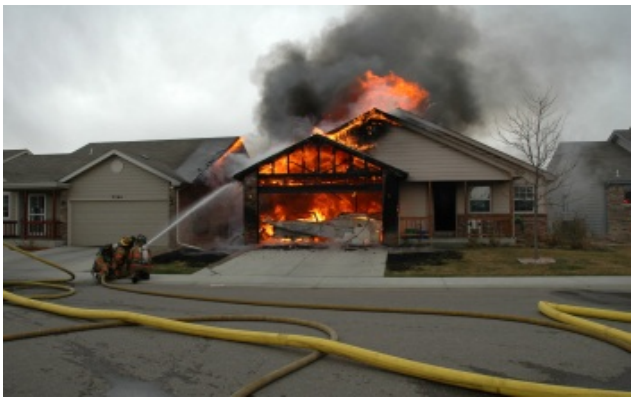
CITY OF LOVELAND
FIRE AND RESCUE DEPARTMENT
410 E. Fifth Street • Loveland, Colorado 80537
(970) 962-2471 • FAX (970) 962-2912 • TDD (970) 663-5144

MASTER STREAM OPERATIONS (1.1)

Developed by Lt. Vance Stolz
January 2011

- NFPA 1001

TASK SKILL DESCRIPTION AND DETAIL



Master Stream operations are a vital component of a large and/ or advancing fire situation. It is imperative that all LFR Engine Companies are proficient in the skill of selecting, deploying, and operating various master stream devices on the fire ground. Completion of strategic goals and tactical objectives can often be dependent of proper master stream application. Performing these operations properly, safely and with proficiency are imperative to both the safety of the firefighter and the public.

Types of LFR master streams:

- Deck Gun
- Ground Monitor
- Blitz-Fire
- Large Hose line

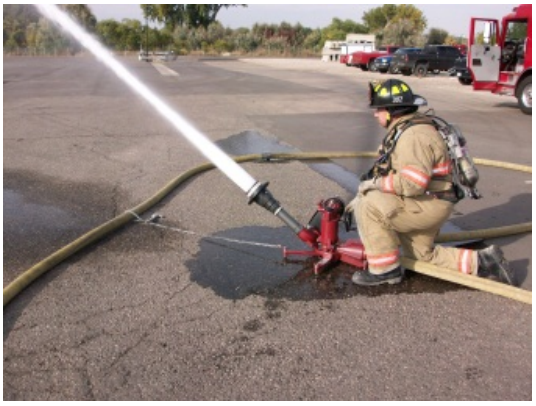
Master stream functions and tactics:

- Large or rapidly advancing fire
- Exposure protection
- Defensive operations
- Transitional fire attack
- Vapor dispersion (Haz-mat situation)
- Minimum staffing situations

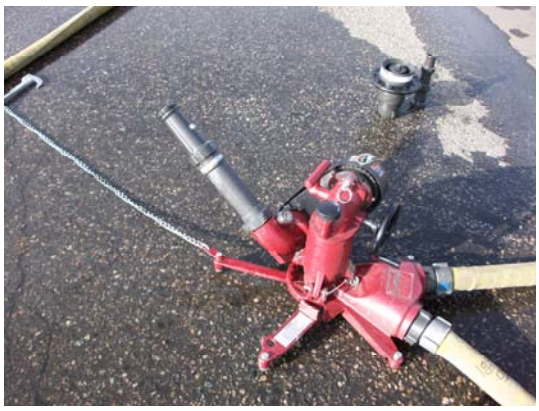
Deck Gun Operations:

Deck guns are found on all Engines within LFR. It is imperative all crews become familiar with the general operation of each unit as there are some variances depending on the age of the apparatus. These devices are capable of flowing up to 1000gpm and can be placed into operation rapidly. Due to the high-flow capability, crews must establish a continuous water supply quickly. Apparatus placement is a crucial component due to fire location and stream reach. Prior to the Engineer charging the deck gun, the unit should be manned (if staffing allows), proper nozzle selected, and the unit adjusted for best stream application. As with any master stream operation, it is critical all crews on the fire ground are aware of when the deck gun is going to be placed in operation.

Portable Ground-Monitor Operations:

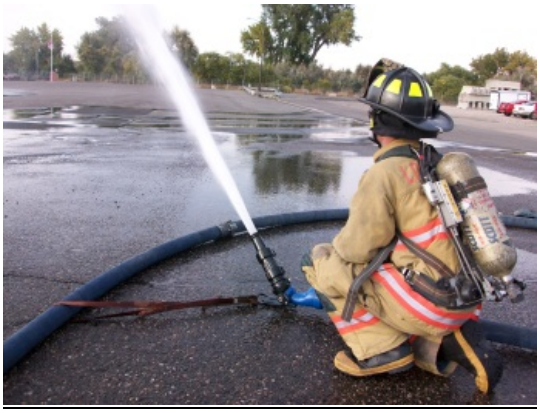


Portable ground monitors are found on LFR SQ-2, E-6, and E-7. The advantages of these units are high fire flows (up to 1250gpm depending on supply hose and nozzle selection), portability, and they can be manned or unmanned. Most monitors are made up from the deck gun component from the apparatus and attaching it to the base/ inlet unit. Units are typically supplied by 2 ½", 3", or LDH hose, depending on model. It is imperative that the monitor is placed at the best tactical position possible while remaining in a safe location (out of the collapse/ hazard zone). Once a deployment location is selected, the unit must be secured properly. The legs on the device must be extended and secured.



This is especially important if the deployment location is on loose gravel, dirt, snow/ ice or any other surface that could allow the unit to become unsecure. The unit can be secured by tying the monitor off to an immovable object or supply hose looped in front of the unit with rope, tie-downs or chain. Although this can sometimes be difficult on the fire ground, it is imperative for firefighter safety. Firefighters should never operate the unit at a lower angle (below stop pin) due to the possibility of the monitor dislodging.

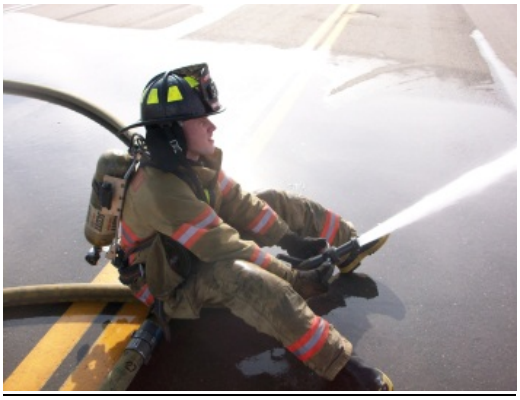
Blitz-Fire:



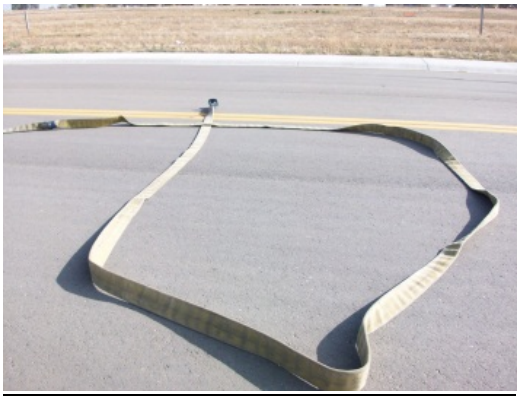
Blitz-Fire units are located on all LFR engines. This device has several advantages over ground monitors, large handlines, portable monitors and deck guns. The Blitz-Fire can easily be deployed by one firefighter and can rapidly be placed in operation. These units can be placed in any safe location and can flow up to 700gpm (depending on supply hose and nozzle selection). The unit can be preconnected to the apparatus, connected to a dead load, or stored in a compartment then connected to the desired hose line on the fire ground. This is dependent on the apparatus; obviously the unit preconnected to the apparatus can be placed into operation more rapidly.

Once the location for the Blitz-Fire is selected by the officer, the legs of the unit must be folded into the operating position prior to charging the hose line. In most cases the unit does not need to be secured further, but in cases of a slippery surface such as loose gravel, snow, ice, and wet surface, it is imperative that the unit is secured properly prior to flowing water. The unit can be manned or unmanned and can be operated by a single firefighter.

Large Hose line:

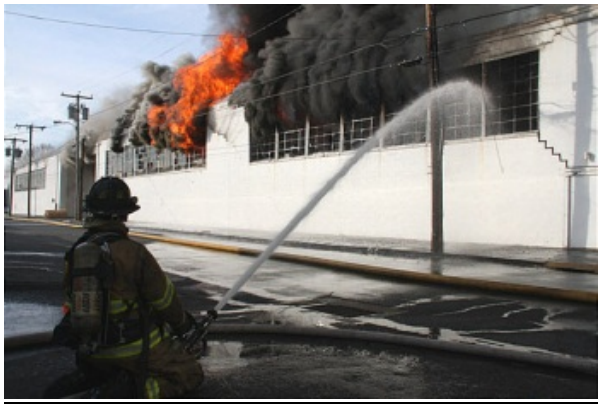


Large hose lines can be utilized as a master stream as well. Usually a 2 ½ line is considered a proper choice for master streams. The advantage of using a hose line is mobility. One major disadvantage is the staffing necessary to operate a 2 ½ hose line usually minimum of three firefighters, especially if the hose line must be moved during the operation. As with any other master stream operation, a safe location must be selected for positioning. Once the location is selected by the officer, the proper nozzle and amount of hose should be stretched with enough extra line to form a loop in which the nozzle can be fed under the line, and secured by the firefighter sitting on the crossing point of the hose lines.



With this set-up, one-to-two Firefighters can operate the hose line safely and effectively.

General Master Stream Safety Guidelines:



Master streams are an important component of controlling rapidly advancing and large fire situations. As with any fire ground operation, firefighter and public safety must be the priority when making decisions on when and where to utilize a master stream operation. Prior to placing heavy streams into operation, communication among all units on the fire ground must take place. Master streams should never be operated in an area where crews are inside the building. All devices and hose lines must be secured properly and set up out of the collapse zone to insure a safe fire ground. Manufacture operational recommendations (GPM/ PSI) of master stream devices must be adhered to at all times.