Standard on Open-Circuit Self-Contained Breathing Apparatus (SCBA) for Emergency Services
TIA Log No.: 1341
Reference: 4.3.23.1(new) and 4.3.23.1.1(new)
Comment Closing Date: October 19, 2017
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1. Add new 4.3.23.1 and 4.3.23.1.1 to read as follows:

4.3.23.1 Where an SCBA submitted for certification to this standard is also submitted with an accessory that is built into or attached to the SCBA, or sold for later attachment to the SCBA, and an NFPA standard exists for the product performance associated with the accessory, the accessory shall be certified to the standard associated with the accessory.

4.3.23.1.1 In all cases, such accessories shall not degrade the performance of the SCBA.

Substantiation. This TIA closes a loophole that has existed for decades in NFPA product performance standards. This loophole has threatened and continues to threaten the effectiveness of NFPA standards by providing a pathway to circumvent the minimum product performance requirements developed by consensus. TIAs are being proposed at this time for NFPA 1981 and NFPA 1982, but the logic behind the TIAs should apply to all NFPA product performance standards where accessory integration exists or potentially exists.

There are NFPA standards for SCBAs (NFPA 1981 and NFPA 1986), PASS devices (NFPA 1982), thermal imagers (NFPA 1801) and ladder and escape belts (NFPA 1983). The Technical Committees responsible for developing these standards spent many days researching, analyzing, discussing and debating the issues associated with those products, ultimately agreeing on what constitutes the minimum requirements necessary to meet the fire service’s needs for safety and performance. As with all NFPA standards, these standards went through a process of public input and public comment before being published by the NFPA. Once published, the standards represent what the fire service wants and needs, at a minimum, from SCBAs, PASS devices, thermal imagers and ladder/escape belts. Performance less than the minimum is not considered acceptable for use by emergency services. While it is certainly possible for manufacturers to design and produce products that fall below the required NFPA performance levels, such products would not be able to be certified as compliant with their respective NFPA standards.

One would then think that a product’s status should be very simple. It either meets the performance requirements of an NFPA standard or it does not, and thus is either certified or not. Unfortunately, one would be wrong in thinking so. All a manufacturer has to do is integrate Product A that does not meet the performance requirements of its associated NFPA standard into Product B that does meet the performance requirements of Product B’s associated standard, and one has effectively skirted Product A’s NFPA standard. Product B is now certified as compliant to Product B’s associated NFPA standard incorporating an integrated Product A that is non-NFPA-compliant.
Why is this important? It goes to the heart of the NFPA standards-writing process. Let’s take thermal imagers as an example. Why invest a lot of time and money into developing minimum performance requirements for thermal imagers if all a manufacturer has to do is slap one that falls short of those requirements on an NFPA-compliant SCBA, call it an “SCBA accessory” instead of a “thermal imager,” and still be able to market the SCBA as being NFPA-compliant? If a fire department wants to purchase a non-NFPA-compliant product, that is certainly their prerogative. But if a fire department wants to purchase an NFPA-compliant product, such as an SCBA, then they should have the expectation that all of that product is NFPA-compliant with all associated NFPA standards.

The same reasoning applies to PASS devices and escape belts. While it is true that all SCBA-integrated PASS devices that are currently being offered have been certified as compliant to NFPA 1982, there is no language in NFPA 1981 requiring that. An SCBA manufacturer that also manufactures PASS devices could develop a “budget” version that perhaps isn’t as loud, or utilizes a different sound pattern, or has a different frequency range—all to save manufacturing cost and lower the selling price—and there is nothing in NFPA 1981 to prevent them from getting that substandard, non-NFPA-compliant PASS device certified as an accessory in an NFPA-compliant SCBA.

“This isn’t really a PASS device,” the SCBA/PASS manufacturer says. “It’s an SCBA accessory. It’s just another useful tool for the firefighter to use. Why would anyone not want to give a firefighter all the tools possible? Not everyone wants to spend the money to get a real PASS device, so we’re offering them a quasi-PASS device that almost does what a PASS device does.”

Virtually everyone would agree that this is completely unacceptable, but it could happen today without the proposed TIA.

One could create the same scenario with SCBA-integrated ladder and escape belts. “So what if this SCBA-integrated ladder belt doesn’t meet NFPA 1983?” the SCBA manufacturer says. “It’s better than nothing. It’s just another tool in the firefighter’s arsenal.” Once again, the firefighter is getting an NFPA-compliant SCBA with a substandard, non-NFPA-compliant integrated accessory—this time a ladder belt.

So what we’re hypothetically hearing is:

“This is just another tool for them to use.”
“Requiring this accessory to meet NFPA performance requirements is overkill. Firefighters don’t need all that.”
“We’re giving them what they want.”
“It’s not really a thermal imager / PASS device / escape belt. It just looks and acts like one.”
“OK, so it doesn’t meet NFPA performance requirements … but it’s close.”

Such dubious logic used by manufacturers to rationalize the integration of non-NFPA-compliant accessories for which NFPA standards exist undermines the entire NFPA standards development process. If an NFPA standard has minimum performance requirements, the intention should be
that those minimum performance requirements apply to the product regardless of whether it is marketed as a stand-alone device or as part of another NFPA-compliant product. Accessory non-compliance with its associated NFPA standard should not be acceptable and should preclude NFPA compliance certification of the parent product.

The proposed TIA accomplishes such preclusion. It also sets a precedent for the future integration of other devices that either already have or will eventually have their own NFPA product performance standards.

*Note:* This TIA is co-submitted and endorsed by Daniel N. Rossos, Oregon Department of Public Safety Standards and Training (Chair of the TC on Respiratory Protection Equipment), and it is endorsed by William E. Haskell, III, National Institute for Occupational Safety & Health (Chair of the Correlating Committee on Fire and Emergency Services Protective Clothing and Equipment).

**Emergency Nature.** The standard contains an error or an omission that was overlooked during the regular revision process. The proposed TIA intends to offer to the public a benefit that would lessen a recognized (known) hazard or ameliorate a continuing dangers condition or situation.

Every day that passes without this TIA in place is a day where substandard, non-NFPA-compliant accessories could be certified, shipped and used in a certified NFPA-compliant product without affecting that parent product’s certification, even though NFPA standards do exist for such accessories. The door must be closed immediately to stop this abuse of the NFPA process and subversion of the NFPA’s mission.

*Anyone may submit a comment by the closing date indicated above. To submit a comment, please identify the number of the TIA and forward to the Secretary, Standards Council, 1 Batterymarch Park, Quincy, MA 02169-7471.*