



Fire Ground Survival

Chapter 4: Self-Survival Skills



Objectives

Participants will be able to demonstrate the following skills, using proper techniques:

- SCBA familiarization and emergency procedures.
- Self-survival procedures and following a hose line to locate an exit.
- Wall breach with low/reduced profile maneuvers.
- Disentanglement maneuvers.
- SCBA confidence maze.
- Upper floor egress escape techniques.



Toronto FD's Experience

Open Video File: "Toronto Fire Fighters Ladder Bail"





Importance of Practical Training

- These skills must be performed quickly and safely whenever a Mayday situation arises.
- You will not have the luxury of time.
- These skills must be practiced continually so they can be performed with 100% proficiency and confidence.





Open Video File: "IAFF FGS Module 2 – Fire Fighter Low on Air"

Watch Module 2 of Fire Ground Survival Video

Fire Fighter Low on Air



SCBA Familiarization and Emergency Procedures

- Assess, test, and don your SCBA.
- Manipulate your SCBA in zero visibility while wearing personal protective equipment.
- Search for and activate the PASS alarm.
- Perform an emergency exit from a room.



Self-Survival Procedures and Following a Hose Line



Perform the actions
of **GRAB LIVES**
while in a simulated
environment where
the fire fighter is lost.



Self-Survival Procedures and Following a Hose Line



Required to:

- Call the Mayday.
- Activate/deactivate the PASS.
- Use light and noise to alert rescuers.
- Locate a hose line and use coupling orientation to find an exit.
- Communicate with IC.





Wall Breach with Low/ Reduced Profile Maneuvers

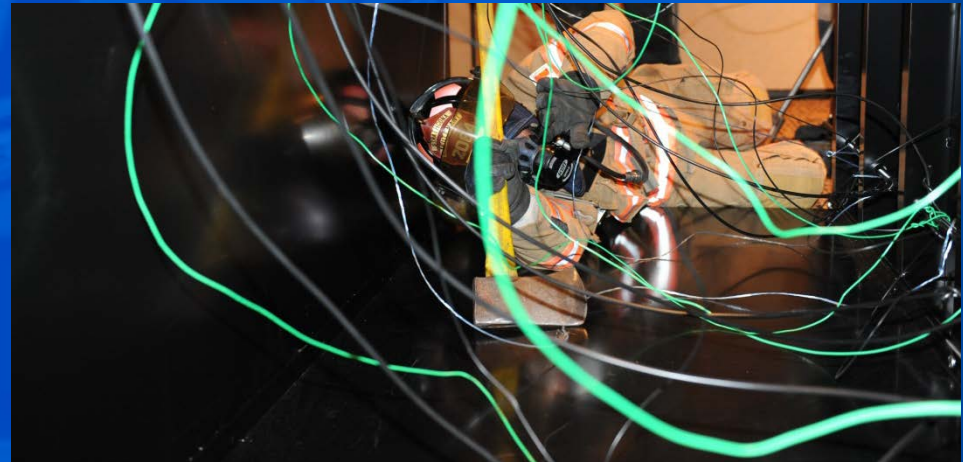
- Breach a wall with and without a hand tool.
- Perform these reduced profile maneuvers:
 - Full SCBA removal with obstructions.
 - Full SCBA removal.
 - Front swim.
 - Backstroke.



Disentanglement Maneuvers



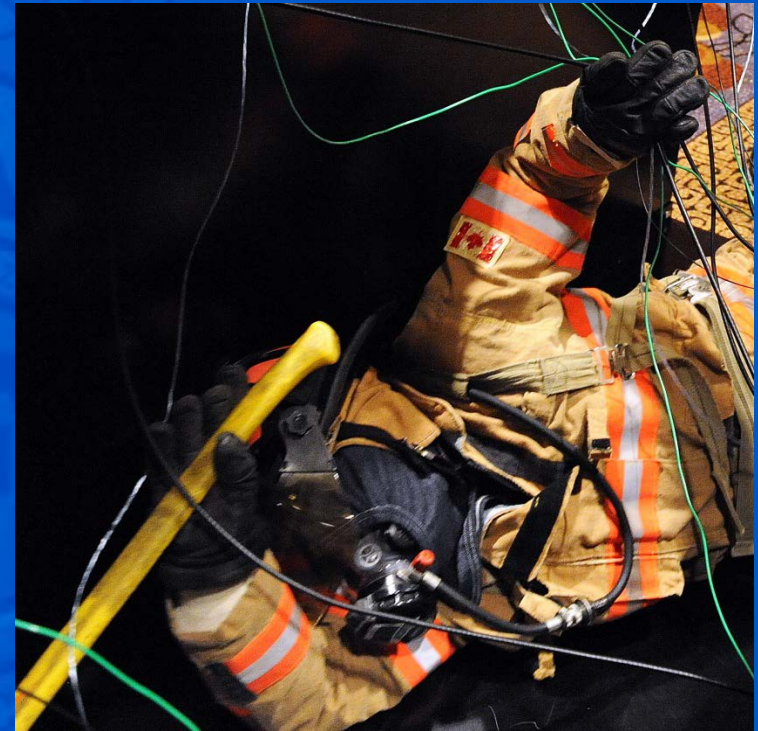
- Simulates entanglement hazards created by wires, chords and debris.
- Perform disentanglement techniques consistent with reduced profile to exit a structure.



Disentanglement Maneuvers



- Physically demanding – requires flexibility.
- Requires good air management – control breathing to conserve air.





SCBA Confidence Maze

- Follow a search line over, off of and around obstacles.
- Operate in confined areas while wearing an SCBA.
- Operate as a team in a reduced visibility environment.





Upper Floor Escape Techniques

Options:

- When a ladder is NOT in position.
- When a ladder is IN position.





FDNY FF J. Cool Video

Open Video File: "FF Jeff Cool Incident"



Jeffery Cool
Fire Fighter, FDNY
IAFF Local 94



Upper Floor Escape Techniques

SAFETY FIRST

- Approved Class III harness shall be worn.





Upper Floor Escape Techniques

SAFETY FIRST

- Safety equipment compliant with NFPA 1983-Standard on Life Safety Rope and Equipment for Emergency Services.
- Personnel responsible for belay system shall be Level I Technical Rescuer trained as per NFPA 1006 –Technical Rescue Professional Qualifications.





Upper Floor Escape Techniques

Window Hang:

- Clear a window.
- Exit the structure through a window head first.
- Use inside lower leg and forearm to support body hanging outside window.





Upper Floor Escape Techniques

Rappel Using Personal Escape System (PES):

- Use when ladders not in position due to:
 - Staffing shortage.
 - No ladder access at ground level.
 - Ladder height limitations.
- Advantages of PES:
 - Quick and easy to deploy.
 - Each fire fighter now carries their own escape system.



Upper Floor Escape Techniques

Personal Escape System (PES) Components:

- System components NFPA 1983 and 1500 approved for self-escape:
 - Harness- NFPA 1983 Class II.
 - Packaging – deploys correctly 100% of time.
 - Anchor - meets NFPA 1983 auxiliary equipment requirements.
 - Rope – 50 feet, 7.5 mm (minimum).
 - Descent Device - certified as a fire fighter escape device by manufacturer.



Upper Floor Escape Techniques

Personal Safety System (PSS)





PSS Demonstration

Open Video File: "PSS Demonstration"





Upper Floor Escape Techniques

Rapid Ladder Escape:

- Clear a window.
- Exit the structure through a window head first.
- Proceed down a ladder (placed at a reduced angle) in a controlled manner.
- Technique is not recommended for wood ladders.





Upper Floor Escape Techniques

Low Profile Ladder Escape:

- Clear a window.
- Exit structure through a window head first and twist so feet are pointed down.
- Preferred technique for wood ladders and if ladder not at flatter angle.





Upper Floor Escape Techniques

Hose Slide:

- Used when water stream overmatched by fire.
- Use window bail technique to exit window onto hose.
- Control rate of descent with legs, arms and hands around hose.





Survival Props – Accurate Simulations

Props Must Be:

- Safe.
- Accurate simulation.
- Well built.
- Allow instructor access for monitoring.

