INTRODUCTION

This manual establishes a series of standard incident-based company evolutions for District use. Collectively, these evolutions are known as the Company Performance Standards. Individual evolutions can be thought of as “plays” commonly run during an incident, and this manual can be thought of as the District’s official “playbook”. Each company is expected to be proficient in these evolutions and each crew member is expected to be skilled in their position-specific role within each evolution. For each role (Captain, Engineer, Firefighter) every required step has been expanded into a position-specific checklist. The checklists are designed to show the preferred or best course of action for the evolution. The checklists also help to avoid missed steps or blind spots in complex evolutions.

In addition to the information contained in this manual, personnel must be familiar with supporting District Policy and Procedure Documents including applicable Training/Safety Bulletins. Personnel should also review common operational reference texts including the Incident Response Pocket Guide, Fireline Handbook (PMS 410-1) and the Field Operations Guide (ICS 420-1).

Operations Team

Bryan Collins, Assistant Chief, Operations  Jack Barton, Battalion Chief
Derek Krause, Division Chief, Training  Mike Brown, Battalion Chief
Mike Picard, Battalion Chief, Special Operations  John Viera, Battalion Chief
# Company Performance Standards

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Forward Lay
Dry
SOP

Forward Lay DRY

Objective
Crew will lay an uncharged 4" supply line from a hydrant or split-lay location to the fire.

Given
Engine; three-person crew in full structural PPE

Additional Information

Position-specific Tasks

Captain
☐ If first arriving unit, perform Initial IC Responsibilities
  ○ Conduct Incident Risk Assessment
  ○ Transmit Initial Report on Conditions
  ○ Activate Radio Extender
  ○ Conduct walk-around size up; transmit Updated Condition Report
☐ Give order to crew
☐ Inform next due engine that you are “laying in dry” and request that they “pick-up” the supply line
☐ Indicate to Engineer where to spot at fire location
☐ Exit engine and retrieve appropriate tools
☐ If not first arriving unit, report for assignment; give orders

Engineer
☐ Stop at hydrant (tailboard approx. 10' past hydrant) or split-lay location
☐ Drive to fire upon signal from Firefighter on supply line
☐ Spot at fire; set brake; engage pump
☐ Don radio, earpiece/ mic and helmet
☐ Chock wheel
☐ Back break 4" hose and return male to hose bed
☐ Make intake connection
☐ Communicate to supply engine that supply line is ready to be charged
☐ Check line; remove kinks
☐ Perform coordinated support functions as necessary (utilities, lighting, stage equipment, etc.)

Firefighter
☐ Exit engine upon order of Captain
☐ Pull enough 4” line to reach hydrant or split-lay location
☐ Bring hydrant wrench
☐ Foot or wrap supply line
☐ Signal Engineer to continue to fire location
☐ Report to Captain for assignment
SOP Forward Lay WET

Objective Crew will lay and charge a 4” supply line from a hydrant to the fire location.

Given Engine; three-person crew in full structural PPE

Additional Information

Position-specific Tasks

Captain

☐ If first arriving unit, perform Initial IC Responsibilities
  o Conduct Incident Risk Assessment
  o Transmit Initial Report on Conditions
  o Activate Radio Extender
  o Conduct walk-around size up; transmit Updated Condition Report

☐ Give order to crew
☐ Transmit that you are “laying in wet”
☐ Indicate to Engineer where to spot at fire location
☐ Exit engine and retrieve appropriate tools
☐ If not first arriving unit, report for assignment; give orders

Engineer

☐ Stop at hydrant (tailboard approx. 10’ past hydrant)
☐ Drive to fire upon signal from Firefighter on supply line
☐ Spot at fire; set brake; engage pump
☐ Don radio, earpiece/mic and helmet
☐ Chock wheel
☐ Back break 4” hose and return male to hose bed
☐ Make intake connection
☐ Communicate to Firefighter that supply line is ready to be charged
☐ Check line; remove kinks
☐ Perform coordinated support functions as necessary (utilities, lighting, stage equipment, etc.)

Firefighter

☐ Exit engine upon order of Captain
☐ Pull hydrant wrench and enough 4” line to reach and hydrant
☐ Foot or wrap hydrant
☐ Signal Engineer to continue to fire location
☐ After supply line is secure remove 4-½” hydrant cap and check for obstructions
☐ Open hydrant to flush
☐ Close hydrant and connect supply hose
☐ Charge line when ordered by Engineer
☐ Follow supply line back to engine removing any kinks; move hose to side of street to allow access for other responding vehicles
☐ Report to Captain for assignment
Reverse Lay
SOP

Objective
Reverse Lay
Crew will lay a 4” line from an engine or truck out to a hydrant and pump into the supply line.

Given
Engine; three-person crew in full structural PPE

Additional Information

Position-specific Tasks

<table>
<thead>
<tr>
<th>Captain</th>
<th>Engineer</th>
<th>Firefighter</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Give order to crew</td>
<td>□ Stop at attack engine or truck</td>
<td>□ Exit engine upon order of Captain</td>
</tr>
<tr>
<td>□ Exit engine and retrieve appropriate tools</td>
<td>□ Drive to hydrant upon signal from Firefighter on supply line</td>
<td>□ Pull enough 4” line to reach any of the target engine intakes</td>
</tr>
<tr>
<td>□ Meet up with Firefighter</td>
<td>□ Spot at hydrant; set brake; engage pump</td>
<td>□ Foot supply line</td>
</tr>
<tr>
<td>□ Report to IC for assignment</td>
<td>□ Don radio, earpiece/ mic, and helmet</td>
<td>□ Signal Engineer to continue to hydrant location</td>
</tr>
<tr>
<td></td>
<td>□ Chock wheel</td>
<td>□ Assist with making connection to intake, if needed</td>
</tr>
<tr>
<td></td>
<td>□ Open front suction drain and pull front suction hose and tools to hydrant</td>
<td>□ Report to Captain for assignment</td>
</tr>
<tr>
<td></td>
<td>□ Remove 4 ½” hydrant cap and check for obstructions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ Open hydrant to flush</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ Close hydrant and connect front suction hose</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ Fully open hydrant</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ Close front suction drain</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ Open front suction valve (<em>note static pressure</em>)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ Back break 4” hose and return male to hose bed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ Connect 4” hose to #3 discharge</td>
<td></td>
</tr>
<tr>
<td>Captain</td>
<td>Engineer</td>
<td>Firefighter</td>
</tr>
<tr>
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<td>-------------</td>
</tr>
<tr>
<td>□ Notify attack Engineer that supply line is ready</td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ If time permits, move 4&quot; hose to side of street to allow access for other responding units</td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Charge supply line on order of attack engine Engineer (<em>use idle pressure unless adjustment is requested</em>)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Check line; remove kinks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ If incoming water supply pressure is excessive, disengage pump</td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ After continuous water supply is established, a second line should be connected to the hydrant to maximize available water and allow uninterrupted supply should first line fail</td>
<td></td>
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</tr>
</tbody>
</table>
Live Line Attack
SOP
Live Line Attack

Objective
Crew will fully advance a 200’ pre-connected “Live Line” and prepare for interior fire attack.

Given
Engine; three-person crew in full structural PPE

Additional Information

Position-specific Tasks

**Captain**
- If first arriving unit, perform Initial IC Responsibilities
  - Conduct *Incident Risk Assessment*
  - Transmit *Initial Report on Conditions*
  - Activate Radio Extender
  - Conduct walk-around size up; transmit *Updated Condition Report*
  - Give order to crew
  - Call for water when Firefighter indicates ready
  - Don face piece, hood, helmet, and gloves
  - Give order to enter when crew is ready

**Engineer**
- Spot at fire; set brake; engage pump
- Don radio, earpiece/ mic, and helmet
- Chock wheel
- Clear hose bed
- Ensure appropriate tools are at entry point
- Charge line on order of Captain; set pump pressure; set pressure relief or engage pump governor
- Check attack line; remove kinks
- Prepare to receive supply
- Check supply line; remove kinks
- Perform coordinated support functions as necessary (utilities, lighting, stage equipment, etc.)

**Firefighter**
- Exit engine upon order of Captain
- Pull Live Line to designated location
- Flake hose
- Indicate to Captain when ready for water
- Don face piece, hood, helmet, and gloves
- Bleed air from line and check for adequate stream and pattern
- Check door for heat
- Open door on order of Captain
SOP 2-½” Attack

Objective
Crew will place 200’ of 2-½” working line in service with nozzle ready for fire attack.

Given
Engine; three-person crew in full structural PPE

Additional Information

Position-specific Tasks

Captain
- If first arriving unit, perform Initial IC Responsibilities
  - Conduct Incident Risk Assessment
  - Transmit Initial Report on Conditions
  - Activate Radio Extender
  - Conduct walk-around size up; transmit Updated Condition Report
- Give order to crew
- Call for water when Firefighter indicates ready
- Assist in preparing for fire attack (make connections, flake line, etc.)
- Don face piece, hood, helmet, and gloves
- Attack fire; report on progress

Engineer
- Spot at fire; set brake; engage pump
- Don radio, earpiece/ mic, and helmet
- Chock wheel
- Ensure appropriate tools are at entry point
- Assist firefighter with 2-½” hose
- Pull off required amount of hose
- Back break hose and connect to discharge
- Charge line on order of Captain; set pump pressure; set pressure relief or engage pump governor
- Check attack line; remove kinks
- Prepare to receive supply
- Check supply line; remove kinks
- Perform coordinated support functions as necessary (utilities, lighting, stage equipment, etc.)

Firefighter
- Exit engine upon order of Captain
- Pull 2-½” nozzle and first loop to location designated by Captain
- Pull and flake sufficient 2-½” hose to reach fire access point
- Indicate to Captain when ready for water
- Don face piece, hood, helmet, and gloves
- Bleed air from line and check for adequate stream and pattern
- Attack fire with Captain
SOP

Objective

Crew will deploy needed length of 2-½” hose and place high-rise bundle in service.

Given

Engine; three-person crew in full structural PPE

Additional Information

Position-specific Tasks

**Captain**
- If first arriving unit, perform Initial IC Responsibilities
  - Conduct Incident Risk Assessment
  - Transmit Initial Report on Conditions
  - Activate Radio Extender
  - Conduct walk-around size up; transmit Updated Condition Report
- Give order to crew
- Exit engine and retrieve appropriate tools
- Shoulder load second high-rise pack
- Stage high-rise pack at location best suited for initial attack
- Call for water when Firefighter indicates ready
- Assist in preparing for fire attack (make connections, flake line, etc.)
- Don face piece, hood, helmet, and gloves
- Give order to enter when crew is ready

**Engineer**
- Spot at fire; set brake; engage pump
- Don radio, earpiece/ mic, and helmet
- Chock wheel
- Ensure appropriate tools are at entry point
- Assist crew with 2-½” hose
- Pull off required amount of hose
- Back break hose and connect to discharge
- Charge line on order of Captain; set pump pressure; set pressure relief or engage pump governor
- Check attack line; remove kinks
- Prepare to receive supply
- Check supply line; remove kinks
- Perform coordinated support functions as necessary (utilities, lighting, stage equipment, etc.)

**Firefighter**
- Exit engine upon order of Captain
- Shoulder load high-rise pack with wye and grab 2-½” line
- Follow Captain to designated location
- Connect high-rise pack with wye to end of 2-½”
- Flake hose
- Open wye to 1-¾” hose
- Indicate to Captain when ready for water
- Don face piece, hood, helmet, and gloves
- Bleed air from line and check for adequate stream and pattern
- Check door for heat
- Open door on order of Captain
Live Line Attack with Foam
**SOP**  
Live Line Attack with Foam

**Objective**  
Crew will place 200’ of 1-½” pre-connected “Live Line” in service with foam, eductor and Class B foam nozzle.

**Given**  
Engine; three-person crew in full structural PPE

**Additional Information**

<table>
<thead>
<tr>
<th>Position-specific Tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Captain</strong></td>
</tr>
<tr>
<td>□ If first arriving unit, perform Initial IC Responsibilities</td>
</tr>
<tr>
<td>o Conduct Incident Risk Assessment</td>
</tr>
<tr>
<td>o Transmit Initial Report on Conditions</td>
</tr>
<tr>
<td>o Activate Radio Extender</td>
</tr>
<tr>
<td>o Conduct walk-around size up; transmit Updated Condition Report</td>
</tr>
<tr>
<td>□ Give order to crew</td>
</tr>
<tr>
<td>□ Bring foam containers to eductor location</td>
</tr>
<tr>
<td>□ Call for water when Firefighter indicates</td>
</tr>
<tr>
<td>□ Don face piece, hood, helmet, and gloves</td>
</tr>
<tr>
<td>□ Give order to attack when crew is ready</td>
</tr>
<tr>
<td>□ Request additional foam and resources as needed</td>
</tr>
</tbody>
</table>

| **Engineer**                           |
| □ Spot at fire; set brake; engage pump |
| □ Don radio, earpiece/ mic, and helmet |
| □ Chock wheel                           |
| □ Clear hose bed                        |
| □ Install foam eductor 150’ from nozzle |
| □ Charge line on order of Captain; set pump pressure; set pressure relief or engage pump governor |
| □ Check line and remove all remaining kinks |
| □ Open all three foam containers        |
| □ Insert eductor into first container   |
| □ Set proportioning meter to proper concentration |
| □ Prepare to receive supply             |
| □ Monitor foam use and change foam containers as needed |
| □ Call for additional foam as necessary |

| **Firefighter**                        |
| □ Exit engine upon order of Captain   |
| □ Retrieve Class B foam nozzle and install in place of fog nozzle |
| □ Pull pre-connected line to designated location |
| □ Flake hose                           |
| □ Indicate to Captain when ready for water |
| □ Don face piece, hood, helmet, and gloves |
| □ Bleed air from line and check for adequate stream, pattern, and foam |
| □ Commence attack on order of Captain |

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**San Ramon Valley Fire Protection District**  
03/09
Hoisting 2-1/2” Line and Nozzle with Drop Line
SOP

Hoisting 2-½” Hose and Nozzle with Drop Line

Objective

Crew will hoist 2-½” hose using drop line and connect and supply two high rise packs.

Given

Engine; three-person crew in full structural PPE

Additional Information

Hoisting hose for fire attack in multiple story buildings.

Position-specific Tasks

Captain

☐ If first arriving unit, perform Initial IC Responsibilities
  ▪ Conduct Incident Risk Assessment
  ▪ Transmit Initial Report on Conditions
  ▪ Activate Radio Extender
  ▪ Conduct walk-around size up: transmit Updated Condition Report

☐ Give order to crew
☐ Exit engine and retrieve appropriate tools
☐ Shoulder load second high rise pack; proceed to designated fire access point
☐ Assist in preparing for fire attack (make connections, flake line, etc.)
☐ Don face piece, hood, helmet, and gloves
☐ Give order to enter when crew is ready

Engineer

☐ Spot at fire; set brake; engage pump
☐ Don radio, earpiece/ mic, and helmet
☐ Chock wheel
☐ Assist crew with hose and appropriate tools
☐ Pull off required amount of 2-½” hose; leave nozzle connected
☐ Secure 2-½” nozzle/hose to drop line
☐ Facilitate hoisting hose up to fire access point
☐ Back break hose and hook up to 2-½” discharge
☐ Charge line on order of Captain; set pump pressure; set pressure relief or engage pump governor
☐ Check attack line; remove kinks
☐ Prepare to receive supply
☐ Check supply line; remove kinks
☐ Perform coordinated support functions as necessary (utilities, lighting, stage equipment, etc.)

Firefighter

☐ Exit engine upon order of Captain with drop line
☐ Shoulder load high rise pack with wye and proceed to fire access point
☐ At fire access point, drop rope to engineer for hose tie-off
☐ Hoist sufficient 2-½” hose to reach fire access point
☐ Secure hose
☐ Remove nozzle and connect 2-½” stinger and high rise packs
☐ Flake high rise packs for fire attack
☐ Indicate to Captain when ready for water
☐ Don face piece, hood, helmet, and gloves
☐ Bleed air from line and check for adequate stream and pattern
☐ Check door for heat
☐ Open door on order of Captain
Standpipe Attack
**SOP**  
Standpipe Attack

**Objective**  
Crew will place high rise packs in service from a standpipe connection.

**Given**  
Engine; three-person crew in full structural PPE

**Additional Information**  
Incoming unit assignment.

### Position-specific Tasks

<table>
<thead>
<tr>
<th>Captain</th>
<th>Engineer</th>
<th>Firefighter</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Receive assignment</td>
<td>□ Spot apparatus; set brake</td>
<td>□ Exit engine upon order of Captain</td>
</tr>
<tr>
<td>□ Give order to crew</td>
<td>□ Chock wheel</td>
<td>□ Shoulder load and carry one high-rise bundle to standpipe connection one floor below fire</td>
</tr>
<tr>
<td>□ Shoulder load and carry one high-rise bundle and irons to standpipe connection one floor below fire</td>
<td>□ Assist crew with equipment, as needed</td>
<td>□ Shoulder load and carry one high-rise bundle to standpipe connection one floor below fire</td>
</tr>
<tr>
<td>□ Confirm standpipe is charged</td>
<td>□ Perform duties as assigned by Captain</td>
<td>□ Flake first bundle up stairwell</td>
</tr>
<tr>
<td>□ Connect pack with 2-1/2&quot; stinger to standpipe</td>
<td></td>
<td>□ Connect second bundle (as needed) and continue to flake dry hose up stairwell</td>
</tr>
<tr>
<td>□ Assist Firefighter with flaking dry hose up stairwell</td>
<td></td>
<td>□ Indicate to Captain when ready for water</td>
</tr>
<tr>
<td>□ Charge hose when Firefighter indicates ready</td>
<td>□ Don face piece, hood, helmet, and gloves</td>
<td>□ Don face piece, hood, helmet, and gloves</td>
</tr>
<tr>
<td>□ Don face piece, hood, helmet, and gloves</td>
<td>□ Bleed air from line and check for adequate stream and pattern</td>
<td>□ Bleed air from line and check for adequate stream and pattern</td>
</tr>
<tr>
<td>□ Give order to enter when crew is ready</td>
<td>□ Check door for heat</td>
<td>□ Check door for heat</td>
</tr>
<tr>
<td></td>
<td>□ Open door on order of Captain</td>
<td>□ Open door on order of Captain</td>
</tr>
</tbody>
</table>
Company Performance Standard No. 10

SOP

Objective
Place portable ground monitor in service with engine spotted at attack location.

Given
Engine; three-person crew in full structural PPE

Additional Information
Could also be performed with a Reverse Lay after dropping equipment at attack location.

Position-specific Tasks

Captain
☐ If first arriving unit, perform Initial IC Responsibilities
  o Conduct Incident Risk Assessment
  o Transmit Initial Report on Conditions
  o Activate Radio Extender
  o Conduct walk-around size up; transmit Updated Condition Report
☐ Give order to crew
☐ Determine best location for monitor and request water supply if one cannot be established by your crew
☐ Receive deck gun and portable monitor base from firefighter at the top of engine
☐ Carry portable base to desired location
☐ With firefighter, pull enough 4” hose to reach the portable monitor plus at least 50’ to wrap monitor
☐ Call for water when crew is ready

Engineer
☐ Spot at fire; set brake; engage pump
☐ Don radio, earpiece/ mic, and helmet
☐ Chock wheel
☐ Pull off required amount of hose
☐ Assist crew with pulling hose to the monitor if time permits
☐ Back break hose and connect to discharge
☐ Charge line on order of Captain; set pump pressure; set pressure relief or engage pump governor
☐ Check monitor line; remove kinks
☐ Prepare to receive supply
☐ Check supply line; remove kinks
☐ Perform coordinated support functions as necessary (utilities, lighting, stage equipment, etc.)

Firefighter
☐ Exit engine upon order of Captain
☐ Climb to top of engine and change deck gun nozzle from fog nozzle to smooth bore stack tips, if directed
☐ Remove deck gun and portable base from engine and pass down to Captain
☐ Carry deck gun to portable monitor base and attach
☐ With Captain, pull enough 4” hose to reach the portable monitor plus at least 50’ to wrap monitor
☐ With Captain, attach hose and secure to monitor base
☐ Aim discharge upward
☐ Adjust stream direction after water is flowing
Objective
Place portable ground monitor in service with proportioned foam at attack location.

Given
Engine; three-person crew in full structural PPE

Additional Information
Could also be performed with a Reverse Lay after dropping equipment at attack location.

Position-specific Tasks

**Captain**
- If first arriving unit, perform Initial IC Responsibilities
  - Conduct Incident Risk Assessment
  - Transmit Initial Report on Conditions
  - Activate Radio Extender
  - Conduct walk-around size up; transmit Updated Condition Report
- Give order to crew
- Determine the best location for monitor and request water supply if one cannot be established by your crew
- Request additional foam
- Remove master stream foam eductor, pick-up tube, and foam nozzle from engine and place at desired monitor location
- Receive deck gun and portable monitor base from firefighter at the top of engine

**Engineer**
- Spot at fire; set brake; engage pump
- Don radio, earpiece/ mic, and helmet
- Chock wheel
- Establish a water supply
- Remove foam concentrate buckets from engine and place at portable monitor
- Assist crew with pulling hose to the monitor if time permits
- Back break hose and connect to discharge
- Charge line on order of Captain; set pump pressure; set pressure relief or engage pump governor
- Check monitor line; remove kinks
- Check supply line; remove kinks
- Perform coordinated support functions as necessary (utilities, lighting, stage equipment, etc.)

**Firefighter**
- Exit engine upon order of Captain
- Climb to top of engine; remove nozzle and stream straightener from deck gun
- Remove deck gun and portable base from engine and pass down to Captain
- Carry deck gun to portable monitor base and attach
- Attach eductor and install proportioning disk; attach pick-up tube and nozzle
- With Captain, pull enough 4” hose to reach the portable monitor plus at least 50’ to wrap monitor
- With Captain, attach hose and secure to monitor base
- Aim discharge upward
- Adjust stream direction after water is flowing
<table>
<thead>
<tr>
<th>Captain</th>
<th>Engineer</th>
<th>Firefighter</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Carry portable base to desired location</td>
<td>□ Determine proper proportioning disk to use and relay to Firefighter</td>
<td></td>
</tr>
<tr>
<td>□ Determine proper proportioning disk to use and relay to Firefighter</td>
<td>□ With Firefighter, pull enough 4” hose to reach the portable monitor plus at least 50’ to wrap monitor</td>
<td></td>
</tr>
<tr>
<td>□ With Firefighter, pull enough 4” hose to reach the portable monitor plus at least 50’ to wrap monitor</td>
<td>□ With Firefighter, attach hose and secure to monitor base</td>
<td></td>
</tr>
<tr>
<td>□ Call for water when crew is ready</td>
<td>□ Call for water when crew is ready</td>
<td></td>
</tr>
<tr>
<td>□ Place pick-up tube in foam bucket</td>
<td>□ Place pick-up tube in foam bucket</td>
<td></td>
</tr>
</tbody>
</table>
Mobile Attack
SOP

Objective
Perform mobile attack using 25’ front bumper line and 25’ 1” rear line.

Given
Type 3 Engine; three person crew in full Wildland PPE

Additional Information

Position-specific Tasks

Captain
- If first arriving unit, perform Initial IC Responsibilities
  - Conduct Incident Risk Assessment
  - Transmit Initial Report on Conditions
  - Activate Radio Extender
  - Conduct size up: transmit Updated Condition Report
- Give order to crew
- Evaluate and discuss LCES
- Determine anchor point and relay to Engineer
- Exit cab with two portable radios (SRM & BK)
- Pull 25’ of 1” line from rear compartment and flake hose out
- Pull 1” rear discharge to open valve
- Bleed air from line and check for adequate stream and pattern
- Signal to Engineer when ready
- Observe crew performance and fire behavior

Engineer
- Spot engine; set brake
- Turn on emergency warning lights
- Engage pump, move selector switch to pump and roll position and relief valve to cab position
- Set pump pressure; set pressure relief
- Turn on foam if directed
- Engage front axle, low range selector, engage rear differential lock (if equipped)
- Upon Captain and Firefighter signal, release parking brake and move forward
- Keep a safe distance between engine and Firefighter
- Stop engine if either crew member cannot be seen

Firefighter
- Exit engine upon order of Captain
- Open front bumper compartment door
- Disconnect 1-½” coupling at the 75’/25’ coupling
- Take nozzle off the end of the hose
- Attach nozzle to male end of hose (25’ section of hose)
- Pull 25’ line out of bumper compartment
- Confirm that nozzle is in off position; open discharge valve
- Bleed air from line and check for adequate stream and pattern
- Signal to Engineer when ready
- Extinguish fire and maintain a continuous wet line
Progressive Hose Lay
Company Performance Standard No. 13

SOP

Objective

Advance progressive hose line while maintaining a continuous wet line.

Given

Engine; three person crew in full Wildland PPE

Additional Information

Position-specific Tasks

Captain

☐ If first arriving unit, perform Initial IC Responsibilities
  o Conduct Incident Risk Assessment
  o Transmit Initial Report on Conditions
  o Activate Radio Extender
  o Conduct size up; transmit Updated Condition Report

☐ Give order to crew
☐ Evaluate and discuss LCES
☐ Determine anchor point and relay to Engineer
☐ Exit cab with two portable radios (SRM & BK)
☐ Don progressive hose pack
☐ Join Firefighter at the nozzle
☐ Pull hose for Firefighter
☐ Continually keep Firefighter updated on remaining hose needed to be pulled
☐ Pull string on hose pack to drop a length of hose
☐ Unclip orange hose strap

Engineer

☐ Spot engine; set brake; engage pump
☐ Exit cab wearing proper PPE with radio
☐ Chock wheel
☐ Open front bumper and pull 100’ of hose
☐ Flake hose for crew
☐ Charge line on order of Captain; set pump pressure; set pressure relief
☐ Engage foam if directed
☐ Look for water source
☐ Monitor LCES
☐ Support crew as needed
☐ Communicate continuously with crew

Firefighter

☐ Exit engine upon order of Captain
☐ Don progressive hose pack
☐ Join Captain at the nozzle
☐ Advance hose to anchor point on fire line
☐ Extinguish fire and create a continuous wet line
☐ Pull string on hose pack to drop a length of hose
☐ Knock down fire as far ahead as straight stream will reach
☐ Once hose is clamped, remove nozzle
☐ Take male end of hose from Captain
☐ Attach nozzle to male end of hose
☐ Advise Captain when ready for water
☐ Advance hose and extinguish fire with a continuous wet line
☐ Repeat steps as needed to continue progressive hose lay
☐ Monitor LCES
☐ Communicate continuously with crew
<table>
<thead>
<tr>
<th>Captain</th>
<th>Engineer</th>
<th>Firefighter</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Open hose in a doughnut configuration</td>
<td>☐ Clamp hose several feet from the coupling</td>
<td>☐ Advise when hose is clamped</td>
</tr>
<tr>
<td>☐ Clamp hose several feet from the coupling</td>
<td>☐ Hand the male end of the hose to the Firefighter</td>
<td>☐ Hand the male end of the hose to the Firefighter</td>
</tr>
<tr>
<td>☐ Advise when hose is clamped</td>
<td>☐ Join the female and the male end of the hose together</td>
<td>☐ Join the female and the male end of the hose together</td>
</tr>
<tr>
<td>☐ Hand the male end of the hose to the Firefighter</td>
<td>☐ Advise water is coming and release hose clamp</td>
<td>☐ Advise water is coming and release hose clamp</td>
</tr>
<tr>
<td>☐ Join the female and the male end of the hose together</td>
<td>☐ Continually pull hose for Firefighter</td>
<td>☐ Continually pull hose for Firefighter</td>
</tr>
<tr>
<td>☐ Advise water is coming and release hose clamp</td>
<td>☐ Continually evaluate crew performance and LCES</td>
<td>☐ Continually evaluate crew performance and LCES</td>
</tr>
<tr>
<td>☐ Continually pull hose for Firefighter</td>
<td>☐ Communicate continuously with crew</td>
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</tr>
</tbody>
</table>
Structure Protection
Bump and Run
SOP

Structure Protection: “Bump and Run”

Objective

Crew will deploy a minimum of 100’ of 1-½” hose and then load it onto rear mounted hooks.

Given

Engine; three person crew in full Wildland PPE

Additional Information

Position-specific Tasks

**Captain**
- If first arriving unit, perform Initial IC Responsibilities
  - Conduct Incident Risk Assessment
  - Transmit Initial Report on Conditions
  - Activate Radio Extender
  - Conduct size up; transmit Updated Condition Report
- Give order to crew
- Evaluate and discuss LCES
- Exit cab with two portable radios (SRM and BK)
- Triage structure; determine suppression needs
- Direct Firefighter to deploy 1-½” single jacket line (100-200’) to the side of the structure most at risk
- Assist Firefighter in fire attack
- Give the order to shut down
- Assist loading hose onto hooks
- Take position in cab; account for crew

**Engineer**
- Discuss LCES
- Back engine into safe location
- Attempt to keep structure between the engine and the fire.
- Engage pump; engage foam unit if directed
- Exit cab wearing proper PPE with radio
- Chock wheel
- Attach line to rear discharge
- Charge line on order; set pump pressure; set pressure relief
- Install hose hooks on back of engine
- Shut down discharge on order
- Disengage pump; prepare engine to move to next location

**Firefighter**
- Discuss LCES
- Exit engine upon order of Captain
- Assist Engineer with placement of engine
- Deploy line where directed
- Call for water
- Leave nozzle open after line is shut down
- Load hose onto hooks
- Take position in cab
Structure Protection
Anchor and Hold
SOP
Structure Protection: “Anchor and Hold”

Objective
Crew will deploy 1-½” lines 100’-200’ and then loop load it onto rear mounted hooks.

Given
Engine; three person crew in full Wildland PPE.

Additional Information

Position-specific Tasks

**Captain**
- □ If first arriving unit, perform **Initial IC Responsibilities**
  - o Conduct **Incident Risk Assessment**
  - o Transmit **Initial Report on Conditions**
  - o Activate Radio Extender
  - o Conduct size up; transmit **Updated Condition Report**
- □ Give order to crew
- □ Evaluate and discuss LCES
- □ Exit cab with two portable radios (SRM & BK)
- □ Triage structure; determine preparation and protection needs
- □ Direct firefighter to deploy 1-½” single jacket line (100-200’) to the side of the structure most at risk
- □ Consider pulling an additional 1-½” single jacket line (100-200’) to the opposite side of the structure
- □ Call for water
- □ Prepare structure as needed and as time permits

**Engineer**
- □ Discuss LCES
- □ Back engine into safe location
- □ Attempt to keep structure between the engine and the fire
- □ Engage pump; engage foam unit if directed
- □ Exit cab wearing proper PPE with radio
- □ Chock wheel
- □ Deploy engine protection line. Look for water source (*garden hose, etc.*)
- □ Open discharge; set pump pressure; set pressure relief
- □ Install/open hose hooks on back of engine
- □ Prepare structure as needed and time permits

**Firefighter**
- □ Discuss LCES
- □ Exit engine upon order of Captain
- □ Assist engineer with placement of engine
- □ Deploy line where directed
- □ Call for water when ready
- □ Prepare structure as needed and as time permits
Water Shuttle Operation with Folding Water Tank Deployment
SOP

Water Shuttle Operation with Portable Folding Water Tank Deployment

Objective

Crew will establish portable tank water drafting source and initiate water shuttle operation.

Given

Water tender with Portable Folding Water Tank; three person crew in Wildland PPE

Additional Information

Incoming unit assignment.

Position-specific Tasks

**Captain**

- Enroute, identify closest hydrant/water source location to refill water tender
- Give order to set up for water shuttle operation from portable folding water tank
- Communicate and coordinate with supporting units
- Determine best area for setup
  - Portable folding water tank setup considerations:
    - Do not block driveway or access points
    - Position drain on downhill side
    - Avoid or remove sharp objects from tank location
    - Leave room for supply engine and incoming water tenders
- Assist with portable folding water tank set up
- Request additional resources as needed

**Engineer**

- Spot water tender; set brake
- Chock wheel
- Deploy portable folding water tank
- Fill portable folding water tank off rear or side dump valve
- Confirm location of hydrant with Captain and go refill water tender
- Shuttle water as needed to keep portable folding water tank full

**Firefighter**

- Exit water tender upon order of Captain
- Assist Engineer with water tender placement
- Assist Engineer with portable folding water tank deployment
- Remove equipment from water tender before the tender leaves to refill
  - *(Leave equipment with supply engine or attack engine)*
    - Tarp
    - Large volume portable pump
    - Fuel can
    - Hard suction
    - Flat Bottom Strainer
- Report to Captain for assignment
Drafting from Portable Water Tank
Drafting from a Portable Water Tank

Objective
Crew will perform drafting operation from portable water tank.

Given
Engine; three person crew in appropriate PPE

Additional Information
Incoming unit assignment.

Position-specific Tasks

**Captain**
- Give order to set up for drafting from a portable water tank
- Determine best area to spot supply engine
- Assist Firefighter and Engineer with on scene setup
- Coordinate water supply operation with supporting units

**Engineer**
- Spot engine 3’-4’ from portable water tank; set brake; engage pump
- Chock wheel
- Assist Firefighter with placement of hard suction and strainer
- Move to pump panel and close all valves
- Increase engine RPM’s to 1000-1200
- Open suction valve and observe compound gauge for vacuum while priming pump
- Primer will discharge water on ground as pressure registers on the discharge gauge
- Maintain a minimum of 50 PSI while opening discharge valve slowly
- Place open booster line into tank to circulate water and maintain prime

**Firefighter**
- Exit engine upon order of Captain
- Assist Engineer with spotting of apparatus near portable water tank (optimal placement is off corner of tank using engine front suction)
- Remove both lengths of 10’ hard suction hose from engine
- Attach strainer to male end of hard suction hose
- Place strainer end of hard suction hose into portable water tank
- Attach female end of hard suction hose to engine front suction. Use side suction if unable to use front suction
- Connect supply line to engine
Rapid Intervention Crew
SOP

Rapid Intervention Crew (RIC)

Objective

Crew will gather the necessary equipment and information in order to perform RIC functions.

Given

Engine, Truck, or USAR; three-person crew in full structural PPE

Additional Information

Position-specific Tasks

<table>
<thead>
<tr>
<th>Captain</th>
<th>Engineer</th>
<th>Firefighter</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Give order to crew</td>
<td>☐ Spot apparatus; set brake &lt;br&gt;☐ Chock wheel &lt;br&gt;☐ Don full PPE with appropriate tools and equipment &lt;br&gt;☐ Locate suitable location for staging of RIC equipment &lt;br&gt;☐ Retrieve and assemble RIC equipment per SRM Operations Policy FF041, Rapid Intervention Crew &lt;br&gt;☐ Complete additional tasks as directed (laddering, softening building, etc.) &lt;br&gt;☐ Monitor tactical radio channel and activities and stand by with Firefighter for deployment</td>
<td>☐ Exit apparatus in full PPE with appropriate tools and equipment &lt;br&gt;☐ Retrieve strobe/first-in bag and report to Captain &lt;br&gt;☐ Conduct scene size-up with Captain &lt;br&gt;☐ Assist Engineer in retrieving remaining equipment; place in RIC staging area &lt;br&gt;☐ Complete additional tasks as directed (laddering, softening the building, etc.) &lt;br&gt;☐ Monitor tactical radio channel and activities and stand by with Engineer for deployment &lt;br&gt;☐ Conduct scene size-up with Firefighter &lt;br&gt;☐ Assist Engineer in retrieving remaining equipment; place in RIC staging area</td>
</tr>
<tr>
<td>Captain</td>
<td>Engineer</td>
<td>Firefighter</td>
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<tr>
<td>- Identify initial rescue concerns and develop incident specific Rapid Intervention Plan</td>
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<td>- Work with IC to monitor operations and update contingency plans (<em>i.e.</em> identify secondary TAC channel, need for additional RICs, etc.)</td>
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</tbody>
</table>
VERTICAL VENTILATION
FROM GROUND LADDER
SOP

Vertical Ventilation from Ground Ladder

Objective

Crew will access roof with all necessary tools and personnel to perform vertical ventilation.

Given

Truck or Engine; three-person crew in structural PPE

Additional Information

Ground ladder selection will dictate a one, two, or three person raise.

Position-specific Tasks

<table>
<thead>
<tr>
<th>Captain</th>
<th>Engineer</th>
<th>Firefighter</th>
</tr>
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</table>
| □ If first arriving unit, perform Initial IC Responsibilities  
  o Conduct Incident Risk Assessment  
  o Transmit Initial Report on Conditions  
  o Activate Radio Extender  
  o Conduct walk-around size up; transmit Updated Condition Report  
| □ Give order to crew  
| □ Set wheel chocks (Truck; optional)  
| □ Set outrigger (Truck; optional)  
| □ Determine fire location  
| □ Remove and raise ground ladder (as needed)  
| □ Hang roof hook on climbing ladder  
| □ Raise roof ladder to climbing ladder (as needed)  
| □ Don face piece, hood, helmet, and gloves; on air before ascending ladder  
| □ Take chain saw aloft  
| □ Evaluate roof conditions  
| □ Spot apparatus; set brake  
| □ Set cab (Truck)  
| □ Chock wheel  
| □ Exit cab wearing proper PPE with radio  
| □ Don SCBA  
| □ Strip and start chain saws  
| □ Stage chain saws  
| □ Remove and raise ground ladder (as needed)  
| □ Don face piece, hood, helmet, and gloves; on air before ascending ladder  
| □ Take roof ladder aloft and position (as needed)  
| □ Evaluate roof conditions  
| □ Sound roof from ladder w/roof hook  
| □ Exit ladder and foot ladder from above  
| □ Continue to sound roof to ventilation location  
| □ Exit apparatus on order of Captain  
| □ Exit cab wearing proper PPE/SCBA with radio  
| □ Remove and raise ground ladder  
| □ Foot ground ladder  
| □ Don face piece, hood, helmet, and gloves; on air before ascending ladder  
| □ Take chain saw aloft  
| □ Evaluate roof conditions  
| □ Exit ladder to roof  
| □ Commence ventilation operation upon order of Captain  

San Ramon Valley Fire Protection District 03/09
☐ Exit ladder to roof
☐ Report any significant roof conditions to IC and/or interior crews
☐ Direct ventilation operation

☐ Commence ventilation operation upon order of Captain
VERTICAL VENTILATION
FROM AERIAL LADDER
SOP

Vertical Ventilation from Aerial Ladder (Commercial)

Objective

Crew will access roof with all necessary tools and personnel to perform vertical ventilation.

Given

Truck; three-person crew in full structural PPE

Additional Information

Position-specific Tasks

Captain

Engineer

Firefighter

San Ramon Valley Fire Protection District 03/09
Vertical Ventilation from Aerial Ladder (Residential)
Crew will access roof with all necessary tools and personnel to perform vertical ventilation.

Truck; three-person crew in full structural PPE

Position-specific Tasks

Captain
Engineer
Firefighter
SOP

Elevated Stream

Objective

Crew will prepare TDA for elevated stream operation.

Given

Tractor Drawn Apparatus (TDA); three-person crew in full structural PPE

Additional Information

Position-specific Tasks

**Captain**
- If first arriving unit, perform *Initial IC Responsibilities*
  - Conduct *Incident Risk Assessment*
  - Transmit *Initial Report on Conditions*
  - Activate Radio Extender
  - Conduct walk-around size up; transmit *Updated Condition Report*
- Give order to crew
- Set wheel chocks *(optional)*
- Set outrigger *(optional)*
- Determine fire location
- Determine nozzle type
- Connect 4" stinger from pump discharge to waterway inlet *(as necessary, based on water supply configuration)*
- Inform engineer that aerial waterway is connected to pump *(if appropriate)*
- Direct Engineer to charge aerial master stream upon order from IC

**Engineer**
- Spot truck; set brake
- Set cab and engage pump
- Chock wheels
- Set outriggers and lock-out
- Connect 4" supply
- Prepare to receive supply
- Inform supply engine when ready for water
- Check supply line; remove kinks
- Charge aerial master stream upon order from Captain; set pump pressure
- Monitor pump operations
- Operate pedestal

**Firefighter**
- Exit apparatus on order of Captain
- Exit cab wearing proper PPE with radio
- Assist Engineer with spotting truck
- Pin waterway at tip of ladder
- Change nozzle if directed
- Raise aerial to directed position
- Report to Captain for assignment
- If directed to tip of ladder: Don SCBA, face piece, hood, helmet, gloves, and ladder belt; on air before ascending aerial ladder
- Manage aerial master stream for effective use
☐ Direct Firefighter to tip of ladder *(if necessary and safe to staff)*
☐ Monitor operation for safety and effectiveness
SOP

Rescue Basket

Objective

Crew will prepare Truck for rescue basket (Stokes) operation.

Given

Truck; three-person crew in appropriate PPE

Additional Information

Minimum of three crews required for Rescue Basket operation.

Position-specific Tasks

**Captain**
- If first arriving unit, perform *Initial IC Responsibilities*
  - Conduct *Incident Risk Assessment*
  - Transmit *Initial Report on Conditions*
  - Activate Radio Extender
  - Conduct walk-around size up; transmit *Updated Condition Report*
- Give order to crew
- Assess scene for proper truck placement
- Set wheel chocks *(optional)*
- Set outrigger *(optional)*
- Retrieve “Stokes operation” equipment bag; remove ladder tip roller and give to Firefighter
- Retrieve two rope bags and hand to crew member at turntable
- Place “Stokes operation” equipment bag on turntable
- Retain both rope ends while ladder is moving

**Engineer**
- With Captain, assess scene for proper truck placement
- Spot truck; set brake
- Set cab
- Chock wheels
- Set outriggers and lock-out
- Attach descent control device (Rack) and carabineers to bottom rung of ladder and load rope
- Operate ladder; place tip approximately 10’ off ground at selected rigging location
- Climb ladder and safety check system from tip to turntable
- Upon order of Captain, raise ladder to position for Stokes placement
- Manage rope bags, as necessary

**Firefighter**
- Assist Engineer with spotting truck
- At aerial ladder tip, confirm waterway is pinned
- Attach ladder tip roller to ladder
- Return to turntable
- Tie “figure eight-on-a-bite” knot at end of both ropes
- Feed both ropes between ladder beams toward ladder tip
- Feed knots through rope guide on rope roller and hand to Captain
- After ladder is lifted from bed, confirm nozzle tip is pointed downward
- Manage rope bags to allow rope to pay out during raising of ladder
- Assist Captain with Stokes set up, as necessary
- Attach guide rope(s) to stokes
- Safety check system from tip of ladder to Stokes
- Operate guide rope to keep Stokes in desired position
☐ Once ladder is in place, remove Stokes litter from rear compartment and attach pre-rig to ropes
☐ Monitor operation for safety and effectiveness