## LIGHTNING SAFETY

From Harris County ARES training article by Earl Pack-AE5PA

#### **Avoid Dangerous Situation**

• Lighting strikes occur all year with Summer time the peak season for lightning.

• The 30 year average weather related death toll places lightning in 3rd place behind Heat and Flooding. In the US over 60 people are killed by lightning each year. People who have been struck by lightning report long-term symptoms of memory loss, attention deficit, sleeping disorder, numbness and pain.

• Lightning deaths and injuries occur most often when people are caught outdoors. Most common activities where people are in harms way are: boating/fishing, standing by a tree, golfing, playing sports in a field, talking on the phone, swimming, bike riding, mowing the lawn.

• Keep an eye on the sky: look for darkening skies, flashes of light, or increasing wind. Listen for thunder.

• Lightning strikes have been recorded as far as 10 – 15 miles from the thunderstorm. A distance of 15 miles is about as far as you can hear thunder. If you can hear thunder you are close enough to be struck by it. Go to a safe shelter immediately. Train children that "When Thunder Roars, Go Indoors".

### Shelter from the lightning

• Shelter in an enclosed building or vehicle. Keep car windows closed and don't choose an automobile with a convertible roof. Lightning can strike your car but the metal frame provides a significant amount of protection. Do not stand beside a vehicle when lightning is a threat. Do not shelter in partially enclosed buildings. Avoid being near any tall isolated object such as a tree, flag pole, radio tower.

• Telephone lines, electric lines, antenna cables, and metal pipes can conduct lightning. Unplug appliances. Avoid using wired telephone, electrical appliances and computers connected to wiring.

• Do not take a bath or shower, or be near running water for any purpose during a thunderstorm.

• Stay away from windows and doors.

• You may want to turn off major power consumers like air conditioner and refrigerators. Power surges in the electrical transmission lines can damage this equipment.

• Draw blinds and shades over windows. If windows break due to objects blown by the wind, the shades will help prevent glass from shattering into your home and injuring you or your family.

• If you are caught outdoors in the open, go to a low-lying, open place away from trees, poles, or metal objects. Make sure the place you pick is not subject to flooding.

• Be a very small target! Squat low to the ground. Place your hands on your knees with your head between them. Keep feet close together. Make yourself the smallest target possible.

• If a group of people are involved spread out to minimize the chance of everyone being injured. If there are injuries those not injured may provide help to the injured.

• Outdoors do not lie on the ground--this will increase the voltage difference across your body if lightning strikes a nearby object.

### After the storm

• Stay away areas damaged by the storm. Downed power lines should always be considered hazardous.

## If someone is struck by lightning

• Lightning victims do not have an electrical charge and must be attended to immediately.

• Call for help. Get someone to dial 911.

• The injured person has received an electrical shock and may be burned, both where they were struck and where the electricity left their body. Check for burns in both places. Being struck by lightning can also cause: cardiac arrest and irregularities, nervous system damage, broken bones, and loss of hearing or eyesight.

• Give first aid. CPR will most likely be needed. If breathing has stopped begin rescue breathing. If the heart has stopped beating, begin chest compressions. If the person has a pulse and is breathing, look and care for other injuries.

## Protecting your Radio Equipment from lightning

- Disconnect antennas and power cords from your radios to prevent damage.
- Install a station ground to divert lightning to earth ground.
- Antenna masts and towers should be properly grounded.
- If radio communications are needed use an indoor antenna with a battery powered HT.
- Stay out of your Shack and away from outdoor antennas leads during the storm.

Short Summary - When lightning strikes an object such as a tree, pole, car there is a large current with a voltage drop going away from the object. There is a lethal voltage difference between a persons or animals feet. Lightning striking a tree, windmill, tractor, water tank may injure or kill any people or animals nearby.

# **ARES District 4 Net Script**

<u>APRIL 5, 2018 Rev. C</u> (net date) Script Rev 03-01-2018

Good Evening everyone and welcome to the South Texas District 4 ARES net. This is

TOM (name) <u>K5BV</u> (call)

### ARES EC FOR ARANSAS AND SAN PATRICIO COUNTIES

(position e.g. member, AEC, etc. & County)

I will be the Net Control Station for tonight's net. First, if there are any stations with priority or emergency traffic please call <u>K5BV</u> (call) at this time. UN-KEY

Either say "nothing heard" or handle the traffic immediately.

All hams in all Counties are welcome to check in to this net. You do not need to be an ARES member to participate in this net.

The purpose of ARES, the Amateur Radio Emergency Service, is to furnish emergency communications via amateur radio when regular means of communications fail or become inadequate during an emergency situation. ARES is sponsored by the ARRL, and supported by area radio clubs and individual hams. The only qualifications for ARES are that you possess an amateur radio license and you have a desire to help others. For more information or off-net questions please contact one of the following by email

Mark Dist. 4 EC	ad5ca@arrl.net
Tom EC for Aransas & San Patricio County	~
Bob Asst EC for Aransas County	-
Jim EC for Live Oak County	-
Harley EC for Kelberg County	-

The net is currently scheduled monthly for the First Thursday at 8 PM. This is subject to change. We are currently using the 147.060 repeater in Corpus Christi with a (+) PLUS offset and a 107.2 tone.

This net is being conducted for the purpose of providing training and information related to emergency communications; to serve as a forum for discussion; and to foster fellowship among Amateur Radio operators.

Next, are there any operators who would like to make announcement or provide information related to EmComm? This is not general check-in. Please State your call now.

## Tonight after Check-In there will be a review of Lightning Safety.

For Check-In, if the frequency has been clear a second or two key the MIC and s-I-o-w-y give your FCC call sign using ITU phonetics spoken clearly and slowly and UNKEY. Stating your name as well will be appreciated. Writing calls down takes a moment so allow a couple of seconds. Keep checking in and calls will be reviewed for clarifications, errors and missed calls. Please check-in with **\_K5BV\_**(Call) now.

## (note these actions)

- read each call back,
- ask for corrections
- ask for additional check-ins

We will have comments after tonight's material on <u>Lightning Safety</u>.

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# <u>This is K5BV</u>

Before we go down the list for comments if there any late check-ins please provide you call now. (again note these actions)

- read each call back,
- ask for corrections

Net Control \_\_\_\_K5BV\_\_\_ (your call) will now go down the list for comments.

- go down list of check-ins
- now have presenter give their comments)

Final call for check-ins. Additional stations for the net please check-in now with <u>**K5BV**</u> (your call).

(again note these actions)

- read each call back,
- ask for corrections
- ask for comments

THIS IS NET. We had XX check-ins tonight. Thank you all for joining the ARES net tonight, and thanks to the repeater owners and mountaineers for the use of these fine repeaters. I am now closing the net and returning these repeaters back to normal amateur radio use. Stations may remain on frequency to make additional QSOs. Net Control <u>K5BV</u> (your call) Out.

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