

NFPA[®]

1983

**Standard on
Life Safety Rope
and Equipment for
Emergency Services**

2017



This is a preview. [Click here to purchase the full publication.](#)

IMPORTANT NOTICES AND DISCLAIMERS CONCERNING NFPA® STANDARDS

NOTICE AND DISCLAIMER OF LIABILITY CONCERNING THE USE OF NFPA STANDARDS

NFPA® codes, standards, recommended practices, and guides (“NFPA Standards”), of which the document contained herein is one, are developed through a consensus standards development process approved by the American National Standards Institute. This process brings together volunteers representing varied viewpoints and interests to achieve consensus on fire and other safety issues. While the NFPA administers the process and establishes rules to promote fairness in the development of consensus, it does not independently test, evaluate, or verify the accuracy of any information or the soundness of any judgments contained in NFPA Standards.

The NFPA disclaims liability for any personal injury, property or other damages of any nature whatsoever, whether special, indirect, consequential or compensatory, directly or indirectly resulting from the publication, use of, or reliance on NFPA Standards. The NFPA also makes no guaranty or warranty as to the accuracy or completeness of any information published herein.

In issuing and making NFPA Standards available, the NFPA is not undertaking to render professional or other services for or on behalf of any person or entity. Nor is the NFPA undertaking to perform any duty owed by any person or entity to someone else. Anyone using this document should rely on his or her own independent judgment or, as appropriate, seek the advice of a competent professional in determining the exercise of reasonable care in any given circumstances.

The NFPA has no power, nor does it undertake, to police or enforce compliance with the contents of NFPA Standards. Nor does the NFPA list, certify, test, or inspect products, designs, or installations for compliance with this document. Any certification or other statement of compliance with the requirements of this document shall not be attributable to the NFPA and is solely the responsibility of the certifier or maker of the statement.



ALERT: THIS STANDARD HAS BEEN MODIFIED BY A TIA OR ERRATA

Users of NFPA codes, standards, recommended practices, and guides (“NFPA Standards”) should be aware that NFPA Standards may be amended from time to time through the issuance of Tentative Interim Amendments or corrected by Errata. An official NFPA Standard at any point in time consists of the current edition of the document together with any Tentative Interim Amendment and any Errata then in effect.

In order to determine whether an NFPA Standard has been amended through the issuance of Tentative Interim Amendments or corrected by Errata, visit the “Codes & Standards” section on NFPA’s website. There, the document information pages located at the “List of NFPA Codes & Standards” provide up-to-date, document-specific information including any issued Tentative Interim Amendments and Errata.

To view the document information page for a specific NFPA Standard, go to <http://www.nfpa.org/docinfo> to choose from the list of NFPA Standards or use the search feature to select the NFPA Standard number (e.g., NFPA 101). The document information page includes postings of all existing Tentative Interim Amendments and Errata. It also includes the option to register for an “Alert” feature to receive an automatic email notification when new updates and other information are posted regarding the document.

IMPORTANT NOTICES AND DISCLAIMERS CONCERNING NFPA® STANDARDS

ADDITIONAL NOTICES AND DISCLAIMERS

Updating of NFPA Standards

Users of NFPA codes, standards, recommended practices, and guides (“NFPA Standards”) should be aware that these documents may be superseded at any time by the issuance of new editions or may be amended from time to time through the issuance of Tentative Interim Amendments or corrected by Errata. An official NFPA Standard at any point in time consists of the current edition of the document together with any Tentative Interim Amendments and any Errata then in effect. In order to determine whether a given document is the current edition and whether it has been amended through the issuance of Tentative Interim Amendments or corrected through the issuance of Errata, consult appropriate NFPA publications such as the National Fire Codes® Subscription Service, visit the NFPA website at www.nfpa.org, or contact the NFPA at the address listed below.

Interpretations of NFPA Standards

A statement, written or oral, that is not processed in accordance with Section 6 of the Regulations Governing the Development of NFPA Standards shall not be considered the official position of NFPA or any of its Committees and shall not be considered to be, nor be relied upon as, a Formal Interpretation.

Patents

The NFPA does not take any position with respect to the validity of any patent rights referenced in, related to, or asserted in connection with an NFPA Standard. The users of NFPA Standards bear the sole responsibility for determining the validity of any such patent rights, as well as the risk of infringement of such rights, and the NFPA disclaims liability for the infringement of any patent resulting from the use of or reliance on NFPA Standards.

NFPA adheres to the policy of the American National Standards Institute (ANSI) regarding the inclusion of patents in American National Standards (“the ANSI Patent Policy”), and hereby gives the following notice pursuant to that policy:

NOTICE: The user’s attention is called to the possibility that compliance with an NFPA Standard may require use of an invention covered by patent rights. NFPA takes no position as to the validity of any such patent rights or as to whether such patent rights constitute or include essential patent claims under the ANSI Patent Policy. If, in connection with the ANSI Patent Policy, a patent holder has filed a statement of willingness to grant licenses under these rights on reasonable and nondiscriminatory terms and conditions to applicants desiring to obtain such a license, copies of such filed statements can be obtained, on request, from NFPA. For further information, contact the NFPA at the address listed below.

Law and Regulations

Users of NFPA Standards should consult applicable federal, state, and local laws and regulations. NFPA does not, by the publication of its codes, standards, recommended practices, and guides, intend to urge action that is not in compliance with applicable laws, and these documents may not be construed as doing so.

Copyrights

NFPA Standards are copyrighted. They are made available for a wide variety of both public and private uses. These include both use, by reference, in laws and regulations, and use in private self-regulation, standardization, and the promotion of safe practices and methods. By making these documents available for use and adoption by public authorities and private users, the NFPA does not waive any rights in copyright to these documents.

Use of NFPA Standards for regulatory purposes should be accomplished through adoption by reference. The term “adoption by reference” means the citing of title, edition, and publishing information only. Any deletions, additions, and changes desired by the adopting authority should be noted separately in the adopting instrument. In order to assist NFPA in following the uses made of its documents, adopting authorities are requested to notify the NFPA (Attention: Secretary, Standards Council) in writing of such use. For technical assistance and questions concerning adoption of NFPA Standards, contact NFPA at the address below.

For Further Information

All questions or other communications relating to NFPA Standards and all requests for information on NFPA procedures governing its codes and standards development process, including information on the procedures for requesting Formal Interpretations, for proposing Tentative Interim Amendments, and for proposing revisions to NFPA standards during regular revision cycles, should be sent to NFPA headquarters, addressed to the attention of the Secretary, Standards Council, NFPA, 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101; email: stds_admin@nfpa.org.

For more information about NFPA, visit the NFPA website at www.nfpa.org. All NFPA codes and standards can be viewed at no cost at www.nfpa.org/docinfo.

Copyright © 2016 National Fire Protection Association®. All Rights Reserved.

NFPA® 1983

Standard on

Life Safety Rope and Equipment for Emergency Services

2017 Edition

This edition of NFPA 1983, *Standard on Life Safety Rope and Equipment for Emergency Services*, was prepared by the Technical Committee on Special Operations Protective Clothing and Equipment and released by the Correlating Committee on Fire and Emergency Services Protective Clothing and Equipment. It was issued by the Standards Council on November 11, 2016, with an effective date of December 1, 2016, and supersedes all previous editions.

This document has been amended by one or more Tentative Interim Amendments (TIAs) and/or Errata. See “Codes & Standards” at www.nfpa.org for more information.

This edition of NFPA 1983 was approved as an American National Standard on December 1, 2016.

Origin and Development of NFPA 1983

The Technical Committee on Protective Equipment for Fire Fighters (later renamed Technical Committee on Fire Service Protective Clothing and Equipment) began work on this standard in 1982 in answer to requests from the fire service to establish requirements for rope used by the fire service to perform rescues. During the development of the standard, harnesses and hardware used with the rope in rescue operations were included. The work was completed in the spring of 1984 and submitted to NFPA for official adoption. The first edition was issued on June 6, 1985.

The Subcommittee on Life Safety Ropes began revision of the 1985 edition in late 1987 and turned over its proposals to the Technical Committee in December 1988. The Technical Committee completed its work on the document in April 1989, and it was submitted for the Annual Meeting 1990 cycle. The second edition was issued on July 20, 1990.

During 1993, NFPA restructured the manner in which committees were organized, and all standing subcommittees were eliminated. Within the Technical Committee on Fire Service Protective Clothing and Equipment, the former standing subcommittees were reorganized as task groups to address specific technical issues, and the technical committee assumed the entire responsibility for NFPA 1983.

In October 1994, just after the revisions for the third edition were completed, the Standards Council appointed the Technical Correlating Committee on Fire and Emergency Services Protective Clothing and Equipment to oversee all fire and emergency services protective clothing and equipment issues. The existing Technical Committee on Fire Service Protective Clothing and Equipment had ceased to exist in May 1995, and seven new technical committees, each responsible for a different segment of the fire and emergency services protective clothing and equipment spectrum, were now in place. The future responsibility for NFPA 1983 would now rest with the new Technical Committee on Special Operations Protective Clothing and Equipment, operating under the Technical Correlating Committee on Fire and Emergency Services Protective Clothing and Equipment.

The third (1995) edition of NFPA 1983 was a complete revision of the document. The document was reformatted to present the certification requirements, the product labeling and user information requirements, the design requirements, the performance requirements, and the testing requirements in separate chapters. A different approach was taken to life safety rope and the various items used in conjunction with the rope. While the life safety rope remained as the key subject of the document, other items used in conjunction with the rope were addressed as system components.

The 1995 edition also included new criteria for personal escape rope to cover a type of life safety rope carried by fire fighters/rescuers and used only for fire fighter/rescuer escape or self-rescue in critical entrapment situations where the rope would provide the only viable means of escape. There were also new criteria, in addition to the harness requirements, for two types of belts: one intended for use to position a fire fighter on a ladder and a second type for escape/self-rescue using a life safety rope. Definitions were expanded to provide better understanding of terms. The testing requirements were greatly expanded to provide the criteria with which to evaluate performance and to determine pass/fail.

The 1995 edition was acted on by the membership of the Association at the Annual Meeting in Denver, Colorado, on May 24, 1995, and was issued with an effective date of August 11, 1995.

The fourth (2001) edition of NFPA 1983 added a new type of rope — a throwline, which is a floating rope intended to be thrown to a person in water or used as a tether for rescuers during water rescue incidents. New requirements for pulleys and portable anchors were also added to the 2001 edition as new items of system components. The former terminology for one-person and two-person load classifications was changed to a simpler load classification based on the weight that the rope or system is designed to support.

In the 2001 edition, testing methods for descent control devices were modified to provide more accurate testing for the three types of descenders. Other testing modifications were made throughout Chapter 6 to clarify testing methods and improve reproducibility of testing results. Also included were new requirements for improved product quality assurance through manufacturers being registered as compliant with the ISO and accreditation of certification laboratories. Annual product evaluation, testing, and recertification were also added. All three of those new criteria were directed to raise the bar for product and certification quality and to provide a better level of safety for the end users.

Throughout the 2001 edition, modifications to existing text were made in the continuing attempt to make the document clearer, less ambiguous, and easier to use by both manufacturers and certification organizations. This process continues during every revision cycle, and the input received from document users is helpful in fixing many of these issues.

The 2001 edition was acted on by the Association membership at the Fall Meeting in Orlando, Florida, on November 15, 2000, and was issued with an effective date of February 9, 2001.

For the fifth (2006) edition of NFPA 1983, the title of the document was changed to *Standard on Life Safety Rope and Equipment for Emergency Services*, to reflect the broader audience for this type of equipment. The 2006 edition continued to refine design and performance criteria and test methods. The former approach of system components was changed to all items being independent and tested according to the type of use to which they could be subjected. Labeling requirements were specified for items that can have detachable components to better advise the user to be sure that all components are assembled properly in order to safely use the equipment.

Throughout the 2006 edition document, modifications to existing text were made in the continuing attempt to make the document clearer, less ambiguous, and easier to use by both manufacturers and the certification organizations. This process continues during every revision cycle and the input received from document users has been very helpful in fixing many of these issues.

The 2006 edition was issued by the NFPA Standards Council on January 27, 2006, with an effective date of February 16, 2006.

The 2012 (sixth) edition of NFPA 1983 featured editorial changes, new definitions, and current terminology. Several new performance requirements were added to Chapter 7, including those for litters, escape webbing, fire escape webbing, victim extrication devices, escape systems, fire escape rope, manufacturer-supplied eye termination, moderate elongation laid life saving rope, belay devices, and escape anchor devices. The related test methods for those items were added to Chapter 8.

For the 2017 (seventh) edition, the Technical Committee has completely reorganized the document and matched up the requirements in Chapters 5, 6, and 7 to make it easier for the user to follow and understand. They also have made corresponding changes in Chapter 1 to the scope and purpose of the standard. This reorganization marked the first step in developing the proposed standard NFPA 1858, a selection, care, and maintenance document that will complement NFPA 1983.

Correlating Committee on Fire and Emergency Services Protective Clothing and Equipment

William E. Haskell, III, Chair

National Institute for Occupational Safety & Health, MA [E]

Jason L. Allen, Intertek Testing Services, NY [RT]
James B. Area, Chimera Enterprises International, MD [SE]
Joseph Arrington, San Antonio Fire Department, TX [U]
Roger L. Barker, North Carolina State University, NC [SE]
James E. Brinkley, International Association of Fire Fighters, DC [L]
 Rep. International Association of Fire Fighters
Steven D. Corrado, UL LLC, NC [RT]
Cristine Z. Fargo, International Safety Equipment Association, VA [M]
Robert A. Freese, Globe Manufacturing Company, NH [M]
Patricia A. Gleason, ASTM/Safety Equipment Institute (SEI), VA [RT]
David V. Haston, U.S. Department of Agriculture, ID [E]
Diane B. Hess, PBI Performance Products, Inc., NC [M]
Thomas M. Hosea, U.S. Department of the Navy, FL [RT]
James S. Johnson, Lawrence Livermore National Laboratory, CA [RT]
Jeff Legendre, Northborough Fire Department, MA [U]

Karen E. Lehtonen, Lion Group, Inc., OH [M]
David G. Matthews, Fire & Industrial (PPE) Ltd., United Kingdom [SE]
 Rep. International Standards Organization
Michael F. McKenna, Michael McKenna & Associates, LLC, CA [SE]
Jack E. Reall, Columbus (OH) Division of Fire, OH [L]
 Rep. Columbus Firefighters Union
Jeffrey O. Stull, International Personnel Protection, Inc., TX [M]
Tim W. Tomlinson, Addison Fire Department, TX [C]
Robert D. Tutterow, Jr., Fire Industry Equipment Research Organization (FIERO), NC [U]
 Rep. NFPA Fire Service Section
William A. Van Lent, Veridian Ltd., Inc., IA [M]
 Rep. Fire & Emergency Manufacturers & Services Association
Bruce H. Varner, BHVarner & Associates, AZ [M]
 Rep. International Fire Service Training Association
Steven H. Weinstein, Honeywell Safety Products, CA [M]
Richard Weise, Los Angeles County Fire Department, CA [U]
Harry P. Winer, HIP Consulting LLC, MA [SE]

Alternates

Louis Carpentier, Innotech Inc., Canada [M]
 (Alt. to William A. Van Lent)
Patricia A. Freeman, Globe Manufacturing Company, LLC, NH [M]
 (Alt. to Robert A. Freese)
Tim J. Gardner, 3M Company, MN [M]
 (Alt. to Cristine Z. Fargo)
Pamela A. Kavalesky, Intertek Testing Services, NY [RT]
 (Alt. to Jason L. Allen)
Benjamin Mauti, Mine Safety Appliances Company, PA [M]
 Rep. Compressed Gas Association
 (Voting Alt.)
Judge W. Morgan, Tyco/Scott Safety, CA [M]
 (Voting Alt.)
Gary L. Neilson, Sparks, NV [U]
 (Alt. to Robert D. Tutterow, Jr.)
Amanda H. Newsom, UL LLC, NC [RT]
 (Alt. to Steven D. Corrado)
Anthony Petrilli, U.S. Department of Agriculture, MT [E]
 (Alt. to David V. Haston)

Stephen R. Sanders, ASTM/Safety Equipment Institute (SEI), VA [RT]
 (Alt. to Patricia A. Gleason)
Russell Shephard, Australasian Fire & Emergency Service Authorities Council, Australia [SE]
 (Alt. to David G. Matthews)
David P. Stoddard, Michael McKenna & Associates, LLC, CA [SE]
 (Alt. to Michael F. McKenna)
Grace G. Stull, International Personnel Protection, Inc., TX [M]
 (Alt. to Jeffrey O. Stull)
Jonathan V. Szalajda, National Institute for Occupational Safety & Health, PA [E]
 (Alt. to William E. Haskell, III)
Donald B. Thompson, North Carolina State University, NC [SE]
 (Alt. to Roger L. Barker)
Jian Xiang, The DuPont Company, Inc., VA [M]
 (Alt. to Diane B. Hess)

Nonvoting

Robert J. Athanas, FDNY/SAFE-IR, Incorporated, NY [U]
 Rep. TC on Electronic Safety Equipment
Christina M. Baxter, U.S. Department of Defense, VA [E]
 Rep. TC on Hazardous Materials PC&E
Tricia L. Hock, ASTM/Safety Equipment Institute (SEI), VA [RT]
 Rep. TC on Emergency Medical Services PC&E
Stephen J. King, Babylon, NY [SE]
 Rep. TC on Structural and Proximity Fire Fighting PC&E
Chris Farrell, NFPA Staff Liaison

Jeremy Metz, West Metro Fire Rescue, CO [U]
 Rep. TC on Special Operations PC&E
Brian Montgomery, U.S. Department of Justice, DC [E]
Daniel N. Rossos, Oregon Department of Public Safety Standards & Training, OR [E]
 Rep. TC on Respiratory Protection Equipment
Rick L. Swan, IAFF Local 2881/CDF Fire Fighters, VA [L]
 Rep. TC on Wildland Fire Fighting PC&E

This list represents the membership at the time the Committee was balloted on the final text of this edition. Since that time, changes in the membership may have occurred. A key to classifications is found at the back of the document.

NOTE: Membership on a committee shall not in and of itself constitute an endorsement of the Association or any document developed by the committee on which the member serves.

Committee Scope: This Committee shall have primary responsibility for documents on the design, performance, testing, and certification of protective clothing and protective equipment manufactured for fire and emergency services organizations and personnel, to protect against exposures encountered during emergency incident operations. This Committee shall also have the primary responsibility for documents on the selection, care, and maintenance of such protective clothing and protective equipment by fire and emergency services organizations and personnel.

Technical Committee on Special Operations Protective Clothing and Equipment

Jeremy Metz, *Chair*
West Metro Fire Rescue, CO [U]

Karen E. Lehtonen, *Secretary*
Lion Group, Inc., OH [M]

Jason L. Allen, Intertek Testing Services, NY [RT]
Joseph Arrington, San Antonio Fire Department, TX [U]
Richard J. Broccolo, Orange County Fire Rescue, FL [U]
Steven D. Corrado, UL LLC, NC [RT]
Paul Dacey, W. L. Gore & Associates, MD [M]
Keith B. Dempsey, City of Dalton Fire Department, GA [C]
Stephen J. Geraghty, Fire Department City of New York, NY [U]
Rep. Fire Department City of New York
William E. Haskell, III, National Institute for Occupational Safety & Health, MA [E]
Diane B. Hess, PBI Performance Products, Inc., NC [M]
Tricia L. Hock, Safety Equipment Institute (SEI), VA [RT]
Gavin P. Horn, University of Illinois Fire Service Institute, IL [SE]
Thomas Howard, New York Division of Homeland Security & Emergency Services, NY [E]

Kim Klaren, Fairfax County Fire & Rescue Department, VA [U]
George R. Krause, II, Globe Manufacturing Company, Inc., NH [M]
Loui McCurley, PMI, CO [M]
Robert G. Nelson, Chula Vista Fire Department, CA [U]
H. Dean Paderick, Special Rescue International, VA [SE]
Jack E. Reall, Columbus (OH) Division of Fire, OH [L]
Rep. Columbus Firefighters Union
Cedric Smith, CMC Rescue, Inc., CA [M]
Michael T. Stanhope, TenCate/Southern Mills, Inc., GA [M]
R. Douglas Stephenson, City of Johns Creek Fire Department, TN [U]
Robert Stinton, Diving Unlimited International Inc., CA [M]

Alternates

Brian J. Beechner, Orange County Fire Rescue Department, FL [U]
(Alt. to Richard J. Broccolo)
Jeffrey S. Bowles, PMI Denver, CO [M]
(Alt. to Loui McCurley)
Jamey B. Brads, Special Rescue International, VA [SE]
(Alt. to H. Dean Paderick)
Charles S. Dunn, TenCate/Southern Mills, GA [M]
(Alt. to Michael T. Stanhope)
Patricia A. Freeman, Globe Manufacturing Company, LLC, NH [M]
(Alt. to George R. Krause, II)
Gregory Gould, New York State Division of Homeland Security & Emergency Services-OFPC, NY [E]
(Alt. to Thomas Howard)
Daniel Hudson, City of Dalton Fire Department, GA [C]
(Alt. to Keith B. Dempsey)
Pamela A. Kavalesky, Intertek Testing Services, NY [RT]
(Alt. to Jason L. Allen)
John McKently, CMC Rescue, Inc., CA [M]
(Alt. to Cedric Smith)

Craig P. Mignogno, Columbus Firefighters Union, IAFF67, OH [L]
(Alt. to Jack E. Reall)
Dean D. Moran, Safety Equipment Institute (SEI), VA [RT]
(Alt. to Tricia L. Hock)
James E. Murray, Fire Department City of New York, NY [U]
(Alt. to Stephen J. Geraghty)
Faith Ortins, Diving Unlimited International Inc., CA [M]
(Alt. to Robert Stinton)
Jon Saito, West Metro Fire Rescue, CO [U]
(Alt. to Jeremy Metz)
Ashley M. Scott, Lion Group, Inc., OH [M]
(Alt. to Karen E. Lehtonen)
Brian P. Shiels, PBI Performance Products, Inc., NC [M]
(Alt. to Diane B. Hess)
Beverly Wooten Stutts, UL LLC, NC [RT]
(Alt. to Steven D. Corrado)

Chris Farrell, NFPA Staff Liaison

This list represents the membership at the time the Committee was balloted on the final text of this edition. Since that time, changes in the membership may have occurred. A key to classifications is found at the back of the document.

NOTE: Membership on a committee shall not in and of itself constitute an endorsement of the Association or any document developed by the committee on which the member serves.

Committee Scope: This Committee shall have primary responsibility for documents on special operations protective clothing and protective equipment, except respiratory equipment, that provides hand, foot, torso, limb, head, and interface protection for fire fighters and other emergency services responders during incidents involving special operations functions including, but not limited to, structural collapse, trench rescue, confined space entry, urban search and rescue, high angle/mountain rescue, vehicular extraction, swift water or flooding rescue, contaminated water diving, and air operations.

This Committee shall also have primary responsibility for documents on station/work uniform garments that are not of themselves primary protective garments but can be combined with a primary protective garment to serve dual or multiple functions.

Additionally, this Committee shall have primary responsibility for documents on the selection, care, and maintenance of special operations protective clothing and equipment by fire and emergency services organizations and personnel.