

# Engine Company Standard Operating Guide Fire Academy

# 14

Section II - Engine Company Operations



**4" Hose Operations**

**2 1/2" Hose Operations**

**1 3/4" Hose Operations**

**Supplemental Hose Lays**

JULY 2021

SAN DIEGO FIRE-RESCUE DEPARTMENT  
**FIRE ACADEMY STANDARD OPERATING GUIDE**



TRAINING & EDUCATION DIVISION

**ENGINE STANDARD OPERATING GUIDE**

**CSEFM FFI/FFII 2019 VERSION**

**JULY 2021**

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(\* ) = Core Academy Skill

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**SECTION 1**

**Supply Lines (Hydrant to Rig)**

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DESCRIPTION:			
<b>*Drill #1: 4" Forward Lay</b>			
SFT TOPIC:	SFT SKILL SHEET:	TIME STANDARD:	VIDEO LINK:
FF1A-5-4	3-15B	:35	<a href="#">Forward Lay</a>

PERFORMANCE MEASURES:	PASS	FAIL
<b>Firefighter #4</b>		
Engineer will stop passed the hydrant.		
<b><u>Exit procedures.</u></b>		
Secure the 4" supply line and hydrant wrench.		
Wrap the hose around the hydrant.		
Place foot on the cross point of the hose and signal and announce, "ENGINE <u>XX</u> TAKE IT AWAY"		
Observe the hose as it pays out of the bed.		
Remove your foot from the cross point of the hose only after first coupling hits the ground, the airbrakes set, or catastrophic event occurs (i.e. the coupling gets caught in the bed).		
<b>Hydrant Operations:</b>		
<b>Remove the hydrant cap and place on the ground in contact with the hydrant.</b>		
<b>Inspect 4" outlet (Steamer Connection) to ensure the threads are intact and there are no obstructions.</b>		
<b>Unwrap the hose from the hydrant, remove the increaser from the 4" hose and place it on the ground in contact with the hydrant.</b>		
<b>Physically check the 4" female coupling and announce "GASKET, SWIVEL, THREAD."</b>		
<b>Make the connection to the 4" port "KNEE TIGHT".</b>		
<b>Flake appropriately</b>		
<b>Wait for the signal for water from the engineer.</b>		
<b>At the signal for water, acknowledge by signaling and announce, "WATER COMING."</b>		
<b>Turn the hydrant valve slowly and observe the water as it travels down the line at a fast walking pace.</b>		
<b>Once water is at the engine, open hydrant valve completely and turn valve back 1/4 turn leaving the hydrant wrench pointing down.</b>		
Grab the increaser, follow the supply line to the engine and identify any leaks and address any kinks or hazards.		
Secure increaser on apparatus		
Locate the Engineer and announce, "YOU-HAVE <u>XX</u> ' OF 4" SUPPLY LINE FROM THE HYDRANT TO ENGINE <u>XX</u> . THERE ARE/ARE NO LEAKS, KINKS AND HAZARDS. WHAT IS MY NEXT ASSIGNMENT?"		
<b>Firefighter #3 will complete connection at the pump if instructed.</b>		

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DESCRIPTION:			
<b>Drill #2: 4" Reverse Lay</b>			
SFT TOPIC:	SFT SKILL SHEET:	TIME STANDARD:	VIDEO LINK:
FF1A-5-4	N/A	N/A	<a href="#">4" Reverse Lay</a>

PERFORMANCE MEASURES:	PASS	FAIL
<b>Firefighter #3</b>		
<a href="#">Exit procedures.</a>		
Don SCBA and secure 4" double male at the anchor location		
Place knee on hose facing the engine and announce, "ENGINEER, TAKE IT AWAY".		
Remove your knee from the hose only if the air brake has set, the first coupling is on the ground, or there is a catastrophic event. Attach the 4" double male to the 4" female coupling.		
At the apparatus intake, check for and announce, "GASKET, SWIVEL, THREAD, *GATE VALVE SHUT, *BLEEDER VALVE CRACKED."		
Spanner tighten all connections (if supplying a truck).		
Announce "ENGINEER, THE LINE IS READY FOR WATER".		

\*If applicable

PERFORMANCE MEASURES:	PASS	FAIL
<b>Firefighter #4</b>		
<a href="#">Exit procedures.</a>		
Remove BA and irons from apparatus and place under tailboard of the Truck or Engine being supplied.		
Pull 4" supply line from hose bed and prepare it for partner to kneel on.		
Remove 2 1/2" to 4" increaser and secure it on the apparatus.		

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DESCRIPTION:			
<b>Drill #3: 4" Hand Lay to Hydrant</b>			
SFT TOPIC:	SFT SKILL SHEET:	TIME STANDARD:	VIDEO LINK:
FF1A-5-4	N/A	N/A	N/A

PERFORMANCE MEASURES:	PASS	FAIL
<b><u>Exit procedures.</u></b>		
Secure 4" supply line from the hose bed.		
Secure hydrant wrench.		
Announce "ENGINEER, BREAK MY LINE WHEN I TELL YOU".		
"CLEAR HOSE,CLEAR TRAFFIC" and move towards the designated hydrant.		
Pull 5' past the hydrant and announce, "ENGINEER, BREAK MY LINE."		
Place the female 4" coupling on the ground.		
<b>Hydrant operations:</b>		
<b>Remove the 4" hydrant cap and place on the ground in contact with the hydrant.</b>		
<b>Inspect 4" outlet (Steamer Connection) to ensure the threads are intact and there are no obstructions.</b>		
<b>Remove the increaser from the 4" hose and place it on the ground in contact with the hydrant.</b>		
<b>Physically check the 4" female coupling and announce "GASKET, SWIVEL, THREAD."</b>		
<b>Make the connection to the 4" port "KNEE TIGHT".</b>		
<b>Flake hose appropriately.</b>		
<b>Wait for the signal for water from the engineer.</b>		
<b>At the signal for water, acknowledge by signaling and announce, "WATER COMING."</b>		
<b>Turn the hydrant valve slowly and observe the water as it travels down the line at a fast walking pace.</b>		
<b>Once water is at the engine, open hydrant valve completely and turn valve back 1/4 turn leaving the hydrant wrench pointing down.</b>		
Grab the increaser, follow the supply line to the engine and identify any leaks and address any kinks or hazards.		
Secure increaser on apparatus		
Locate the Engineer and announce, "YOU HAVE <u>XX</u> 'OF 4" SUPPLY LINE FROM THAT HYDRANT TO ENGINE X. THERE ARE/ARE NO LEAKS, KINKS AND HAZARDS. WHAT IS MY NEXT ASSIGNMENT?"		



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DESCRIPTION:			
<b>Drill #4: 4" Spot the Pump</b>			
SFT TOPIC:	SFT SKILL SHEET:	TIME STANDARD:	VIDEO LINK:
FF1A-5-4	N/A	N/A	N/A

PERFORMANCE MEASURES:	PASS	FAIL
<b>#4 Firefighter</b>		
Engineer will spot the apparatus at the hydrant.		
<u><a href="#">Exit procedures.</a></u>		
Secure 25' roll of 4" hose and hydrant wrench.		
Set the 25' roll of 4" on the ground.		
Give the male coupling to the Engineer (if available)		
Walk the female coupling to the hydrant.		
<b>Hydrant operations:</b>		
<b>Remove the hydrant cap and place on the ground in contact with the hydrant</b>		
<b>Inspect 4" outlet (Steamer Connection) to ensure the threads are intact and there are no obstructions.</b>		
<b>Physically check female coupling with fingers and announce "GASKET, SWIVEL, THREAD."</b>		
<b>Make the connection to the 4" port "KNEE TIGHT".</b>		
<b>Flake hose appropriately.</b>		
<b>Wait for the call for water from the Engineer.</b>		
<b>At the call for water, acknowledge by signaling appropriately and replying, "WATER COMING" and slowly charge the line.</b>		
<b>Once water is at the engine, open hydrant valve completely and turn valve back 1/4 turn leaving the hydrant wrench pointing down.</b>		
Follow the supply line to the engine and identify any leaks and address any kinks or hazards..		
Locate the Engineer and announce, "YOU HAVE <u>XX</u> ' OF 4" SUPPLY LINE FROM THAT HYDRANT TO ENGINE <u>X</u> . THERE ARE/ARE NO LEAKS, KINKS AND HAZARDS. WHAT IS MY NEXT ASSIGNMENT?"		

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DESCRIPTION:			
<b>Drill #5: 4" Supply to Truck (Unspecified)</b>			
SFT TOPIC:	SFT SKILL SHEET:	TIME STANDARD:	VIDEO LINK:
<b>FF1A-5-4</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>

PERFORMANCE MEASURES:	PASS	FAIL
<b>Firefighter #3</b>		
<a href="#"><u>Exit procedures.</u></a>		
Secure 4" supply line from the hose bed.		
Carry supply line to the safe side of apparatus away from traffic approx. 15 ft.		
Remove the increaser and secure supply line under the tailboard.		
Place the increaser in the appropriate compartment and remove the 4" double male.		
Collect the 4" supply line from under the tailboard and attach the double male to the female coupling.		
Announce "ENGINEER, BREAK MY LINE WHEN I TELL YOU"		
Announce "CLEAR HOSE, CLEAR TRAFFIC" and proceed towards the Truck's intake.		
Once at apparatus (Truck 4" intake) announce, "ENGINEER BREAK MY LINE."		
At the Truck intake, check for and announce, "GASKET, SWIVEL, THREAD, *GATE VALVE SHUT, *BLEEDER VALVE CRACKED."		
Connect 4" supply line to the intake spanner tight and announce, "SPANNER TIGHT."		
Flake out the hose appropriately.		
Inform Truck Engineer "ENGINEER YOUR TRUCK IS READY FOR WATER".		

\*If applicable

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DESCRIPTION:			
Drill #6: 4" Supply to Portable Monitor			
SFT TOPIC:	SFT SKILL SHEET:	TIME STANDARD:	VIDEO LINK:
FF1A-5-4	N/A	N/A	N/A

PERFORMANCE MEASURES:	PASS	FAIL
Secure the 4" double male from the compartment and announce, "SECURING 4" DOUBLE MALE".		
Secure 4" supply line from the hose bed.		
Remove increaser and place under the tailboard		
Physically check the 4" female coupling and announce "GASKET, SWIVEL, THREAD."		
Attach the 4" double male to the female coupling.		
Secure the appropriate fold of 4" supply line from hose bed (usually 3 <sup>rd</sup> fold over from supply line) and pull out of the hose bed approximately 3'.		
From the rear of the apparatus, secure 4" double male over one shoulder and loop of hose over the other		
Announce "ENGINEER BREAK LINE WHEN I TELL YOU."		
Walk the hose to the portable monitor and set the 4" double male coupling down.		
Walk the loop past the portable monitor and announce, "ENGINEER BREAK MY LINE".		
Loop the 4" supply line around the portable monitor on the ground.		
Check for and announce "GASKET, SWIVEL, THREADS" on the monitor coupling and attach the 4" supply line to the monitor and hand tighten.		
Flake out all the hose in a big loop around monitor.		
Set the anchor.		
Secure the 4" supply line to the portable monitor using the hose straps.		
Complete checks "COUPLINGS TIGHT, NOZZLE IN FULL UPRIGHT POSITION, LOCKED, PINS SET, <u>LOW</u> GPM, FULL FOG, SPANNER TIGHT".		
Spanner tighten the 4" supply line and portable monitor to the double male coupling.		
Call out "WATER TO PORTABLE MONITOR".		
While wearing eye protection, secure the monitor pins to the ground with a sledgehammer.		

**SAN DIEGO FIRE-RESCUE DEPARTMENT  
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DESCRIPTION:			
<b>Drill #7: 2 1/2" Hand Lay to Hydrant (Unspecified)</b>			
SFT TOPIC:	SFT SKILL SHEET:	TIME STANDARD:	VIDEO LINK:
<b>FF1A-5-4</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>

PERFORMANCE MEASURES:	PASS	FAIL
<a href="#"><u>Exit procedures.</u></a>		
Secure 2 1/2" hose from the bulk bed onto the ground a safe distance off the tail board.		
Remove the gated wye from the hose line.		
Secure the 2 1/2" double female and hydrant wrench.		
Announce "ENGINEER, BREAK MY LINE WHEN I TELL YOU."		
Announce, "CLEAR HOSE, CLEAR TRAFFIC."		
Pull hose to hydrant.		
Advise Engineer to "BREAK MY LINE."		
<b>Hydrant operations:</b>		
<b>Remove 2 1/2" hydrant cap and place on ground next to hydrant</b>		
<b>Connect hose to hydrant</b>		
<b>Flake hose appropriately.</b>		
<b>Wait for the call for water from the Engineer.</b>		
<b>At the call for water, acknowledge by signaling appropriately and replying, "WATER COMING" and slowly charge the line.</b>		
<b>Once water is at the engine, open hydrant valve completely and turn valve back 1/4 turn leaving the hydrant wrench pointing down.</b>		
Follow the supply line to the engine and identify any leaks and address any kinks or hazards..		
Locate the Engineer and announce, "YOU HAVE <u>XX</u> ' OF 2 1/2" SUPPLY LINE FROM THAT HYDRANT TO ENGINE <u>X</u> . THERE ARE/ARE NO LEAKS, KINKS AND HAZARDS. WHAT IS MY NEXT ASSIGNMENT?"		

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DESCRIPTION:			
<b>Drill #8: 2 1/2" Supply Line to FDC (Unspecified)</b>			
SFT TOPIC:	SFT SKILL SHEET:	TIME STANDARD:	VIDEO LINK:
FF1A-5-4	N/A	N/A	<a href="#">Supply the FDC</a>

PERFORMANCE MEASURES:	PASS	FAIL
<a href="#">Exit procedures.</a>		
Secure 2 1/2" hose from the bulk bed onto the ground a safe distance off the tail board.		
Remove the gated wye from the hose line.		
Secure gated wye in the engineer's compartment and retrieve 2 1/2" shut off butt.		
Attach 2 1/2" shut off butt to the end of the hose on the ground.		
Secure additional 2 1/2" hose on the ground next to the first length pulled off.		
Pick up the 2 1/2 shut off butt and hose, load it on shoulder and pull to FDC announcing, "ENGINEER, BREAK MY LINE WHEN I TELL YOU TO"		
Announce, "CLEAR HOSE, CLEAR TRAFFIC".		
Once at the FDC, announce "ENGINEER, BREAK MY LINE".		
Remove the FDC caps and place on the ground in contact with the wall.		
Check and announce "GASKET, SWIVEL, THREADS, CLAPPER VALVE, NO OBSTRUCTION".		
Connect 2 1/2" shut off butt and hose to the furthest/most difficult FDC connection first.		
Spanner tighten female coupling on the FDC and announce, "SPANNER TIGHT". Spanner tighten male hose coupling attached to shut off butt and announce, "SPANNER TIGHT".		
Check the shutoff butt making sure it is in the off position.		
Signal and announce "WATER TO THE FDC" to Engineer when ready.		
Announce "PARTNER, ARE YOU READY FOR WATER TO THE STANDPIPE?"		
Wait for confirmation from partner, then open shutoff butt announcing, "WATER TO STANDPIPE".		
Follow the supply line, identify leaks and address kinks and hazards and announce to the Engineer "YOU HAVE A 2 1/2" SUPPLY LINE TO THE FDC. THERE ARE/ARE NO LEAKS, KINKS OR HAZARDS. WHAT IS MY NEXT ASSIGNMENT?"		

**SECTION 2**

**Attack Line Deployment (Rig to Door)**

**SAN DIEGO FIRE-RESCUE DEPARTMENT  
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DESCRIPTION:			
<b>*Drill #9: 1 3/4" Grab and Go (<a href="#">Unobstructed/Direct</a>)</b>			
SFT TOPIC:	SFT SKILL SHEET:	TIME STANDARD:	VIDEO LINK:
<b>FF1A- 5-6</b>	<b>3-10E</b>	<b>1:30</b>	<a href="#">Grab and Go</a>

PERFORMANCE MEASURES:	PASS	FAIL
<a href="#">Exit procedures.</a>		
Secure SCBA.		
Secure selected length of 1 3/4" hose.		
Load the nozzle on left shoulder.		
Place right arm through lower loop (stab) and grab onto upper loop (grab).		
Announce "CLEAR HOSE, CLEAR TRAFFIC" as the hose is pulled out of the bed.		
Pull the hose out until the slack tightens.		
Drop the first loop announcing, "TIGHT. HOSE BED CLEAR".		
Continue to extend the line to the last coupling for working line.		
Flake out the hose and place 50' coupling and nozzle at P.O.E.		
Complete nozzle checks and call out "BUTT SHUT".		
Signal and call for water to the Engineer announcing, "WATER TO MATTYDALE #__".		
<a href="#">PPT.</a>		

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DESCRIPTION:			
<b>*Drill #10: 1 3/4" Flip Method (<a href="#">Obstructed/Indirect</a>)</b>			
SFT TOPIC:	SFT SKILL SHEET:	TIME STANDARD:	VIDEO LINK:
FF1A- 5-6	3-10E	2:15	<a href="#">Flip Method</a>

PERFORMANCE MEASURES:	PASS	FAIL
<a href="#">Exit procedures.</a>		
Secure SCBA.		
Secure appropriate length of 1 3/4" hose.		
<a href="#">Flip Method</a> : Pull the stack of hose partially out from the bed and twist it to flip upside down and load the stack onto shoulder.		
Pull the remainder of the hose out of the bed by looking back and announce, "HOSE BED CLEAR".		
Announce "CLEAR HOSE. CLEAR TRAFFIC" and head towards objective.		
Climb the stairs as hose pays out from the top of the load (see <a href="#">Stairway vs Stairwell</a> below)		
Announce the floors as you approach them "1, 2, 3, etc."		
Upon reaching the fire floor utilize <a href="#">Accordion Forward</a> or <a href="#">V-Split</a> (see glossary) to flake excess hose before placing the nozzle against the wall.		
Tie off hose to a stationary object with a cow hitch around the hose and clove hitch around the anchor with an overhand safety knot.		
Flake out the hose and place 50' coupling and nozzle at P.O.E.		
Complete nozzle checks and call out "BUTT SHUT".		
Signal and call for water to the Engineer announcing, "WATER TO MATTYDALE #__".		
<a href="#">PPT</a>		

<a href="#">Stairway Stretch</a>		
Deploy hose from shoulder and lay along stairs as you ascend.		
Keep hose to the outside wall when making turns to avoid kinks in the line when charged.		
<a href="#">Stairwell Stretch</a>		
Ascend stairs while allowing hose to feed straight up through the well hole.		
Hole must be wide enough to allow hose couplings to easily pass through without getting hung up (use a gloved fist to measure).		



**SAN DIEGO FIRE-RESCUE DEPARTMENT  
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DESCRIPTION:			
<b>*Drill #11- 2 1/2" Attack Line (Bulk/Accordion Bed)</b>			
SFT TOPIC:	SFT SKILL SHEET:	TIME STANDARD:	VIDEO LINK:
<b>FF1A- 5-6</b>	<b>3-10E</b>	<b>2:30</b>	<a href="#"><u>2 1/2" Attack Line</u></a>

PERFORMANCE MEASURES:	PASS	FAIL
<a href="#"><u>Exit procedures.</u></a>		
Secure SCBA		
Secure 2 1/2" hose from the bulk bed onto the ground a safe distance off the tail board.		
Remove the gated wye from the hose line.		
Secure nozzle and shut off butt from compartment and attach to male coupling.		
Grab folds and remove required amount of hose- count couplings as they hit the ground.		
Fan stacks of hose out starting towards objective and work back towards rig.		
<a href="#"><u>Specified length</u></a> - Pull the amount of hose that the officer calls for.		
<a href="#"><u>Unspecified length</u></a> - Estimate and pull the appropriate amount of hose to the objective.		
Announce "ENGINEER BREAK MY LINE WHEN I TELL YOU"		
Announce, "CLEAR HOSE, CLEAR TRAFFIC"		
Once at objective (drop point) announce "ENGINEER, BREAK MY LINE."		
Utilize <a href="#"><u>Accordian Forward</u></a> or <a href="#"><u>V-Split</u></a> hose deployment (depending on space).		
Flake out the hose and place 50' coupling and nozzle at P.O.E.		
Complete nozzle checks and call out "BUTT SHUT".		
Signal and call for water to the Engineer announcing, "WATER TO THE 2 1/2".		
<a href="#"><u>PPT.</u></a>		

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DESCRIPTION:			
<b>*Drill #12: 2 1/2" Attack Line (150' Quick Attack)</b>			
SFT TOPIC:	SFT SKILL SHEET:	TIME STANDARD:	VIDEO LINK:
FF1A- 5-6	3-10E	1:30	<a href="#">2 1/2" Quick Attack</a>

PERFORMANCE MEASURES:	PASS	FAIL
<a href="#">Exit procedures.</a>		
Secure SCBA.		
<a href="#">Unobstructed</a> - Deploy hose by utilizing either the Flip method, the Grab and Go method or placing the stack on the ground.		
<a href="#">Obstructed</a> - Utilize Flip Method (Drill #10) to get hose on shoulder.		
Ensure all hose is out of the bed and announce, "HOSE BED CLEAR".		
Announce "CLEAR TRAFFIC"		
Utilize <a href="#">Accordian Forward</a> or <a href="#">V-Split</a> hose deployment (depending on space).		
Flake out the hose and place 50' coupling and nozzle at P.O.E.		
Complete nozzle checks and call out "BUTT SHUT".		
Signal and call for water to the Engineer announcing, "WATER TO THE 2 1/2".		
<a href="#">PPT.</a>		

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DESCRIPTION:			
<b>Drill #13: Vertical Stretch</b>			
SFT TOPIC:	SFT SKILL SHEET:	TIME STANDARD:	VIDEO LINK:
<b>FF1A-5-12</b>	<b>3-10A</b>	<b>N/A</b>	<a href="#">Vertical Stretch</a>

PERFORMANCE MEASURES:	PASS	FAIL
<a href="#">Exit procedures.</a>		
Secure SCBA.		
<b>Female Coupling Down</b>		
Shoulder load (Flip) hose line and break it at the whip (partner/Engineer may assist)		
Ascend designated stairway and lower female coupling to partner on ground		
Partner will complete connection to rig/supply line		
Tie off remaining hose line on pump side of coupling		
<b>Drop Bag Method</b>		
Ascend to location and lower rope from drop bag to ground announcing, "ROPE"		
Partner will stretch dry attack line and tie off nozzle.		
Pull nozzle and working line up.		
Tie off remaining hose line on pump side of coupling.		
Flake out the hose and place 50' coupling and nozzle at P.O.E.		
Complete nozzle checks and call out "BUTT SHUT".		
Signal and call for water to the Engineer announcing, "WATER"		
<a href="#">PPT.</a>		

**SAN DIEGO FIRE-RESCUE DEPARTMENT  
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DESCRIPTION:			
<b>Drill #14- Attack Lines Up a Ladder</b>			
SFT TOPIC:	SFT SKILL SHEET:	TIME STANDARD:	VIDEO LINK:
<b>FF1A-5-12</b>	<b>3-10A</b>	<b>N/A</b>	<b>N/A</b>

PERFORMANCE MEASURES:	PASS	FAIL
<a href="#"><u>Exit procedures.</u></a>		
Secure SCBA.		
Deploy hose to appropriate location utilizing an approved method.		
Drop tag at base of ladder or at P.O.E.		
Tell partner to “ <i>FOOT MY LADDER</i> ”		
<b>Dry Line (not charged)</b>		
Loop nozzle underneath arm and up over opposite shoulder.		
Confirm shut-off butt is closed, ascend ladder.		
Once on top, sound the sill/floor with boot and announce, “ <i>SILL SAFE. FLOOR SAFE.</i> ”		
Secure nozzle and pull up appropriate amount of line over the sill/railing.		
Tie off remaining hose line on pump side of the coupling.		
Flake out the hose and place 50’ coupling and nozzle at P.O.E.		
Complete nozzle checks and calls out “ <i>BUTT SHUT</i> ”.		
Signal and call for water to the Engineer announcing, “ <i>WATER</i> ”		
<a href="#"><u>PPT</u></a>		
<b>Charged Line</b>		
Complete nozzle checks and call out “ <i>BUTT SHUT</i> ”.		
Signal and call for water to the Engineer announcing, “ <i>WATER</i> ”		
<a href="#"><u>PPT</u></a>		
Use utility webbing to secure the nozzle with a cow hitch, half-hitch, half-hitch.		
Place the webbing over shoulder.		
Announce “ <i>PARTNER FOOT MY LADDER</i> ”		
Sling webbing off shoulder onto the top ladder beam.		
Sound the sill/floor with boot and announce, “ <i>SILL SAFE. FLOOR SAFE.</i> ”		
Secure nozzle under boot and hoist 50’ of working line over the sill/railing.		
Tie off remaining hose line on pump side of the coupling.		

**SECTION 3**

**Interior Operations/Water Application (Door to Seat, Seat of Fire)**

**SAN DIEGO FIRE-RESCUE DEPARTMENT  
FIRE ACADEMY STANDARD OPERATING GUIDE**

DESCRIPTION:			
<b>*Drill #15: 1 3/4" Hose Control</b>			
SFT TOPIC:	SFT SKILL SHEET:	TIME STANDARD:	VIDEO LINK:
<b>FF1A-5-12</b>	<b>3-10C</b>	<b>4:30 (PPT to Seat) 1:00 (Standing hose Ctrl)</b>	<a href="#"><u>1 3/4" Playlist</u></a>

PERFORMANCE MEASURES:	PASS	FAIL
<a href="#"><u>PPT</u></a>		
<a href="#"><u>Entry Procedures</u></a>		
Open nozzle and flow water in the <a href="#"><u>Clamp Method</u></a> (see Appendix B).		
Demonstrate <a href="#"><u>Hit and Move</u></a>		
With partner back up, open nozzle in the Clamp Method flowing high to low.		
Shut down line and continue advance.		
Open line back up		
Demonstrate <a href="#"><u>Making a Push</u></a>		
With partner assistance and line open, transition into a Hip Grip and advance into fire room while continuously flowing water.		
Transition into <a href="#"><u>Comella Method</u></a> (see Appendix B).		
Transition into <a href="#"><u>Hip Grip Method</u></a> (see Appendix B).		
Shut down line once all targets have been addressed (seat)		
<b>Exterior Operations- <a href="#"><u>Standing Hose Control</u></a> (full GPM/full fog)</b>		
Adjust nozzle settings to full GPM/full fog		
Lock the charged hose against sternum with working line arranged into an S-curve.		
Slowly open the nozzle in full GPM/full fog.		
Adjust stream pattern to straight stream.		
Hit targets as directed, then flow water for 1 minute.		
Recite nozzle GPM settings.		
Change stream back to full fog and shut down line.		

**SAN DIEGO FIRE-RESCUE DEPARTMENT  
FIRE ACADEMY STANDARD OPERATING GUIDE**

DESCRIPTION:			
<b>*Drill #16: 2 1/2" Hose Control</b>			
SFT TOPIC:	SFT SKILL SHEET:	TIME STANDARD:	VIDEO LINK:
<b>FF1A-5-12</b>	<b>3-10C</b>	<b>1:00 (Standing hose Ctl)</b>	<a href="#">2 1/2" Playlist</a>

PERFORMANCE MEASURES:	PASS	FAIL
<a href="#">Exit procedures.</a>		
Secure SCBA.		
Deploy hose to appropriate location utilizing 2 1/2" <b>Attack Line</b> (Drill #11, 12).		
<b>Interior operations</b> ( <u>full</u> GPM/ <u>straight</u> stream)		
<a href="#">Entry Procedures</a>		
Flow water in the <a href="#">Clamp Method</a> (see Appendix B).		
Demonstrate Hit and move		
With partner assistance, open nozzle in Clamp Method flowing high to low.		
Shut down line and advance 15' using a Clamp Slide or Comella Crawl.		
Request partner assistance and transition into <a href="#">Comella Method</a> (see Appendix B).		
Request partner assistance and transition into <a href="#">Hip Grip Method</a> (see Appendix B).		
Demonstrate <a href="#">Making a Push</a>		
With partner assistance and line open in a Hip Grip advance into fire room while continuously flowing water. (This skill is to be performed with smooth bore nozzle only.)		
When instructed, back out of IDLH while keeping nozzle pointed down range.		
Demonstrate #4 position.		
<b>Exterior Operations- <a href="#">Standing Hose Control w/ Webbing</a></b>		
Adjust nozzle settings to full GPM/ <u>full</u> fog.		
Measure utility strap and apply to hose with a cow-hitch.		
Ensure partner is in position for assistance.		
Loop strap around outside shoulder and open nozzle.		
Open nozzle in a fog pattern and adjust pattern to straight stream.		
Hit targets as directed while flowing water for 1 minute.		
Recite nozzle GPM settings.		
Change stream back to full fog and shut down line.		
Demonstrate #4 position.		

**SECTION 4**

**Compound Evolutions**



**SAN DIEGO FIRE-RESCUE DEPARTMENT  
FIRE ACADEMY STANDARD OPERATING GUIDE**

DESCRIPTION:			
<b>*Drill #17: 1 3/4" Hose Management</b>			
SFT TOPIC:	SFT SKILL SHEET:	TIME STANDARD:	VIDEO LINK:
FF1A-5-12	3-10D	1:30 (Rig to Door) 4:30 (PPT to Seat) 1:00 (Standing Hose Ctl)	<a href="#">1 3/4" Playlist</a>

PERFORMANCE MEASURES:	PASS	FAIL
<b>Firefighter #3</b>		
<a href="#">Exit procedures.</a>		
Secure SCBA.		
Deploy hose to appropriate location utilizing the <a href="#">Flip</a> or <a href="#">Grab and Go Method.</a>		
Complete nozzle checks and call out "BUTT SHUT".		
Call and signal to Engineer, "WATER".		
<a href="#">PPT</a>		
<a href="#">Entry Procedures</a>		
Advance hose utilizing <a href="#">Clamp Slide/Comella Crawl.</a>		
Demonstrate <a href="#">Hit and Move</a>		
With partner assistance, open nozzle in the Clamp Method flowing high to low.		
Shut down line and continue advance.		
Open line back up		
Demonstrate <a href="#">Making a Push</a>		
With partner assistance and line open transition into a Hip Grip and advance into fire room while continuously flowing water.		
Transition into <a href="#">Comella Method</a> (see Appendix B).		
Transition into <a href="#">Hip Grip Method</a> (see Appendix B).		
Shut down line once all targets have been addressed (seat)		

<a href="#">Firefighter #4</a>		
Exit procedure.		
Secure SCBA.		
Secure forcible entry equipment (irons).		
<a href="#">Entry Procedures</a>		
Advance hose hand over hand into building		
Demonstrate <a href="#">Straight Stick Method</a>		
Advance forward with hose directly behind partner.		
Demonstrate <a href="#">Bus Driver Method</a>		
While stationary, shuffle hands to move hose around corner.		
Demonstrate <a href="#">Taking a Bight</a>		
Bring loop of extra hose up to partner (or to friction point)		
Demonstrate <a href="#">Loading the "T"</a>		

**SAN DIEGO FIRE-RESCUE DEPARTMENT**  
**FIRE ACADEMY STANDARD OPERATING GUIDE**

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Off-load hose opposite direction of travel to bypass corner (friction point).		
Bump up to partner when directed.		
Assist partner making a <a href="#">Push</a> .		

**SAN DIEGO FIRE-RESCUE DEPARTMENT  
FIRE ACADEMY STANDARD OPERATING GUIDE**

DESCRIPTION:			
<b>*Drill #18: Interior Attack</b>			
SFT TOPIC:	SFT SKILL SHEET:	TIME STANDARD:	VIDEO LINK:
FF1A- 5-6, FF2- 2-2	3-3	Rig to door 1:00 Entire evolution 5:00	<a href="#">Interior Attack</a>

PERFORMANCE MEASURES:	PASS	FAIL
<b>Firefighter #3</b>		
<a href="#">Exit procedures.</a>		
Secure SCBA.		
Deploy hose to appropriate location utilizing the <a href="#">Flip</a> or <a href="#">Grab and Go Method.</a>		
Perform nozzle checks and announce "BUTT SHUT".		
Call and signal to Engineer, "WATER".		
Perform <a href="#">Transitional Attack.</a>		
<a href="#">Entry Procedures</a>		
Protect partner as they open door.		
Perform <a href="#">Hit and Move</a>		
Advance hose utilizing <a href="#">Clamp Slide/Comella Crawl.</a>		
Make a <a href="#">Push</a> into fire room (when indicated).		
Knock down fire (high to low attack).		
Check for extension.		
Assist partner with primary search and/or victim rescue by staying oriented to the hose line and leading/guiding out of IDLH (stay on hose line).		
Perform radio report (PPN) to IC upon knockdown and completion of primary search.		
Notify IC that both firefighters have exited IDLH		

<b>Firefighter #4</b>		
<a href="#">Exit procedures.</a>		
Secure SCBA.		
Secure irons, box light and TIC.		
Address forcible entry.		
Identify 4 L's (Life, Location, Layout, Lift).		
Control flow path.		
<a href="#">Entry procedures</a>		
Chock door open.		
<a href="#">Moves hose into building appropriately</a> -1 3/4" Hose Management (Drill #17)		
Assist partner making a <a href="#">Push</a>		
Conduct primary search while staying in verbal and/or visual communication with partner.		

**SAN DIEGO FIRE-RESCUE DEPARTMENT  
FIRE ACADEMY STANDARD OPERATING GUIDE**

DESCRIPTION:			
<b>*Drill #19: 2 1/2" Extended (Condo Lay)</b>			
SFT TOPIC:	SFT SKILL SHEET:	TIME STANDARD:	VIDEO LINK:
<b>FF1A- 2-9, 2-10</b>	<b>3-2, 3-3</b>	<b>10:00</b>	<a href="#">2 1/2" Playlist</a>

PERFORMANCE MEASURES:	PASS	FAIL
<a href="#">Firefighter #3</a>		
<a href="#">Exit procedures.</a>		
Secure SCBA.		
Secure the 2 1/2" line with gated wye for unspecified supply line.		
Announce "Engineer, break my line when I tell you"		
Advance the 2 1/2" line to a safe area near the P.O.E.		
Announce "Engineer, break my line"		
Make the proper checks, announce "BOTH GATES SHUT."		
Signal and call for water, announce "ENGINEER, WATER TO THE 2 1/2."		
Check for and address any kinks.		
Work with partner to attach Hose Pack A.		
Perform nozzle checks.		
Announce, "PARTNER, CHARGE THE HOSE PACK."		
<a href="#">PPT.</a>		
<a href="#">Entry procedures</a>		
Advance hose into building.		
Perform <a href="#">Interior Attack</a> .		
Advance to seat of the fire, advise partner to bump up.		
Knock down fire (high to low attack).		
Check for extension.		
Perform radio report (PPN) to IC/Division.		
Assist partner with primary search and/or victim rescue by staying oriented to the hose line and leading/guiding out of IDLH (stay on hose line).		
Perform radio report (PPN) to IC/Division once outside.		

**SAN DIEGO FIRE-RESCUE DEPARTMENT  
FIRE ACADEMY STANDARD OPERATING GUIDE**

<b><u>Firefighter #4</u></b>		
<b><u>Exit procedures.</u></b>		
Secure SCBA.		
Secure irons, TIC, Hose Pack A		
Address forcible entry.		
Identify 4 L's (Life, Location, Layout, Lift).		
Control flow path.		
Attach Hose Pack A to gated wye.		
Charge the 1 3/4" line safely when advised by partner.		
Tie off gated wye in open position after charging the 1 3/4" line.		
<b><u>Entry procedures</u></b>		
Chock door open.		
<b><u>Moves hose into building appropriately -1 3/4" Hose Management (Drill #17)</u></b>		
Conduct primary search while staying in verbal and/or visual communication with partner.		
If victim located:		
Notify partner and begin rescue.		
Remove victim >10' from IDLH.		
Assess ABC's and initiate CPR.		

**SAN DIEGO FIRE-RESCUE DEPARTMENT  
FIRE ACADEMY STANDARD OPERATING GUIDE**

DESCRIPTION:			
<b>*Drill #20: 2 1/2" Compound Evolution</b>			
SFT TOPIC:	SFT SKILL SHEET:	TIME STANDARD:	VIDEO LINK:
FF1A- 2-9, 2-10	3-2, 3-3	<b>Forward Lay :35</b> <b>Quick Attack 1:30</b> <b>Exposure Line 2:30</b> <b>Standing Hose Cntrl</b> <b>1:00</b>	<a href="#">2 1/2" Playlist</a>

PERFORMANCE MEASURES:	PASS	FAIL
<b>Firefighter #3</b>		
<b><u>Exit procedures.</u></b>		
Perform <b><u>Forward Lay</u></b> (Drill #1).		
Secure SCBA.		
Deploy <b><u>150' 2 1/2" Attack Line -Quick Attack</u></b> (Drill #12).		
Perform nozzle checks and announce "BUTT SHUT".		
Call and signal to Engineer, "WATER".		
<b><u>PPT</u></b> Adjust nozzle settings to <u>full</u> GPM/ <u>straight</u> stream.		
<b><u>Entry procedures</u></b>		
<b>2 1/2" Hose Control (Drill #16)</b>		
<b>Interior Operations</b>		
Flow water in the <b><u>Clamp Method</u></b> (see Appendix B).		
Request partner assistance and move hose 15' using <b><u>Clamp Slide/Comella Crawl</u></b>		
Request partner assistance and transition into <b><u>Comella Method</u></b> .		
Request partner assistance and transition into <b><u>Hip Grip Method</u></b> .		
When instructed, back out of IDLH while keeping nozzle pointed down range.		
Demonstrate #4 position.		
Remove mask and deploy unspecified <b><u>2 1/2" Attack Line Accordion/Bulk Bed</u></b> to appropriate location (Drill #11) Utilize smooth bore nozzle with 1 1/8" tip.		
<b>Exterior Operations <u>Standing Hose Control</u></b>		
Measure utility strap and apply to hose with a cow-hitch.		
Loop strap around outside shoulder and open nozzle.		
Ensure partner is in position to assist.		
Hit targets as directed while flowing water for 1 minute.		
Recite GPM flows for smooth bore tips.		
Demonstrate #4 position.		

**SAN DIEGO FIRE-RESCUE DEPARTMENT  
FIRE ACADEMY STANDARD OPERATING GUIDE**

DESCRIPTION:			
<b>*Drill #21: 1 3/4" Hose Pack Ops</b>			
SFT TOPIC:	SFT SKILL SHEET:	TIME STANDARD:	VIDEO LINK:
<b>FF1A-5-12</b>	<b>3-10E</b>	<b>09:30</b>	<a href="#">Hose Pack Ops</a>

PERFORMANCE MEASURES:	PASS	FAIL
<b>Firefighter #3</b>		
Secure SCBA.		
Perform <a href="#">2 1/2" Supply Line to FDC</a> (Drill #8) <i>if not already completed.</i>		
Secure Hose Pack A and proceed to FDC connection.		
Check and announce "Shutoff butts shut" at the FDC and ascend stairs calling out each floor.		
Check and announce "standpipe closed" at fire floor.		
Stage hose pack at half landing below fire floor and open straps.		
Open pack in a circle and stand in the middle		
Perform nozzle checks (150 GPM/straight stream)		
Announce "partner, water to Hose Pack A."		
Perform PPT.		
<a href="#">Entry procedures</a>		
Advance hose line appropriately using <a href="#">Clamp Slide/Comella Crawl/Heisman</a> (see Appendix B).		
Work with partner to connect hose packs A and B		

<b>Firefighter #4</b>		
<a href="#">Exit procedures.</a>		
Secure SCBA.		
Secure irons, TIC, and Hose Pack B.		
Checks supply line for leaks, kinks and hazards.		
Confirms with partner standpipe outlet is shut and charges FDC by opening shut off butts.		
Ascend stairs calling out each floor.		
Properly connect the gated wye to the standpipe (spanner tight).		
Properly connect Hose Pack A to the gated wye.		
Tie off gated wye in open position.		
Advance to entry point, fixing kinks along the way.		
<a href="#">Entry procedures</a>		
Move hose into building appropriately - <b>1 3/4" Hose Management</b> (Drill #17)		
Advance up the line with Hose Pack B.		
Extend line by attaching Hose Pack B to Hose Pack A (remove 7/8" Slug Tip)		

**SECTION 5**

**Additional State Fire Training Skills**



**SAN DIEGO FIRE-RESCUE DEPARTMENT  
FIRE ACADEMY STANDARD OPERATING GUIDE**

DESCRIPTION:			
<b>Drill #22: Vehicle Fire</b>			
SFT TOPIC:	SFT SKILL SHEET:	TIME STANDARD:	VIDEO LINK:
FF1A- 7-2, FF2- 3	3-7, 3-1	N/A	N/A

PERFORMANCE MEASURES:	PASS	FAIL
<b>Firefighter #3</b>		
<u><a href="#">Exit procedures.</a></u>		
Secure SCBA.		
Deploy hose to appropriate location utilizing the <u><a href="#">Flip</a></u> or <u><a href="#">Grab and Go Method.</a></u>		
Perform PPT and set to 30-degree fog.		
Identify if vehicle is an alternative fuel vehicle.		
Approach the vehicle from the side or a 45-degree angle.		
Attack fire from uphill and upwind if possible.		
Protect exposures (if applicable).		
Adjust nozzle pattern for protection if needed.		
Overhaul the fire scene and preserve origin and cause indicators.		
Call for the line to be shut down, bleed line.		

<b>Firefighter #4</b>		
<u><a href="#">Exit procedures.</a></u>		
Secure SCBA.		
Secure Irons.		
Identify if vehicle is an alternative fuel vehicle.		
Approach the vehicle from the side or a 45-degree angle.		
Check for victims in and around vehicle.		
Expose all hidden fire and open all vehicle compartments using proper tools and techniques.		
Overhaul the fire scene and preserve origin and cause indicators.		

<b>Foam Application</b>		
Secure foam container, foam wrench and foam eductor.		
Open foam container and place eductor inside.		
Connect eductor to 1 3/4" hose line.		
Adjust foam concentration.		
Signal and call for water to the Engineer announcing, "Water."		
Attach foam nozzle		

<b>Fire Extinguishers (FF1A-5-3 Skill Sheet- 3-16)</b>		
Obtain the appropriate extinguisher for type of fire.		
Pull the pin and aim at base of fire.		
Squeeze trigger		

**SAN DIEGO FIRE-RESCUE DEPARTMENT  
FIRE ACADEMY STANDARD OPERATING GUIDE**

Sweep from side to side			
DESCRIPTION:			
<b>Drill #23: Progressive Hose Lay</b>			
SFT TOPIC:	SFT SKILL SHEET:	TIME STANDARD:	VIDEO LINK:
<b>FF1A- 7-1</b>	<b>3-10D, 3-19</b>	<b>N/A</b>	<b>N/A</b>

PERFORMANCE MEASURES:	PASS	FAIL
<b>Firefighter #3</b>		
Secure wildland hose pack and tool.		
Bump up the crosslay and take the nozzle from partner.		
Advance the line and wet down the area before shutting line down and break nozzle off.		
Secure first bundle of hose from wildland hose pack.		
Secure the nozzle and attach to male coupling and call for water.		
Continue advancing the hose line until notified to stop by partner.		
Wet down the area then announce, “ <i>clamp.</i> ”		
Break off nozzle and shut off butt while partner connects next bundle of hose from the pack.		
Attach nozzle and shut off butt to male coupling and call for water.		
Continue advancing the hose in this manner until out of hose.		

<b>Firefighter #4</b>		
Deploy 200’ cross lay utilizing the <b>Flip</b> or <b>Grab and Go Method</b> .		
Adjust GPM to lowest setting and advance hose.		
Take tool from partner and give them the nozzle.		
Call out “ <i>hose</i> ” when down to 10 ft. of charged line.		
Drop first section of hose from wild land pack and connect female coupling.		
When connection is made and partner is ready announce, “ <i>water coming</i> ” and charge line.		
Pull hose and call out ‘ <i>ten feet</i> ’ when down to 10 ft. of charged line.		
Announce “ <i>clamp</i> ” and apply clamp to charged line.		
Drop second section of hose from wild land pack and connect female coupling.		
When connection is made and partner is ready announce, “ <i>water coming</i> ” and remove clamp.		
Continue advancing the hose in this manner until out of hose.		

**SAN DIEGO FIRE-RESCUE DEPARTMENT  
FIRE ACADEMY STANDARD OPERATING GUIDE**

DESCRIPTION:			
<b>Drill #24: Replace a Burst Section of Hose</b>			
SFT TOPIC:	SFT SKILL SHEET:	TIME STANDARD:	VIDEO LINK:
<b>FF1A- 7-1</b>	<b>4-2A</b>	<b>N/A</b>	<b>N/A</b>

PERFORMANCE MEASURES:	PASS	FAIL
Wear appropriate PPE.		
Place hose clamp at least five feet behind the female coupling of damaged hose length.		
Apply hose clamp correctly.		
Direct team member to drain hose at nozzle.		
Remove damaged hose section.		
Replace damaged hose section of hose with new hose.		
Close nozzle.		
Release the clamp slowly and correctly to prevent water hammer.		

DESCRIPTION:			
<b>Drill #25: Build a Hose Roll</b>			
SFT TOPIC:	SFT SKILL SHEET:	TIME STANDARD:	VIDEO LINK:
<b>FF1A- 7-1</b>	<b>4-2B</b>	<b>N/A</b>	<b>N/A</b>

PERFORMANCE MEASURES:	PASS	FAIL
Wear appropriate PPE.		
Lay hose out straight and flat on clean surface.		
Roll hose (begin at male coupling if using single roll method).		
Continue rolling keeping edges aligned.		
Lay completed roll on ground.		
Pack any protruding coils down into roll with foot.		

**SAN DIEGO FIRE-RESCUE DEPARTMENT  
FIRE ACADEMY STANDARD OPERATING GUIDE**

DESCRIPTION:			
<b>Drill #26: Clean and Maintain Hose, Mark Defective Hose</b>			
<b>SFT TOPIC:</b>	<b>SFT SKILL SHEET:</b>	<b>TIME STANDARD:</b>	<b>VIDEO LINK:</b>
<b>FF1A- 7-1</b>	<b>4-2C</b>	<b>N/A</b>	<b>N/A</b>

PERFORMANCE MEASURES:	PASS	FAIL
Wear appropriate PPE.		
Clean hose (coupling, swivels, male threads and length of hose).		
Rinse hose thoroughly with clean water.		
Inspect hose for any remaining grease, oil stains, frays, snags, or worn edges.		
Inspect coupling gaskets and replaces in necessary.		
Mark damaged areas if found. Places out of service and notifies Company Officer.		
Roll and stores in service section.		

DESCRIPTION:			
<b>Drill #27: Deploy Portable Water Tank</b>			
<b>SFT TOPIC:</b>	<b>SFT SKILL SHEET:</b>	<b>TIME STANDARD:</b>	<b>VIDEO LINK:</b>
<b>FF1A- 4-4</b>	<b>3-15A</b>	<b>N/A</b>	<b>N/A</b>

PERFORMANCE MEASURES:	PASS	FAIL
Wear appropriate PPE.		
Deploy Portable water tank.		
Check gaskets on hard suction hose for dirt, gravel or defects.		
Connect strainer to hose.		
Fasten rope to strainer or hard suction hose.		
Connect hard suction hose to apparatus.		
Use appropriate tools to ensure an airtight connection.		
Place hose and strainer into water source.		
Signal pump operator starts drafting procedure.		

**SAN DIEGO FIRE-RESCUE DEPARTMENT  
FIRE ACADEMY STANDARD OPERATING GUIDE**

DESCRIPTION:			
Drill #28: Operate a Portable Master Stream			
SFT TOPIC:	SFT SKILL SHEET:	TIME STANDARD:	VIDEO LINK:
FF1A-	3-8	N/A	N/A

PERFORMANCE MEASURES:	PASS	FAIL
Wear appropriate PPE.		
Assemble necessary tools, hose, appliance for set up.		
Place master stream device (monitor and base) in position with assistance.		
Secure device according to department guidelines.		
Perform <b>4" Supply Line to Portable Monitor</b> (Drill #6)		
Set nozzle to desired elevation and adjusts nozzle pattern.		
Direct pump operator to charge the device supply line.		
Demonstrate setting all device position and locks.		
Demonstrate direction of stream.		
Signal pump operator to shut down water supply.		

DESCRIPTION:			
Drill #29: Flow Water From a Ladder			
SFT TOPIC:	SFT SKILL SHEET:	TIME STANDARD:	VIDEO LINK:
FF1A- 5-12	3-10A	N/A	N/A

PERFORMANCE MEASURES:	PASS	FAIL
Deploy 1 3/4" line using <b>Flip</b> or <b>Grab and Go Method</b> .		
Position on ladder for operation of nozzle.		
Place nozzle through rung of ladder, extending hose at least 1 foot in front of body.		
Tie off attack line using approved method.		
Open nozzle and flow water.		

**SAN DIEGO FIRE-RESCUE DEPARTMENT  
FIRE ACADEMY STANDARD OPERATING GUIDE**

DESCRIPTION:			
Drill #30: Load Supply Hose			
SFT TOPIC:	SFT SKILL SHEET:	TIME STANDARD:	VIDEO LINK:
FF1A-5-4	3-10F	N/A	N/A

PERFORMANCE MEASURES:	PASS	FAIL
Wear appropriate PPE (gloves).		
Inspect hose and couplings for damage.		
Place appropriate coupling in hose bed.		
Lay hose into bed for correct load type.		
Layer hose so couplings don't flip and get caught up.		
Attach appropriate fitting and secure hose bed straps.		

DESCRIPTION:			
Drill #31- Flammable Gas Cylinder			
SFT TOPIC:	SFT SKILL SHEET:	TIME STANDARD:	VIDEO LINK:
FFII- 3	3-2	N/A	

PERFORMANCE MEASURES:	PASS	FAIL
Secure SCBA.		
Identify contents and safety zone prior to advancing.		
Advances toward fire with safe approach maintaining team integrity.		
Operates nozzle on 30-degree fog pattern.		
Applies fire stream without extinguishing flames (unless leak has been stopped).		
Operates valve to control gas flow.		
Retreats in controlled manner maintaining team integrity.		

**SAN DIEGO FIRE-RESCUE DEPARTMENT  
FIRE ACADEMY STANDARD OPERATING GUIDE**

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DESCRIPTION:			
State Fire Training FFII Skills			
SFT TOPIC:	SFT SKILL SHEET:	TIME STANDARD:	VIDEO LINK:
Various	Various	N/A	N/A

PERFORMANCE MEASURES:	PASS	FAIL
Fire Hose Annual Service Test- FFII Topic 5 Skill 5-5		
Organize an Incident Management System- FFII Topic 1 Skill 1-1		
Complete a Basic Incident Report- FFII Topic 2 Skill 2-1		
Perform a Fire Safety Survey- FFII Topic 5 Skill 5-1		
Present Fire Safety Information- FFII Topic 5 Skill 5-2		
Perform a Pre-Incident Survey FFII Topic 5 Skill 5-3		

## Appendix A- Glossary

**Dance Floor-** Area from tailboard to approximately 6' directly behind apparatus, where couplings should **not** be connected or broken.

**Direct Pull-** If angle from the tailboard to the target is LESS than 45° off tailboard.

**Entry Procedure/Door check-** Size-up door, TIC door, tag out, mask up, glove up, click-in regulator, perform 3/5 count, sound the floor, announce “SDFD, can anyone hear me”, check and communicate the 4 L’s (Life, Layout, Location and Lift).

**Exit Procedure-**At the command “Drop Off”, FF will exit the cab in proper PPE, assuring there is no traffic and announce, “Clear traffic.” They will exit the cab with three points of contact.

**4 L’s-** Quick evaluation of interior conditions usually performed by the #4 firefighter just prior to making entry. For this to be effective the firefighter must stay low to the ground and should consider the use of a flashlight or handlight:

1. **Life-** presence of victims
2. **Layout-** floor plan
3. **Location-** visible fire or glow
4. **Lift-** evaluate presentation of smoke layer/neutral plane

**IDLH-** Immediately Dangerous to Life or Health. Must drop accountability tag prior to entering an IDLH.

**Indirect Pull-** If angle from the tailboard to the target is GREATER than 45° off tailboard.

**Nozzle Checks-** Performed prior to stowing nozzle in the hose bed and prior to calling for water. Check that the first coupling is tight, the shut off butt is shut, the second coupling is tight.

**Obstructed Pull-** objects in way of target. Hose bundle must be flipped on shoulder to navigate.

**P.O.E-** Point of Entry is the area where firefighters enter their work area or IDLH. This is the area you drop your accountability tag if an Accountability Officer is not available

**PPN-** Position, Progress and Needs is communicated to the IC via radio. Communicate your position in the structure, what progress you have made and what further needs you have in order to mitigate the incident

**PPT-** Pressure and Pattern Test is performed prior to making entry into an IDLH with a charged attack line. It is done to remove air in the line, adjust the stream to the appropriate pattern, ensure there is enough pressure, and help to remove kinks.

1. In a standing or clamp position open the nozzle and flow water.
2. Ensure that the hose stream has adequate pressure and that the GPM selector is set to 150 GPM for an interior 1 3/4”, or 250 GPM for 2 1/2”



3. Next manipulate stream shaper to a fog pattern and then back to a straight stream to ensure the nozzle is functioning properly.
4. For Interior Attack the nozzle must be in a **straight stream** pattern at the appropriate GPM.
5. If you are experiencing poor stream quality adjust GPM selector to the “flush” position. This ensures no debris is clogged in the line. Reset selector to the appropriate GPM.
6. If kinks are in the line, open and shut the bale rapidly to clear them. This is called **“cycling the line”**. If kinks remain after cycling the line they must be removed by hand.

**Specified Pull-** Captain specifies length of hose to be pulled. Firefighter deploys specified length to objective.

**Threshold-** The transition from one interior room to another. Sound the floor with your lead foot.

**Transitional Attack-** Exterior straight stream operation to cool the fire compartment before transitioning into an interior attack. Position straight stream directly at the ceiling in a steady pattern, just beneath exterior opening.

**Unspecified Pull-** No length specified. Firefighter must estimate and pull the appropriate amount of hose to the objective.

**Unobstructed Pull-** Clear path to objective. Select easiest/preferred hose deployment method.

<b>Appendix B- Reference Images</b>

<b>IMAGE #1: CLAMP METHOD</b>	<b>IMAGE #2: COMELLA METHOD</b>
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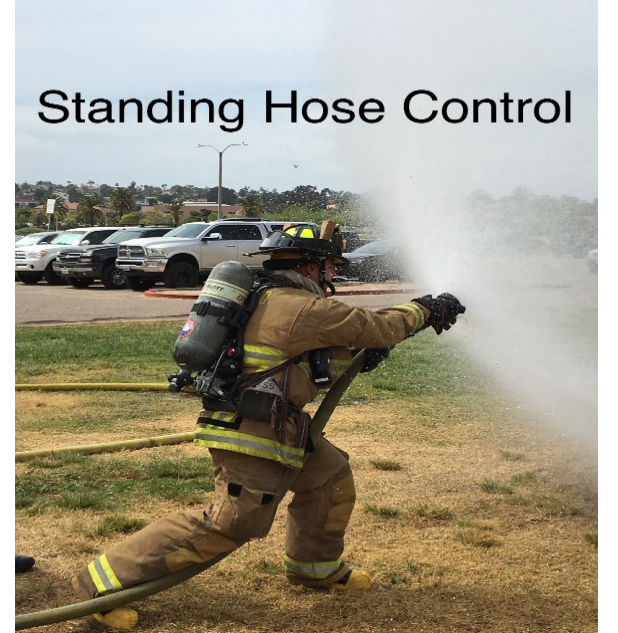
**IMAGE #3: HIP GRIP METHOD**



**IMAGE #4: STANDING HOSE CONTROL**

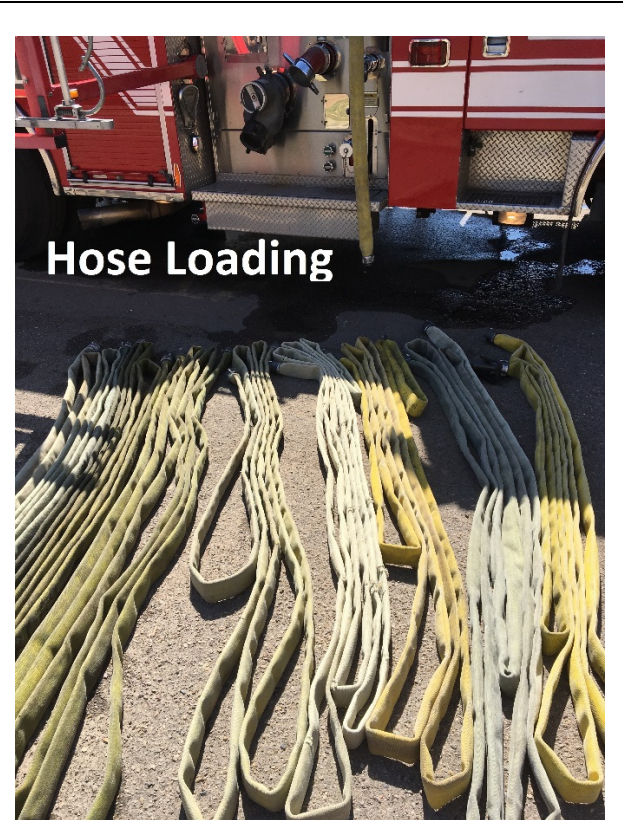


**IMAGE #5: HOSE LOADING #1**

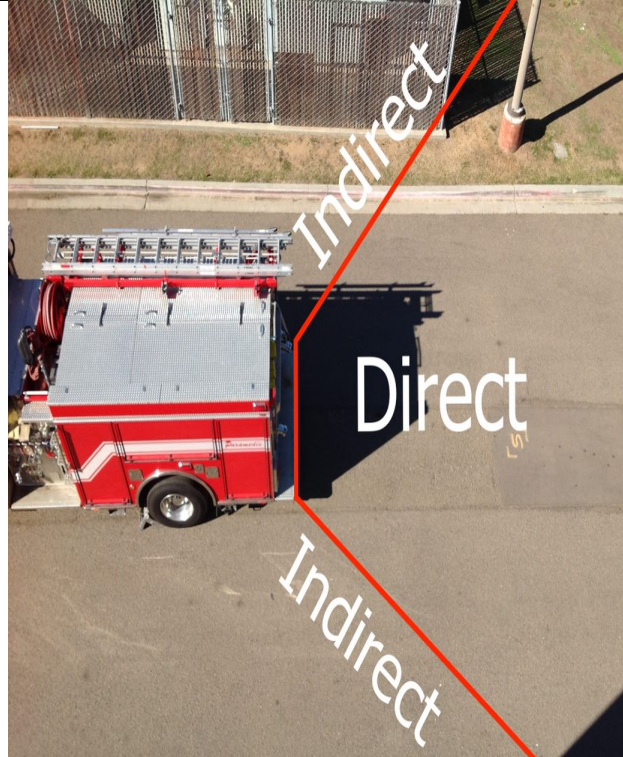
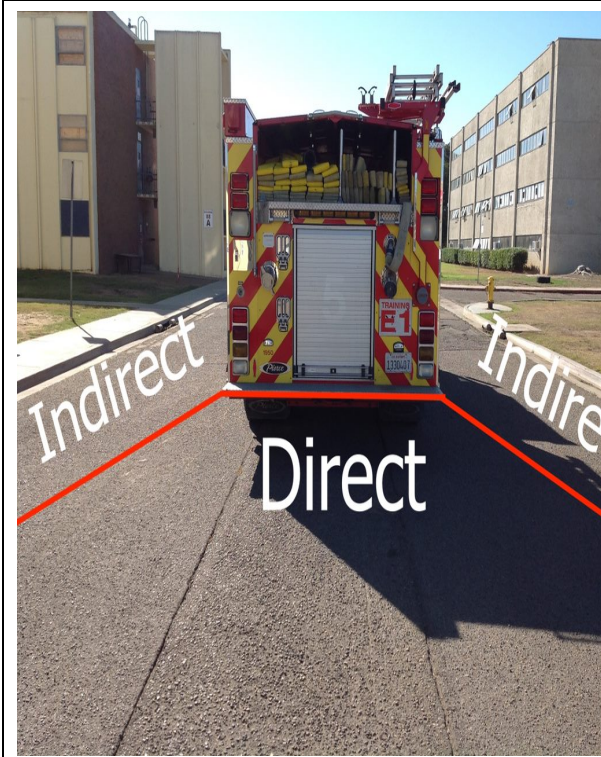


**IMAGE #6: HOSE LOADING #2**





**IMAGE #7: LEG LOCK**







## Appendix C: Engine Drill Equipment Guide

\*\*\*Decon Kit for each Drill\*\*\*

### Hose-Pack Operations

- (1) SCBA and extra bottle per firefighter
- (3) radios and collar mics
- (1) TIC
- (2) additional hosepacks
- (1) Hose roller

### 2 1/2" Extended (Condo-Lay)

- (1) SCBA and extra bottle per firefighter
- (3) radios and collar mics
- (1) TIC
- (1) Attack Panel and remote
- (1) Smoke machine w/ additional smoke
- Black out masks
- (1) Rescue dummy
- (1) additional hosepack
- (1) Hose roller

### Interior Attack

- (1) SCBA and extra bottle per firefighter
- (3) radios and collar mics
- (1) TIC
- (1) Attack Panel and remote
- (1) Smoke machine w/ additional smoke
- Black out masks
- (1) Rescue dummy

### Progressive Hose-Lay

- Wildland PPE
- (2) additional hose packs
- (1) Hose roller

### Vertical Stretch

- Drop Bags
- (1) 24' GEL

### Vehicle Fire

- Car prop
- Wheel chocks
- Fire control cart
- Water pan and garden hose
- Pilot box and braided lines
- Extension cords

Supply the Portable Monitor

- (1) Portable monitor and base

Portable Water Tank

- (1) Portable tank
- Hard suction hose w/filter