



Commentary

Title: Operating Fire Department Vehicles

Issued: March 2004

From time to time, questions are raised regarding the operation of a fire department vehicle related to requirements for vehicle registration and plates, requirements for operators (driver's) license and operation of apparatus. Simply, a vehicle owned and operated by a fire department* is not required to be registered or to have a license plate and drivers are not required to have an operators (driver's) license. However, there are some considerations the fire department should make to ensure they are following the regulations and have not created a risk management issue.

*(defined as a fire department owned and operated by a municipality or under contract to a municipality)

23(1) No person by himself or by his agent or employee shall drive a motor vehicle, trailer or semi-trailer on a highway, unless a certificate of registration or registration permit is obtained pursuant to The Vehicle Administration Act with respect to the vehicle.

(2) Subsection (1) does not apply to:

(d) the driver of:

(i) a fire engine or a fire department apparatus;

This section from the Highway Traffic Act identifies a fire engine or fire department apparatus is not required to have a registration or a license plate.

17(1) No person shall drive a motor vehicle on a highway unless he holds a driver's licence permitting him to drive that motor vehicle.

(2) Subsection (1) does not apply:

(b) to the driver of:

(i) a fire engine or a fire department apparatus;

This section from the Highway Traffic Act identifies the driver of a fire engine or fire department apparatus is not required to have an operators (driver's) license. However, it is strongly recommended that any person driving a fire engine or fire department apparatus have at least a valid (ie: not suspended) driver's license as a risk management consideration. It should also be noted the driver/operator of a fire department vehicle should be 16 years of age or older to comply with Occupational Health and Safety regulations (section 14).

The following sections of the Vehicle Equipment Regulations are important to consider. If a vehicle used by the fire department as an emergency vehicle to respond to emergency incidents is not properly equipped as an emergency vehicle with both lights and siren, this raises the question if the vehicle is in fact a fire truck or fire department apparatus.

Section 5 of the Vehicle Equipment Regulations

5 No vehicle other than an emergency vehicle shall be equipped with a emergency light or a siren.

Section 7 of the Vehicle Equipment Regulations

(3) A **fire-fighting vehicle** may be fitted with the following equipment:

- (a) one or more red beacons;
- (b) one or more red flashing lamps mounted on the front, rear and sides of the vehicle;
- (c) a red beacon or flashing lamp mounted on the dash of the vehicle;
- (d) one or more stationary lamps;
- (e) one or more amber flashing lamps;
- (f) a siren.

(4) A vehicle approved as an **emergency vehicle** by the Highway Traffic Board may be fitted with the following equipment:

- (a) one or more red beacons;
- (b) one or more red flashing lamps mounted on the front, rear and sides of the vehicle;
- (c) a red beacon or flashing lamp mounted on the dash of the vehicle;
- (d) one or more stationary lamps;
- (e) one or more amber flashing lamps;
- (f) a siren.

Sections 5 and 7 of the Vehicle Equipment regulations and section 67 of the Highway Traffic Act (below) identify that a fire truck, fire department apparatus or other emergency vehicle that may be operated by the fire department must be properly equipped with both lights and siren.

67(1) *The driver of an emergency vehicle that is:*

- (b) *used for the transportation of a member of a fire department in response to an emergency;*
 - (d) *a vehicle or class of vehicle designated by the board as an emergency vehicle which is used in response to an emergency;*
- may, while an emergency exists and only while the emergency device and emergency light are in operation, drive contrary to this Act, the regulations or a traffic bylaw where it is necessary in the circumstances to do so.*

The words "fire engine" and "fire department apparatus" identify a vehicle owned and operated by a fire department for the purposes of responding to an emergency. This suggests that a vehicle that is obviously a fire truck, and other vehicles (but not necessarily a specific type of vehicle and including 1/2 tons, cube vans, etc.) that are owned and operated by the fire department for the purposes of responding to an emergency, provided the vehicle is equipped with both red lights and siren, are "fire department apparatus".

It is not usually necessary for a vehicle meeting the above to be designated as an "emergency vehicle" by the Highway Traffic Board (see 67(1)(d) of the Highway Traffic Act above). However, if the operation of a vehicle by the fire department continues to be an issue or raise concerns regarding the designation of the vehicle as a fire truck or fire department apparatus, the best method is to make written application to the Highway Traffic Board to have the vehicle designated as an "emergency vehicle". The Board can be contacted at the address and telephone number below.

Highway Traffic Board,
11th Avenue,
Regina, S4P 2N7
Inquiry 775-6674

A number of questions are also be raised regarding operation of a fire truck or fire department apparatus, right of way and display of red lights and sirens. The following excerpts from regulations identify answers to these questions.

Section 67 of the Highway Traffic Act

Emergency vehicles

(1) The driver of an emergency vehicle that is:
(b) used for the transportation of a member of a fire department in response to an emergency;
(d) a vehicle or class of vehicle designated by the board as an emergency vehicle which is used in response to an emergency;
may, while an emergency exists and only while the emergency device and emergency light are in operation, drive contrary to this Act, the regulations or a traffic bylaw where it is necessary in the circumstances to do so.

Critical part of the regulation if found in the statement, “***where it is necessary in the circumstances to do so***”. While an emergency may exist, it must also be necessary, due to the circumstances of the emergency, to drive the fire apparatus contrary to the Act, the regulations or a traffic bylaw. This suggests that operating a fire department vehicle contrary to the Act, the regulations or a traffic bylaw must be considered on each and every response. While it is unknown if this section of the Highway Traffic Act has been addressed in Saskatchewan, it has in other jurisdictions where fire apparatus are permitted to be driven in contravention of the Act, the regulations or a traffic bylaw. A number of Courts have defined this statement to mean “a situation in which there is a high probability of death or serious injury to an individual or significant property loss”.

(2) The driver of an emergency vehicle being operated in accordance with subsection (1) has the right of way over all other vehicles on the highway.

(4) The driver of an emergency vehicle exercising any of the privileges granted by this Act shall drive and park with due regard for safety, having regard to all the circumstances including:

- (a) the nature, condition and use of the highway;*
- (b) the amount of traffic that is, or might reasonably be expected to be on the highway; and*
- (c) the nature of and the use of the vehicle at the time.*

(5) A vehicle to which right of way is given under this section has priority of right of way over other vehicles to which the same right is given, in the following order of priority:

- (a) fire engines;*
- (b) fire department apparatus;*
- (c) ambulances;*
- (d) police vehicles; and*
- (e) vehicles approved as emergency vehicles by the board.*

While fire department vehicles responding to an emergency with lights and siren operating have the right of way over all other vehicles, this does not mean that the vehicle can be driven with disregard to road and traffic conditions. The emergency vehicle must be driven and parked with all due consideration to:

- the nature, condition and use of the highway (condition of the road surface, width; weather conditions, traffic, etc.),
- the amount of traffic on or that can be expected on the road (light, heavy, other types of vehicles; a rural grid, urban street, freeway etc.), and
- the nature and use of the vehicle being operated (can a five ton truck do 75 mph safely on a gravel road?).

It is recommended that the fire department have very clear written operating guidelines concerning the operation of fire department vehicles. A number of studies have taken place in Canada and United States that provide information that should be considered in a policy document.

- Vehicles are typically visible at 2,500 feet during the daytime on the open road. With their headlights on, they become visible at 4,700 feet under similar conditions. Consider a policy requiring all emergency vehicles to operate with headlights on during the daylight hours.
- The public does not understand the different siren modes. Therefore, while changing the siren does increase the ability to attract attention, it does little to impact reaction. A variety of studies indicate that the effective distance of sirens range from 30' (thirty feet) to 150' (one hundred and fifty feet). In some urban locations, the effective distance can be as little as 15' (fifteen feet). A driver of a fire apparatus can easily “overdrive” the vehicle siren if excessive speed is used.

In a number of studies, it was found:

- Within urban areas, average response time is less than 35 miles per hour. If speeds are increased to 45 mpg, and the average response distance is one mile; a total of about 23 seconds is saved. In rural areas, if average response speeds are increased from 55 mph to 65 mph over a response distance of 5 miles, a total of about 51 seconds is saved in the response time.
- Speeds and cautions such as limitations on hills, curves, or ramps are designed for passenger cars. Emergency vehicles are typically heavier overall and more top heavy than cars. The posted cautionary speeds are an even more important consideration for emergency vehicles.

In many fire departments, vehicle operating guideline identify:

Emergency vehicles must not be driven in excess of the posted speed limits regardless of any traffic law exemption.

- Emergency vehicle drivers should still follow several basic procedures:
 - Utilize the lights and siren whenever responding to an emergency
 - Change the mode of the siren from wail to yelp at least 200' from entering an intersection
 - Studies have indicated that the high low mode is the **least** effective siren mode

- Use another audible device, if so equipped, to alert vehicles or otherwise clear traffic that fails to hear the siren. If using an air horn, use short repetitive blasts.
- Space Management - Establish a cushion of safety on all sides of the emergency vehicle. Following distance, rate of vehicle closure, blind spots, and traffic closure on an emergency vehicle are major area of concern in maintaining this cushion.

Some limitations involving emergency lights to be aware of include:

- Low sun or glare can greatly reduce their effectiveness.
- At night, red beacons can be confused with traffic lights and neon signs
- Lights on emergency vehicles may pass over motorists if the emergency vehicle is close to the rear of the passenger car ahead.
- When parking emergency vehicles on the highway, it should be remembered that too many emergency lights on stationary vehicles create a carnival effect and causes confusion. Within this context, emergency vehicles should be safely parked at emergency scenes with most of the emergency warning lights off. The placement of flares or warning triangles should create a safe lane between the emergency incident and the flow of traffic on the highway.

The largest percentage of collisions involving emergency vehicles occur at intersections. Careful consideration should be given to establishing policies for addressing both controlled and uncontrolled intersections.

An intersection that does not offer a control device (stop sign, yield sign or traffic signal) in the direction of travel of the emergency vehicle or when a signal is green for the emergency vehicle, is defined as an uncontrolled intersection. Emergency drivers should:

- Scan the intersection for possible hazards (right turns on red, pedestrians, vehicles traveling very fast, etc). Observe traffic in all four directions: left, right, front and back.
- Slow down and cover the brake pedal with the foot.
- Change the siren cadence not less than 200 ft from the intersection.
- Avoid using the opposing lane of traffic, if at all possible.

Any controlled intersection requires a complete stop by the emergency vehicle driver. In addition to bringing the vehicle to a complete stop, these additional steps must be followed:

- Do not rely on warning devices to clear traffic.
- Scan the intersection for possible hazards as well as driver options.
- Begin to slow down well before reaching the intersection and cover the brake pedal with the driver's foot.
- Change the siren cadence not less than 200 ft from the intersection.
- Scan the intersection for possible passing options (Pass on right, left, wait, etc).
- Avoid using the opposing lane of traffic, if at all possible.
- Come to a complete stop.

- Establish eye contact with the other vehicle drivers; have partner communicate all is clear; reconfirm all other vehicles are stopped.
- Proceed one lane of traffic at a time. Treat each lane as a separate intersection.

Every emergency service organization should have standard operating guidelines (SOGs) for placing emergency vehicles at emergency incidents. These guidelines should address, at a minimum, the following issues:

- Placement of vehicles at emergencies located on streets and highways.
- Positioning of emergency vehicles at incidents to minimize the blinding effect of the warning lights on approaching and passing vehicles.
- Identification of potential hazards affecting placement of vehicles at emergency scenes.
- Identify appropriate safe distances from certain types of emergencies (such as vehicle fires) for the placement of emergency vehicles.
- Consideration for the ease of leaving the scene because of changing conditions at the emergency incident; or, a directive to leave the scene to respond to another incident, or be available for any potential issues.