

FIRE AND RESCUE DEPARTMENT

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PROGRESSIVE HOSE DEPLOYMENT (1.1)

Developed by Lieutenant Mark Lyons, Engineer Kurt Nakata and Firefighter Robbie Popp December 2010

TASK SKILL DESCRIPTION AND DETAIL

Properly anchoring and deploying progressive hose during a wild land fire is critical to the safety of firefighters. The concept is once the hose is deployed and charged you can add to the end of the line with more hose of the same size or branch off with smaller hose, to be used for mop up, without having to shut off the hose at the pump.

Task #1 – Choose an anchor point. This may be in close proximity of the engine or it may be away from the engine.

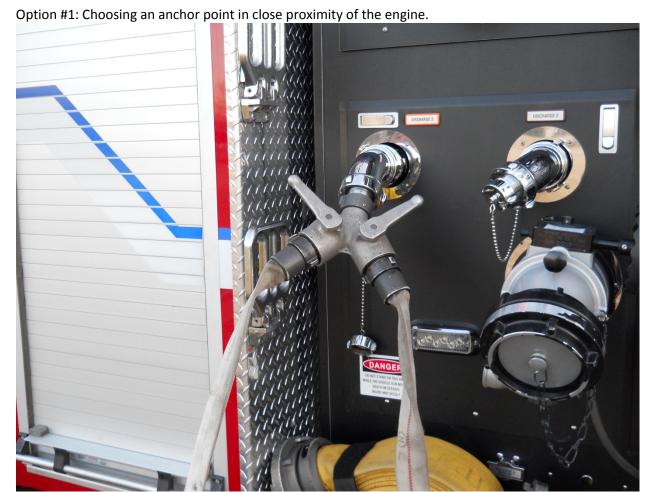


Figure 1



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Option #2: Using the engine as a hook up point and the anchor point further away from the engine. See the examples in Figures 2 and 3.



Figure 2

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Figure 3

Task #2 - The Firefighter deploys the progressive hose starter pack. Connect the hose to the wye either at the engine or at the end of the hose located at the anchor point (See Figure 3). Open up the starter pack and lay it out so that the hose deploys from the center of the Gasner.



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Figure 4



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Optional depending on how long of hose lay you have. Each of the firefighters can carry hose packs over their shoulder so they can keep progressing forward.



Figure 5



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Figure 6



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Figure 7



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Figure 8

Task #3 – Clamp the line upstream from the coupling when you need to add more trunk line. By removing the nozzle and add the next section of line, adding the nozzle to the end of that section. Remove the clamp slowly and progress the line forward after the line charges again.



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Figure 9

Task #4 – When adding lateral lines – (1) remove the 1" cap and connect the hose to the tee (2) turn on the water by turning the t-valve on the opposite side of the tee counter-clockwise. The 1" lines should be connected at every other tee. Each section will reach the same length as one of the main sections of hose. So by connecting at every other one, it should cover and be able to overlap with the spray between each section.



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Figure 10

Task #5 – At the end of each 1" line you can reduce the line down to a .75" line for mop up. Start by clamping the line as in task # 4. Remove the nozzle and connect the reducer to the tee on the end of the hose. Each side of the tee has a shut off valve on. Connect the .75" line to the end of the tee and put a nozzle on the other end. Make sure the shut off valve is open on the side of the tee you have connected the hose to. If there is not a second line added to the tee make sure the side with no hose connected is off. Remove the clamp slowly and continue with the mop up. Figures 10 and 11 show the two nozzle options for the .75" hose.



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Figure 11- nozzle



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Figure 12 - mop up wand



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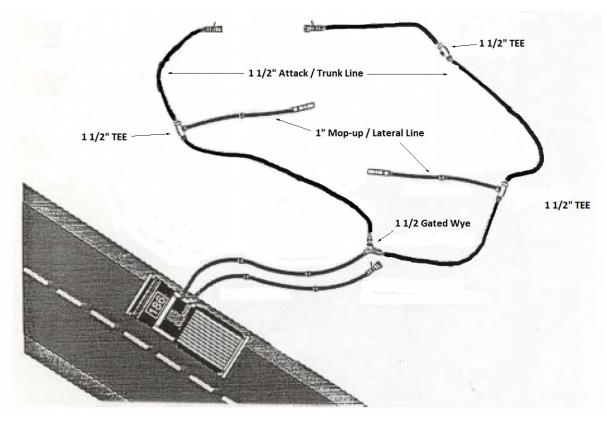


Figure 13

Figure 13 shows one way the progressive hose is deployed. The anchor point is at the 1 12 gated wye with the 1" mop up lateral lines in place on each side.



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PROGRESSIVE HOSE LOADS

Fire apparatus with 1000 feet of 1 ½" (E1, E3, E5, E6, E7, E8, WT1, WT5, E216, E236)

- Three attack packs (600 feet total).
 - **Note**: only two of the attack packs should have a nozzle on them.
- Four short attack packs (400 feet total).
- The 1" mop up lines (500 to 600 feet total).
- E216 and E236 has been modified to carry two attack packs of 200' and two attack packs of 100'.

Fire apparatus with 400 feet of 1 ½" Truck 7 (Squad2 = 700')

Two attack packs (400 feet total): Each attack pack should be loaded the same as the other loads described in this document. A NP to NH 1 ½" adaptor is added to female coupling on each attack pack (note: this is designed for a quick connection to engine's discharge – one for each attack pack).



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Reloading the Hose Packs and Inventory of the Appliance Bag

200' Starter Packs

Each attack pack should have two – 100 foot sections of 1 ½" with each 100 foot section rolled individually in a 5' Gasner load then joined together with a forest "T" valve in the center (T valve shut off screwed all the way down and the cap on the 1 inch outlet). See Fig. 13 for contents of 200' starter packs.



Figure 14 Contents to make up 200' starter pack



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Figure 15 200' Starter pack Gasner loads connected



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Figure 16 200' Starter pack completed

- 1. Then fold each 100 foot pack into a horseshoe as if to be carried on a shoulder.
- 2. Place one 100 foot section on top of the other with male end of the load facing up.
- 3. Then place another forest "T" on the male end then place an attack select gallon nozzle on the male end of the forest "T" each 200' pack should have a total of two forest "T".
- 4. Then join the load together with a husky strap at the center of the horseshoe fold so when lifted by the strap it can be carried on the shoulder, a wildland hose clamp should be placed connected to the husky strap, at this point you can hold the bottom of the horseshoe load together with a Velcro strap See Fig. 14 and 15

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100' Short Attack Packs



Figure 17 Contents to make up 100' Attack Packs

- 1. Short attack pack should be a 100 foot section of 1 $\frac{1}{2}$ " rolled in a 5' Gasner load.
- 2. A forest "T" valve should be placed on the female end coupling with the T valve off and the cap screwed on the 1 inch outlet.

See Figure 17 for the contents of a short 100' attack pack.



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Figure 18 100' Attack Pack complete

Then fold the load into a horseshoe, then at the fold place a husky strap. At this point you can hold the bottom of the horseshoe load together with a Velcro strap.

See Figure 18 for a complete 100' attack pack.



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1" Mop Up Lines

The 1" mop up lines should be rolled in single separate 100 foot Gasner loads. Each section should be in a 4' load then folded over into a horseshoe. A piece of Velcro or duct tape should be used to bind the load together at the horseshoe fold. 1 inch mop up line should be placed in a yellow wildland gear bag and placed on the apparatus all six loads will fit into one yellow bag.

The .75" mop up lines need to be rolled with a 1" to .75" reducer, a tee with shut off valves, nozzles with shut off valves and a spanner. All put into a small yellow FSS bag, two of these bags will go into the 1" mop up kit bag.

See Figures 20 and 21 for a complete mop up kit in the bag.



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Figure 20 Contents in 0.75" Mop up kit



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Figure 21 1" Mop up kit complete with .75" kits included.



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Appliance Bag



Figure 22 Contents of appliance bag

Inventory of Appliance Bag

- 1- Gated Wye
- 2- Hose clamps
- 2- Hose tees
- 2- 1½" NH to NPSH
- 1- 1½" Double Male
- 1- 1½" Double Female
- 2-1½" Female NPSH to1½" Male NH
- 2- 1½" Female NH to 1½" Male NPSH