TRUCK COMPANY OPERATIONS

1 INTRODUCTION

1.1 Background

1.1.1 Throughout the nineteenth and early parts of the twentieth century, firefighters controlled and extinguished fires by projecting streams onto a fire from the exterior of a structure. The role of ladder companies was primarily removal of trapped occupants by ladder and hooking down burning structures to prevent fire from spreading to others. Major improvements have been made in the last half of the twentieth century. The use of breathing apparatus, ventilation techniques, and protective clothing has allowed firefighters to operate on the interior of structure fires. It should be remembered that the primary function of today's truck companies is to rescue civilians from burning structures and to provide the support necessary for engine companies to access and extinguish fires. This support is typically in the form of forcible entry, ventilation and locating the fire.

1.2 Purposes:

- To provide guidelines and general information regarding truck company operations.
- To describe the duties and responsibilities of the truck company.
- To identify tactical and strategic considerations for truck company operations.
- To define the truck company officer's roles and responsibilities.
- To establish guidelines for apparatus positioning on the fireground.
- To establish guidelines for 11 duties of the truck company.
- To establish guidelines for post fire critique of the company's performance.
- To establish procedures for truck driver/operator qualifications.

2 PLANNING AND PREPARATION

2.1 Planning and preparation starts the moment the members assigned to the Truck company arrive at work. Members should check for any pertinent information such as street closings, equipment that is out of service, etc.

2.2 Line up should be conducted to accomplish two very basic tasks. To gather all members at one location to ensure that all assigned are present and to disseminate any **new** information that would be immediately necessary to respond to emergency incidents such as road or weather hazards, neighboring companies that are out of service.

2.3 Vehicle Inspection

2.3.1 Immediately after line up, the truck company members should inspect the apparatus. This should include checking of all items necessary to the operations of the apparatus itself, i.e. oil, coolant, hoses, belts, etc. All tools and equipment shall be examined and inspected. Documentation regarding the vehicle itself should be completed and discrepancies reported.

2.4 Personal Equipment

2.4.1 Each company member is responsible to ensure that all of their personal protective clothing, breathing apparatus, and other assigned equipment is clean and ready for use at the beginning of the shift. This includes portable radios, rapid entry keys, and any other ancillary equipment that might be assigned to their riding position on the truck. Documentation of such shall be noted in the station logbook.

2.4.2 All truck company first and second due street maps shall be reviewed regularly to assure that buildings are shown accurately, especially in garden and highrise apartment complexes.

2.5 Other Tools and Equipment

2.5.1 All other tools and equipment not specifically assigned to a particular riding position shall be checked to ensure that they are present and functioning properly. This includes saws, fans or blowers, lights, hand tools, life belts, ground ladders, meters and EMS equipment.

2.6 Staffing

2.6.1 It is recognized and proven through fireground experience that the current staffing level on ladder companies of 3 members (officer, driver, and firefighter) is not only inadequate, but also unsafe. The information herein is based on a staffing assignment of an officer, a driver and a firefighter. In a majority of situations, with a total of three members, the officer and right bucket or tillerperson shall work as a team and be designated " Truck 410 ". The driver will often work alone and be designated " Truck 410 Driver ". (See section 4 - Fireground Operations)

2.6.2 When the staffing total is four (an officer, driver and two firefighters) the officer and right bucket shall work as a team and be designated " Truck 208 " and, the driver and left bucket or tillerperson shall work as a team and be designated " Truck 208 Alpha ". Dividing truck crews in this manner gives the incident commander more crews with which to accomplish more tasks in less time.

2.6.3 In some cases, it will be a better use of members if the entire truck crew remain together to accomplish a task. For example, in a fire on the 20th floor of a sealed, commercial highrise, the driver, working alone on the exterior can neither reach the fire floor with the aerial nor effect smoke conditions there with mechanical ventilation. Therefore, the officer shall ultimately decide how the company will operate.

3 RESPONDING

3.1 Response and Arrival Considerations

3.1.1 Whether a truck company is responding alone or as part of a larger assignment determines many of the actions, enroute preparations, and thought processes that take place during the response.

3.2 Alarm Responses

3.2.1 The truck's assignment is dependent upon where it is in the dispatch order for the alarm. In other words, the responsibility of the company is based upon it being first due, second due, etc. This assignment is paramount in determining the preparations to be made by the truck company crew while enroute to the incident. In most instances, the company assignments will fall in the dispatch order. If a unit is out of position or other circumstances indicate that it will arrive on the scene significantly before or after it normally would, the unit shall communicate via radio with the controlling dispatch center and advise the change in assignments.

3.2.2 An example of a change in assignments is as follows. Trucks 208 and 410 are dispatched, in that order, along with other units to a high-rise fire. Truck 208 is going to be delayed in responding due to being involved in a drill. Truck 208 shall simply advise the communications center that they will be delayed and that truck 410 should take the first-due assignment. Communications should then simply repeat this change so that the battalion chief and all units responding know of the change. The only unit that should acknowledge this change is the unit affected, truck 410. Units shall **NOT** engage in debate over order of arrival.

3.3 Monitoring Radio Traffic

3.3.1 Companies responding to a fire shall monitor both PSCC and on-scene units to gather information. This will provide firefighters with vital information about conditions at the scene and make them aware of the problems encountered by first arriving units.

3.4 Safety

3.4.1 All responses must be made consistent with all current Commonwealth of Virginia driving laws as well as Fire and Rescue Department regulations. The response must be as rapid as is reasonable while at the same time maintaining a high level of safety. The knowledge of all members regarding the area and routes of travel is of utmost importance.

3.5 Response Considerations

3.5.1 All members shall listen attentively to the dispatch general announcement and realize the type of incident to which they are responding and the order in which their company is due to arrive. Response types will be:

3.5.1.1 One truck only - Incident types such as lockouts, stuck elevators, control of utilities, etc.

3.5.2 First alarm response - structure fires

3.5.2.1 Truck company duties are typically those which support the engine company attempting to extinguish the fire. Rescue may be the first task undertaken. Anticipate action based on being the first or second due truck.

3.5.3 First due

3.5.3.1 Turntable placement, forcible entry, ventilation, search for the fire, search for occupants, ladder placement.

3.5.3.2 Occasionally, a truck will be the fire unit to arrive at a fire scene. In those cases, the officer should give an "on-scene" radio report, announce their location (side 1, side 3), actions they are going to take, and request additional resources if needed.

3.5.3.3 Information received from dispatch is critical. It enables all members, not only officers, to draw a mental picture of what can be expected. The more information we have, the more intelligent safe and efficient our decisions and actions will be. All members shall monitor all radio traffic so to be better mentally prepared.

3.5.3.4 Officers shall read all dispatch text from the MCT, locate the address from the street book and anticipate positioning of the apparatus turntables. Officers shall brief their members while enroute on anticipated or specific assignments.

3.5.4 Second due

3.5.4.1 Support the operations of the first truck or other engine companies operating in other areas of the building.

3.5.5 Additional alarm response

3.5.5.1 Companies typically go to staging and are assigned from there. However, companies may occasionally be given an assignment while enroute.

3.5.5.2 Additional alarm trucks may be required to use their aerials for various tasks. Therefore, it will be necessary to be in close proximity to the building.

3.5.5.3 Additional alarm trucks may need to reposition other abandoned apparatus (rescue or EMS unit) to gain access to an efficient fireground spot.

3.5.5.4 All members shall listen attentively to additional radio traffic while responding and anticipate fireground action.

3.5.5.5 All members shall listen attentively to the officer for additional information, assignments, or the need for specific tools or tasks. Members should ask for a repeat from the officer if orders are not clear.

4 APPARATUS POSITIONING

4.1 The apparatus shall approach the scene slowly, keeping in mind the need to carefully and deliberately spot the turntable, not the cab. A fast-paced, hectic stop often produces a fireground with poorly placed apparatus. Remember, at this point, we should be laying the foundation for an efficient fireground, which begins with proper apparatus positioning. A slow approach also gives all members extra time to read the building and make better decisions.

4.2 The officer shall decide where to position the apparatus (turntable). Several factors affect this decision such as:

- incident priorities
- strategy
- size and location of fire
- occupancy type
- wind direction
- arrival sequence
- truck type
- access
- potential for collapse
- topography
- set back
- type of roof

4.3 Additional considerations are how each of the above factors affect tactics and the nine typical duties of a truck company. These nine basic duties include:

- Rescue
- Ventilation
- Laddering
- Forcible Entry
- Checking for Extension
- Elevated Stream Operation
- Utility Control
- Overhaul
- Salvage

4.4 The most important reason for truck companies to get close to the fire building is for use of the aerial device and the proximity of ground ladders. Most often, the truck is positioned parallel to the building front because of typical building layouts and response routes.

NOTE: Throughout the following section, the term "aerial" applies to both aerial ladder trucks and tower ladders except where specifically noted.

4.5 If the aerial will be used, the driver and OIC shall scan the scene for obstructions. There must a clear line of sight from the turntable to the objective. This means that obstacles such as trees, utility poles, signs, and wires may interfere with the positioning of the ladder. In rescue situations, aggressive placement of the ladder in pushing through tree branches and limbs or signs may be necessary. Due caution must always be exercised when operating around wires, no matter what the circumstances.

4.6 The ground on which the jacks will rest must, ideally, be firm and level. Jacks shall never be placed on manhole covers, storm sewer boxes or other underground vaults. Beware that these obstacles can often be found in the lawns and courtyards of apartment complexes.

4.7 In many areas of Northern Virginia, parking garages are found near or surrounding buildings, which may require aerial operations if a fire occurs. These parking structures often cannot support the weight of the truck on its jacks and sometimes cannot support the weight of the truck at all.

4.8 Before parking the truck, be sure that nothing will prevent the jacks from extending such as vehicles, curbs or any of the obstructions listed above.

4.9 The horizontal distance from the building to the turntable is critical. If the aerial is needed but the turntable is too close, the aerial cannot be rotated between the building and the turntable. This is why trucks, especially tower ladders, must not park near the curb closest to the building at a fire in a strip shopping center or other one-story building. Specifically, towers must be able to place their basket on the ground in front of the fire building.

Insert picture here

4.10 The operator of the vehicle needs to know the retracted length of the ladder for proper turntable positioning. That information tells the operator how far the vehicle must be from the building if the aerial device will be operated at low angles.

4.11 In order to use the aerial at its maximum working height, the turntable will need to be positioned close enough to the building to allow the aerial device to be raised at its maximum angle and reach.

4.12 The most important factor in positioning is to determine your intended target and then spot the turntable appropriately.

4.12.1 Scrub surface is the portion of the face of the building that can be touched by the tip of the aerial or reached from the bucket of a tower ladder. When positioned, the tactical assignment will dictate whether the scrub surface coverage in needed on one side or face of the building or if the coverage of two faces of the building is needed. Positioning on a corner allows for coverage on two sides or faces.

5 CREW RESPONSIBILITIES

5.1 The following are typical fireground duties and may change as the situation dictates.

5.1.1 Officer. The officer is responsible for overall action of company. The officer:

- Supervises the company in tasks
- Supervises firefighters one-on-one
- Decides on a course of action for the company for both inside and outside crews
- Is responsible for communicating with Command and other companies.

5.1.2 Driver. The driver is responsible for the vehicle itself. Duties include:

- Check and maintenance of vehicle and equipment.
- Knowledge of first and second due streets
- Knowledge of buildings and complexes with limitation affecting operations and placement of apparatus
- Safe operation of apparatus
- Calm, deliberate placement of apparatus on incident scene
- Safe and efficient use of aerial device
- Independent action on the fireground
- Crew leader of outside crew
- Communicate via portable radio to Command and other companies
- Exterior ventilation
- Aerial and ground ladder placement
- Exterior utility control
- Lighting

5.1.3 3rd Crew Member - Right bucket or tillerperson. Duties include:

- Works with OIC
- Forcible entry
- Assisting in locating the fire
- Assisting in performance of primary search
- Removal of victims
- Interior utility control
- Overhauling the fire area
- Checking for extension of fire

5.1.4 4th Crew Member. Duties include:

- Works with driver
- Exterior ventilation
- Ground ladder placement
- Exterior utility control
- Other support duties

6 TRUCK COMPANY TACTICS

6.1 All operations should be based upon the five basic firefighting objectives of :

- Rescue
- Exposure protection
- Confining the fire
- Extinguishing the fire
- Overhauling the fire area

6.2 The minimum compliment of tools to be taken into a structure shall be:

- Set of irons
- A hook of some sort to pull with
- Hand lights
- Thermal imager
- Radio

6.3 Depending upon the occupancy and the tasks assigned to the crew, other tools that are commonly used include:

- Hydraulic forcible entry tool, i.e. Rabbet Tool or Hydra-Ram
- A-Tool
- Water can
- Rubber door masks and wood chocks
- Sledge hammers or mauls
- K-Tool

6.4 If not committed to an exterior rescue operation, elevated stream, or other task identified by command, the inside truck crew shall begin support activities that enable the engine company to extinguish the fire. In as much a chronological order as can be expected, this involves forcible entry, ventilation from the interior, the search for the fire and the search for occupants.

6.5 After completing forcible entry and the search of the area assigned by command or other documents, the inside truck crew shall begin those activities that enable the engine company to extinguish hidden fire and make the fire area safer. This involves extension check, control of utilities, overhaul and salvage.

6.6 Outside crew primary duties

6.6.1 The driver or “Alpha” crew shall be responsible for venting the fire area by breaking windows, using fans or blowers to exhaust combustion products through windows opened by interior crews, or a combination of the two.

6.6.2 If venting a first or second floor window, breaking windows is most efficiently accomplished by use of the shortest possible pike pole. It is easier to handle and does a better job of removing all obstructions (drapes, blinds, screens, etc.). This is the preferred method when a series of windows must be taken.

6.6.3 Placement of ground ladders is also the responsibility of the outside member(s). At times, a ladder will be used to knock out a window where the ladder is placed.

6.6.4 Barring a need to VES (vent, enter and search) or create another means of access, it is more productive to do some effective ventilation and then place some ladders for egress assuming the driver is working alone.

6.6.5 A third floor or above fire may require the use of ground or aerial ladders and hooks. The most efficient means of accomplishing horizontal ventilation may be done by placing a ladder against the building and climbing with a pike pole that will reach 2 or more windows. It is acceptable to use the ladder to break the third floor or above windows but remember all obstructions should be removed for maximum effect.

6.6.6 The driver of a tower ladder can be particularly effective in venting a number of windows. The driver can enter the basket and move from window to window taking glass as he or she goes.