Heart of TN.
A. R. E. S.

Heart of Tennessee **SAFETY**
Amateur Radio Emergency Service® **SAFE 1-1**

Safety
General Safety Guidelines

1. Introduction

When Amateur Radio Emergency Service® (ARES®) responds to assist in emergency situations, the situation may have been triggered by an incident that contains hazards or results in hazardous conditions. Those hazardous conditions resulting from the incident can lead to injury, or even death, if proper care is not taken to insure the safety of responding ARES® personnel, including those responding to the Tennessee Emergency Management Agency's (TEMA) State Emergency Operations Center (SEOC) or the Rutherford County Emergency Operations Center (RCEOC). This document will provide reminders of safety precautions that should be exercised by ARES® personnel while supporting disaster events. These measures also apply during training exercises.

2. Responsibilities

The Assistant Emergency Coordinator (AEC) for Administration is responsible for maintaining this document.

All personnel are responsible for ensuring their own safety during ARES® activities. Each individual should also watch out for other members of their responding teams since, during operations, personnel may be distracted by their duties and fail to notice developing conditions that put them at risk.

All Heart of TN. ARES® members should provide comment for input for this document as the need is identified. Suggestions for specific safety procedures should be submitted to the AEC for Administration.

3. Related Publications

None.

4. Definition of Terms

ARES® Amateur Radio Emergency Service® (ARES® and Amateur Radio Emergency Service® are registered service marks of the American Radio Relay League.)

EOC Emergency Operations Center

GFI Ground Fault Interrupt
NCS Net Control Station
Served Agency A public service agency with which [County name] ARES® has established a support agreement through the implementation of a formal Memorandum of Understanding.
RCEOC Rutherford County Emergency Operations Center
SEOC State Emergency Operations Center
TEMA Tennessee Emergency Management Agency

5. Guideline

5.1. General Guidelines

If unsafe conditions are observed, they should immediately be reported to the Served Agency's individual responsible for the location. If you, as a responder, consider the conditions to be sufficiently hazardous, you have the right and prerogative to remove yourself from the situation immediately and report your status to the Net Control Station (NCS) under whose net you are to operate or are operating, if possible.

5.2. Safety Precautions

5.2.1. Site Setup

During site setup, observe the following safety precautions:

- Ensure antennas are installed a safe distance from overhead power lines.
- Use safety glasses when installing ground rods or raising antennas installed above normal arm reach.
- Use hard hats when raising antennas above head height. All personnel in the area should be removed from the area of activity, unless they are involved in the installation and wearing appropriate protective equipment, until the installation is complete.
- Use gloves suitable for protecting hands from rope burns and other antenna installation activities.
- Mark antennas so portions that may be touched by individuals are marked to indicate a hazard. Use flagging tape strips tied to guy lines and feed lines to mark those items that individuals may walk into or are a tripping hazard.
- Cordon off antennas and other hazardous areas with CAUTION tape.

5.2.2. Equipment Grounding

Employ the following grounding principles at sites as appropriate:

- All HF radio equipment should be properly grounded using a minimum of a 4-foot ground rod with clamp.
- All generators providing AC voltage for powering equipment should be properly grounded using a minimum of a 4-foot ground rod with clamp at the location of the generator(s).
- Wear safety glasses and suitable work gloves when installing and removing ground rods.
- If equipment is located in an area that could become a shock hazard by becoming wet, make sure equipment powered by AC is fed through properly installed Ground Fault Interrupt (GFI) protection. This may be in the form of an extension cord with a GFI outlet plugged into a properly grounded 3-wire 120V AC outlet.

5.2.3. Severe Weather

Severe weather that contains lightning poses a severe risk to amateur radio operations. Other conditions such as high wind, hail, icing, etc., also pose hazard conditions that may impact Amateur Radio activity. Precautions must be taken to minimize the risk if conditions warrant during emergency operations. The following precautions should be taken during storms that may contain hazardous conditions:

- All HF radio equipment should be properly grounded using a minimum of a 4-foot ground rod with clamp as indicated above.
- If outside antennas are employed, during lighting conditions, disconnect antennas from equipment and place connectors at a safe distance from equipment and personnel. It has been suggested that connectors be placed in a glass container to control any flash point that may occur.
- If AC power is used, disconnect power supplies from the power source.
- Never install or service antennas and equipment connected to AC power during lightning storms.
- If icing conditions exist, take extreme care if travel is required. Keep away from overhead items that may be a source of falling ice, including antennas, trees and power lines.
- If there is a potential for flooding in the area, move your operation to higher ground where flooding will not be a hazard.
- If high wind conditions are expected, make sure antennas are adequately secured and the area restricted in the event an antenna comes down. If temporary/portable towers are used and can be lowered, do so.
- If possible, notify the Net Control Station that you will be leaving the air due to weather conditions.

5.2.4. Bomb Threats

In the event of a bomb threat at your location, IMMEDIATELY cease all transmissions. DO NOT call net control to advise them of the condition. Some explosive devices can be triggered by radio frequency energy. Follow all instructions from the Served Agency's individual in charge of the site at which you are operating. If they instruct that the site be evacuated, leave all equipment and immediately evacuate the location. Return only when the site has been declared safe by an authorized person.

5.2.5. Buddy System

Any time a team member may be placed in a potentially dangerous situation, whether it is installing an antenna, refueling generators, etc., a team member should act as a safety observer during the process. The safety observer should be ready to respond if needed.

5.2.6. Take Breaks

When individuals are overly tired, as may happen during a disaster operation, accidents are more likely to occur. One of the best things an individual can do, for safety reasons, is when you feel tired, request a relief operator and rest.

5.3. Incident Reporting

All safety incidents should be recorded in the operating location's log. Details regarding the incident should be included for later review and determination about how the incident might have been prevented.

If conditions continue to be unsafe and it is possible, appropriate Served Agency personnel should be notified so actions can be taken to resolve the unsafe condition.

5.4. Post-Event Reporting

After completing an event, copies of all logs, including safety incident reports, should be submitted to the DEC for TEMA if the operation was at the SEOC or Heart of TN. ARES® EC for local operations. The DEC for TEMA or Heart of TN. ARES® EC shall review all logs and compile a summary of safety incidents for review for determination of any required action(s).

6. Release Information

Keith Miller, N9DGK, Emergency Coordinator, is the author of this document. The date of publication for this document is January 11, 2008, and is the initial publication.