



# Training Announcement

**VOLUME XV • ISSUE 10**

## FIREGROUND ESSENTIALS I: THE SCBA

There are a lot of tools that are used on the fireground but there are a couple that are absolutely essential, the SCBA is one of them. When it comes to the SCBA, the more you know about it the more you'll be able to deal with any issues that come up while operating on the fireground. Solving SCBA problems on the fireground starts at the firehouse! We all know what the SCBA is, and what it does. What we tend to become complacent with is checking the SCBA every day to make sure it's ready to go.

Developing an SCBA daily checkout routine is the first step in being ready to operate on the fireground. While it would be nice to rely on the last person that used it that's not the best practice. Knowing the condition and readiness of the SCBA is YOUR responsibility. The daily SCBA check is pretty simple — you know the basic components so just develop a routine that walks you through the checkout and finish up by storing the SCBA so it's ready to use (in the jumpseat, the compartment or your storage location).

The daily SCBA checkout information will go a long way towards troubleshooting any issues on the fireground. For starters, it gives you a solid timeline of when the unit was checked last — and functioning properly. If you know everything was ready to go then maybe the current fireground problem is due to the operator (you). If you determine immediately that the problem was not an oversight then the next step may be a Mayday (although that's not the subject of this session).

A few simple SCBA drills at the firehouse will help you quickly troubleshoot a problem on the fireground. Twisted straps, partially opened cylinder, low air indication with adequate air in cylinder, free-flow through the mask, HUD lights not consistent with air supply...the list goes on. This session will review the basics of the department SCBA and the things that should be covered in a daily SCBA checkout. The review will also cover common problems encountered on the fireground that may be easily solved. The hands-on drills will reinforce the basics and let you develop, or review, your daily SCBA checkout.

**Date:** \_\_\_\_\_

**Time:** \_\_\_\_\_

**Trainer:** \_\_\_\_\_

**Location:** \_\_\_\_\_



## **Fireground Essentials I: The SCBA**

### **I. SCBA Basics — Overview**

- A. Face Mask
  - 1. Face piece
  - 2. Webbing / harness
  - 3. Amplifier...
- B. Regulator
  - 1. Donning/doffing switch
  - 2. Bypass valve
  - 3. Heads-up display (HUD)
- C. PASS Device
  - 1. Manual activation button
  - 2. Reset button(s)
- D. Backpack / Straps / Buckles
  - 1. Cylinder strap
  - 2. Universal air connection (UAC)
  - 3. Regulator assembly
  - 4. Strap attachments
  - 5. Buckles / clips
- E. Other...
  - 1. Emergency air option (buddy breathing system)
  - 2. Tracking devices (if applicable)

### **II. The Daily SCBA Check**

- A. Check SCBA Backpack Assembly
  - 1. Remove the SCBA from Bracket (storage location)
  - 2. Make sure apparatus bracket is functioning correctly
  - 3. Clean area (if needed)
- B. Check Cylinder
  - 1. Make sure it's full
  - 2. Fill if necessary
  - 3. Ensure attaching straps/brackets are tight
  - 4. Ensure cylinder connection is tight
  - 5. Open the cylinder
  - 6. Listen for low air alarm when opening cylinder
  - 7. Check remote gauge for accuracy with cylinder
  - 8. Turn off cylinder
- C. Check the UAC
  - 1. Clean if needed
  - 2. Ensure cover is in place
- D. Check the PASS
  - 1. Allow to activate while motionless
  - 2. Manually activate
  - 3. Make sure reset switch is working
- E. Check the Face Mask and Regulator
  - 1. Clean if needed
  - 2. Ensure straps are OK
  - 3. Don mask and take a few breaths
  - 4. Check bypass operation
  - 5. Breath down and watch HUD display (make sure it's working)
  - 6. Reset SCBA (cylinder off / PASS off and reset)
- F. Check the Straps



1. Work all straps
  2. Position straps for storage and donning
  3. Ensure buckles function properly
- G. Store SCBA in a ready position (jump seat, compartment, etc.)

### III. SCBA Maintenance

- A. Daily Maintenance
1. Address any issues found during daily check
  2. Correct when found
  3. Remove from service if unable to correct
  4. Ensure repairs are initiated
- B. Clean (as needed)
- C. Batteries
1. PASS
  2. HUD
  3. Other...tracking, etc.
- D. Flow Test (on department/manufacturer schedule)
- E. Other...

### IV. SCBA Troubleshooting on the Fireground

*If any of these problems arise while operating inside a structure the condition may require a Mayday transmission — this session is about troubleshooting problems with the pack, not dealing with or declaring a mayday (which will be covered in a later issue)*

*If any issue can not be corrected then remove the SCBA from service until corrected.*

- A. Backpack / Harness Issues
1. Usually not many issues
  2. Cylinder attachment may loosen / unclip
- B. Air-Related Issues
1. Air leak at cylinder connection
    - a. possible blown o-ring
    - b. may happen if cylinder connection loosens prior to opening
    - c. replace o-ring
  2. Low air alarm activating with adequate air
    - a. cylinder not turned on all the way
    - b. if opening fully doesn't correct then remove SCBA from service
  3. HUD lights show out of air but adequate air remains
    - a. possibly a low battery
    - b. replace battery
  4. No air from mask
    - a. bottle may not be turned on
    - b. open bypass – may be regulator problem
  5. Low pressure (face mount) regulator freeflows / can't stop
    - a. regulator may have something stuck inside – tap lightly to try and dislodge (may or may not stop flow)
    - b. Turn off cylinder or disconnect regulator (if applicable)
    - c. Try another regulator if available
- C. Face Piece Issues
1. Can't make a seal
  2. Regulator won't stay in
  3. Harness / head strap attachment breaks
  4. Other...

# Fireground Essentials I: The SCBA – Test



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STUDENT NAME: \_\_\_\_\_ INSTRUCTOR NAME: \_\_\_\_\_ DATE: \_\_\_\_\_

1. **The SCBA needs to be removed from the bracket/holder in order to perform a daily SCBA check.**
  - A. True
  - B. False
  
2. **Checking the SCBA cylinder includes:**
  - A. Making sure it is full
  - B. Ensuring the attaching strap is tight
  - C. Turning on the cylinder
  - D. All of the above
  
3. **Checking the PASS includes:**
  - A. Manually activating, Resetting
  - B. Allowing to self-alarm, Resetting, Manually activating, Resetting
  - C. Allowing to self-alarm, Resetting
  - D. All of the above
  
4. **When checking the face mask it's important to:**
  - A. Take a few breaths
  - B. Check the HUD lights
  - C. Check the bypass valve
  - D. All of the above
  
5. **The SCBA should be cleaned:**
  - A. Once a week
  - B. Once a month
  - C. After every use and when needed
  - D. None of the above
  
6. **A high-pressure air leak when turning the SCBA on may be from:**
  - A. A blown o-ring from a loose connection
  - B. A bad seal on the face mask
  - C. The bypass valve being open
  - D. All of the above
  
7. **When the HUD reads empty and the cylinder is full, the *likely* problem is:**
  - A. Faulty connection
  - B. Batteries need replacing
  - C. The cylinder gauge is faulty
  - D. All of the above
  
8. **A low air alarm sounding intermittently while the gauge reads over half is usually due to:**
  - A. A bad gauge
  - B. A faulty low air alarm device
  - C. Not opening the cylinder completely
  - D. None of the above