

APPENDIX B - ACES Weather Spotter Safety Program

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10 Golden Spotter Safety Rules

The following rules should be strictly adhered to and followed while actively “All Hazards” spotting. These rules were designed to address the safety of private citizens that volunteer to be weather spotters. Obviously public safety officials can also benefit from following most of these safety rules. The majority of spotters will be reporting from a stationary location such as their residence or workplace. Spotting can also involve reporting observations while mobile. These rules address both situations. Competent all hazards spotters follow these Golden Rules every time they are “actively” spotting.

Rule Number 1.

ALWAYS operate with your safety as the number one priority

A. The spotter’s personal safety is the primary objective of every spotter.

- The information provided by the spotter is critical for public safety and the spotter should maintain the ability to provide that information.
- The spotter should not perform any act that would jeopardize their own personal safety or that of any other person.

B. Timely and accurate reports aid in the personal safety of self and others which is the overall goal of the spotter program.

Rule Number 2.

ALWAYS follow any and all directives from public safety officials.

- If asked by an emergency official to leave an area, this should be followed.
- Spotters are a vital public safety function and operate within this system.
- Spotters are not public safety officials and should obey all applicable laws and directives.

Rule Number 3.

ALWAYS adhere to the concept of **ACES** at all times. **ACES** = Awareness, Communication, Escape routes, Safety Zones

Awareness

The spotter should maintain *situational awareness* at all times.

- Spotting severe weather places spotters in possible hazardous areas. Situational awareness is the mental process of being vigilantly and keenly aware of their surroundings at all times while spotting.

- This will require the spotter to use all media (weather radio, Internet connection, HAM radio) available to continually monitor forecasted and current weather conditions as well as keeping an eye in all directions, at all times.
- Never become complacent, keep monitoring weather **in all directions** before, during, and after a weather event.
- It is recommended that mobile spotters travel in teams of two. This allows for an increase in awareness of current conditions while providing for safer driving.
- Spotter Awareness includes continued mental evaluation of escape routes and safety zones.
- The spotter should practice the **“Sterile Cockpit”** method while actively spotting under hazardous situations. This practice has long been used by Airline pilots and involves only concentrating on the task of flying while in the cockpit. Adapting this to an All Hazards spotter during active spotting involves strict discipline of only performing spotter activities and safety practices during escalating hazards. If you’re in a hazardous environment, perform no other tasks except to ensure your safety and reporting.

Communication

The spotter should maintain communication through cell phone, radio, or other means at all times.

- It is imperative that someone knows the spotter’s location when monitoring severe weather.
- Never operate as a mobile spotter without someone knowing your location and estimated time of return.

Escape Routes

The spotter should maintain escape routes at all times.

- For the mobile spotter, this means having the ability to move to a safe zone when necessary.
- If possible, back into dead end roadways and have a thorough knowledge of the roadways in the immediate area.
 - Do not get trapped between severe weather and a dead end.
 - Be aware of **traffic congestion** in metro areas, especially avoid roadways with overpasses since civilians tend to wrongfully congregate under them to protect their vehicles.
 - Remember that low water crossings can trap you and that gravel roads can become impassable after heavy rains
 - Be aware of construction areas.
 - Don't rely solely on GPS or Internet maps as they may be outdated.
- For the stationary spotter, ensure you have a clear route to a safety zone in time if needed. Locked basement doors or obstructed pathways will do you no good in the event that you need to get to these areas for safety.

Safety Zones

A safety zone is a place in which you will be safe from the oncoming severe weather event.

- For stationary spotters this could be a basement or storm shelter.
- For mobile spotters, this could be a solid building with a basement (not a mobile home) or an area away from the storm.
- Know your safety zones and how long it will take to get to them when you need them.
- Remember that the safest place in your home will be a basement or storm shelter. If one is not available, go to the center-most portion of your home on the lowest floor, ideally in a windowless room or closet.
- Be aware of your escape routes to your safe zone at all times.

Rule Number 4.

ALWAYS activate emergency services

Mobile and stationary spotters should activate emergency services BEFORE making a weather report when faced with incidents that cause injuries to civilians. Spotters should notify emergency officials (911, local dispatch, law enforcement) by phone, HAM radio or other means, prior to making a weather report when possible. Note that it is unsafe to use a corded phone during a thunderstorm. Once help has been notified then a weather report can be submitted.

Rule Number 5.

NEVER place yourself in a position to be overrun by, or unprotected from, a storm.

- Maintain situational awareness and avoid problem areas of the storm.
- Driving in large hail increases the relative speed of the hail and the potential to lose a windshield.
- If no other hazards exist, it may be better to stop your vehicle off of a roadway and wait until the large hail passes.
 - Driving will only increase the damage to the vehicle.
- It is strongly recommended that spotters wear protective eyewear during large hail events to protect their eyes from breaking glass.
- This includes hurricanes and other large events.

Rule Number 6.

ALWAYS be aware of overhead obstructions or objects that could become a safety issue during a storm.

- Spotters should not park beneath power lines, trees, or other overhanging structures.
- Stationary observers should not stand in front of windows during high wind or hail events.
- Be aware of items that could be carried towards you during high wind events.

Rule Number 7.

NEVER enter a flooded roadway or area for any reason, whether on foot or in a vehicle.

- Practice “Turn around, don’t drown” while in your vehicle.
 - Less than 6 inches of water can wipe pedestrians off their feet.
 - 6 inches of swiftly flowing water will reach the bottom of most passenger cars causing loss of control and possible stalling.

- A foot of water will float many vehicles.
- Two feet of rushing water can carry away most vehicles including sport utility vehicles (SUV's) and pick-ups.
- Washed out roadways, missing manhole covers, and other obstacles can be hidden under high water.
- Many jurisdictions are now issuing tickets, fines, and charging for rescue operations when vehicles become stranded in high waters on roadways which have been barricaded.

Rule Number 8.

ALWAYS treat all downed power lines as energized at all times.

- Downed power lines can re-energize at any time from automated systems at remote substations. The system will automatically try to re-energize the circuit multiple times before it completely shuts the line down.
- Electricity can travel through both wet and dry ground. Maintain a safe distance at all times and be aware that you can be electrocuted by electricity that travels through the ground.
- Do not use ANY item to attempt to move a power line. Even dry boards or fiberglass tools can conduct electricity due to carbon content and inherent moisture.
- A good rule of thumb is to stay back a full span of poles (Two Poles) from any downed line.
- Be aware that many power lines have “spool memory” which will cause recoil when they arc, burn through and break.
- Report downed power lines to 911.
- If your vehicle is in contact with live power lines, stay in your vehicle and do not touch anything metal. Summon emergency services.
- DO NOT DRIVE OVER downed power lines. If they are energized they can arc if the weight of your vehicle breaks the insulation. This could cause your tire to instantly blow out and your vehicle to become energized.

Rule Number 9.

ALWAYS obey all state, federal, and local traffic laws and regulations. AND practice defensive and safe driving techniques, especially during inclement and night-time driving conditions

- Driving during inclement weather is hazardous and extreme caution should prevail at all times. Match your driving speed and following distances to existing roadway conditions. Rain and standing water will cause vehicles to hydroplane. Hail will create icy conditions on roadways.
- When driving on icy or wet roads, drivers should avoid using cruise control.
- Be cautious of debris on roadways, including power lines.
- Spotting and reporting of severe weather for ANY agency does not supersede state, local or federal laws or regulations.
- Ensure your vehicle is up to safety standards and capable of properly operating during hazardous weather.

Rule Number 10.

ALWAYS Operate safely when operating alongside of roadways.

A “Hot Zone” or hazardous working area is to be established within 25 feet of any operating roadway. This Hot Zone is a very hazardous area due to moving vehicles. Many people are severely injured and killed every year by being struck by moving vehicles alongside of America’s roadways. Especially during hazardous events, vehicle operators are less attentive on driving and may be distracted by severe weather or other distractions. Try to avoid operating within the Roadway Hot Zone if at all possible. Pull vehicles outside of this Zone if you need to pull over for any reason. If this is not possible, attempt to find areas in different locations outside the Hot Zone (rest stops, convenience stores, pullovers, etc.). Whenever operating within the Roadway “Hot Zone” the following should be done:

- Wear ANSI approved reflective traffic vests or outerwear while operating outside of a vehicle. Increased visibility is key for your safety in this hazardous environment.
- Never have your back to moving traffic. Always face traffic while in the Hot Zone. This may give you the ability to dodge an approaching out of control vehicle.
- If assisting at a collision, NEVER enter the roadway until traffic in the area has come to a stop. The first priority of Emergency crews is to establish a “Safe Work Zone” using fire apparatus and police vehicles.