

### 3.2.2.4 First-In Engine Operations



YOUR ORGANIZATION  
STANDARD OPERATING PROCEDURES/GUIDELINES

**TITLE:** First-In Engine Operations

**SECTION/TOPIC:** Company Operations

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**PREPARED BY:**

**APPROVED BY:**

X

Preparer

X

Approver

These SOPs/SOGs are based on FEMA guidelines FA-197

#### 1.0 POLICY REFERENCE

CFR

NFPA

NIMS

#### 2.0 PURPOSE

This standard operating procedure/guideline addresses duties and functions of the first-in engine company at a fire scene.

#### 3.0 SCOPE

This SOP/SOG pertains to all personnel in this organization.

#### 4.0 DEFINITIONS

These definitions are pertinent to this SOP/SOG.

#### 5.0 PROCEDURES/GUIDELINES & INFORMATION

##### 5.1 Duties and functions of the first-in engine company at a fire scene:

##### ORDER OF ARRIVAL ASSIGNMENTS:

The following “Best Practices” represent the arrival assignment functions of each Engine Company. If for any reason an Engine Company must deviate from the following functions, the Officer of that apparatus is responsible for communicating the information to all incoming apparatus. (Example: E71 is arriving... we do not have a hydrant.).

This does not limit a company to only its listed functions. Every company will be expected to perform all basic functions safely within the limits of their capabilities.

All Companies shall announce their Arrival Order upon arrival. (Example: E72’s arriving second Engine)

#### **FIRST ARRIVING ENGINE COMPANY:**

##### **FIRST ARRIVING ENGINE COMPANY POSITIONING:**

Positioning of the first arriving Engine Company determines positioning for all other responding apparatus.

The front of the building should be left open for the Ladder Company.

The first arriving Engine Company should pull past or stop short of the fire building.

The first arriving Engine Company should establish a primary water supply.

Depending on the Incident, the first arriving Engine Company should supply the FDC.

The first arriving Engine Company should initiate fire attack functions.

#### **PLACEMENT OF APPARATUS**

Apparatus function should regulate placement. Many times we reverse this rule by virtue of poor placement, limiting the options or eliminating functions we can assign to a unit.

Firefighters operate with a natural inclination to drive apparatus as close to the fire as possible. Many times this results in positioning of rigs that is both dysfunctional and dangerous. The placement of all apparatus on the fireground should be a reflection of one of the following:

- The standard operational procedure for first arriving companies.
- The pre-arranged staging procedure.
- A direct order from Command.
- A conscious decision on the part of the officer assigned to that apparatus based on existing or predictable conditions.

Effective apparatus placement must begin with the arrival of first units. The placement of the initial arriving companies should be based upon initial size-up and general conditions upon arrival. First arriving companies should place themselves to maximum advantage to operate; later arriving units should place themselves in a manner that builds on the initial plan and allows for expansion of the operation.

Key tactical positions should be identified and engines placed in those positions with a strong water supply. The forward engine can distribute this water supply to a variety of hand lines or master streams. The number of supply lines will be substantially reduced.

Consideration of equipment placement on a dead end street should facilitate access around that equipment. Be cognoscente of hydrants past your position.

On 3-1 assignments, the first engine and ladder companies on the scene should go directly to the fire; all others use Level 1 staging. Avoid bumper to bumper placement on the fireground. Stage a minimum of one block short **in the direction of travel to** the immediate fire area, and remain uncommitted until ordered into action by Command. Company officers should select standby positions with a maximum of tactical options. (See Level 1 staging procedure, 203.00.) Incoming units should tactically view the hydrants adjacent to the incident.

In large, complex, and lengthy operations, use Level 2 Staging Procedure. Under these procedures, Command communicates directly with the Staging Officer for the additional resource required on the fireground. (See Level 2 staging procedure, 203.00.)

Command must maintain an awareness that access equals tactical options and that the immediate fire area can quickly become congested with apparatus. He must regard apparatus on the fireground in two categories:

- Apparatus that is working.
- Apparatus that is parked - "taxis."

Park "taxis" out of the way. That includes staff vehicles. Apparatus that is not working should be left in the staging area. Command, sectors, and all operating units should attempt to maintain an access lane down the center of streets wherever possible.

Think of fire apparatus as an expensive exposure: position working apparatus in a manner that considers the extent and location of the fire and a pessimistic evaluation of fire spread and building failure. Anticipate the heat which may be released with structural collapse. Apparatus should generally be positioned at least 30 ft. away from involved buildings, even with nothing showing. Greater distances are indicated in many situations.

Beware of putting fire apparatus in places where it cannot be repositioned easily and quickly -- particularly operating positions with only one way in and out; i.e., yards, alleys, driveways, etc.

Beware of overhead power lines when positioning apparatus. Do not park where lines may fall or endanger operations, i.e., aerials.

If apparatus does become endangered, operate lines between it and the fire while you reposition it. When you do move it -- move it to a position that is safe. It is dysfunctional to move a rig several times throughout the progress of a fire.

Take maximum advantage of good operating positions and "build" the capability of units assigned to these effective positions. Initial arriving pumpers should be placed in "key" positions. These positions should offer maximum fire attack access to the fire area and be supplied with large diameter-pumped supply lines as quickly as possible. Subsequent arriving companies can operate the hose lines from this apparatus. Place these "key" companies first -- before they are "buried" by later arriving units.

Key tactical positions should be identified and engines placed in those locations with a strong water supply. The forward engine can distribute this water supply to a variety of hand lines or master streams.

The number of lines from hydrants to the fire will be substantially reduced.

Hydrants located closest to the fire area should be regarded as "key" hydrants. Large diameter streamer hook-ups of big pumpers take maximum advantage of such hydrants and facilitates pumping multiple lines. Do not take away the capability of such hydrants with single-unpumped hydrant lines.

Position pumpers on "key" hydrants before tying up secondary hydrants that require longer hose lays. Pumpers hooked-up to key hydrants can supply water to two or more pumpers in forward positions.

Take advantage of the equipment on apparatus already in the fire area instead of bringing in more units. Connect extra lines to pumpers which already have a good supply line instead of making "daisy chain" supply line connections.

Do not hook up to hydrants so close to the fire building that structural failure or fire extension will jeopardize the apparatus. Think pessimistically and extend lines off the apparatus into marginal areas.

Fire hose (particularly large diameter) soon limits the general access as the fireground operation gets older. Command and sectors must get apparatus well-placed in key positions. Lines should be laid with attention to the access problems they present. Try to lay lines on the same side of street as the hydrant and cross over near the fire.

When the aerial ladder is not needed for upper level access or rescue, spot apparatus in a position that would provide an effective position for ladder pipe operations if the fire goes to a defensive

mode. Ladder officers must consider extent and location of fire, most dangerous direction of spread, confinement, exposure conditions, overhead obstructions, and structural conditions in spotting apparatus. The truck should be spotted where the ladder can be raised and used effectively without repositioning. Incoming engines should consider area for the aerial to set up when in place.

Spot the command vehicle in a manner that will allow maximum visibility of the fire building and surrounding area and the general effect of the companies operating on the fire. Command vehicle position should be easy and logical to find and should not restrict the movement of other apparatus.

Be aware of drainage and protection of your hose line and firefighter when operating on vehicle fires and/or auto accidents. Essentially, block traffic and provide a safe area to operate.

Treatment Sector must also provide for ambulance access to the Treatment Area in situations involving multiple patient transportation. On routine EMS calls, attempt to leave room for the ambulance to off and on load. This will speed up the whole operation should this change for the worse.

In trenching incidents, all apparatus should park a safe distance from the cave in (300') to avoid further vibrations that could cause another collapse. If an apparatus is to be used at the incident, park 100' distance. (See Trench Rescue Operations, xx.) Consider a safe staging area to park multiple apparatus that is away from having any affect on soil stability.

On freeways and busy streets, apparatus should be parked so as to block traffic from the area of operation and protect personnel. Attempt to direct traffic by angling in the direction you want them to go. This is achieved by parking the apparatus in a way that forces the traffic to move in that direction. Try to keep as may lanes open as possible without jeopardizing your safe working area. When possible, the compartments or panels most frequently used should face the “safe” area.