Drill Ground Activity 1: Size Up and Soften a Structure

Description	This drill ground activity provides students with an opportunity to practice sizing up and softening a structure to prepare for RIC operations.
Timeframe	30 minutes
Students	Groups of up to 10 students
Materials	• Appropriate training structure • Fire service ladders • Extension ladders • Flashlights • Saws • Hand tools • Full turn out PPE • SCBA
Site Preparation	• Ensure that site is free of all hazards.
Instructor Directions	1. Review the operation of the evolution and the desired outcome with participants 2. Review safety considerations with participants. 3. Show participants starting and ending points of the course. 4. Ensure all participants are wearing full PPE. 5. Perform a final safety check prior to performing the evolution.

Student Directions
1. Perform size up • 360° of the structure including use of TIC • Occupancy and type • Building construction • Structural triage • Note any additions or remodels • Note any other hazards or fire conditions present or changing
2. Soften structure • Communicate with Operations and Command • Remove security bars and doors • Create openings using existing doors and windows • Place a box light, turned on, in openings to denote an exit • Throw additional ladders to the roof (minimum two ladders at all times) • Place ladders to all floors of the operation

Drill Ground Activity 2: Assemble a Mobile Tool Cache

Description	This drill ground activity provides students with an opportunity to practice assembling a mobile tool cache based on construction type, building layout, and incident priorities.
Timeframe	15 minutes
Students	Groups of up to 10 students
Materials	• Appropriate training structure • Tools and equipment used in assembling a mobile tool cache • Ground ladder appropriate for the structure • Full turn out PPE
Site Preparation	• Ensure that site is free of all hazards.
Instructor Directions	1. Review the operation of the evolution and the desired outcome with participants. 2. Review safety considerations with participants. 3. Show participants the starting and ending points of the course. 4. Increase the complexity of scenarios as appropriate (no air, on air, decreased visibility, no visibility, etc.) 5. Ensure all participants are wearing full PPE. 6. Perform a final safety check prior to performing the evolution.

Student Directions	
1. Select a ground ladder appropriately sized for structure. 2. Bed ladder on ground.	

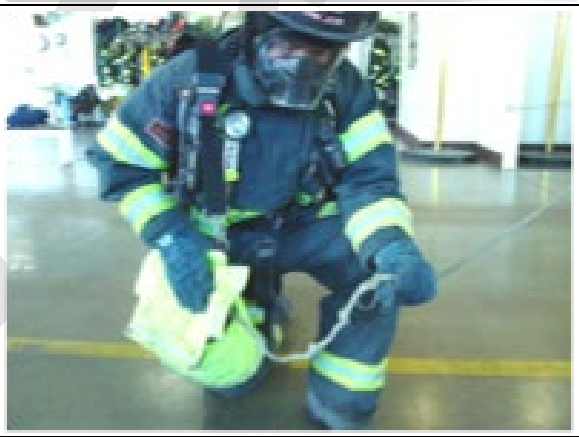
3. Place salvage cover or hall runner on ladder, extending salvage cover the full length of ladder and rest it between the rungs.	
4. Select and place appropriate tools and equipment on ladder dispersing weight evenly.	
5. Pick up ladder. • Use proper lifting techniques. • Place one crew member on each corner of ladder. • If RIC has three people, crewmember at ladder tip or rear holds both beams.	

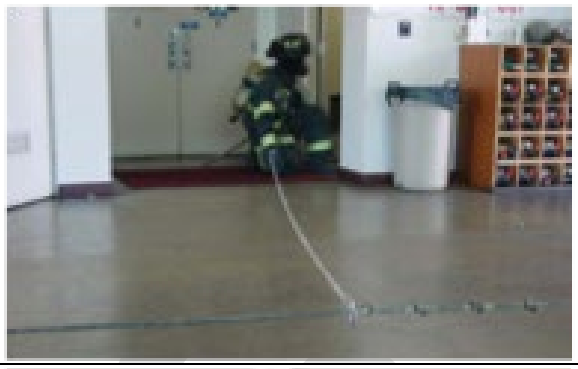
6. Deploy tool and equipment cache to appropriate location.	

Drill Ground Activity 3: Search Line Deployment

Description	This drill ground activity provides students with an opportunity to practice working as part of a RIC to deploy a search line during a rescue.
Timeframe	30 minutes
Students	Groups of up to 10 students
Materials	• Appropriate training structure • PASS device to simulate location of downed firefighter • Full turn out PPE • SCBA • Search line and anchoring equipment • Taglines • Radio • TIC (optional)
Site Preparation	• Ensure that site is free of all hazards.
Instructor Directions	1. Review the operation of the evolution and the desired outcome with participants. 2. Review safety considerations with participants. 3. Show participants the starting and ending points of the course. 4. Increase the complexity of scenarios as appropriate (no air, on air, decreased visibility, no visibility, etc.). 5. Ensure all participants are wearing full PPE. 6. Perform a final safety check prior to performing the evolution.

Student Directions	
1. Ensure search line is anchored appropriately outside structure. • Approximately 10 feet outside and 3 feet off ground • Exterior identifier showing at point of entry	

2. Place taglines in an easily accessible location. 3. Confirm radio channel. 4. Enter structure.	
5. RIC leader: Stop crew at an ideal location to determine where PASS device is sounding. • Use TIC if available.	
6. Deploy search line bag. • Ensure line is coming out front of primary search line bag. 7. Exit structure when search is completed, downed fire fighter is located, or lack of air.	
8. Wrap tagline around wrist or hand.	

9. Deploy tagline.	
10. Connect tagline to a metal ring on primary search line (if possible). • If RIC is not located at a ring and does not want to move to a ring, use a friction wrap.	
11. Rescuer deploying search line: Move past downed fire fighter and tie off or wrap search line. • 5 feet to one side, if possible, and past RIC • Keep search line out of the way while packaging downed fire fighter. • Ensure other crews deploying will be able to locate downed fire fighter.	
12. If a RIC is deploying into a structure and knows that the deployment area is meant for foot travel, allow the search line to follow the RIC without using a change of direction point.	

13. If deploying into an area that may not be meant for foot travel, use solid objects as change of direction point. • Do not take time to actually wrap or tie-off. • Do not use a chair or an object that will be moved by the search line.	

Drill Ground Activity 4: Oriented Search

Description	This drill ground activity provides students with an opportunity to practice performing an oriented search a RIC to locate a downed fire fighter.
Timeframe	1 hour
Students	Groups of up to 10 students
Materials	• Appropriate training structure • Simulated downed firefighter with SCBA • Hose line • Rope • TIC • Full turn out PPE • SCBA
Site Preparation	• Ensure the site is free of all hazards. • The course must include the ability to orient using hoseline, rope, wall, and TIC.

Instructor Directions	1. Review the operation of the evolution and the desired outcome with participants.
	  • Crew leader will determine the search method and positional assignments for crew members.
	  • Ensure that the plan is communicated to all members and Incident Command.
	2. Review safety considerations with participants.
	3. Show participants the starting and ending points of the course.
	4. Increase the complexity of scenarios as appropriate (no air, on air, decreased visibility, no visibility, etc.).
	5. Ensure all participants are wearing full PPE.
	6. Perform a final safety check prior to performing the evolution.

Student Directions
1. Listen for MAYDAY transmission.
2. RIC Leader: Identify point of entry for RIC deployment.
3. RIC Leader: Determine search method (hose line, rope line, wall, TIC) and positional assignments of crew members.
4. RIC Leader: Communicate method, point of entry, and number of members deploying to Incident Command.
5. Properly anchor search rope outside of structure (if applicable).
6. Enter the structure.
7. Maintain orientation throughout the search, effectively utilizing all crew members.
8. Utilize R.O.A.M. to monitor crew air levels.
9. Perform periodic pauses to listen for PASS device and scan with thermal imaging camera.
10. Exit the structure when search is completed, downed fire fighter is located, or lack of air.

Drill Ground Activity 5: Assess a Downed Fire Fighter (PAC CAN)

Description	This drill ground activity provides students with an opportunity to practice working as a member of a team to perform a PAC assessment and deliver a CAN report to the exterior of the structure.
Timeframe	45 minutes
Students	Groups of up to 10 students Can be completed by one student
Materials	• Appropriate training structure • Simulated downed firefighter with SCBA • Full turn out PPE • SCBA
Site Preparation	• Ensure that site is free of all hazards.
Instructor Directions	1. Review the operation of the evolution and the desired outcome with participants. 2. Review safety considerations with participants. 3. Show participants the starting and ending points of the course. 4. Increase the complexity of scenarios as appropriate (no air, on air, decreased visibility, no visibility, etc.). 5. Ensure all participants are wearing full PPE. 6. Perform a final safety check prior to performing the evolution.

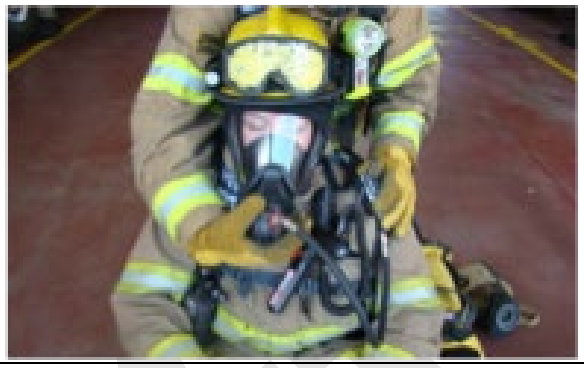
Student Directions	
1. Locate downed fire fighter. 2. RIC leader: Monitor fire and structural conditions.	
3. Deactivate downed fire fighter's PASS device and identify fire fighter.	

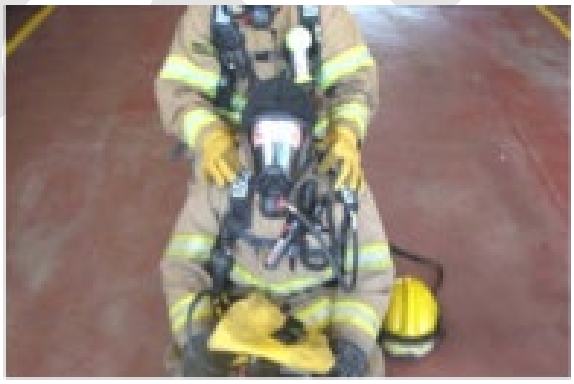
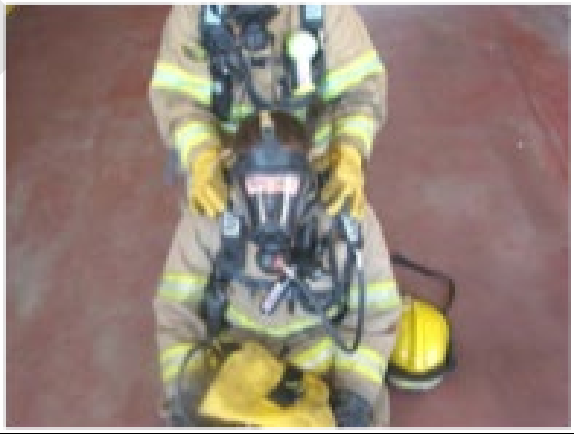
4. Assess downed firefighter for breathing andSCBA pressure. • Begin at SCBA mask and work back toward second stage regulator and cylinder gauge.	
5. Assess downed fire fighter. • Significant injuries, any entrapment issues, etc.	
6. Report assessment findings to RIC leader.	
7. RIC leader: Deliver CAN (conditions, actions, needs) report to Incident Command.	

Drill Ground Activity 6: RIC Air Delivery

Description	This drill ground activity provides students with an opportunity to practice supplying a downedfire fighter with air from a RIC air pack or SCBA.
Timeframe	45 minutes
Students	Groups of up to 10 students
Materials	• Appropriate training structure • Simulated downed firefighter with SCBA • RIC air pack or SCBA with mask • Full turn out PPE
Site Preparation	• Ensure the site is free of all hazards.
Instructor Directions	1. Review the operation of the evolution and the desired outcome with participants. 2. Review safety considerations with participants. 3. Show participants the starting and ending points of the course. 4. Increase the complexity of scenarios as appropriate (no air, on air, decreased visibility, no visibility, etc.). 5. Ensure all participants are wearing full PPE. 6. Perform a final safety check prior to performing the evolution.

Student Directions	
Universal Air Connection (UAC)	
1. Perform PAC CAN assessment to determine appropriate air deliverymethod. 2. Access downed fire fighter's UAC, repositioning fire fighter if necessary. 3. Make connection to UAC. 4. Complete equalization. 5. Remove supply hose prior to movement.	

Mask-Mounted Regulator (MMR) Exchange	
6. Perform PAC CAN assessment to determine appropriate air delivery method. 7. Access downed fire fighter's MMR, repositioning fire fighter if necessary. 8. Place one hand around regulator where it connects to face piece.	
9. Leave MMR in place, giving RIC member a point ofreference when making regulator exchange. 10. Place RIC's MMR where it is readily accessible, within reach and close to downed fire fighter’s face piece.	
11. Remove downed fire fighter's regulator. • If downed fire fighter is conscious, advise them to hold breath during exchange. 12. Replace downed fire fighter’s regulator with RIC's regulator as quickly as possible to reduce IDLH exposure. 13. Remove downed fire fighter's SCBA if necessary.	
Low-Pressure Hose to MMR	
14. Perform PAC CAN assessment to determine appropriate air delivery method. 15. Access downed fire fighter's low-pressure hose connection, repositioning fire fighter if necessary.	

16. Remove downed fire fighter's low-pressure hose from SCBA and replace with RIC air pack's low-pressure hose.	
Full Face Piece Exchange	
17. Perform PAC CAN assessment to determine appropriate air delivery method.	
18. Move downed fire fighter into a sitting position to access entire SCBA mask. • RIC member is behind downed fire fighter.	
19. Place RIC air pack face piece in a readily available location. • Regulator attached • Harness and straps pulled over front of mask	
20. Remove downed fire fighter's helmet, pull hood down, and loosed face piece straps.	
21. Remove downed fire fighter's face piece using one hand, using other hand to replace with RIC air pack face piece. 22. Tighten face piece straps and replace hood and helmet.	

23. Remove downed fire fighter's SCBA if necessary.	
Secure RIC Air Pack (All Methods)	
24. Place RIC air pack on downed fire fighter's lap. 25. Secure RIC air pack to downed fire fighter. • Clip to downed fire fighter's waist usinga carabiner. • Ensure it does not pull away from downed fire fighter.	
Shared Regulator Method (last resort)	
26. Position shoulder-to-shoulder with downed fire fighter wrapping arms around each other's shoulders. 27. Maintain contact with regulator at all times (downed fire fighter removes their regulator).	

Drill Ground Activity 7: SCBA Conversion to Drag a Downed Fire Fighter

Description	This drill ground activity provides students with an opportunity to practice converting a downed fire fighter's SCBA in preparation to drag the downed fire fighter to safety.
Timeframe	15 minutes
Students	Groups of up to 10 students
Materials	• Full turn out PPE • SCBA
Site Preparation	• Ensure that site is free of all hazards.
Instructor Directions	1. Review the operation of the evolution and the desired outcome with participants. 2. Review safety considerations with participants. 3. Increase the complexity of scenarios as appropriate (no air, on air, decreased visibility, no visibility, etc.) 4. Ensure all participants are wearing full PPE. 5. Perform a final safety check prior to performing the evolution.

Student Directions
1. Release accessible tensioner (D rings, gator clip etc.) on waist strap.
2. Position as closely as possible to downed fire fighter's waist.
3. Reach under downed fire fighter, grasping lower side of waist strap.
4. Pull strap straight up rotating downed fire fighter onto their back/SCBA cylinder.
5. Loosen other side of the waist strap tensioner.
6. Grab waist strap and forcefully pull SCBA toward downed fire fighter's feet.
7. Lift downed fire fighter's leg onto rescuer's opposite shoulder.
8. Grasp one side of waist strap in each hand and release buckle.
9. Reconnect waist strap between downed fire fighter's legs, placing the SCBA in "drag" configuration.
10. Adjust shoulder straps to allow gloved hands underneath.
11. Attempt to position downed fire fighter with regulator-side shoulder up to protect low pressure hose.

Drill Ground Activity 8: Remove PPE from a Downed Fire Fighter

Description	This drill ground activity provides students with an opportunity to practice removing a downed fire fighter's PPE to facilitate a rescue.
Timeframe	15 minutes
Students	Groups of up to 10 students
Materials	• Full turn out PPE • SCBA • Radio
Site Preparation	• Ensure that site is free of all hazards.
Instructor Directions	1. Review the operation of the evolution and the desired outcome with participants. 2. Review safety considerations with participants. 3. Show participants the starting and ending points of the course. 4. Increase the complexity of scenarios as appropriate (no air, on air, decreased visibility, no visibility, etc.) 5. Ensure all participants are wearing full PPE. 6. Perform a final safety check prior to performing the evolution.

Student Directions
1. Move downed fire fighter to a safe area.
2. Silence downed fire fighter's PASS device.
3. Use radio to notify IC of downed fire fighter's location and CAN.
4. Rescuer #1: Pull downed fire fighter by shoulder straps to position them between Rescuer #1's legs. Remove downed fire fighter's helmet, face piece, hood, and gloves. Holds wrist area of downed fire fighter's turnout coat.
5. Rescuer #2: Position between downed fire fighter's legs.
6. Rescuer #1: Perform CPR (anticipate downed fire fighter being moved while CPR is performed).
7. Rescuer #2: Move between downed fire fighter's legs, grab their bunker pant cuffs, and look towards Rescuer #1 holding downed fire fighter's wrist area.
8. Rescuer #2: Stand and walk backwards sliding downed fire fighter out of bunker coat and SCBA.
9. Rescuer #1: Continue CPR as downed fire fighter is moved toward additional care.

Drill Ground Activity 9: Drag a Downed Fire Fighter

Description	This drill ground activity provides students with an opportunity to practice dragging a downed fire fighter individually and as a member of a team.
Timeframe	30 minutes
Students	Groups of up to 10 students
Materials	• Full turn out PPE • SCBA • Webbing, MAST device, or rescue loops
Site Preparation	• Ensure that site is free of all hazards.

Instructor Directions	1. Review the operation of the evolution and the desired outcome with participants.
	  • In good visibility or fire conditions drag can be performed from standing position.
	  • In poor visibility or fire conditions drag can be performed from 3-point crawl and pull.
	  • Drags can be augmented with tools.
	2. Review safety considerations with participants.
	3. Show participants the starting and ending points of the course.
	4. Increase the complexity of scenarios as appropriate (no air, on air, decreased visibility, no visibility, etc.)
	5. Ensure all participants are wearing full PPE.
	6. Perform a final safety check prior to performing the evolution.

Student Directions	
One Person Drag	
1. Locate the downed fire fighter. 2. Perform PAC CAN assessment. 3. Place downed fire fighter's SCBA waist strap between their legs to create a rescue harness.	

4. Grab downed fire fighter's SCBA shoulder and drag downed fire fighter to exit or safety without dislodging their SCBA or face piece. • Webbing, MAST device, or recuse loops can be used to aid in removal.	

Multi-Person Drag
5. Locate the downed fire fighter.
6. Perform PAC CAN assessment.
7. Place downed fire fighter's SCBA waist strap between their legs to create a rescue harness.
8. Each rescuer grabs a downed fire fighter SCBA shoulder strap and drags downed fire fighter to exit or safety without dislodging their SCBA or face piece. • Webbing, MAST device, or recuse loops can be used to aid in removal.

Drill Ground Activity 10: Drag a Downed Fire Fighter Up/Down Stairs

Description	This drill ground activity provides students with an opportunity to practice working as part of a RIC to properly drag a downed fire fighter up and down stars when packaging equipment is not available.
Timeframe	1 hour (15 minutes – Up Stairs / 45 minutes – Down Stairs)
Students	Groups of up to 10 students Two students minimum required for drill
Materials	• Appropriate training structure • Simulated downed firefighter in full PPEE • Full turn out PPE • SCBA • Rescue loop
Site Preparation	• Ensure that site is free of all hazards
Instructor Directions	1. Review the operation of the evolution and the desired outcome with participants. 2. Review safety considerations with participants. 3. Show participants the starting and ending points of the course. 4. Increase the complexity of scenarios as appropriate (no air, on air, decreased visibility, no visibility, etc.). 5. Ensure all participants are wearing full PPE. 6. Perform a final safety check prior to performing the evolution.

Student Directions	
Dragging Down Stairs	
1. Position downed fire fighter. • On their side, headfirst, stomach toward any anticipated inside bends 2. Rescuer #1: Take position below downed fire fighter's head, staying low. 3. Rescuer #2: Take position behind Rescuer #1. 4. Rescuer #2: Grasp Rescuer #1's SCBA frame or waist strap with one hand. • Preparing to guide down the stairs 5. Rescuer #1: Grasp downed fire fighter's SCBA shoulder straps using cross grasp to cradle head.	
6. Rescuer #1: Pull downed fire fighter down the stairs. • Lean into downed fire fighter to gain control. • Shield from falling debris (if necessary). • Use proper body mechanics.	
7. Rescuer #2: Guide descent. • Maintain physical and verbal contact other RIC members. • Use proper body mechanics.	

Dragging Up Stairs Two Rescuers using SCBA Straps	
8. Position downed fire fighter. • Face up, head first 9. Create seat harness for downed fire fighter. • Place SCBA waist strap between downed fire fighter's legs. 10. Rescuer #1: Take position at downed fire fighter's head. 11. Rescuer #1: Grasp downed fire fighter's SCBA shoulder straps. 12. Rescuer #2: Take position at downed fire fighter's feet. 13. Rescuer #2: Lift downed fire fighter's legs over their shoulders, standing between both legs. 14. Both rescuers carry downed fire fighter.	
Dragging Up Stairs Two Rescuers using Rescue Loop or Webbing	
15. Position downed fire fighter. • Face up, head first 16. Create seat harness for downed fire fighter. • Place SCBA waist strap between downed fire fighter's legs. 17. Rescuer #1: Take position at downed fire fighter's head. 18. Rescuer #1: Apply rescue loop with a girth hitch around top of downed fire fighter's SCBA harness straps.	

19. Rescuer #2: Take position at downed fire fighter's feet. 20. Rescuer #2: Lift downed fire fighter's legs, grabbing both legs at knees while standing between them. 21. Both rescuers carry downed fire fighter.	

Drill Ground Activity 11: Head-first Ladder Carry

Description	This drill ground activity provides students with an opportunity to practice removing a downed (injured/unconscious) fire fighter from a multistory structure head-first using a ladder.
Timeframe	1 hour
Students	Groups of up to 10 students Four students minimum required for drill
Materials	• Appropriate training structure with an above-ground door or window • Fall protection system • Minimum two (2) fire service ladders • Mechanical footing for each ladder used • Simulated downed firefighter in full PPE • Full turn out PPE • SCBA
Site Preparation	• Ensure the site is free of all hazards. • Assign an instructor on the second ladder to ensure safe removal and to coach students through the operation.
Instructor Directions	1. Review the operation of the evolution and the desired outcome with participants 2. Review safety considerations with participants. 3. Review fall protection system with all personnel/students. 4. Assign personnel/students to appropriate fall protection positions. 5. Show participants starting and ending points of the course. 6. Increase the complexity of scenarios as appropriate (no air, on air, decreased visibility, no visibility, etc.) 7. Ensure all participants are wearing full PPE. 8. Ensure all students are wearing a full-body harness attached to a safety line in accordance with fall protection system requirements. 9. Perform a final safety check prior to performing the evolution.

Student Directions	
1. Rescuers #1, #2: Drag the downed fire fighter to the window, orienting their head up and feet toward the window.	
2. Rescuers #1, #2: Prepare window for egress (if necessary). 3. Rescuers #1, #2: Call out window for assistance from other fire fighters. 4. Rescuers #1, #2: Direct ladder placement from exterior crews (rescue position).	
5. Rescuers #1, #2: Position downed fire fighter below the window. • Sitting upright, knees bent, as close as possible to interior wall	

6. Rescuers #1, #2: Lift downed fire fighter to window. 7. Rescuers #1, #2: Confirm a third rescue fire fighter (rescuer #3) is on the ladder ready to assist. 8. Rescuers #1, #2: Use one hand to grasp bottom of downed fire fighter's SCBA harness or turnout coat, while the other hand grasps shoulder strap or turnout collar. 9. Rescuers #1, #2: Lift downed fire fighter to windowsill, headfirst, with downed fire fighter's waist on sill.	
10. Rescuers #1, #2: Transition downed fire fighter onto ladder and rotate downed fire fighter until their lower armpit rests on exterior fire fighter's forearm. 11. Rescuer #3: Firmly grasp ladder beam to support downed fire fighter's upper torso. 12. Rescuers #1, #2: Rotate and bend downed fire fighter's legs to maneuver through window. 13. Rescuer #3: Firmly grasp other ladder beam ladder between downed fire fighter's legs. • Rescuer may need to step down a rung for the leg transition. 14. Rescuers #1, #2: Assist throughout transition, maintaining contact with downed fire fighter as long as possible.	

15. Rescuer #3: Lower downed fire fighter to the ground, controlling speed of descent by pressing downed fire fighter against ladder with their upper body.
16. Rescuer #3: Communicate control of downed fire fighter with Rescuers #1 and #2.
17. Additional personnel: Wait on the ground, foot the ladder, and prepare to receive the downed fire fighter.

Drill Ground Activity 12: Feet-first Ladder Carry

Description	This drill ground activity provides students with an opportunity to practice moving a downed (injured/unconscious) fire fighter to a window, positioning them face up and feet first on the ground, then lifting them up and onto a ladder feet-first for rescue from a multistory structure.
Timeframe	1 hour
Students	Groups of up to 10 students Three students minimum required for drill
Materials	• Appropriate training structure • Simulated downed firefighter in full PPE • Fall protection system • Minimum two (2) fire service ladders • Mechanical footing for each ladder used • Full turn out PPE • SCBA
Site Preparation	• Ensure that site is free of all hazards.
Instructor Directions	1. Review the operation of the evolution and the desired outcome with participants 2. Review safety considerations with participants. 3. Review fall protection system with all personnel/students. 4. Assign personnel/students to appropriate fall protection positions. 5. Show participants starting and ending points of the course. 6. Increase the complexity of scenarios as appropriate (no air, on air, decreased visibility, no visibility, etc.). 7. Ensure all participants are wearing full PPE. 8. Ensure all students are wearing a full-body harness attached to a safety line in accordance with fall protection system requirements. 9. Perform a final safety check prior to performing the evolution.

Student Directions	
1. Rescuer #1 and #2: Position downed firefighter so their head faces from window. 2. Rescuer #1 and #2: Grasp downed fire fighter's pant cuff and waist strap. 3. Rescuer #1 and #2: Drag downed fighter to window.	
4. Rescuer #1 and #2: Place downed fire fighter's feet on windowsill while maintaining contact with downed fire fighter.	

5. Rescuer 1: Give command, “Ready, ready, lift”. 6. Rescuer #1 and #2: Lift and place downed fire fighter’s thighs on windowsill, controlling the lift. 7. Rescuer #1 and #2: Readjust and grasp downed fire fighter’s waist strap. • Rescuer #2: Readjust and grasp downed fire fighter’s chest and Rescuer #1’s hand. 8. Rescuer #1 and #2: Lift downed fire fighter out window placing a leg under downed fire fighter to help hold weight if necessary.	
9. Rescuer #3 (on ladder): Perform a basic leg lock on downed fire fighter. • Move downed fire fighter’s legs to one side of their body, placing one hand between downed fire fighter’s legs, wrapping other hand around opposite beam for stabilization, and resting underneath downed fire fighter’s armpit.	

10. Rescuer #1 and #2: Continue to assist downed fire fighter until completely secured on ladder. 11. Rescuer #3: Descend ladder with downed fire fighter, controlling descent by wrapping both hands around beams.	

Drill Ground Activity 13: Rescue without a RIC

Description	This drill ground activity provides students with an opportunity to practice working as a team to rescue an unconscious downed fire fighter.
Timeframe	1 hour
Students	Groups of up to 10 students
Materials	• Full turn out PPE • SCBA • Charged hose (1 ½" or larger, able to produce fire flow) with nozzle • Radio • Downed fire fighter with SCBA
Site Preparation	• Ensure that site is free of all hazards.

Instructor Directions	1. Review the operation of the evolution and the desired outcome with participants.
	  • Operate inside a structure and lead a crew to advance and operate a charged hose line to simulate the activity of a second fire attack hose line. Transmit radio traffic of a downed fire fighter.
	  • Crew operating the second attack line will respond to the area of the downed fire fighter while maintaining orientation to the building's exterior. Once at the downed fire fighter the crew will follow ROAM, preform the PAC-CAN to the Incident Commander, and rescue the downed fire fighter including SCBA waist strap conversion
	  • The downed fire fighter will be unconscious and low air alarm and PASS will be sounding.
	2. Review safety considerations with participants.
	3. Show participants the starting and ending points of the course.
	4. Increase the complexity of scenarios as appropriate (no air, on air, decreased visibility, no visibility, etc.).
	5. Ensure all participants are wearing full PPE.
	6. Perform a final safety check prior to performing the evolution.

Student Directions
1. Advance charged hose line.
2. Monitor radio.
3. Redirect crew to downed fire fighter location.
4. Stay orientated to outside (hose, rope, AHJ).
5. Follow Rules of Air Management (ROAM).
6. Perform PAC-CAN (Request additional resources i.e., RIC, second company).
7. Perform SCBA waist strap conversion.
8. Follow orientation method to begin rescue.
9. Move downed fire fighter 50 feet.

10. Monitor ROAM the entire time in IDLH (IDLH can be simulated).
11. Communicate downed fire fighter's location via radio if rescuer must leave downed fire fighter.

Drill Ground Activity 14: Rescue Using VES

Description	This drill ground activity provides students with an opportunity to practice rescuing a downed fire fighter using VES (vent, enter, search) techniques.
Timeframe	1 hour
Students	Groups of up to 10 students
Materials	• Appropriate training prop with a second-story window • Simulated downed firefighter in full PPE • Ladder • Full turn out PPE • SCBA • Radio • Ventilation tools (hook/irons, saw, etc.)
Site Preparation	• Ensure that site is free of all hazards.
Instructor Directions	1. Review the operation of the evolution and the desired outcome with participants. 2. Review safety considerations with participants. 3. Show participants the starting and ending points of the course. 4. Increase the complexity of scenarios as appropriate (no air, on air, decreased visibility, no visibility, etc.). 5. Ensure all participants are wearing full PPE. 6. Perform a final safety check prior to performing the evolution.

Student Directions
1. Procure outside ventilation tools (hook/irons and a saw).
2. Conduct a 360.
3. Locate a laddered window with a PASS device alarming inside.
4. Radio Captain to convey discovery and actions to take.
5. Put on mask.
6. Confirm a crew member is at ladder before entering.
7. Sound floor before entering room.
8. Locate downed fire fighter.
9. Drag downed fire fighter to window.
10. Lift downed fire fighter into window (request assistance if needed).
11. Follow down ladder after rescue is made.
12. Inform Command and request medical for downed fire fighter.

Drill Ground Activity 15: Window-to-Door Conversion

Description	This drill ground activity provides students with an opportunity to practice using hand tools and/or power saws to stitch/cut vertically down an existing window frame opening to create a "door" frame and using a prying tool as needed to clear material to create the new opening.
Timeframe	30 minutes
Students	Groups of up to 10 students One student required for drill completion

Materials	• Tools (based on construction)
	  ○ Sledgehammer or flat head axe
	  ○ Circular saw or chainsaw
	  ○ Prying/pulling tool (roof rake, etc.)
	  ○ Other tools as needed
	• Exterior and/interior sheathing material (OSB, plywood, brick, concrete, cement board, etc.)
	• Full turn out PPE
	• SCBA

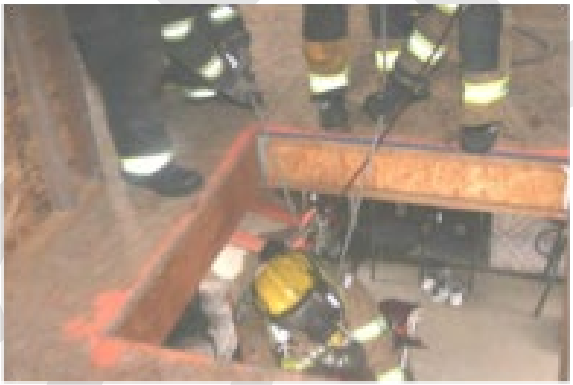
Site Preparation	• Ensure that site is free of all hazards
Instructor Directions	1. Review the operation of the evolution and the desired outcome with participants. 2. Review safety considerations with participants. 3. Show participants the starting and ending points of the course. 4. Increase the complexity of scenarios as appropriate (no air, on air, decreased visibility, no visibility, etc.). 5. Ensure all participants are wearing full PPE. 6. Perform a final safety check prior to performing the evolution.

Student Directions
1. Size up structure to identify construction type and tools needed.
2. Select tools.
3. Identify location for operation.
4. Confirm utilities have been secured.
5. Communicate with interior crews to ensure they are clear.
6. Break stucco or simulated stucco with striking tool (if necessary).
7. Cut wall where wall is weakened proximal to studs from sill level.
8. Use prying tool to clear all material from wall to create opening.

Drill Ground Activity 16: Below Grade Rescue Using Ropes

Description	This drill ground activity provides students with an opportunity to practice rescuing a downed fire fighter from the floor below using ropes as a member of a team.
Timeframe	1 hour
Students	Groups of up to 10 students Four students minimum needed for drill
Materials	• Appropriate training structure • Fall protection system • Rope • Simulated downed firefighter in full PPE • Full turn out PPE • SCBA
Site Preparation	• Ensure that site is free of all hazards. • Consider creating a realistic, moveable damaged wood floor insert to cover pre-cut 4'x4' holes in training towers. • Confirm an appropriate anchor can be constructed in accordance with fall protection system. • Consider assigning an instructor at the downed firefighter to ensure a safe operation.
Instructor Directions	1. Review the operation of the evolution and the desired outcome with participants 2. Review safety considerations with participants. 3. Review fall protection system with all personnel/students. 4. Assign personnel/students to appropriate fall protection positions. 5. Show participants starting and ending points of the course. 6. Increase the complexity of scenarios as appropriate (no air, on air, decreased visibility, no visibility, etc.) 7. Ensure all participants are wearing full PPE. 8. Ensure all students are wearing a full-body harness attached to a safety line in accordance with fall protection system requirements. 9. Perform a final safety check prior to performing the evolution.

Student Directions	
1. Rescuer #2: Determine depth and approximate length of rope needed to reach downed fire fighter and communicate this to Rescuer #3. 2. Rescuer #1: Make a bight in the rope and secure it. • Under the right or left SCBA shoulder strap • Down and under the SCBA waist strap • Around the opposite leg	
3. Rescuer #1: Pull the slack out of the rope. 4. Rescuer #1: Sit on the edge of the opening.	
5. Rescuer #1: Roll onto the shoulder that the rope went through. 6. Rescuers #2, #3, #4: Slowly lower Rescuer #1 into the opening allowing enough slack for Rescuer #1 to locate the downed fire fighter. • Rescuer #2 is the primary contact person for Rescuer #1. • Rescuer #1 keeps the rope system on in case there is an immediate need to get out.	
7. Rescuer #1: Assess the downed fire fighter. 8. Rescuer #1: Deliver PAC CAN report.	

9. Rescuer #1: Secure downed fire fighter with rope system.	
10. Rescuer #1: Call “Ready”. 11. Rescuer #2: Respond with “Ready” when prepared to lift. 12. Rescuer #1: Call “Lift”. 13. Rescuer #3: Direct the lift and call any additional commands.	
14. Rescuers #2, #3, #4: Lift Rescuer #1 and downed fire fighter through opening. 15. Rescuer #3: Call for Rescuer #2 to release rope and grab downed fire fighter after downed fire fighter is safely through opening.	
16. Rescuers #3 and #4: Assist with removing downed fire fighter. 17. Rescuer #4: Remove rope system from downed fire fighter and send it down to Rescuer #1.	
18. Rescuer #1: Secure rope system. 19. Rescuer #1: Call “Ready”. 20. Rescuer #2: Respond with “Ready” when prepared to lift. 21. Rescuer #1: Call “Lift”. 22. Rescuer #3: Directs lift and calls any additional commands. 23. Rescuer 3#: After Rescuer #1 is safely of out opening, call for Rescuer #2 to release rope and grab Rescuer #1.	

24. Rescuers #3 and #4: Assist with removal of Rescuer #1. 25. Rescuer #4: Remove rope system from Rescuer #1.	

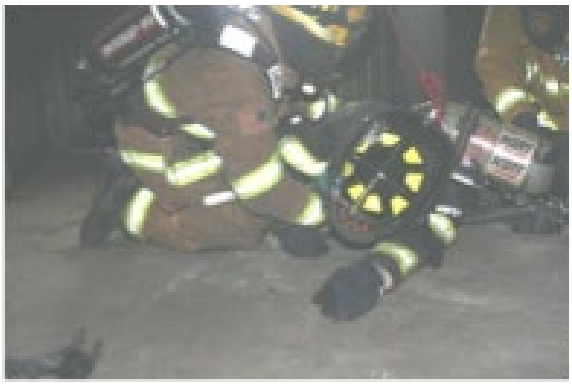
Drill Ground Activity 17: Below Grade Rescue Using a Ladder

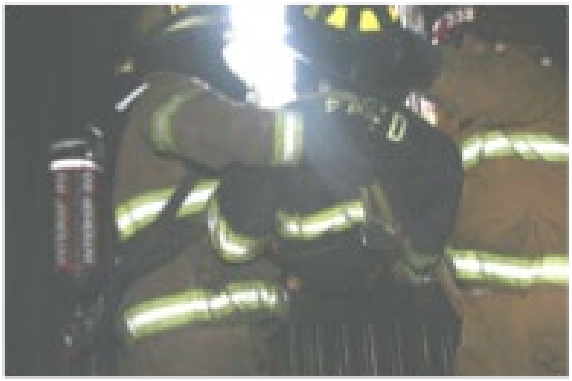
Description	This drill ground activity provides students with an opportunity to practice using a ladder to rescue a downed fighter from a below grade location.
Timeframe	1 hour
Students	Group of up to 10 students working in three- or four-member teams
Materials	• Appropriate training prop • Simulated downed firefighter in full PPE • Hoseline and water supply (for fire protection • Ladder • Full turn out PPE • SCBA
Site Preparation	• Ensure that site is free of all hazards.
Instructor Directions	1. Review the operation of the evolution and the desired outcome with participants 2. Review safety considerations with participants. 3. Show participants starting and ending points of the course. 4. Increase the complexity of scenarios as appropriate (no air, on air, decreased visibility, no visibility, etc.). 5. Ensure all participants are wearing full PPE. 6. Perform a final safety check prior to performing the evolution.

Student Directions
1. Listen to MAYDAY! Transmission.
2. Select appropriate tools and rapidly deploy.
3. Bring charged hoseline and ladder to floor above downed fire fighter.
4. Flow water continuously while operating on floor above downed fire fighter.
5. Locate hole the down fire fighter fell through.
6. Flow water into hole around downed fire fighter.
7. Travel ladder through hole to downed firefighter and perform PAC CAN.
8. Remove downed fire fighter from hole. • Call for additional help in PAC CAN if needed. • Supplement downed fire fighter with EBSS or RIC pack (if applicable).
9. Assist disoriented downed fire fighter up ladder.
10. Assist disoriented fire fighter out of building.
11. Inform command that RIC and downed fire fighter have left building.

Drill Ground Activity 18: Seated Carry with SCBA Removal

Description	This drill ground activity provides students with an opportunity to practice rescuing a downed fire fighter using the seated carry method with SCBA removal.
Timeframe	30 minutes
Students	Groups of up to 10 students 3 students minimum per evolution
Materials	• Appropriate training structure • Ladder • Fall protection system • Simulated downed firefighter in full PPE • Full turn out PPE • SCBA
Site Preparation	• Ensure that site is free of all hazards. • Confirm that an appropriate anchor can be constructed in accordance with the fall protection system.
Instructor Directions	1. Review the operation of the evolution and the desired outcome with participants 2. Review safety considerations with participants. 3. Review fall protection system with all personnel/students. 4. Assign personnel/students to appropriate fall protection positions. 5. Show participants starting and ending points of the course. 6. Increase the complexity of scenarios as appropriate (no air, on air, decreased visibility, no visibility, etc.) 7. Ensure all participants are wearing full PPE. 8. Ensure all students are wearing a full-body harness attached to a safety line in accordance with fall protection system requirements. 9. Perform a final safety check prior to performing the evolution.

Student Directions	
1. Position downed fire fighter with their head facing window, on shoulder where their SCBA low pressure air hose is located. 2. Disconnect downed fire fighter's waist strap. 3. Loosen both SCBA shoulder straps. 4. Maneuver downed fire fighter's upper arm through SCBA shoulder strap. 5. Roll downed fire fighter face down. 6. Slide SCBA off opposite arm.	

• SCBA is now connected to mask by low pressure hose only.	
7. Roll downed fire fighter face up. 8. Take position on one side of downed fire fighter with Rescuer #2 on other side. 9. Grab downed fire fighter's shoulder and leg with Rescuer #2 doing the same on other side. 10. Lift downed fire fighter's legs to 90 degrees. 11. Rescuer on downed fire fighter's SCBA side grabs SCBA.	
12. Rotate fire fighter so their legs are facing window. 13. Maintaining grip, push downed fire fighter until their buttocks are up against the wall and their legs are vertical. 14. Disconnect regulator or remove face piece. 15. Place downed fire fighter's arms across their chest.	
16. Gripping as low as possible, with palm facing up, both rescuers position one hand near buttocks and other hand up by collar. • Webbing can be used at this stage. 17. Rescuer #1: Give command, "Ready, lift." 18. Both rescuers, using proper body mechanics, lift in unison and place downed fire fighter on windowsill. • Rescuers should rotate on their leg closest to window. • After downed fire fighter is off ground rescuers should lift their other leg and	

put their knee under downed fire fighter to assist with lift. 19. Maintain control of downed fire fighter at windowsill.	
20. Rescuer #3: Ascend ladder, stopping short of sill until downed fire fighter is placed on sill and feet are out window. 21. Rescuer #3: Moves into position to receive downed fire fighter, ensuring shoulders are below sill and maintaining three points of contact on ladder (both feet and one hand).	

Drill Ground Activity 19: High Point Window Rescue

Description	This drill ground activity provides students with an opportunity to practice rescuing a downed fire fighter from a high point window.
Timeframe	1 hour
Students	Groups of up to 10 students
Materials	• Appropriate training prop with a second-story window • Simulated downed fire fighter in full PPE • Fall protection • Extension ladder(s) • Rope • Full turn out PPE • SCBA • Radio
Site Preparation	• Ensure that site is free of all hazards.
Instructor Directions	1. Review the operation of the evolution and the desired outcome with participants 2. Review safety considerations with participants. 3. Review fall protection system with all personnel/students. 4. Assign personnel/students to appropriate fall protection positions. 5. Show participants starting and ending points of the course. 6. Increase the complexity of scenarios as appropriate (no air, on air, decreased visibility, no visibility, etc.). 7. Ensure all participants are wearing full PPE. 8. Ensure all students are wearing a full-body harness attached to a safety line in accordance with fall protection system requirements. 9. Perform a final safety check prior to performing the evolution.

Student Directions
1. Inside Rescuer: Locate downed fire fighter and call “MAYDAY” by radio (who, what, where, air).
2. Inside Rescuer: Check downed fire fighter’s air supply.
3. Inside Rescuer: Request extension ladder and rope for a high point removal • Be sure to identify floor.
4. Inside Rescuer: Position the downed fire fighter close to the window with their back against the wall.
5. Inside Rescuer: Grab downed fire fighter’s shoulder straps and prepare for 2:1 haul. • Perform SCBA waist-strap conversion on downed fire fighter.
6. Outside Rescuers: Deploy ladder with approximately four rungs above top of window, if possible.

7. Outside Rescuer: Takes running end of rope, climb ladder leaving rope bag on ground, and pass it through rungs. • Choose highest rung possible for anchor rung.
8. Inside Rescuer: Take large carabiner from outside fire fighter and hook both downed fire fighter shoulder straps.
9. Outside Rescuer: Take running end to anchor rung, wrap four, and connect carabiner back to itself or tie a knot. • This creates a 2:1 lifting, hauling, and lowering system.
10. All Rescuers: Work together on haul line using mechanical advantage. • Inside Rescuer gives commands. • Outside Rescuer captures lifting progress.
11. Outside Rescuer: When downed fire fighter is outside window use standing end of rope to create friction on lower rung where rope was originally passed through from outside to inside and around backside of their body to lower downed fire fighter safely to ground.

Drill Ground Activity 20: Attic Rescue

Description	This drill ground activity provides students with an opportunity to practice rescuing a downed fire fighter from an attic environment.
Timeframe	1 hour
Students	Groups of up to 10 students Complete operations as a four-person team
Materials	• Appropriate training structure • Fire service ladder (if required by prop) • Fall protection system • Hose line • Hand tools • Rope bag/tag line • Simulated downed firefighter in full PPE • Full turn out PPE • SCBA
Site Preparation	• Ensure that site is free of all hazards.

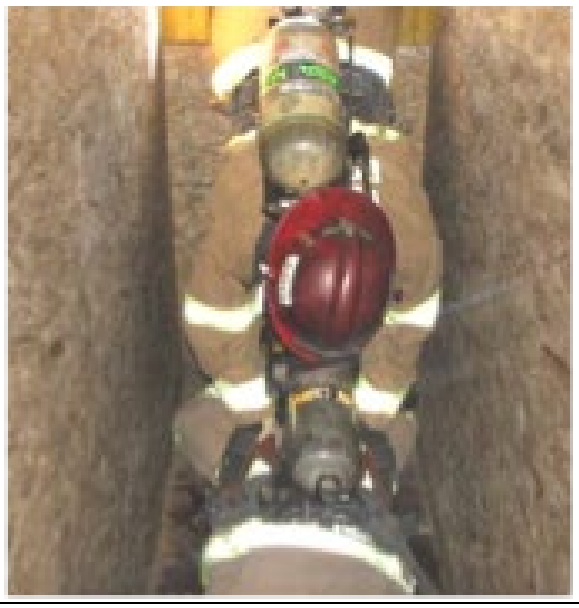
Instructor Directions	1. Review the operation of the evolution and the desired outcome with participants.
	  • Deploy a hose line to support the rescue under fire conditions. Take the appropriate ladder to the floor below, create a hole in ceiling or utilize scuttles to access the attic space and locate the fire fighter.
	  • The downed fire fighter will be unconscious, and PASS will be sounding. Perform a PAC-CAN assessment and SCBA conversion.
	  • Lower Fire fighter feet first to rescuers below and move out of the building utilizing any approved drag methods. Keep command updated of your progress.
	2. Review safety considerations with participants.
	3. Review fall protection system with all personnel/students.
	4. Assign personnel/students to appropriate fall protection positions.
	5. Show participants starting and ending points of the course.
	6. Increase the complexity of scenarios as appropriate (no air, on air, decreased visibility, no visibility, etc.).
	7. Ensure all participants are wearing full personal protective equipment.
	8. Ensure all students are wearing a full-body harness attached to a safety line in accordance with fall protection system requirements.
	9. Perform a final safety check prior to performing the evolution.

Student Directions
1. Listen to MAYDAY! transmission.
2. Select appropriate tools including appropriate ladder and rapidly deploy.

3. Rescuers #1and #2: Access the attic space and locate the fire fighter.
4. Rescuer #1: Perform PAC-CAN.
5. Rescuer #1: Perform SCBA waist strap conversion.
6. Rescuer #2: If downed fire fighter is far from the scuttle, open a hole in the ceiling near the downed fire fighter. • May need to brake or cut out a joist to enlarge the opening.
7. Rescuer #3, #4: Reposition below the hole created near downed fire fighter or below scuttle.
8. Rescuer #1, #2: Rotate the fire fighter onto their stomach with feet towards the hole or scuttle.
9. Lower into the hole feet first utilizing the shoulder straps.
10. Rescuer #3, #4: Lower the fire fighter to the floor.

Drill Ground Activity 21: Confined Area Rescue

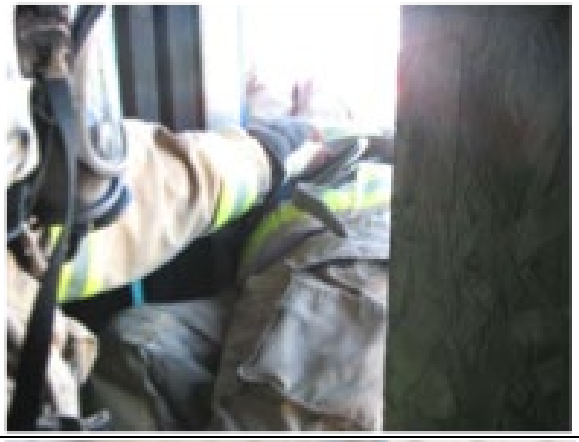
Description	This drill ground activity provides students with an opportunity to practice rescuing a downed fire fighter from a confined area (as was encountered by the Denver Fire Department in the LODD of Mark Langvardt).
Timeframe	2 hours (1 ground school / 1 ladder operations)
Students	Groups of up to 10 students Three students minimum needed for drill
Materials	• Appropriate training structure • Confined area prop (Appendix B) • Three fire service ladders appropriate size for the structure • Fall protection system • Simulated downed firefighter in full PPE • Full turn out PPE • SCBA
Site Preparation	• Ensure that site is free of all hazards.
Instructor Directions	1. Review the operation of the evolution and the desired outcome with participants. 2. Review safety considerations with participants. 3. Show participants the starting and ending points of the course. 4. Increase the complexity of scenarios as appropriate (no air, on air, decreased visibility, no visibility, etc.). 5. Ensure all participants are wearing full PPE. 6. Perform a final safety check prior to performing the evolution.

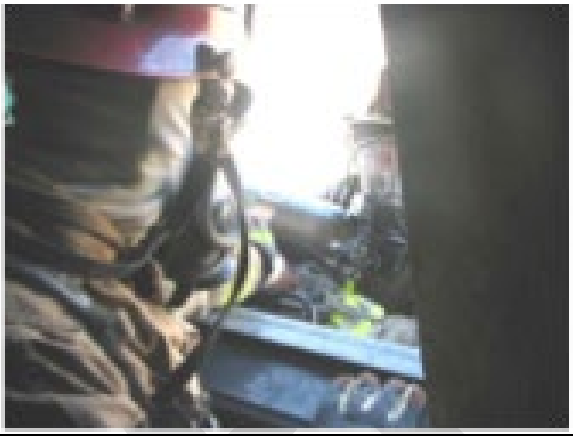
Student Directions	
1. Position downed fire fighter face down with their head against exterior wall.	
2. Rescuer #1: Enter through window. 3. Rescuer #1: Move to downed fire fighter's feet. • Control descent into window to prevent further injury.	

4. Rescuer #1: Turn downed fire fighter face up.	
5. Rescuer #1: Moved downed fire fighter's knees toward their buttocks. • Stand on downed fire fighter's feet to prevent slipping and provide leverage.	
6. Rescuer #1: Lock knees against downed fire fighter. 7. Rescuer #1: Grab downed fire fighter's SCBA should straps with a firm grip. 8. Rescuer #1: Pull downed fire fighter into a sitting position.	

9. Rescuer #2: Enter behind downed fire fighter.	
10. Rescuer #2: Position behind downed fire fighter. • Loosen SCBA straps. • Offset bottle to corner. • Keep knees close together.	
11. Both Rescuers: Lift the downed firefighter in a semicircular onto knees of second rescuer.	
12. Rescuer #1: Stand up and position between downed fire fighter's legs with a firm grip under the downed fire fighter's thighs.	

13. Rescuer #2: Place palms under downed fire fighter's SCBA bottle preparing to push up.	
14. Exterior Rescuer: Help lift downed fire fighter up and onto windowsill.	
15. All Rescuers: Lift downed fire fighter into windowsill.	

16. Begin ladder operations. • Ensure downed fire fighter's upper body is completely out of structure. • Hold downed fire fighter in a sitting position with thighs resting on windowsill.	
17. Interior Rescuer: Hold downed fire fighter's SCBA strap. 18. Exterior Rescuer: Rotate downed fire fighter. 19. Exterior Rescuer: Pull downed fire fighter's chest into structure exterior.	
20. Exterior Rescuer (positioned at downed fire fighter's head): Reach under downed fire fighter's arms and grab ladder beam. 21. Exterior Rescuer (positioned at downed fire fighter's legs): Step down one rung below other rescuer, grabbing beam between downed fire fighter's legs.	

22. Interior Rescuer: Maintain grip on SCBA straps and assist with lowering as long as possible. 23. Interior Rescuer: Pull downed fire fighter's chest against ladder beams.	
24. Exterior Rescuers: Lower downed fire fighter to ground. • Rescuer carrying legs remains one rung lower during descent.	
25. Additional Exterior Rescuers: Assist with lowering downed fire fighter to ground.	

Drill Ground Activity 22: Roof Rescue

Description	This drill ground activity provides students with an opportunity to practice removing a downed fire fighter from a roof utilizing a ladder and a rope bag.
Timeframe	1 hour
Students	Groups of up to 10 students Two students minimum required for drill
Materials	• Appropriate training structure • Fire service ladder • Fall protection system • Rope bag/tag line • Simulated downed firefighter in full PPE • Full turn out PPE • SCBA
Site Preparation	• Ensure that site is free of all hazards.
Instructor Directions	1. Review the operation of the evolution and the desired outcome with participants 2. Review safety considerations with participants. 3. Review fall protection system with all personnel/students. 4. Assign personnel/students to appropriate fall protection positions. 5. Show participants starting and ending points of the course. 6. Increase the complexity of scenarios as appropriate (no air, on air, decreased visibility, no visibility, etc.). 7. Ensure all participants are wearing full PPE. 8. Ensure all students are wearing a full-body harness attached to a safety line in accordance with fall protection system requirements. 9. Perform a final safety check prior to performing the evolution.

Student Directions
1. Rescuer #1 (on the roof) Locate downed fire fighter.
2. Rescuer #1: Move downed fire fighter from hazard area on roof (if necessary).
3. Rescuer #1: Perform SCBA waist strap conversion.
4. Rescuer #1: Move fire fighter to edge of roof next to ladder (ladder should be fully extended, if possible).
5. Rescuer #1: While holding running end of a rope, place running end between first and second rung of ladder.
6. Rescuer #1: Throw drop bag down to ground.
7. Rescuer #2 (on the ground): Wrap rope around two rungs at ladder base (aka – friction wrap).
8. Rescuer #1: Attach downed fire fighter to running end of rope.
9. Rescuer #2: Take out all slack in rope.

10. Rescuer #1: Push ladder away from building suspending downed fire fighter between ladder and building (like a pendulum).
11. Rescuer #2: Use “friction wrap” to lower downed fire fighter to ground.

Drill Ground Activity 23: Tarver Evolution

Description	This evolution provides students with an opportunity to practice rescue two fire fighters disoriented and low on air who believe they are just off the hose line—working as a team, on air, with face pieces covered to simulate limited visibility.
Timeframe	20 minutes per student
Students	Two companies
Materials	• Appropriate training structure with limited visibility (or use wax paper in the mask) • RIC tool cache • RIC air pack • Search line system (200 feet minimum) • 1¾" charged hoseline (400 feet minimum) • Two portable radios • Two simulated downed fire fighters in full PPE • Full turn out PPE • SCBA
Site Preparation	• Ensure that site is free of all hazards. • First downed fire fighter is just off the hoseline, alert, but low on air. • Second downed fire fighter is approximately 40 feet off the nozzle and unconscious.

Instructor Directions	1. Review the evolution and safety protection system requirements.
	  • The RIC will conduct a size up of the training structure and assemble a tool cache.
	  • One RIC member will assume the role of RIC Leader.
	  • One RIC member will act as the IC/RIC Group Supervisor on the exterior.
	  • The IC/RIC Group Supervisor will track and maintain accountability of the resources, as well as perform PAR checks.
	  • RIC may request any additional assistance or resources.
	  • RIC will always manage its air.
	  • If a RIC member runs out of air, they are considered another downed fire fighter.
	  • The evolution ends after RIC anchors their orientation point and communicates their PAC CAN to the RIC Group Supervisor.
	  • Alternate between using a search line system and a hoseline.
	2. Review safety considerations with participants.
	3. Show participants the starting and ending points of the course.
	4. Increase the complexity of scenarios as appropriate (no air, on air, decreased visibility, no visibility, etc.).
	5. Ensure all participants are wearing full PPE.

	6. Perform a final safety check prior to performing the evolution.

Student Directions
1. RIC enters structure and listens for PASS devices
2. Using a search line system or hose line as a reference point, RIC moves toward sound of first downed fire fighter's PASS device
3. After locating downed fire fighter near hose line, RIC delivers air through an approved method
4. RIC continues to listen for second downed fire fighter's PASS device and searches using a tether or hose line
5. After locating second downed fire fighter, RIC delivers air if necessary
6. RIC leader performs PAC CAN and may request a second RIC if necessary
7. RIC packages and moves downed fire fighters using an approved method of their choice
8. RIC removes downed fire fighters from structure following their designated hose line or search line system
9. Evolution ends after downed fire fighters are extricated from structure and all rescuers have exited structure

Tarver Evolution – Existing Structure

Tarver Evolution – Simulated Structure

Drill Ground Activity 24: Pittsburg Evolution

Description	This evolution provides students with an opportunity to practice maneuvering through three obstacles—working as a team, on air, with face pieces covered to simulate limited visibility—to access and rescue a downed fire fighter.
Timeframe	20 minutes per student
Students	Groups of up to 10 students
Materials	• Appropriate training structure with limited visibility (or use wax paper in the mask) • One 4'x8' sheet of ½" plywood or oriented strand board (OSB) • Six 2"x4"x8" pieces of wood (used for support/legs) • Three standard size shipping pallets • Three 55-gallon drums or one 10- to 12-foot plastic tube (36" diameter) • Two 2"x30" flat stabilizers with 6" uprights • Simulated downed firefighter in full PPE • Full turn out PPE • SCBA
Site Preparation	• Ensure that site is free of all hazards. • The course is 50 feet in length with three separate obstacles (under, over, and through). • The first obstacle is a low-profile opening. • The second obstacle is an A-frame. • The third obstacle is a 10- to 12-foot tube. • A section of 1½" (1¾" optional) hoseline is stretched from the entrance of the course through all three obstacles to the downed firefighter at the end
Instructor Directions	1. Review the evolution and safety protection system requirements. 2. Assign personnel to appropriate positions. 3. Ensure all students are wearing full PPE and the face piece is covered to limit visibility. 4. Perform a final safety check prior to performing the skill. 5. Downed fire fighter is unconscious but assumed to have good air supply. 6. The downed fire fighter's face piece must remain in place throughout obstacle course. • If it dislodges, stop the evolution stops and reposition the face piece. 7. If a rescuer's low air alarm sounds, the entire crew must escort them outside to replace their air cylinder. 8. Rescuer must change out the cylinder before going back in to assist. 9. The drill terminates after 20 minutes regardless of where the downed fire fighter is in the course.

Student Directions
1. Following a designated hose line, rescuers maneuver as a company through obstacles to access downed fire fighter and bring them back through obstacle course while on air: • Obstacle 1: wall breach/narrow opening • Obstacle 2: A-frame • Obstacle 3: Tube
2. At the entrance to Obstacle 3 (tube), two rescuers low-profile crawl through tube to downed fire fighter while remaining rescuers wait in place at tube entrance. • Downed fire fighter is assumed to have a good air supply but is unconscious.
3. Both rescuers prepare downed fire fighter for a low-profile drag back through tube using techniques for packaging and moving a downed fire fighter.
4. Both rescuers maneuver downed fire fighter back through Obstacle 3 (tube).
5. Crew works together to maneuver downed fire fighter over Obstacle 2 (A-frame) and through Obstacle 1 (wall breach/narrow opening). • Two rescuers travel through breach/opening first to pull from opposite side.
6. Remaining rescuers profile through breach/opening and help get downed fire fighter to starting point where time will stop.

Pittsburg Evolution Set Up