

# California Chapter of SPAAMFAA

## Safety Manual

### SAFETY OFFICER

The California Chapter of SPAAMFAA Board of Directors shall appoint the Safety Officer to serve until he or she is replaced by the Board. The appointment shall be based on the individual's qualifications, including fire service experience, training, familiarity with the chapter safety manual, and willingness to perform the assigned duties. The Safety Officer shall wear some form of identification to make him or her recognizable during the event.

At every California Chapter of SPAAMFAA event, the Safety Officer shall either be present or one shall be appointed by the ranking chapter official. The Safety Officer may appoint one or more other qualified people to assist him or her.

The Safety Officer shall check for driver's licenses, liability insurance, fire extinguishers, wheel chocks, and the general condition of the apparatus. The Safety Officer shall have the authority to deny entrance to any driver or apparatus that does not meet the requirements of this safety manual.

During the event, the Safety Officer and assistants shall observe the operation of all activities to assure safe practices regarding driving, pump operation, aerial operation, equipment handling, and crowd control.

The Safety Officer has the authority to order changes or halt any activity if, in the Safety Officer's opinion, an unsafe condition exists. Any discussion of this order will occur only after the operation has been changed or halted.

The Safety Officer shall have access to a cell phone or other means of summoning emergency help.

Local officials and practices override the Safety Officer and Safety Manual if they are more restrictive.

### INSURANCE

All apparatus participating in a California Chapter of SPAAMFAA event must have current vehicle liability insurance. Written proof of current liability insurance for each apparatus is required as part of the check-in procedure.

Failure to provide written proof of current liability insurance will disqualify an apparatus from entering the event site and participating in the event in any way, including static display.

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## **FIRE EXTINGUISHERS**

All apparatus must carry one or more fire extinguishers with an individual, or combined, UL rating of 2A10BC. Soda-acid, carbon tetrachloride, or other obsolete extinguishers may not be claimed for protection.

All extinguishers must be fully charged and carried in a location where they are quickly accessible. Extinguishers do not need to be carried in a visible location.

All apparatus drivers/operators must be familiar with the location and proper operation of each extinguisher.

## **WHEEL CHOCKS**

All apparatus must carry a pair of properly sized wheel chocks that fit the contour of the tires and are of sufficient height to prevent the apparatus from rolling.

Wheel chocks must be placed ahead and behind one of the rear tires as soon as the vehicle reaches a stationary position and the brakes are set to prevent accidental motion.

## **DRIVER / OPERATOR REQUIREMENTS**

All apparatus drivers and aerial tiller operators must possess and present a valid driver license for the type of vehicle being driven or operated. Driver's licenses must include the appropriate class and/or endorsements for the vehicle, and must be accompanied by a current medical examiner's certificate, if required.

All drivers and tiller operators must be familiar with the proper operation of the particular make and type of apparatus as specified in the manufacturer's operation manual.

The driver or another qualified person must remain in close vicinity of the apparatus while the pump is engaged or the aerial is raised. This person must be familiar with the proper operation of the pump or aerial and know how to deal with emergencies.

Other qualified persons may assist in the operation of an apparatus if they comply with the Safety Officer and Safety Manual.

## **APPARATUS REQUIREMENTS**

All apparatus must be provided with the necessary devices and equipment for safe operation of the particular make and type of apparatus. This shall include, but not be limited to, properly designed and functioning brake systems and parking brake devices, pump discharge pressure

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gauges and shut-off valves, aerial stabilizer and/or jack ground plates, aerial stabilizer and/or jack locking pins, etc.

All hoses, nozzles, monitors, and other fire equipment must be in good working order, if they are to be used. This does not apply to equipment carried for display only.

## **MOVING AN APPARATUS**

No apparatus shall be driven at a speed in excess of 20 mph while on the event or parade site. A minimum of two vehicle lengths separation must be maintained between apparatus or other vehicles while they are in motion.

All riders on an apparatus must sit in a designated seat within the cab or on the floor within the hosebed. Only adults may stand on the tailboard or runningboards. No one may stand in the hosebed or sit or stand on top of any portion of the cab, hood, or body while the apparatus is moving.

All apparatus must have one or more people on the ground to guide the driver when backing up -- even for short distances. These ground guides must position themselves so they are able to see all people and obstacles behind the apparatus and are able to communicate with the driver through visual or audible signals. Ground guides must not ride on the rear step of the apparatus while it is backing.

No candy or other objects may be thrown from a moving apparatus.

All city, county, state, and federal vehicle laws and restrictions apply to apparatus when operated on public roads. Operation of red lights and sirens on public roads is only allowed with prior permission of the local authorities - such as in parades.

## **ALCOHOLIC BEVERAGES**

No alcoholic beverages are permitted on the event site. No apparatus driver, operator, or other person involved with the use of fire equipment may consume alcoholic beverages, on or off the event site, during the course of the event.

## **OPERATING THE PUMP**

The maximum pump pressure when relay pumping into another pumper or pumping into a monitor shall be 70 psi, as indicated on the pump discharge gauge, unless authorized by the Safety Officer.

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Monitors shall be adequately secured to prevent movement before charging the line. Demountable deck guns shall be checked to ensure they are locked into place on top of the apparatus before charging the line.

The maximum pump pressure when pumping into a handline shall be 50 psi, as indicated on the pump discharge gauge.

All handlines shall have an adequate number of personnel to safely control the nozzle -- generally one for a booster line, two for a 1-1/2-inch line, and three for a 2-1/2-inch line.

All handline nozzles shall have quarter-turn shut-off valves.

All pump suction and discharge valves shall be opened and closed slowly to avoid water hammer, which can burst hose.

Spectators shall be kept clear of charged hoselines. No one shall be allowed to place any part of their body in front of the nozzle discharge -- children are especially prone to do this and need to be watched.

Water streams shall not be directed into areas where they will cause property damage or interfere with traffic.

Horseplay or deliberately aiming a water stream at a person or apparatus shall not be allowed.

Steam pumpers shall not pump.

## **OPERATING THE AERIAL**

No aerial device may be raised until the Safety Officer checks the condition of the ladder, vehicle, hydraulic lines, cables, stabilizers, etc.

Aerial devices may not be raised if the wind speed exceeds 15 mph or if lightning is present in the area.

Aerial devices may not be raised closer than 30 feet from electrical power lines.

If the aerial device is to be raised, the vehicle must be on level, stable ground with all jacks or stabilizers fully extended and locked or pinned in place -- no short-jacking. Ground plates must be placed beneath the foot pads. Tractor-trailer aerials must have the tractor jackknifed.

The aerial device may not be rotated from the bedded alignment. It may not be extended more than 60% of the total length of the device and may not be left elevated at less than 75 degrees from the horizontal.

If the aerial device is to flow water from an elevated master stream, the nozzle must not be located higher than the first aerial section and must not flow greater than 50% of the nozzle rated

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capacity. A shut-off valve must be provided at ground level. Wooden aerial ladders may not flow water from elevated master streams.

A “collapse zone” equal in radius to the length of the raised aerial device and in an arc of 45 degrees to each side of the axis of the aerial must be indicated on the ground. All apparatus and personnel must be kept clear of this zone.

No person may climb or stand on any portion of a raised aerial device, except that a qualified person may stand at the base of the aerial to operate the controls.

## **GENERAL SAFETY RECOMMENDATIONS**

This Safety Manual supersedes all previous editions.

The California Chapter of SPAAMFAA Safety Manual supersedes the National SPAAMFAA Muster Safety Guidelines at all chapter-sponsored events.

Apparatus drivers and operators have primary responsibility for safety and compliance with the provisions of the Safety Manual. The Safety Officer observes and directs as required.

When participating in public, non-California Chapter of SPAAMFAA events, local restrictions apply. Follow the directions of local officials. Be mindful that members of the general public may not be cautious and act accordingly.

Before moving an apparatus, walk around to check for loose objects, obstacles, and people in the vicinity. Give a verbal warning and have a ground guide before backing.

We recommend you disconnect electrical power to the siren when the apparatus is on static display -- children often stick their fingers in the electro-mechanical siren air openings.

Seat belts can save lives. If you have them, use them. If you don't, we recommend you get them professionally installed.

Never operate a cell phone when driving a vehicle.

Old fire apparatus were not meant to be driven very fast or very far. To protect your pre-1960 apparatus, and yourself, we recommend you never drive faster or further than the last two digits of the year -- for example, 25 mph and 25 miles for a 1925 rig, and 45 mph and 45 miles for a 1945 rig.

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