



# **VOLUSIA COUNTY FIRE CHIEFS ASSOCIATION**



## **MODEL OPERATING GUIDELINE**

<b>GUIDE #</b> 100-12	<b>SUBJECT:</b> ADVERSE WEATHER OPERATIONS
<b>DATE ISSUED:</b> 01/26/05	<b>REVIEW DATE:</b>

### **Purpose;**

The following procedures have been adopted to address response to incidents during adverse weather. This provides guidance for companies encountering severe weather conditions during field operations. Company officers should use discretions to alter their functions should weather conditions change rapidly.

### **General;**

Any severe weather conditions encountered should be reported immediately to Dispatch and the Supervising Officers. Safety of personnel and members of the public must be the first priority of officers commanding units in the field. Attention to debris, downed power lines, drainage collection, and blocked access is required. Damage to equipment and apparatus due to weather must be documented

### **Heavy Rain;**

Heavy rain should not have any effect on fire or rescue operations except that care should be taken to protect patient or fire victims.

### **Lightning;**

Lightning storms are common in and around the Volusia County area and are encountered frequently by fire rescue units. Personnel not actively involved in emergency operations should remain sheltered inside apparatus or structures during frequent local lightning. Aerial operations should be halted during lightning conditions.

### **Hail:**

When encountering hail conditions, all personnel will wear full protective clothing and company officers should use discretions to determine if the company should seek shelter.

Tornadoes;

When a tornado or funnel cloud is observed in the field, companies should move away from it at right angles to its direction of travel, if possible. If proximity to the tornado prevents escape, the apparatus should be abandoned and personnel should seek shelter and keep together. If a tornado is observed from quarters, personnel should mount the apparatus and move away as indicated above.

Flooding;

Company officers must exercise considerable judgment and discretion relative to personnel safety when entering flooded areas. In rapidly moving water more than two (2) feet deep, personnel should use a lifeline and wear Personal Floatation Devices (PFDs). In any water over three (3) feet deep, PFDs should be used. Particular care should be taken to avoid run-off areas, drains, open manholes, and ditches.

High Wind and Hurricane;

Sustained wind conditions can be very hazardous. Personnel operating out in sustained wind conditions above 30 MPH will wear helmets and bunker gear for protection from flying debris. At sustained wind speeds above 35 MPH aerial operations should be halted. Any final decision concerning safe wind speeds should be made by the fire chief based on the urgency of the situation and personal judgment.

Vehicle Operation;

A classification of wind speeds is provided in the following table for different classifications of vehicles. The lower end of the Critical range is for wind speeds that will make driving the vehicle difficult. The upper end of the Critical range is for extremely dangerous driving conditions. Seek Shelter indicates the wind speed for which this vehicle should not be driven, and parked indoors if possible.

Table 1\*:

	<b>Critical</b>	<b>Seek Shelter</b>
Fire Truck	<b>50 – 70 MPH</b>	70+ MPH
Ambulance	<b>30 – 50 MPH</b>	50+ MPH
(SUV)	<b>60 – 70 MPH</b>	70+ MPH

Regardless of the fact that it has been stated that it is unsafe to operate these vehicles in winds in the Critical zone, it is likely that it can occur. There are some

basic recommendations that can be done to ensure the safety of personnel. First ensure that the vehicles have good tires at all times. Secondly, send only experienced drivers into winds within the Critical zone. Finally, critical wind speed is a function of the speed of the vehicle. It is recommended that under no circumstances should a vehicle be driven in winds approaching the "Seek Shelter Category".

It should be noted that the above table is for reference to vehicles operating at those wind speeds. This is not to indicate that personnel can perform rescue operations in wind speeds of this magnitude.

*\* Ref. "Wind Effects on Emergency Vehicles"; WHIRL Wind & Hurricane Impact Research Laboratory, Florida Institute of Technology, Melbourne, Florida.*