tells the NCS that you have traffic to pass and that Aid3 station is the calling station. You do not need to announce your FCC call sign at this time
- j. Station Identification
1. Give your FCC assigned call sign at the END of each complete exchange. WHAT IS A COMPLETE EXCHANGE?
 2. During the information exchange, use only your tactical call sign
 3. Information exchanges on emergency nets will NOT take ten (10) minutes to complete normally
 4. Rendering your FCC call sign at the completion of each exchange serves two (2) purposes

- a. It satisfies the FCC requirement to identify at 10 minute intervals during an exchange, and at the completion of each exchange.
- b. Announcing your FCC call sign tells the NCS or the receiving station that you have NOTHING FURTHER, and that you are continuing to monitor the net.

k. Completing a Call

1. Complete a call by giving your tactical call, AND your FCC call sign
EX: Aid3, WA5KKY
2. The called station now knows that you have nothing further

l. Habits to Avoid

1. Thinking out loud on the air
2. On-air arguments or criticism
3. Rambling commentaries
4. Shouting into the microphone
5. Cute phonetics
6. Identifying every time you key or un-key the mic
7. using 10-codes
8. Speaking without planning your message
9. Talking just to pass the time

3. ALLOWING CRITICAL RESPONDERS TO SPEAK DIRECTLY OVER THE RADIO...(level III, Pg. 125)

- a. Third Party Traffic **is allowed** by FCC Regulations [97.115(B)(1)]
- b. Often, the terminology used will not be part of the Radio Operators vocabulary
 - 1. Most of us don' t ~~s~~peak the language of Doctors, Paramedics, Firemen, Police Officers, etc.
 - 2. Direct conversation between critical responders:
 - saves time (time may be essential in life saving)
 - eliminates errors in translation (which could cost lives)
 - 3. The licensed operator is present, and is in control the radio
 - 4. A record of the individual speaking over your radio should be noted
 - note the NAME of the person
 - note the DATE/ TIME of the third party traffic
 - note the TACTICAL CALL of the other station in the contact
 - THIS ABOVE DATA SHOULD BE PASSED TO THE EC ON STAND-DOWN.

4. WHAT YOU SEE (HEAR) THERE, LEAVE THERE

- a. At your assigned duty station:
 - 1. You may be exposed to "INSIDER" (proprietary) information that should/must not be revealed outside of that establishment.
 - THIS INFORMATION IS NOT TO BE DISCUSSED OUTSIDE OF THAT PLACE OF BUSINESS, WITH ANYONE.
 - 2. Criminal Acts ARE NOT proprietary information and MUST be disclosed to proper authority.
 - a. Who should be notified depends on the position / authority of the violator.
 - b. Perhaps the safest bet is to notify the ARES EC, and let that individual determine the best approach to reporting.
 - 3. It is extremely important that ARES volunteers establish and maintain a trusted and respected relationship with those we serve

ITU PHONETIC ALPHABET

A alfa	N november
B bravo	O oscar
C charlie	P papa
D delta	Q quebec
E echo	R romeo
F foxtrot	S sierra
G golf	T tango
H hotel	U uniform
I india	V victor
J juliet	W whiskey
K kilo	X x-ray
L lima	Y yankee
M mike	Z zulu

NUMBERS

1 one	6 six
7 seven	
3 three	8 eight
4 four	9 nine (niner)
5 five	0 zero (never oh)

The emphasis on spoken words and numbers is usually placed on the first syllable.

PROWORDS

Prowords that will be used are contained in the packet distributed by the Emergency Coordinator.

GENERAL

Please use only the ITU Phonetic alphabet, the numbers and the Prowords as listed. All should speak the same language. This aids clarity, and helps to limit repeats.

LOCAL AREA REPEATERS

<u>REPEATER OUTPUT</u>	<u>OFFSET</u>	<u>PL</u>
145.010 Packet		
145.110	-	ARES No PL Port.
145.330	-	67
145.410	-	88.5
146.700	-	162.2
146.880	-	
147.060	+	RACES No PL Closed
147.140	+	67
147.160	+	162.2
147.200	+	162.2
147.240	+	162.2
147.300	+	
147.280	+	162.2
147.320	+	162.2
147.360	+	
144.390		APRS
146.620	-	100
224.820	-	
53.55	-	1MHz
442.125	+	103.5
442.250	+	100
442.550	+	100
442.825	+	100
442.950	+	67
443.400	+	100
444.200	+	100
447.500	-	103.5
448.125	-	100
449.925	-	100

rev 3/2004

Radio Operators Notes

(Data for your personnel brand of equipment)

Setting/Clearing memory, Setting/changing PL tone, any other information peculiar to your radio(s), etc...

AMATEUR RADIO EMERGENCY SERVICE PECOS COUNTY

Introduction

1. The Pecos County Amateur Radio Emergency Service (ARES) is composed of FCC-licensed Amateur Radio operators who have voluntarily registered their expertise and equipment for public service communications duty.
2. Under FCC regulations, Amateur Radio public service communications are furnished without compensation.
3. The Pecos County ARES functions under the direction of the Pecos County Emergency Coordinator (EC), who is appointed by the ARRL West Texas Section Emergency Coordinator in consultation with the District Coordinator.
4. The EC may appoint assistant ECs as needed for the ARES to function efficiently.

Purpose

1. The purpose of this plan is to provide a written guide containing the minimum information that would be needed in an emergency. Each emergency is different, so flexibility is necessary to provide an adequate response during an emergency.
2. The primary responsibility of the Pecos County ARES is to furnish communications in the event of a disaster, when regular communications fail or are inadequate.
3. All drills, training and instruction shall be carried out to insure readiness to respond quickly in providing effective amateur radio communications whenever the occasion may arise.
4. The primary area of coverage for the Pecos County ARES is Pecos County. The agencies served during a communications emergency will include Pecos County, City of Fort Stockton, American Red Cross, Fort Stockton Police, Pecos County Sheriff, Fort Stockton Volunteer Fire Department, National Weather Service, and any other agency requiring communications aid during an emergency.

Activating the Plan

1. Any member of the Pecos County ARES, who for any reason suspects a communications emergency exists, should monitor the assigned net frequencies for activity.
2. If local telephone service is available, the EC and/or assistant ECs should be notified by telephone.
3. In an emergency in which Amateur Radio services might be required, Amateur Radio operators may be alerted by any city, Red Cross, or similar official notifying the Emergency Coordinator.

ARES Mobilization Procedure

24. The EC or assistant EC receiving notification of the emergency shall activate the telephone tree. All means shall be used to contact all members; i.e. telephone, cell phone, pager, and email.
25. Upon the awareness or notification that a communications emergency exists, ARES members will report into the Pecos County Emergency Net on the 145.37 repeater with 146.52 simplex used as the backup frequency.
26. The EC will assume net control or designate another station as net control. Net Control will be equipped with emergency power capability. If the Emergency Operations Center (EOC) is activated, Net Control will be located in the EOC.
27. If needed, supporting nets will be activated on alternate frequencies to facilitate efficient operations. Alternate nets may include a check-in net for members reporting and awaiting assignment or a traffic net for handling health-and-welfare traffic.

Duties of NCS

8. The Pecos County Emergency Net will be called to order by the Net Control Station (NCS).
9. Members of the Pecos County Emergency Net will be checked into the net and asked to standby to await further instructions.
10. If necessary, liaison stations will be assigned to the following nets:
 - 10.1 Texas Traffic Net (3.873 MHz nighttime, 7.273 MHz daytime)
 - 10.2 Big Bend Emergency Net (3.922 MHz)
11. Mobiles will be dispatched as needed.

Operations

- 9 All written messages must be in standard ARRL form
- 10 All messages must be signed by the official who originates them, with his title, taking responsibility for their content.
- 11 Message precedences of EMERGENCY, Priority, Welfare, and Routine, as defined on ARRL Form FSD-3, shall be used on all messages.
- 12 Stations do not transmit unless invited to do so by net control. The only exception to this rule is for a station having EMERGENCY traffic.

Preparedness

- 4 An annual test will be conducted in October of each year in conjunction with the nationwide ARRL Simulated Emergency Test.
- 5 The Pecos County ARES will regularly supply public safety communications in conjunction with local events, to test the effectiveness of the operation.
- 6 The Pecos County Emergency Net will meet every Sunday at 7 PM.
- 7 At the discretion of the EC, the ARES will be activated unannounced via the telephone tree at least once per year.
- 8 The EC will provide a member contact list and repeater frequency list to all members; this list will be updated as necessary.