

NFPA 1003

Standard for Airport Fire Fighter Professional Qualifications

2005 Edition



NFPA, 1 Batterymarch Park, Quincy, MA 02169-7471
An International Codes and Standards Organization

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Standard for
Airport Fire Fighter Professional Qualifications
2005 Edition

This edition of NFPA 1003, *Standard for Airport Fire Fighter Professional Qualifications*, was prepared by the Technical Committee on Fire Fighter Professional Qualifications, released by the Technical Correlating Committee on Professional Qualifications, and acted on by NFPA at its November Association Technical Meeting held November 13–17, 2004, in Miami Beach, FL. It was issued by the Standards Council on January 14, 2005, with an effective date of February 7, 2005, and supersedes all previous editions.

This edition of NFPA 1003 was approved as an American National Standard on February 7, 2005.

Origin and Development of NFPA 1003

In 1972, the Joint Council of National Fire Service Organizations (JCNFSO) created the National Professional Qualifications Board for the Fire Service (NPQB) to facilitate the development of nationally applicable performance standards for uniformed fire service personnel. On December 14, 1972, the Board established four technical committees to develop those standards using the National Fire Protection Association (NFPA) standards-making system. The initial committees addressed the following career areas: fire fighter, fire officer, fire service instructor, and fire inspector and investigator.

The Committee on Fire Fighter Professional Qualifications met regularly from 1976 to 1978 to produce the first edition of this document. Adopted by the Association in 1978, NFPA 1003 was the third in the series of fire fighter professional qualifications standards.

The original concept of the professional qualification standards, as directed by the JCNFSO and the NPQB, was to develop an interrelated set of performance standards specifically for the fire service. The various levels of achievement in the standards were to build upon each other within a strictly defined career ladder. In the late 1980s, revisions of the standards recognized that the documents should stand upon their own merit in terms of job performance requirements for a given field. Accordingly, the strict career ladder concept was abandoned, except for the progression from fire fighter to fire officer. The later revisions, therefore, facilitated the use of the documents by other than the uniformed fire services.

In 1990, responsibility for the appointment of professional qualifications committees and the development of the professional qualifications standards was assumed by the NFPA. The Correlating Committee for Professional Qualifications Standards was appointed by the NFPA Standards Council in 1990 and assumed the responsibility for coordinating the requirements of all of the professional qualifications documents.

The intent of the technical committee was to develop clear and concise job performance requirements that can be used to determine that an individual, when measured to the standard, possesses the skills and knowledge to perform as an airport fire fighter. The committee further contends that these job performance requirements can be used in any fire department in any city, town, or private organization throughout North America.

Changes in the standard for the 2005 edition include the requirement that for certification as an airport fire fighter, the candidate meet the requirements for Fire Fighter II defined in NFPA 1001, *Standard for Fire Fighter Professional Qualifications*.

The 2005 edition includes changes to bring the standard in conformance with the NFPA *Manual of Style for NFPA Technical Committee Documents* requirements. The Technical Committee would like to thank the members of the Airport Fire Fighter Task Group who provided them with valuable time and expertise in the development of this document. These individuals are Hugh Pike, Chair; Kenneth Gilliam; Jim Goodbread; Don Hilderbrand; Jim Hotell; Bob Lindstrom; Greg Ranard; and Gary Schott.

Technical Correlating Committee on Professional Qualifications

Barbara L. Koffron, *Chair*
Phoenix Fire Department, AZ [U]

Stephen P. Austin, State Farm Insurance Companies, DE [I]
Rep. International Assn. of Arson Investigators Inc.
Timothy L. Bradley, North Carolina Fire Commission, NC [E]
Rep. TC on Fire Service Instructor Pro Qual
(Vote Limited to Pro Qual)
Richard W. Carlson, Okolona Fire Department, KY [U]
Rep. TC on Fire Inspector Pro Qual
(Vote Limited to Pro Qual)
Boyd F. Cole, SunnyCor Inc./SmartCoat Inc., CA [M]
Rep. TC on Emergency Vehicle Mechanic Technicians Pro Qual
(Vote Limited to Pro Qual)
Jim A. Crawford, Vancouver Fire Department, WA [E]
Rep. TC on Fire Marshal Pro Qual
(Vote Limited to Pro Qual)
Yves Desjardins, Ecole nationale des pompiers du Quebec, Canada [U]
David T. Endicott, Endicott & Associates, MD [U]
Rep. TC on Fire Fighter Pro Qual
(Vote Limited to Pro Qual)
Douglas P. Forsman, Union Colony Fire & Rescue Authority, CO [E]
Rep. Louisiana State University
Carl Goodson, Fire Protection Publications, WA [M]
Rep. TC on Rescue Technician Pro Qual
(Vote Limited to Pro Qual)
Jon C. Jones, Jon Jones & Associates, MA [SE]
Rep. TC on Industrial Fire Brigades Pro Qual
(Vote Limited to Pro Qual)
Alan E. Joos, Utah Fire and Rescue Academy, UT [E]
Rep. International Fire Service Accreditation Congress

Charles E. Kirtley, City of Guymon Oklahoma Fire Department, OK [U]
Rep. TC on Public Fire Educator Pro Qual
(Vote Limited to Pro Qual)
Michael J. McGovern, Lakewood Fire Department, WA [U]
Gerard J. Naylis, U.S. Consumer Product Safety Commission, NY [C]
Rep. TC on Fire Investigator Pro Qual
(Vote Limited to Pro Qual)
Chris Neal, Fire Protection Publications, OK [M]
Rep. TC on Fire Officer Pro Qual
(Vote Limited to Pro Qual)
David K. Nelson, David K. Nelson Consultants, CA [SE]
Rep. TC on Wildfire Suppression Pro Qual
(Vote Limited to Pro Qual)
William E. Peterson, Plano Fire Department, TX [M]
Rep. International Fire Service Training Association
Richard Powell, Saginaw Township Fire Department, MI [L]
Rep. TC on Accreditation & Certification Pro Qual
(Vote Limited to Pro Qual)
Jack R. Reed, Iowa Professional Fire Fighters, IA [L]
Rep. International Association of Fire Fighters
Philip C. Stittleburg, LaFarge Fire Department, WI [L]
Rep. National Volunteer Fire Council
Michael A. Wieder, Fire Protection Publications, OK [M]
Rep. TC on Incident Management Functional Positions Pro Qual
(Vote Limited to Pro Qual)
Johnny G. Wilson, Georgia Firefighter Standards & Training Council, GA [E]
Rep. National Board on Fire Service Professional Qualification

Alternate

Michael W. Robinson, Baltimore County Fire Department, MD [E]
(Alt. to J. G. Wilson)

Frank E. Florence, NFPA Staff Liaison

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Committee Scope: This Committee shall have primary responsibility for the management of the NFPA Professional Qualifications Project and documents related to professional qualifications for fire service, public safety, and related personnel.

Technical Committee on Fire Fighter Professional Qualifications

David T. Endicott, *Chair*
Endicott & Associates, MD [U]

Steve Willis, *Secretary*
MFTE/SMTC, ME [SE]
Rep. International Society of Fire Service Instructors

William Anderson, Carlsbad Fire Department, CA [L]
Jack Casner, The Great American Insurance Company,
CT [I]
Michael P. Craig, Covington Fire Department, TN [U]
Yves Desjardins, Ecole nationale des pompiers du Quebec,
Canada [U]
Collin J. DeWitt, Town of Gilbert Fire Department, AZ [U]
David R. Fischer, State Fire Marshal, NV [SE]
Craig S. Hall, U.S. Air Force, FL [E]
C. Gordon Henderson, City of Rome Fire Department,
GA [E]
Rep. Georgia State Firefighter's Association, Inc.
Marcia S. Holtz, City of Madison Fire Department, WI [L]
Rep. Women in the Fire Service, Inc.

F. Patrick Marlatt, Maryland Fire and Rescue Institute,
MD [SE]
Henry Morse, Fire Service Testing Company, Inc.,
FL [RT]
Mickey Pophin, Texas Commission on Fire Protection,
TX [E]
Michael A. Wieder, Fire Protection Publications, OK [M]
Rep. International Fire Service Training Association
Michael L. Young, Volunteer Firemen's Insurance
Services, Inc., PA [I]
Rep. Volunteer Firemen's Insurance Services, Inc.

Alternates

Scott L. Davidson, Volunteer Firemen's Insurance
Services, Inc., PA [I]
(Alt. to M. L. Young)
Terese M. Floren, Women in the Fire Service, WI [L]
(Alt. to M. S. Holtz)
Ted J. Pagels, City of DePere, WI [SE]
(Alt. to S. Willis)

Thomas P. Ruane, Fire Protection Publications, OK [M]
(Alt. to M. A. Wieder)
Robert Singletary, City of Warner Robins Fire
Department, GA [E]
(Alt. to C. G. Henderson)

Frank E. Florence, NFPA Staff Liaison

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Committee Scope: This Committee shall have primary responsibility for documents on professional competence required of fire fighters.

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Standard for

Airport Fire Fighter
Professional Qualifications

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A reference in brackets [] following a section or paragraph indicates material that has been extracted from another NFPA document. As an aid to the user, the complete title and edition of the source documents for mandatory extracts are given in Chapter 2 and those for nonmandatory extracts are given in Annex D. Editorial changes to extracted material consist of revising references to an appropriate division in this document or the inclusion of the document number with the division number when the reference is to the original document. Requests for interpretations or revisions of extracted text shall be sent to the technical committee responsible for the source document.

Information on referenced publications can be found in Chapter 2 and Annex D.

Chapter 1 Administration

1.1 Scope. This standard identifies the minimum job performance requirements for the airport fire fighter who is responsible for aircraft rescue and fire fighting.

1.2 Purpose.

1.2.1 The purpose of this standard is to specify the minimum job performance requirements for service as an airport fire fighter.

1.2.2 It is not the intent of this standard to restrict any jurisdiction from exceeding these minimum requirements.

1.3 Units.

1.3.1 In this standard, metric values for measurement are followed by an equivalent in U.S. units. Either set of values can be used, but the same set of values (either metric or U.S. units) shall be used throughout.

1.3.2 Conversion values for SI units and U.S. units are found in Table 1.3.2.

Table 1.3.2 Conversions

Quantity	SI Unit/ Symbol	U.S. Unit/ Symbol	Conversion Factor
Length	millimeter/mm	inch/in.	1 in. = 25.4 mm
	meter/m	foot/ft	1 ft = 0.305 m
Area	sq meter/m ²	sq foot/ft ²	1 ft ² = 0.0929 m ²

Chapter 2 Referenced Publications

2.1 General. The documents or portions thereof listed in this chapter are referenced within this standard and shall be considered part of the requirements of this document.

2.2 NFPA Publications. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471.

NFPA 472, *Standard for Professional Competence of Responders to Hazardous Materials Incidents*, 2002 edition.

NFPA 1001, *Standard for Fire Fighter Professional Qualifications*, 2002 edition.

NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program*, 2002 edition.

NFPA 1582, *Standard on Comprehensive Occupational Medical Program for Fire Departments*, 2003 edition.

2.3 Other Publications. (Reserved)

Chapter 3 Definitions

3.1* General. The definitions contained in this chapter shall apply to the terms used in this standard. Where terms are not defined in this chapter or within another chapter, they shall be defined using their ordinarily accepted meanings within the context in which they are used. *Merriam-Webster's Collegiate Dictionary*, 11th edition, shall be the source for the ordinarily accepted meaning.

3.2 NFPA Official Definitions.

3.2.1* Approved. Acceptable to the authority having jurisdiction.

3.2.2* Authority Having Jurisdiction (AHJ). An organization, office, or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, an installation, or a procedure.

3.2.3 Shall. Indicates a mandatory requirement.

3.2.4 Standard. A document, the main text of which contains only mandatory provisions using the word “shall” to indicate requirements and which is in a form generally suitable for mandatory reference by another standard or code or for adoption into law. Nonmandatory provisions shall be located in an appendix or annex, footnote, or fine-print note and are not to be considered a part of the requirements of a standard.

3.3 General Definitions.

3.3.1 Aircraft Accident. An occurrence associated with the operation of an aircraft that takes place between the time any person boards the aircraft with the intention of flight and until all such persons have disembarked and in which any person suffers death or serious injury or in which the aircraft receives substantial damage. [403, 2003]

3.3.2 Aircraft Incident. An occurrence, other than an accident associated with the operation of an aircraft, that affects or could affect continued safe operation if not corrected. An incident does not result in serious injury to persons or substantial damage to aircraft. [402, 2002]

3.3.3 Airport Fire Fighter. The Fire Fighter II who has demonstrated the skills and knowledge necessary to function as an integral member of an aircraft rescue and fire-fighting (ARFF) team.

3.3.4 Critical Rescue and Fire-Fighting Access Area. The rectangular area surrounding any runway within which most aircraft accidents can be expected to occur on airports. Its width extends 150 m (500 ft) from each side of the runway centerline, and its length is 1000 m (3300 ft) beyond each runway end. [403, 2003]

3.3.5 Dangerous Goods. Articles or substances that are capable of posing a significant risk to health, safety, or property when transported by air and that are classified and outlined in the International Air Transport Association (IATA) Dangerous Goods Manual/ Regulations.

3.3.6 Fire Department. An organization providing rescue, fire suppression, and related activities, including any public, governmental, private, industrial, or military organization engaging in this type of activity. [1002, 2003]

3.3.7* Hazardous Area. For an aircraft, the area inside 23 m (75 ft) from any external surface of the aircraft.

3.3.8 Job Performance Requirement (JPR). A statement that describes a specific job task, lists the items necessary to complete the task, and defines measurable or observable outcomes and evaluation areas for the specific task. [1000, 2000]

3.3.9* National Defense Area. An area established on nonfederal lands located in the United States, its territories, or its possessions for the purpose of safeguarding classified defense information or protecting Department of Defense (DOD) equipment, material, or both.

3.3.10 Practical Critical Fire Area (PCA). This area is two-thirds of the Theoretical Critical Fire Area (TCA). [402, 2002] (See also 3.3.15, *Theoretical Critical Fire Area*.)

3.3.11* Proximity Personal Protective Equipment (PrPPE). A protective ensemble consisting of approved proximity protective clothing, self-contained breathing apparatus (SCBA), and personal alert safety systems (PASS).

3.3.12 Requisite Knowledge. Fundamental knowledge one must have in order to perform a specific task. [1031, 2003]

3.3.13 Requisite Skills. The essential skills one must have in order to perform a specific task. [1031, 2003]

3.3.14 Task. A specific job behavior or activity. [1002, 2003]

3.3.15 Theoretical Critical Fire Area (TCA). The theoretical critical fire area (TCA) is a rectangle, the longitudinal dimension of which is the overall length of the aircraft, and the width includes the fuselage and extends beyond it by a predetermined set distance that is dependent on the overall width. Therefore, the aircraft length multiplied by the calculated width equals the size of the TCA. [402, 2002]

3.3.16 Zone. One of the sections of an area created for a particular purpose.

3.3.16.1* Cold Zone. The hazard-free area around an incident.

3.3.16.2* Hot Zone. The control zone immediately surrounding a hazardous materials incident that extends far enough to prevent adverse effects from hazardous materials releases to personnel outside the zone.

3.3.16.3* Warm Zone. The control zone at a hazardous materials incident site where personnel and equipment decontamination and hot zone support takes place.

Chapter 4 General Requirements

4.1* Certification. For certification as an airport fire fighter, the candidate shall meet the requirements for Fire Fighter II defined in NFPA 1001, *Standard for Fire Fighter Professional Qualifications*; first responder operational level defined in Chapter 5 of NFPA 472, *Standard for Professional Competence of Responders to Hazardous Materials Incidents*; and the requirements for airport fire fighter defined in this standard.

4.2 Safety.

4.2.1 Candidates shall safely complete job performance requirements in accordance with recognized practices and procedures.

4.2.2 Candidates also shall meet all applicable occupational safety and health requirements of the jurisdiction.

4.3 Job Performance Requirements.

4.3.1 Job performance requirements defined by this standard shall be evaluated by individuals approved by the authority having jurisdiction.

4.3.2 Job performance requirements shall not be required to be mastered in the order in which they appear.

4.3.3 The local, state/provincial, or federal training program shall establish the instructional priority and the training program content to prepare individuals to meet the job performance requirements of this standard.

4.3.4 Job performance requirements involving exposure to products of combustion outside of the aircraft rescue and fire-fighting (ARFF) vehicle shall be performed in PrPPE.

Chapter 5 Entrance Requirements

5.1 Entry Requirements. Prior to entering training to meet the requirements of Chapter 5, the candidate shall meet the following requirements:

- (1) The minimum educational requirements established by the authority having jurisdiction
- (2) The age requirements established by the authority having jurisdiction
- (3) The medical requirements of NFPA 1582, *Standard on Comprehensive Occupational Medical Program for Fire Departments*

5.2 Physical Fitness Requirements.

5.2.1 Physical fitness requirements shall be developed and validated by the authority having jurisdiction.

5.2.2 Physical fitness requirements shall be in compliance with applicable equal opportunity regulations and other legal requirements.

Chapter 6 Airport Fire Fighter

6.1 General.

6.1.1 Qualifications. For qualification as an airport fire fighter, the candidate shall meet each of the job performance requirements defined in this chapter.

6.1.1.1 Duties. These requirements shall be divided into three major duties: response, fire suppression, and rescue.