



COMPANY PERFORMANCE STANDARDS

MARCH, 2009

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).

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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**
 - 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
- 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



**FORWARD LAY
WET**

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

Reverse Lay

Objective

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

Captain

- Give order to crew
- Exit engine and retrieve appropriate tools
- Meet up with Firefighter
- Report to IC for assignment

Engineer

- Stop at attack engine or truck
- Drive to hydrant upon signal from Firefighter on supply line
- Spot at hydrant; set brake; engage pump
- Don radio, earpiece/ mic, and helmet
- Chock wheel
- Open front suction drain and pull front suction hose and tools to hydrant
- Remove 4 ½” hydrant cap and check for obstructions
- Open hydrant to flush
- Close hydrant and connect front suction hose
- Fully open hydrant
- Close front suction drain
- Open front suction valve (*note static pressure*)
- Back break 4” hose and return male to hose bed
- Connect 4” hose to #3 discharge

Firefighter

- Exit engine upon order of Captain
- Pull enough 4” line to reach any of the target engine intakes
- Foot supply line
- Signal Engineer to continue to hydrant location
- Assist with making connection to intake, if needed
- Report to Captain for assignment

Captain**Engineer****Firefighter**

- Notify attack Engineer that supply line is ready
- If time permits, move 4" hose to side of street to allow access for other responding units
- Charge supply line on order of attack engine Engineer (*use idle pressure unless adjustment is requested*)
- Check line; remove kinks
- If incoming water supply pressure is excessive, disengage pump
- 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



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



2-1/2" ATTACK

SOP

2-1/2" Attack

Objective

Crew will place 200' of 2-1/2" 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**
 - 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
- 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 2-1/2" 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 2-1/2" nozzle and first loop to location designated by Captain
- Pull and flake sufficient 2-1/2" 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



WYED LINE ATTACK

SOP

Wyed Line Attack

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

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
- Bring foam containers to eductor location
- Call for water when Firefighter indicates
- Don face piece, hood, helmet, and gloves
- Give order to attack when crew is ready
- Request additional foam and resources as needed

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



**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	Engineer	Firefighter
<ul style="list-style-type: none"> <input type="checkbox"/> If first arriving unit, perform Initial IC Responsibilities <ul style="list-style-type: none"> <input type="checkbox"/> Conduct Incident Risk Assessment <input type="checkbox"/> Transmit Initial Report on Conditions <input type="checkbox"/> Activate Radio Extender <input type="checkbox"/> Conduct walk-around size up: transmit Updated Condition Report <input type="checkbox"/> Give order to crew <input type="checkbox"/> Exit engine and retrieve appropriate tools <input type="checkbox"/> Shoulder load second high rise pack; proceed to designated fire access point <input type="checkbox"/> Assist in preparing for fire attack (<i>make connections, flake line, etc.</i>) <input type="checkbox"/> Don face piece, hood, helmet, and gloves <input type="checkbox"/> Give order to enter when crew is ready 	<ul style="list-style-type: none"> <input type="checkbox"/> Spot at fire; set brake; engage pump <input type="checkbox"/> Don radio, earpiece/ mic, and helmet <input type="checkbox"/> Chock wheel <input type="checkbox"/> Assist crew with hose and appropriate tools <input type="checkbox"/> Pull off required amount of 2-½” hose; leave nozzle connected <input type="checkbox"/> Secure 2-½” nozzle/hose to drop line <input type="checkbox"/> Facilitate hoisting hose up to fire access point <input type="checkbox"/> Back break hose and hook up to 2-½” discharge <input type="checkbox"/> Charge line on order of Captain; set pump pressure; set pressure relief or engage pump governor <input type="checkbox"/> Check attack line; remove kinks <input type="checkbox"/> Prepare to receive supply <input type="checkbox"/> Check supply line; remove kinks <input type="checkbox"/> Perform coordinated support functions as necessary (utilities, lighting, stage equipment, etc.) 	<ul style="list-style-type: none"> <input type="checkbox"/> Exit engine upon order of Captain with drop line <input type="checkbox"/> Shoulder load high rise pack with wye and proceed to fire access point <input type="checkbox"/> At fire access point, drop rope to engineer for hose tie-off <input type="checkbox"/> Hoist sufficient 2-½” hose to reach fire access point <input type="checkbox"/> Secure hose <input type="checkbox"/> Remove nozzle and connect 2-½” stinger and high rise packs <input type="checkbox"/> Flake high rise packs for fire attack <input type="checkbox"/> Indicate to Captain when ready for water <input type="checkbox"/> Don face piece, hood, helmet, and gloves <input type="checkbox"/> Bleed air from line and check for adequate stream and pattern <input type="checkbox"/> Check door for heat <input type="checkbox"/> 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

Captain

- Receive assignment
- Give order to crew
- Shoulder load and carry one high-rise bundle and irons to standpipe connection one floor below fire
- Confirm standpipe is charged
- Connect pack with 2-1/2" stinger to standpipe
- Assist Firefighter with flaking dry hose up stairwell
- Charge hose when Firefighter indicates ready
- Don face piece, hood, helmet, and gloves
- Give order to enter when crew is ready

Engineer

- Spot apparatus; set brake
- Chock wheel
- Assist crew with equipment, as needed
- Perform duties as assigned by Captain

Firefighter

- Exit engine upon order of Captain
- Shoulder load and carry one high-rise bundle to standpipe connection one floor below fire
- Flake first bundle up stairwell
- Connect second bundle (*as needed*) and continue to flake dry hose up stairwell
- 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



PORTABLE GROUND MONITOR

SOP	Portable Ground Monitor
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	Engineer	Firefighter
<ul style="list-style-type: none"> <input type="checkbox"/> If first arriving unit, perform Initial IC Responsibilities <ul style="list-style-type: none"> 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 <input type="checkbox"/> Give order to crew <input type="checkbox"/> Determine best location for monitor and request water supply if one cannot be established by your crew <input type="checkbox"/> Receive deck gun and portable monitor base from firefighter at the top of engine <input type="checkbox"/> Carry portable base to desired location <input type="checkbox"/> With firefighter, pull enough 4" hose to reach the portable monitor plus at least 50' to wrap monitor <input type="checkbox"/> Call for water when crew is ready 	<ul style="list-style-type: none"> <input type="checkbox"/> Spot at fire; set brake; engage pump <input type="checkbox"/> Don radio, earpiece/ mic, and helmet <input type="checkbox"/> Chock wheel <input type="checkbox"/> Pull off required amount of hose <input type="checkbox"/> Assist crew with pulling hose to the monitor if time permits <input type="checkbox"/> Back break hose and connect to discharge <input type="checkbox"/> Charge line on order of Captain; set pump pressure; set pressure relief or engage pump governor <input type="checkbox"/> Check monitor line; remove kinks <input type="checkbox"/> Prepare to receive supply <input type="checkbox"/> Check supply line; remove kinks <input type="checkbox"/> Perform coordinated support functions as necessary (<i>utilities, lighting, stage equipment, etc.</i>) 	<ul style="list-style-type: none"> <input type="checkbox"/> Exit engine upon order of Captain <input type="checkbox"/> Climb to top of engine and change deck gun nozzle from fog nozzle to smooth bore stack tips, if directed <input type="checkbox"/> Remove deck gun and portable base from engine and pass down to Captain <input type="checkbox"/> Carry deck gun to portable monitor base and attach <input type="checkbox"/> With Captain, pull enough 4" hose to reach the portable monitor plus at least 50' to wrap monitor <input type="checkbox"/> With Captain, attach hose and secure to monitor base <input type="checkbox"/> Aim discharge upward <input type="checkbox"/> Adjust stream direction after water is flowing



PORTABLE GROUND MONITOR WITH FOAM

SOP	Portable Ground Monitor with Foam
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	Engineer	Firefighter
<ul style="list-style-type: none"> <input type="checkbox"/> If first arriving unit, perform Initial IC Responsibilities <ul style="list-style-type: none"> <input type="checkbox"/> Conduct Incident Risk Assessment <input type="checkbox"/> Transmit Initial Report on Conditions <input type="checkbox"/> Activate Radio Extender <input type="checkbox"/> Conduct walk-around size up; transmit Updated Condition Report <input type="checkbox"/> Give order to crew <input type="checkbox"/> Determine the best location for monitor and request water supply if one cannot be established by your crew <input type="checkbox"/> Request additional foam <input type="checkbox"/> Remove master stream foam eductor, pick-up tube, and foam nozzle from engine and place at desired monitor location <input type="checkbox"/> Receive deck gun and portable monitor base from firefighter at the top of engine 	<ul style="list-style-type: none"> <input type="checkbox"/> Spot at fire; set brake; engage pump <input type="checkbox"/> Don radio, earpiece/ mic, and helmet <input type="checkbox"/> Chock wheel <input type="checkbox"/> Establish a water supply <input type="checkbox"/> Remove foam concentrate buckets from engine and place at portable monitor <input type="checkbox"/> Assist crew with pulling hose to the monitor if time permits <input type="checkbox"/> Back break hose and connect to discharge <input type="checkbox"/> Charge line on order of Captain; set pump pressure; set pressure relief or engage pump governor <input type="checkbox"/> Check monitor line; remove kinks <input type="checkbox"/> Check supply line; remove kinks <input type="checkbox"/> Perform coordinated support functions as necessary (<i>utilities, lighting, stage equipment, etc.</i>) 	<ul style="list-style-type: none"> <input type="checkbox"/> Exit engine upon order of Captain <input type="checkbox"/> Climb to top of engine; remove nozzle and stream straightener from deck gun <input type="checkbox"/> Remove deck gun and portable base from engine and pass down to Captain <input type="checkbox"/> Carry deck gun to portable monitor base and attach <input type="checkbox"/> Attach eductor and install proportioning disk; attach pick-up tube and nozzle <input type="checkbox"/> With Captain, pull enough 4" hose to reach the portable monitor plus at least 50' to wrap monitor <input type="checkbox"/> With Captain, attach hose and secure to monitor base <input type="checkbox"/> Aim discharge upward <input type="checkbox"/> Adjust stream direction after water is flowing

Captain

Engineer

Firefighter

- Carry portable base to desired location
- Determine proper proportioning disk to use and relay to Firefighter
- With Firefighter, pull enough 4" hose to reach the portable monitor plus at least 50' to wrap monitor
- With Firefighter, attach hose and secure to monitor base
- Call for water when crew is ready
- Place pick-up tube in foam bucket



MOBILE ATTACK

SOP

Mobile Attack

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

SOP

Progressive Hose Lay

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**
 - 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)
- 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

Captain

Engineer

Firefighter

- Open hose in a doughnut configuration
- Clamp hose several feet from the coupling
- Advise when hose is clamped
- Hand the male end of the hose to the Firefighter
- Join the female and the male end of the hose together
- Advise water is coming and release hose clamp
- Continually pull hose for Firefighter
- Continually evaluate crew performance and LCES
- Communicate continuously with crew



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	Engineer	Firefighter
<ul style="list-style-type: none"> <input type="checkbox"/> Enroute, identify closest hydrant/ water source location to refill water tender <input type="checkbox"/> Give order to set up for water shuttle operation from portable folding water tank <input type="checkbox"/> Communicate and coordinate with supporting units <input type="checkbox"/> Determine best area for setup Portable folding water tank setup considerations: <ul style="list-style-type: none"> <input type="checkbox"/> Do not block driveway or access points <input type="checkbox"/> Position drain on downhill side <input type="checkbox"/> Avoid or remove sharp objects from tank location <input type="checkbox"/> Leave room for supply engine and incoming water tenders <input type="checkbox"/> Assist with portable folding water tank set up <input type="checkbox"/> Request additional resources as needed 	<ul style="list-style-type: none"> <input type="checkbox"/> Spot water tender; set brake <input type="checkbox"/> Chock wheel <input type="checkbox"/> Deploy portable folding water tank <input type="checkbox"/> Fill portable folding water tank off rear or side dump valve <input type="checkbox"/> Confirm location of hydrant with Captain and go refill water tender <input type="checkbox"/> Shuttle water as needed to keep portable folding water tank full 	<ul style="list-style-type: none"> <input type="checkbox"/> Exit water tender upon order of Captain <input type="checkbox"/> Assist Engineer with water tender placement <input type="checkbox"/> Assist Engineer with portable folding water tank deployment <input type="checkbox"/> Remove equipment from water tender before the tender leaves to refill <i>(Leave equipment with supply engine or attack engine)</i> <ul style="list-style-type: none"> <input type="checkbox"/> Tarp <input type="checkbox"/> Large volume portable pump <input type="checkbox"/> Fuel can <input type="checkbox"/> Hard suction <input type="checkbox"/> Flat Bottom Strainer <input type="checkbox"/> Report to Captain for assignment



DRAFTING FROM PORTABLE WATER TANK

SOP	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	Engineer	Firefighter
<ul style="list-style-type: none"> <input type="checkbox"/> Give order to set up for drafting from a portable water tank <input type="checkbox"/> Determine best area to spot supply engine <input type="checkbox"/> Assist Firefighter and Engineer with on scene setup <input type="checkbox"/> Coordinate water supply operation with supporting units 	<ul style="list-style-type: none"> <input type="checkbox"/> Spot engine 3'-4' from portable water tank; set brake; engage pump <input type="checkbox"/> Chock wheel <input type="checkbox"/> Assist Firefighter with placement of hard suction and strainer <input type="checkbox"/> Move to pump panel and close all valves <input type="checkbox"/> Increase engine RPM's to 1000-1200 <input type="checkbox"/> Open suction valve and observe compound gauge for vacuum while priming pump <input type="checkbox"/> Primer will discharge water on ground as pressure registers on the discharge gauge <input type="checkbox"/> Maintain a minimum of 50 PSI while opening discharge valve slowly <input type="checkbox"/> Place open booster line into tank to circulate water and maintain prime 	<ul style="list-style-type: none"> <input type="checkbox"/> Exit engine upon order of Captain <input type="checkbox"/> Assist Engineer with spotting of apparatus near portable water tank (<i>optimal placement is off corner of tank using engine front suction</i>) <input type="checkbox"/> Remove both lengths of 10' hard suction hose from engine <input type="checkbox"/> Attach strainer to male end of hard suction hose <input type="checkbox"/> Place strainer end of hard suction hose into portable water tank <input type="checkbox"/> Attach female end of hard suction hose to engine front suction. Use side suction if unable to use front suction <input type="checkbox"/> 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

Captain

- Give order to crew
- Report to IC for RIC Briefing in full PPE with appropriate tools and equipment
- Gather information from IC on current operational mode, crew locations and assignments, and any known hazards or concerns
- If a Two-Out team has been established prior to RIC, receive transfer from the Two-Out team
- Conduct scene size-up with Firefighter to accomplish the following:
 - Locate and secure utilities (*Advise IC when secure*)
 - Location of hazards
 - Locate and identify possible means of egress
 - Place strobes to identify means of egress
 - Locate places for secondary ladders

Engineer

- Spot apparatus; set brake
- Chock wheel
- Don full PPE with appropriate tools and equipment
- Locate suitable location for staging of RIC equipment
- Retrieve and assemble RIC equipment per SRM Operations Policy FF041, Rapid Intervention Crew
- Complete additional tasks as directed (*laddering, softening building, etc.*)
- Monitor tactical radio channel and activities and stand by with Firefighter for deployment

Firefighter

- Exit apparatus in full PPE with appropriate tools and equipment
- Retrieve strobe/first-in bag and report to Captain
- Conduct scene size-up with Captain
- Assist Engineer in retrieving remaining equipment; place in RIC staging area
- Complete additional tasks as directed (*laddering, softening the building, etc.*)
- Monitor tactical radio channel and activities and stand by with Engineer for deployment

Captain

Engineer

Firefighter

- Identify initial rescue concerns and develop incident specific Rapid Intervention Plan
- Work with IC to monitor operations and update contingency plans (*i.e. identify secondary TAC channel, need for additional RICs, etc.*)



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

Captain	Engineer	Firefighter
<ul style="list-style-type: none"> <input type="checkbox"/> If first arriving unit, perform Initial IC Responsibilities <ul style="list-style-type: none"> <input type="checkbox"/> Conduct Incident Risk Assessment <input type="checkbox"/> Transmit Initial Report on Conditions <input type="checkbox"/> Activate Radio Extender <input type="checkbox"/> Conduct walk-around size up; transmit Updated Condition Report <input type="checkbox"/> Give order to crew <input type="checkbox"/> Set wheel chocks (<i>Truck; optional</i>) <input type="checkbox"/> Set outrigger (<i>Truck; optional</i>) <input type="checkbox"/> Determine fire location <input type="checkbox"/> Remove and raise ground ladder (<i>as needed</i>) <input type="checkbox"/> Hang roof hook on climbing ladder <input type="checkbox"/> Raise roof ladder to climbing ladder (<i>as needed</i>) <input type="checkbox"/> Don face piece, hood, helmet, and gloves; on air before ascending ladder <input type="checkbox"/> Take chain saw aloft <input type="checkbox"/> Evaluate roof conditions 	<ul style="list-style-type: none"> <input type="checkbox"/> Spot apparatus; set brake <input type="checkbox"/> Set cab (<i>Truck</i>) <input type="checkbox"/> Chock wheel <input type="checkbox"/> Exit cab wearing proper PPE with radio <input type="checkbox"/> Don SCBA <input type="checkbox"/> Strip and start chain saws <input type="checkbox"/> Stage chain saws <input type="checkbox"/> Remove and raise ground ladder (<i>as needed</i>) <input type="checkbox"/> Don face piece, hood, helmet, and gloves; on air before ascending ladder <input type="checkbox"/> Take roof ladder aloft and position (<i>as needed</i>) <input type="checkbox"/> Evaluate roof conditions <input type="checkbox"/> Sound roof from ladder w/roof hook <input type="checkbox"/> Exit ladder and foot ladder from above <input type="checkbox"/> Continue to sound roof to ventilation location 	<ul style="list-style-type: none"> <input type="checkbox"/> Exit apparatus on order of Captain <input type="checkbox"/> Exit cab wearing proper PPE/ SCBA with radio <input type="checkbox"/> Remove and raise ground ladder <input type="checkbox"/> Foot ground ladder <input type="checkbox"/> Don face piece, hood, helmet, and gloves; on air before ascending ladder <input type="checkbox"/> Take chain saw aloft <input type="checkbox"/> Evaluate roof conditions <input type="checkbox"/> Exit ladder to roof <input type="checkbox"/> Commence ventilation operation upon order of Captain

- 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

In Revision

In Revision

SOP Vertical Ventilation from Aerial Ladder (Residential)
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

In Revision

In Revision



ELEVATED STREAM

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



RESCUE BASKET

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	Engineer	Firefighter
<ul style="list-style-type: none"> <input type="checkbox"/> If first arriving unit, perform <i>Initial IC Responsibilities</i> <ul style="list-style-type: none"> <input type="checkbox"/> Conduct Incident Risk Assessment <input type="checkbox"/> Transmit Initial Report on Conditions <input type="checkbox"/> Activate Radio Extender <input type="checkbox"/> Conduct walk-around size up; transmit Updated Condition Report <input type="checkbox"/> Give order to crew <input type="checkbox"/> Assess scene for proper truck placement <input type="checkbox"/> Set wheel chocks (<i>optional</i>) <input type="checkbox"/> Set outrigger (<i>optional</i>) <input type="checkbox"/> Retrieve “Stokes operation” equipment bag; remove ladder tip roller and give to Firefighter <input type="checkbox"/> Retrieve two rope bags and hand to crew member at turntable <input type="checkbox"/> Place “Stokes operation” equipment bag on turntable <input type="checkbox"/> Retain both rope ends while ladder is moving 	<ul style="list-style-type: none"> <input type="checkbox"/> With Captain, assess scene for proper truck placement <input type="checkbox"/> Spot truck; set brake <input type="checkbox"/> Set cab <input type="checkbox"/> Chock wheels <input type="checkbox"/> Set outriggers and lock-out <input type="checkbox"/> Attach descent control device (Rack) and carabineers to bottom rung of ladder and load rope <input type="checkbox"/> Operate ladder; place tip approximately 10’ off ground at selected rigging location <input type="checkbox"/> Climb ladder and safety check system from tip to turntable <input type="checkbox"/> Upon order of Captain, raise ladder to position for Stokes placement <input type="checkbox"/> Manage rope bags, as necessary 	<ul style="list-style-type: none"> <input type="checkbox"/> Assist Engineer with spotting truck <input type="checkbox"/> At aerial ladder tip, confirm waterway is pinned <input type="checkbox"/> Attach ladder tip roller to ladder <input type="checkbox"/> Return to turntable <input type="checkbox"/> Tie “figure eight-on-a-bite” knot at end of both ropes <input type="checkbox"/> Feed both ropes between ladder beams toward ladder tip <input type="checkbox"/> Feed knots through rope guide on rope roller and hand to Captain <input type="checkbox"/> After ladder is lifted from bed, confirm nozzle tip is pointed downward <input type="checkbox"/> Manage rope bags to allow rope to pay out during raising of ladder <input type="checkbox"/> Assist Captain with Stokes set up, as necessary <input type="checkbox"/> Attach guide rope(s) to stokes <input type="checkbox"/> Safety check system from tip of ladder to Stokes <input type="checkbox"/> 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



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