

Safety & Health Advisory



Preventing Loss of Communication: Using Self-contained Breathing Apparatus (SCBA) Bluetooth Radio Accessories

Understand how to use SCBA Bluetooth radio accessories in immediately dangerous to life and health (IDLH) environments to prevent communication loss and protect firefighter safety.

WHAT FIREFIGHTERS CAN DO:

- ❑ Train to use SCBA Bluetooth radio accessories
- ❑ Understand SCBA components, safety features and limitations, and emergency use techniques
- ❑ Use the manufacturer's user instructions to troubleshoot pairing issues, including unacknowledged radio transmission
- ❑ Confirm Bluetooth pairing upon donning the SCBA before entering an active fire scene
- ❑ Tag out the SCBA when accessories do not work properly
- ❑ Incorporate SCBA Bluetooth radio accessory use into standard operating procedures or guidelines



An SCBA regulator with integrated microphones.
Photo by NIOSH

EVENT SUMMARY:

On December 29, 2025, firefighters were seriously injured during interior operations in an abandoned residential structure fire. On arrival, the crew declared a working fire. Firefighters entered the structure with an attack line, above an active basement fire. As the firefighters entered the structure, the living room floor partially collapsed, and three firefighters fell into the basement. They were covered by furniture and debris. The officer attempted to declare a Mayday. His message was unreadable and his Maydays went unheard. This delayed activation of the rapid intervention team for the emergency. The fire department used SCBAs with a Bluetooth integrated two-way radio-voice communication system. Only some companies were trialing and trained on the use of the accessory. It is believed that the portable radio and SCBA used by the detailed officer were not paired as the officer was not trialing its use. The computer-aided dispatch system recorded two transmissions from the officer, but they were unreadable. Read the [full report](#) for more details.

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QUESTIONS & ANSWERS

How can fire departments train firefighters to use their SCBA?

Repetitive skills training with an SCBA is vital for the safety of firefighters working inside an IDLH environment. NFPA 1400, NFPA 1550, and NFPA 1850 require fire departments to maintain a respiratory-protection training program to ensure firefighters are trained to use the SCBA model the firefighter will use. This training includes understanding the SCBA's components, safety features and limitations, and emergency use techniques. This program also includes practical application training to evaluate firefighters' mastery of the SCBA, including accessories.

What are SCBA accessories?

SCBA manufacturers offer many accessories with their units including telemetry and monitoring systems, personnel location systems, and emergency egress systems for bailout. These systems may include integrated Bluetooth radio communications.

What are SCBA Bluetooth radio accessories?

These accessories allow firefighters to communicate wirelessly from the SCBA through the portable radio via Bluetooth technology. The SCBA facepiece or regulator may contain microphones with noise canceling technology. This gives firefighters an alternative to physically bringing the portable radio's remote speaker microphone within hearing distance of the SCBA voice amplifier to transmit a message.

How do SCBA Bluetooth radio accessories work?

To use this accessory, the portable radio and SCBA must pair via Bluetooth. The SCBA manufacturers offer a radio-pairing guide for fire departments. When SCBA accessories do not work properly, firefighters can troubleshoot with the manufacturer's user instructions. If troubleshooting is unsuccessful, firefighters can consider using only the portable radio for communications at an incident.

How can fire departments train firefighters to use SCBA accessories?

Fire departments can include use of SCBA Bluetooth accessories in regular training for firefighters. Training can include pairing, troubleshooting, confirming the portable radio and SCBA successfully paired, and equipment features that indicate connection status. Firefighters in IDLH environments using SCBA accessories without training or proficiency increase safety and health risks for themselves and the fire department. Additionally, fire departments can help keep firefighters safe by training firefighters to check and confirm Bluetooth pairing before entering IDLH environments and employing troubleshooting procedures when transmissions are not acknowledged.

REFERENCES

NIOSH [2026]. [Four career firefighters injured from a floor collapse in an abandoned residential structure fire – Kansas](#). By Lago LR and Attwood WR. Morgantown, WV: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, F2026-01.

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DHHS (NIOSH) Publication No. 2026-113 | August 2026

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