NFPA 1021
Standard for
Fire Officer
Professional
Qualifications

1997 Edition



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NFPA 1021

Standard for

Fire Officer Professional Qualifications

1997 Edition

This edition of NFPA 1021, *Standard on Fire Officer Professional Qualifications*, was prepared by the Technical Committee on Fire Officer Professional Qualifications, released by the Technical Correlating Committee on Professional Qualifications, and acted on by the National Fire Protection Association, Inc., at its Annual Meeting held May 19–22, 1997, in Los Angeles, CA. It was issued by the Standards Council on July 24, 1997, with an effective date of August 15, 1997, and supersedes all previous editions.

This edition of NFPA 1021 was approved as an American National Standard on August 15, 1997.

Origin and Development of NFPA 1021

In 1971, the Joint Council of National Fire Service Organizations (JCNFSO) created the National Professional Qualifications Board (NPQB) for the fire service 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 instructors, and fire inspector and investigator.

The Committee on Fire Officer Professional Qualifications met through 1973, 1974, and 1975, producing the first edition of this document. The first edition of NFPA 1021 was adopted by the Association in July of 1976. Subsequent to the adoption of the initial edition, the committee has met regularly to revise and update the standard. Additional editions were adopted and issued by the NFPA under the auspices of the NPQB in 1983 and 1987.

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 on each other within a strictly defined career ladder. In the late 1980s, revisions of the standards recognized that the documents should stand on 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 fields other than the uniformed fire services.

In 1990, responsibility for the appointment of professional qualifications committees and the development of the professional qualifications standards were assumed by the NFPA.

The Correlating Committee on Professional Qualifications 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 1992 edition of NFPA 1021 reduced the number of levels of progression in the standard to four.

This new edition represents an effort on the part of the technical committee to update the standard based on several years of further use. With this edition, NFPA 1021 is converted to the job performance requirement (JPR) format to be consistent with the other standards in the Professional Qualifications Project. Each JPR consists of the task to be performed; the tools, equipment, or materials that must be provided to successfully complete the task; evaluation parameters and/or performance outcomes; and lists of prerequisite knowledge and skills one must have to be able to perform the task. More information about JPRs can be found in Appendix C.

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 a fire officer. 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.

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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.

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

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

Contents

Chapter	1 Administration	5 4-2	Human Resource Management 1021-	- 6
1-1	Scope 1021–	5 4-3	Community and Government Relations 1021-	- 9
1-2	Purpose 1021–	5 4-4	Administration	- 9
1-3	General 1021-	5 4-5	Inspection and Investigation 1021-	-10
1-4	Definitions	5 4-6	Emergency Service Delivery 1021-	
		4-7	Safety	-10
Chapter	2 Fire Officer I	6	•	
2-1	General	Giiaptei	5 Fire Officer IV	-10
2-2	Human Resource Management 1021–	6 5-1	General	
2-3	Community and Government Relations 1021–	:)-/	Human Resource Management 1021-	
2-4	Administration	6 5-3	Community and Government Relations 1021-	
2-5	Inspection and Investigation 1021–	7 5-4	Administration	
2-6	Emergency Service Delivery 1021–	7		
2-7	Safety 1021-	7 5-5	Inspection and Investigation 1021-	
		5-6	Emergency Services Delivery 1021-	
Chapter	3 Fire Officer II 1021-	7 5-7	Safety 1021-	-11
3-1	General 1021–			
3-2	Human Resource Management 1021–	7 Chapter	6 Referenced Publications 1021-	-11
3-3	Community and Government Relations 1021–	8		
3-4	Administration	8 Append	ix A Explanatory Material 1021-	-12
3-5	Inspection and Investigation 1021–			
3-6	Emergency Service Delivery 1021–		ix B Referenced Publications 1021-	-13
3-7	Safety 1021-			
	•		ix C 1021-	-13
Chapter	4 Fire Officer III	9		
_	General 1021–		1021-	-17

ADMINISTRATION 1021–5

NFPA 1021

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NOTICE: An asterisk (*) following the number or letter designating a paragraph indicates that explanatory material on the paragraph can be found in Appendix A.

Information on referenced publications can be found in Chapter 6 and Appendix B.

Chapter 1 Administration

- **1-1 Scope.*** This standard identifies the performance requirements necessary to perform the duties of a fire officer and specifically identifies four levels of progression.
- **1-2 Purpose.** The purpose of this standard is to specify the minimum job performance requirements for service as a fire officer.
- 1-2.1 The intent of the standard is to define progressive levels of performance required at the various levels of officer responsibility. The authority having jurisdiction has the option to combine or group the levels to meet its local needs and to use them in the development of job descriptions and specifying promotional standards.
- **1-2.2** It is not the intent of this standard to restrict any jurisdiction from exceeding these minimum requirements.
- **1-2.3** This standard shall cover the requirements for the four levels of progression—Fire Officer I, Fire Officer II, and Fire Officer IV.

1-3* General.

- **1-3.1** All of the standards for any level of fire officer shall be performed in accordance with recognized practices and procedures or as defined by an accepted authority.
- **1-3.2** It is not required for the objectives to be mastered in the order in which they appear. The local or state/provincial training program shall establish both the instructional priority and the program content to prepare individuals to meet the performance objectives of this standard.
- **1-3.3** The Fire Fighter II shall meet all the objectives for Fire Officer I before being certified at the Fire Officer I level, and the objectives for each succeeding level in the progression shall be met before being certified at the next higher level.

1-4* Definitions.

Approved.* Acceptable to the authority having jurisdiction.

Authority Having Jurisdiction.* The organization, office, or individual responsible for approving equipment, an installation, or a procedure.

Comprehensive Emergency Management Plan. Planning document that includes preplan information and resources for the management of catastrophic emergencies within the jurisdiction.

Fire Department. An organization providing rescue, fire suppression, and other related activities. For the purposes of this standard, the term "fire department" shall include any public, private, or military organization engaging in this type of activity.

Fire Officer I. The fire officer, at the supervisory level, who has met the job performance requirements specified in this standard for Level I.

Fire Officer II. The fire officer, at the supervisory/managerial level, who has met the job performance requirements specified in this standard for Level II.

Fire Officer III. The fire officer, at the managerial/administrative level, who has met the job performance requirements specified in this standard for Level III.

Fire Officer IV. The fire officer, at the administrative level, who has met the job performance requirements specified in this standard for Level IV.

Incident Management System. An organized system of roles, responsibilities, and standard operating procedures used to manage and direct emergency operations.

Job Performance Requirement. 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.

Labeled. Equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization that is acceptable to the authority having jurisdiction and concerned with product evaluation, that maintains periodic inspection of production of labeled equipment or materials, and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

Listed.* Equipment, materials, or services included in a list published by an organization that is acceptable to the authority having jurisdiction and concerned with evaluation of products or services, that maintains periodic inspection of production of listed equipment or materials or periodic evaluation of services, and whose listing states that either the equipment, material, or service meets identified standards or has been tested and found suitable for a specified purpose.

Member. A person involved in performing the duties and responsibilities of a fire department under the auspices of the organization. A fire department member can be a full-time or part-time employee or a paid or unpaid volunteer, can occupy any position or rank within the fire department, and can engage in emergency operations.

Promotion. The advancement of a member from one rank to a higher rank by a method such as election, appointment, merit, or examination.

Qualification. Having satisfactorily completed the requirements of the objectives.

Shall. Indicates a mandatory requirement.

Should. Indicates a recommendation or that which is advised but not required.

Supervisor. An individual responsible for overseeing the performance or activity of other members.

Unit. An engine company, truck company, or other functional or administrative group.

Chapter 2 Fire Officer I

- **2-1 General.** For certification at Fire Officer Level I the candidate shall meet the requirements of Fire Fighter II as defined in NFPA 1001, *Standard on Fire Fighter Professional Qualifications*, and the job performance requirements defined in Sections 2-2 through 2-7 of this standard.
- **2-1.1 General Prerequisite Knowledge.** The organizational structure of the department; departmental operating procedures for administration, emergency operations, and safety; departmental budget process; information management and record keeping; the fire prevention and building safety codes and ordinances applicable to the jurisdiction; incident management system; socioeconomic and political factors that impact the fire service; cultural diversity; methods used by supervisors to obtain cooperation within a group of subordinates; the rights of management and members; agreements in force between the organization and members; policies and procedures regarding the operation of the department as they involve supervisors and members.
- **2-1.2 General Prerequisite Skills.** The ability to communicate verbally and in writing, to write reports, and to operate in the incident management system.
- **2-2 Human Resource Management.** This duty involves utilizing human resources to accomplish assignments in a safe and efficient manner and supervising personnel during emergency and nonemergency work periods, according to the following job performance requirements.
- **2-2.1** Assign tasks or responsibilities to unit members, given an assignment at an emergency operation, so that the instructions are complete, clear, and concise; safety considerations are addressed; and the desired outcomes are conveyed.
- (a) Prerequisite Knowledge: Verbal communications during emergency situations, techniques used to make assignments under stressful situations, methods of confirming understanding.
- (b) *Prerequisite Skills*: The ability to condense instructions for frequently assigned unit tasks based upon training and standard operating procedures.
- **2-2.2** Assign tasks or responsibilities to unit members, given an assignment under nonemergency conditions at a station or other work location, so that the instructions are complete, clear, and concise; safety considerations are addressed; and the desired outcomes are conveyed.
- (a) Prerequisite Knowledge: Verbal communications under nonemergency situations, techniques used to make assignments under routine situations, methods of confirming understanding.
- (b) Prerequisite Skills: The ability to issue instructions for frequently assigned unit tasks based upon department policy.
- **2-2.3** Direct unit members during a training evolution, given a company training evolution and training policies and procedures, so that the evolution is performed safely, efficiently, and as directed.
- (a) Prerequisite Knowledge: Verbal communication techniques to facilitate learning.
- (b) *Prerequisite Skills*: The ability to distribute issue-guided directions to unit members during training evolutions.

- **2-2.4** Recommend action for member-related problems, given a member with a situation requiring assistance and the member assistance policies and procedures, so that the situation is identified and the actions taken are within the established policies and procedures.
- (a) *Prerequisite Knowledge: The signs and symptoms of member-related problems, causes of stress in emergency services personnel, adverse effects of stress on the performance of emergency service personnel.
- (b) *Prerequisite Skills:* The ability to recommend a course of action for a member in need of assistance.
- **2-2.5*** Apply human resource policies and procedures, given an administrative situation requiring action, so that policies and procedures are followed.
- (a) Prerequisite Knowledge: Human resource policies and procedures.
- (b) Prerequisite Skills: The ability to communicate verbally and in writing and to relate interpersonally.
- **2-2.6** Coordinate the completion of assigned tasks and projects by members, given a list of projects and tasks and the job requirements of subordinates, so that the assignments are prioritized, a plan for the completion of each assignment is developed, and members are assigned to specific tasks and supervised during the completion of the assignments.
- (a) *Prerequisite Knowledge*: Principles of supervision and basic human resource management.
- (b) Prerequisite Skills: The ability to plan and to set priorities.
- **2-3 Community and Government Relations.** This duty involves dealing with inquiries and concerns from members of the community and projecting the role of the department to the public, according to the following job performance requirements.
- **2-3.1** Initiate action to a citizen's concern, given policies and procedures, so that the concern is answered or referred to the appropriate individual for action and all policies and procedures are complied with.
- (a) *Prerequisite Knowledge:* Interpersonal relationships and verbal and nonverbal communication.
- (b) *Prerequisite Skills:* Familiarity with public relations and the ability to communicate verbally.
- **2-3.2** Respond to a public inquiry, given the policies and procedures, so that the inquiry is answered accurately, courte-ously, and in accordance with applicable policies and procedures.
- (a) Prerequisite Knowledge: Written and verbal communication techniques.
- (b) *Prerequisite Skills:* The ability to relate interpersonally and to respond to public inquiries.
- **2-4 Administration.** This duty involves general administrative functions and the implementation of departmental policies and procedures at the unit level, according to the following job performance requirements.
- **2-4.1** Implement a new departmental policy at the unit level, given a new departmental policy, so that the policy is communicated to and understood by unit members.
- (a) Prerequisite Knowledge: Written and verbal communication.
- (b) *Prerequisite Skills*: The ability to relate interpersonally.
- 2-4.2 Execute routine unit-level administrative functions, given forms and record management systems, so that the

FIRE OFFICER II 1021–7

reports and logs are complete and files are maintained in accordance with policies and procedures.

- (a) Prerequisite Knowledge: Administrative policies and procedures and records management.
- (b) Prerequisite Skills: The ability to communicate verbally and in writing.
- **2-5* Inspection and Investigation.** This duty involves performing a fire investigation to determine preliminary cause, securing the incident scene, and preserving evidence, according to the following job performance requirements.
- **2-5.1** Evaluate available information, given a fire incident, observations, and interviews of first-arriving members and other individuals involved in the incident, so that a preliminary cause of the fire is determined, reports are completed, and, if required, the scene is secured and all pertinent information is turned over to an investigator.
- (a) Prerequisite Knowledge: Common causes of fire, fire growth and development, and policies and procedures for calling for investigators.
- (b) Prerequisite Skills: The ability to determine basic fire cause and the ability to conduct interviews and write reports.
- **2-5.2** Secure an incident scene, given rope or barrier tape, so that unauthorized persons can recognize the perimeters of the scene, are kept from restricted areas, and all evidence or potential evidence is protected from damage or destruction.
- (a) Prerequisite Knowledge: Types of evidence, the importance of fire scene security, and evidence preservation.
- (b) *Prerequisite Skills*: The ability to establish perimeters at an incident scene.
- **2-6* Emergency Service Delivery.** This duty involves supervising emergency operations, conducting preincident planning, and deploying assigned resources, according to the following job performance requirements.
- **2-6.1** Develop a preincident plan, given an assigned facility and preplanning policies, procedures, and forms, so that all required elements are identified and the appropriate forms are completed and processed in accordance with policies and procedures.
- (a) Prerequisite Knowledge: Elements of a preincident plan, basic building construction, basic fire protection systems and features, basic water supply, basic fuel loading, and fire growth and development.
- (b) *Prerequisite Skills*: The ability to write reports, to communicate verbally, and to evaluate skills.
- **2-6.2** Develop an initial action plan, given size-up information for an incident and assigned emergency response resources, so that resources are deployed to control the emergency.
- (a) *Prerequisite Knowledge: Elements of a size-up, standard operating procedures for emergency operations, and fire behavior.
- (b) Prerequisite Skills: The ability to analyze emergency scene conditions, to allocate resources, and to communicate verbally.
- **2-6.3*** Implement an action plan at an emergency operation, given assigned resources, type of incident, and a preliminary plan, so that resources are deployed to mitigate the situation.

(a) Prerequisite Knowledge: Standard operating procedures, resources available, basic fire control and emergency operation procedures, an incident management system, and a personnel accountability system.

- (b) Prerequisite Skills: The ability to implement an incident management system, to communicate verbally, and to supervise and account for assigned personnel under emergency conditions.
- **2-7* Safety.** This duty involves integrating safety plans, policies, and procedures into the daily activities to ensure a safe work environment for all assigned members, according to the following job performance requirements.
- **2-7.1** Apply safety regulations at the unit level, given safety policies and procedures, so that required reports are completed, in-service training is conducted, and member responsibilities are conveyed.
- (a) Prerequisite Knowledge: The most common causes of personal injury and accident to the member, safety policies and procedures, basic workplace safety, and the components of an infectious disease control program.
- (b) *Prerequisite Skills:* The ability to identify safety hazards and to communicate verbally and in writing.
- **2-7.2** Conduct an initial accident investigation, given an incident and investigation forms, so that the incident is documented and reports are processed in accordance with policies and procedures.
- (a) Prerequisite Knowledge: Procedures for conducting an accident investigation, and safety policies and procedures.
- (b) Prerequisite Skills: The ability to communicate verbally and in writing and to conduct interviews.

Chapter 3 Fire Officer II

- **3-1 General.** For certification at Level II, Fire Officer I shall meet the requirements of Fire Instructor I as defined in NFPA 1041, *Standard for Fire Service Instructor Professional Qualifications*, and the job performance requirements defined in Sections 3-2 through 3-7 of this standard.
- **3-1.1 General Prerequisite Knowledge.** The organization of local government; the law-making process at the local, state/provincial, and federal level; functions of other bureaus, divisions, agencies and organizations; and their roles and responsibilities that relate to the fire service.
- **3-1.2 General Prerequisite Skills.** Intergovernmental and interagency cooperation.
- **3-2 Human Resource Management.** This duty involves evaluating member performance, according to the following job performance requirements.
- **3-2.1** Initiate actions to maximize member performance and/or to correct unacceptable performance, given human resource policies and procedures, so that member and/or unit performance improves or the issue is referred to the next level of supervision.

- (a) Prerequisite Knowledge: Human resource policies and procedures, problem identification, organizational behavior, group dynamics, leadership styles, types of power, and interpersonal dynamics.
- (b) *Prerequisite Skills*: The ability to communicate verbally and in writing, to solve problems, to increase team work, and to counsel members.
- **3-2.2** Evaluate the job performance of assigned members, given personnel records and evaluation forms, so each member's performance is evaluated accurately and reported according to human resource policies and procedures.
- (a) *Prerequisite Knowledge:* Human resource policies and procedures, job descriptions, objectives of a member evaluation program, and common errors in evaluating.
- (b) *Prerequisite Skills*: The ability to communicate verbally and in writing and to plan and conduct evaluations.
- **3-3 Community and Government Relations.** This duty involves delivering life safety, injury, and fire prevention education programs, according to the following job performance requirements.
- **3-3.1** Deliver a public education program, given the target audience and topic, so that the intended message is conveyed clearly.
- (a) Prerequisite Knowledge: Contents of the fire department's public education program as it relates to the target audience.
- (b) *Prerequisite Skills*: The ability to communicate to the target audience.
- **3-4 Administration.** This duty involves preparing budget requests, news releases, and policy changes, according to the following job performance requirements.
- **3-4.1** Prepare recommendations for changes to an existing policy or procedure, given a policy or procedure in need of change, so that the recommendations identify the problem and propose a solution.
- (a) Prerequisite Knowledge: Policies and procedures and problem identification.
- (b) *Prerequisite Skills*: The ability to communicate in writing and to solve problems.
- **3-4.2** Prepare a budget request, given a need and budget forms, so that the request is in the proper format and is supported with data.
- (a) *Prerequisite Knowledge:* Policies and procedures and the revenue sources and budget process.
- (b) Prerequisite Skill: The ability to communicate in writing.
- **3-4.3** Prepare a news release, given an event or topic, so that the information is accurate and formatted correctly.
- (a) Prerequisite Knowledge: Policies and procedures and the format used for news releases.
- (b) *Prerequisite Skills*: The ability to communicate verbally and in writing.
- **3-4.4** Prepare a concise report for transmittal to a supervisor, given fire department record(s) and a specific request for details such as trends, variances, or other related topics.
- (a) Prerequisite Knowledge: The data processing system.
- (b) Prerequisite Skills: The ability to communicate in writing and to interpret data.

- **3-5 Inspection and Investigation.** This duty involves conducting inspections to identify hazards and address violations and conducting fire investigations to determine origin and preliminary cause, according to the following job performance requirements.
- **3-5.1** Describe the procedures for conducting fire inspections, given any of the following occupancies:
 - (a) Assembly
 - (b) Educational
 - (c) Health care
 - (d) Detention and correctional
 - (e) Residential
 - (f) Mercantile
 - (g) Business
 - (h) Industrial
 - (i) Storage
 - (j) Unusual structures
 - (k) Mixed occupancies

so that all hazards, including hazardous materials, are identified, appropriate forms are completed, and appropriate action is initiated.

- (a) Prerequisite Knowledge: Inspection procedures; fire detection, alarm, and protection systems; identification of fire and life safety hazards; and marking and identification systems for hazardous materials.
- (b) *Prerequisite Skills:* The ability to communicate in writing and to apply the appropriate codes.
- **3-5.2** Determine the point of origin and preliminary cause of a fire, given a fire scene, photographs, diagrams, pertinent data and/or sketches, to determine if arson is suspected.
- (a) Prerequisite Knowledge: Methods used by arsonists, common causes of fire, basic cause and origin determination, fire growth and development, and documentation of preliminary fire investigative procedures.
- (b) Prerequisite Skills: The ability to communicate verbally and in writing and to apply knowledge using deductive skills.
- **3-6 Emergency Service Delivery.** This duty involves supervising multi-unit emergency operations, conducting preincident planning, and deploying assigned resources, according to the following job requirements.
- **3-6.1** Produce operational plans, given a hazardous materials incident and another emergency requiring multi-unit operations, so that required resources, their assignments, and safety considerations for successful control of the incident are identified
- (a) Prerequisite Knowledge: Standard operating procedures; national, state/provincial, and local information resources available for the handling of hazardous materials under emergency situations; basic fire control and emergency operation procedures; an incident management system; and a personnel accountability system.
- (b) Prerequisite Skills: The ability to implement an incident management system, to communicate verbally, and to supervise and account for assigned personnel under emergency conditions.

FIRE OFFICER III 1021–9

- **3-7 Safety.** This duty involves reviewing injury, accident, and health exposure reports, identifying unsafe work environments or behaviors, and taking appropriate action to prevent reoccurrence, according to the following job requirements.
- **3-7.1** Analyze a member's accident, injury, or health exposure history, given the case study, so that a report is prepared for a supervisor and includes action taken and recommendations given.
- (a) Prerequisite Knowledge: The causes of unsafe acts, health exposures, or conditions that result in accidents, injuries, occupational illnesses, or deaths.
- (b) Prerequisite Skills: The ability to communicate in writing and to interpret accidents, injuries, occupational illnesses, or death reports.

Chapter 4 Fire Officer III

- **4-1 General.** For certification at Level III, the Fire Officer II shall meet the requirements of Fire Instructor II as defined in NFPA 1041, *Standard for Fire Service Instructor Professional Qualifications*, and the job performance requirements defined in Sections 4-2 through 4-7 of this standard.
- **4-1.1 General Prerequisite Knowledge.** Current national and international trends and developments related to fire service organization, management, and administrative principles; public and private organizations that support the fire and emergency services and the functions of each.
- **4-1.2 General Prerequisite Skills.** The ability to use evaluative methods, to analyze data, to communicate verbally and in writing, and to motivate members.
- **4-2 Human Resource Management.** This duty involves establishing procedures for hiring, assigning, promoting, and encouraging professional development of members, according to the following job performance requirements.
- **4-2.1** Establish personnel assignments to maximize efficiency, given knowledge, training, and experience of the members available in accordance with policies and procedures.
- (a) Prerequisite Knowledge: Minimum staffing requirements, available human resources, and policies and procedures.
- (b) Prerequisite Skills: The ability to relate interpersonally and to communicate verbally and in writing.
- **4-2.2** Develop procedures for hiring members, given applicable policies and legal requirements, so that the process is valid and reliable.
- (a) Prerequisite Knowledge: Applicable federal, state/provincial, and local laws, regulations and standards, and policies and procedures.
- (b) Prerequisite Skills: The ability to communicate verbally and in writing.
- **4-2.3** Develop procedures for promoting members, given applicable policies and legal requirements, so that the process is valid and reliable.
- (a) Prerequisite Knowledge: Applicable federal, state/provincial, and local laws; regulations and standards; and policies and procedures.

(b) Prerequisite Skills: The ability to communicate verbally and in writing, to encourage professional development, and to mentor members.

- **4-2.4** Describe methods to facilitate and encourage members to participate in professional development to achieve their full potential.
- (a) Prerequisite Knowledge: Interpersonal and motivational techniques.
- (b) *Prerequisite Skills*: The ability to evaluate potential, to communicate verbally, and to counsel members.
- **4-3 Community and Government Relations.** This duty involves developing programs that improve and expand service and that build partnerships with the public, according to the following job performance requirements.
- **4-3.1** Prepare community awareness programs to enhance the quality of life by developing nontraditional services that provide for increased safety, injury prevention, and convenient public services.
- (a) Prerequisite Knowledge: Community demographics, resource availability, community needs, and customer service principles.
- (b) *Prerequisite Skills:* The ability to relate interpersonally and to communicate verbally and in writing.
- **4-4 Administration.** This duty involves preparing a budget, developing a budget management system, soliciting bids, planning for resource allocation, and working with information management systems, according to the following job performance requirements.
- **4-4.1** Develop a budget, given schedules and guidelines concerning its preparation, so that capital, operating, and personnel costs are determined and justified.
- (a) Prerequisite Knowledge: The supplies and equipment necessary for existing and new programs; repairs to existing facilities; new equipment, apparatus maintenance, and personnel costs; and appropriate budgeting system.
- (b) Prerequisite Skills: The ability to allocate finances, to relate interpersonally, and to communicate verbally and in writing.
- **4-4.2*** Develop a budget management system, given fiscal and financial policies, in order to stay within the budgetary authority.
- (a) Prerequisite Knowledge: Revenue to date, anticipated revenue, expenditures to date, encumbered amounts, and anticipated expenditures.
- (b) *Prerequisite Skills*: The ability to interpret financial data and to communicate verbally and in writing.
- **4-4.3** Describe the process of soliciting and awarding bids, given established specifications, in order to assure competitive bidding.
- (a) Prerequisite Knowledge: Purchasing laws, policies, and procedures.
- (b) *Prerequisite Skills*: The ability to use evaluative methods and to communicate verbally and in writing.

- **4-4.4** Direct the development, maintenance, and evaluation of a department record-keeping system, given policies and procedures, so as to attain completeness and accuracy.
- (a) Prerequisite Knowledge: The principles involved in the acquisition, implementation, and retrieval of information by data processing as it applies to the record and budgetary processes, capabilities, and limitations of information management systems.
- (b) Prerequisite Skills: The ability to use evaluative methods, to communicate verbally and in writing, and to organize.
- **4-4.5** Analyze and interpret records and data, given fire department records system, to determine validity and recommend improvements.
- (a) Prerequisite Knowledge: The principles involved in the acquisition, implementation, and retrieval of information and data.
- (b) *Prerequisite Skills:* The ability to use evaluative methods, to communicate verbally and in writing, to organize, and to analyze.
- **4-4.6** Develop a model plan, given a prescribed quantity of personnel and equipment for a given area to be protected, for the maximum utilization of resources.
- (a) Prerequisite Knowledge: Demographics of the area, hazards, geographic area, and established maximum response times.
- (b) *Prerequisite Skills*: The ability to use evaluative methods, to communicate verbally and in writing, and to organize.
- **4-5 Inspection and Investigation.** This duty involves evaluating inspection programs to determine effectiveness and developing public safety plans, according to the following job performance requirements.
- **4-5.1** Evaluate and identify construction, alarm, detection, and suppression features that contribute to or prevent the spread of fire, heat, and smoke throughout the building or from one building to another, given an occupancy, to evaluate the development of a preincident plan for any of the following occupancies:
 - (a) Public assembly
 - (b) Educational
 - (c) Institutional
 - (d) Residential
 - (e) Business
 - (f) Industrial
 - (g) Manufacturing
 - (h) Storage
 - (i) Mercantile
 - (j) Special properties
- (a) Prerequisite Knowledge: Fire behavior, program evaluation, building construction, inspection and incident reports, detection, alarm and suppression systems, and applicable codes, ordinances, and standards.
- (b) *Prerequisite Skills:* The ability to use evaluative methods, to communicate verbally and in writing, and to organize.
- **4-5.2** Develop a plan, given an identified fire safety problem, to facilitate the approval for a new program, legislation, public education, or fire safety code.
- (a) Prerequisite Knowledge: Policies and procedures; and applicable codes, ordinances, and standards and their development process.

- (b) *Prerequisite Skills:* The ability to use evaluative methods, to use consensus-building techniques, to communicate verbally and in writing, and to organize.
- **4-6 Emergency Service Delivery.** This duty involves managing multi-agency planning, deployment, and operations, according to the following job performance requirements.
- **4-6.1** Prepare an action plan, given an emergency incident requiring multiple agency operations, so that the required resources are determined and the assignment and placement of the resources are designated in order to mitigate the incident.
- (a) Prerequisite Knowledge: Policies and procedures, resources, capabilities, roles, responsibilities, and authority of support agencies.
- (b) Prerequisite Skills: The ability to use evaluative methods, to delegate authority, to communicate verbally and in writing, and to organize.
- **4-7 Safety.** This duty involves developing, managing, and evaluating a departmental safety program, according to the following job performance requirements.
- **4-7.1** Develop a measurable accident and injury prevention program, given specific data, so that the results are evaluated to determine effectiveness.
- (a) Prerequisite Knowledge: Policies and procedures; accepted safety practices; and applicable codes, standards, and laws.
- (b) Prerequisite Skills: The ability to use evaluative methods, to analyze data, and to communicate verbally and in writing.

Chapter 5 Fire Officer IV

- **5-1 General.** For certification at Level IV the Fire Officer III shall meet the job performance requirements defined in Sections 5-2 through 5-7 of this standard.
- **5-1.1 General Prerequisite Knowledge.** Advanced administrative, financial, communications, political, legal, managerial, analytical, and information management.
- **5-1.2 General Prerequisite Skill.** The ability to effectively apply prerequisite knowledge.
- **5-2 Human Resource Management.** This duty involves administrating job performance requirements and evaluating and improving the department, according to the following job performance requirements.
- **5-2.1** Appraise a grievance program, given appropriate data, to determine if the program is effective, consistent, and produces resolution at the appropriate level.
- (a) Prerequisite Knowledge: Policies and procedures; contractual agreements; and local, state/provincial, and federal regulations.
- (b) Prerequisite Skills: The ability to communicate verbally and in writing, to negotiate, to conduct interviews, to relate interpersonally, and to detect and analyze the cause of grievances.
- **5-2.2** Establish and evaluate a list of education and in-service training goals, given a summary of the job requirements for all positions within the department, so that all members can achieve and maintain required proficiencies.

- (a) Prerequisite Knowledge: Training resources; community needs; internal and external customers; policies and procedures; contractual agreements; and local, state/provincial, and federal regulations.
- (b) Prerequisite Skills: The ability to communicate verbally and in writing and to organize.
- **5-2.3** Appraise a member-assistance program, given appropriate data, to determine if the program, when used, produces the desired results and benefits.
- (a) Prerequisite Knowledge: Policies and procedures; available assistance programs; contractual agreements; and local, state/provincial, and federal regulations.
- (b) *Prerequisite Skills*: The ability to communicate verbally and in writing, to relate interpersonally, and to analyze.
- **5-2.4** Evaluate an incentive program, given appropriate data, so that a determination is made regarding achievement of the desired results.
- (a) Prerequisite Knowledge: Policies and procedures; available incentive programs; contractual agreements; and local, state/provincial, and federal regulations.
- (b) *Prerequisite Skills*: The ability to communicate verbally and in writing, to relate interpersonally, and to analyze.
- **5-3 Community and Government Relations.** This duty involves projecting a positive image of the fire department to the community, according to the following job performance requirements.
- **5-3.1** Attend, participate, and play a leadership role in given community events in order to enhance the image of the fire department.
- (a) Prerequisite Knowledge: Community demographics, community issues, and formal and informal community leaders.
- (b) Prerequisite Skills: The ability to communicate verbally and familiarity with public relations
- **5-4 Administration.** This duty involves long-range planning and fiscal projections, according to the following job performance requirements.
- **5-4.1** Develop a comprehensive long-range plan, given community requirements, current department status, and resources, so that the projected needs of the community are met.
- (a) Prerequisite Knowledge: Policies and procedures; physical and geographical characteristics; demographics; community plan; staffing requirements; response time benchmarks; contractual agreements; and local, state/ provincial, and federal regulations.
- (b) Prerequisite Skills: The ability to communicate verbally and in writing; and familiarity with fiscal analysis, public policy processes, forecasting, and analyzing.
- **5-4.2** Evaluate and project training requirements, facilities, and buildings, given appropriate data that reflect community needs and resources, to meet departmental training goals.
- (a) Prerequisite Knowledge: Policies and procedures; physical and geographical characteristics; building and fire codes; departmental plan; staffing requirements; training standards; needs assessment; contractual agreements; and local, state/provincial, and federal regulations.

- (b) Prerequisite Skills: The ability to communicate verbally and in writing; and familiarity with fiscal analysis, forecasting, and analyzing.
- 5-5 Inspection and Investigation.
- **5-5.1 Definition of Duty.** No additional job performance requirements at this level.
- **5-6 Emergency Services Delivery.** This duty involves developing plans for major disasters, according to the following job performance requirements.
- **5-6.1** Develop a comprehensive disaster plan that integrates other agencies' resources, given appropriate data, in order to rapidly and effectively mitigate the impact on a community.
- (a) Prerequisite Knowledge: Major incident policies and procedures; physical and geographical characteristics; demographics; target hazards; incident management system; communications systems; contractual and mutual-aid agreements; and local, state/provincial, and federal regulations and resources.
- (b) *Prerequisite Skills*: The ability to communicate verbally and in writing and to organize; and familiarity with interagency planning and coordination.
- **5-6.2** Develop a comprehensive plan, given appropriate data (including agency data), so that the agency operates at a civil disturbance, integrates with other agencies' actions, and provides for the safety and protection of members.
- (a) Prerequisite Knowledge: Major incident policies and procedures; physical and geographical characteristics; demographics; incident management system; communications systems; contractual and mutual-aid agreements; and local, state/provincial, and federal regulations and resources.
- (b) Prerequisite Skills: The ability to communicate verbally and in writing and to organize; and familiarity with interagency planning and coordination.
- **5-7 Safety.** This duty involves administering a comprehensive risk management program, according to the following job performance requirements.
- **5-7.1** Maintain, develop, and provide leadership for a risk management program, given specific data, so that injuries and property damage accidents are reduced.
- (a) Prerequisite Knowledge: Risk management concepts; retirement qualifications; occupational hazards analysis; and disability procedures, regulations, and laws.
- (b) Prerequisite Skills: The ability to communicate verbally and in writing, to analyze, and to use evaluative methods.

Chapter 6 Referenced Publications

6-1 The following documents or portions thereof are referenced within this standard as mandatory requirements and shall be considered part of the requirements of this standard. The edition indicated for each referenced mandatory document is the current edition as of the date of the NFPA issuance of this standard. Some of these mandatory documents might also be referenced in this standard for specific informational purposes and, therefore, are also listed in Appendix B.

6-1.1 NFPA Publications. National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101.

NFPA 1001, Standard for Fire Fighter Professional Qualifications, 1997 edition.

NFPA 1041, Standard for Fire Service Instructor Professional Qualifications, 1996 edition.

Appendix A Explanatory Material

This appendix is not a part of the recommendations of this NFPA document but is included for informational purposes only.

- **A-1-1** It is envisioned that in addition and supplemental to the requirements of NFPA 1021 appropriate educational credentials are necessary. These can include fire degree programs and general education in business, management, science, and associated degree curriculums.
- A-1-3 Fire officers are expected to be ethical in their conduct. Ethics implies honesty, doing what's right, and performing to the best of one's ability. For public safety personnel, ethical responsibility extends beyond one's individual performance. In serving the citizens, public safety personnel are charged with the responsibility of ensuring the provision of the best possible safety and service.

Ethical conduct requires honesty on the part of all public safety personnel. Choices must be made on the basis of maximum benefit to the citizens and the community. The process of making these decisions must also be open to the public. The means of providing service, as well as the quality of the service provided, must be above question and must maximize the principles of fairness and equity as well as those of efficiency and effectiveness.

- **A-1-4** Definitions of action verbs used within this document are based upon the first definition of the word found in *Webster's Dictionary*. (*Webster's Third New International Dictionary of the English Language*, Unabridged, G. & C. Merriam Company.)
- A-1-4 Approved. The National Fire Protection Association does not approve, inspect, or certify any installations, procedures, equipment, or materials; nor does it approve or evaluate testing laboratories. In determining the acceptability of installations, procedures, equipment, or materials, the authority having jurisdiction may base acceptance on compliance with NFPA or other appropriate standards. In the absence of such standards, said authority may require evidence of proper installation, procedure, or use. The authority having jurisdiction may also refer to the listings or labeling practices of an organization that is concerned with product evaluations and is thus in a position to determine compliance with appropriate standards for the current production of listed items.
- **A-1-4 Authority Having Jurisdiction.** The phrase "authority having jurisdiction" is used in NFPA documents in a broad manner, since jurisdictions and approval agencies vary, as do their responsibilities. Where public safety is primary, the authority having jurisdiction may be a federal, state, local, or other regional department or individual such as a fire chief; fire marshal; chief of a fire prevention bureau, labor department, or health department; building official; electrical inspector; or others having statutory authority. For insurance purposes, an insurance inspection department, rating bureau,

- or other insurance company representative may be the authority having jurisdiction. In many circumstances, the property owner or his or her designated agent assumes the role of the authority having jurisdiction; at government installations, the commanding officer or departmental official may be the authority having jurisdiction.
- **A-1-4 Listed.** The means for identifying listed equipment may vary for each organization concerned with product evaluation; some organizations do not recognize equipment as listed unless it is also labeled. The authority having jurisdiction should utilize the system employed by the listing organization to identify a listed product.
- **A-2-2.4(a)** Member-related problems could include substance abuse; acute, chronic, and delayed stress; and health, financial, personal, family, and other situations that adversely affect the member's job performance.
- **A-2-2.5** The Fire Officer I should be able to deal with administrative procedures that might include the following: transfers, promotions, compensation/member benefits, sick leave, vacation, requests for pay or benefits while acting in a temporary position, change in member benefits, commendations, disciplinary actions, and grievances.
- A-2-5 The committee's intent is to instill an awareness of those areas that officers might address in the performance of their duties. Organizations that desire higher levels of competency in these areas should refer to the applicable NFPA professional qualifications standards: NFPA 1031, Standard for Professional Qualifications for Fire Inspector, and NFPA 1033, Standard for Professional Qualifications for Fire Investigator.
- **A-2-6** Emergency service delivery is the component of fire department organization providing responses to emergency incidents.
- **A-2-6.2(a)** Size-up includes the many variables that the officer collects from the time of the alarm, during response, and upon arrival in order to develop an initial action plan to control an emergency incident. These observations can include building type and occupancy, fire involvement, number of occupants, mechanism of injury, materials spilled or involved in fire, wind direction, topography, demographics, and other observations relevant to the incident.
- **A-2-6.3** This requirement takes into consideration the officer's ability to give orders, direct personnel, evaluate information, and allocate resources to respond to the wide variety of emergency situations the fire service encounters.
- A-2-7 One of the fire officer's primary responsibilities is safety both on the fire ground and during normal operations. This standard defines the minimum requirements for the fire officer. NFPA 1521, Standard for Fire Department Safety Officer; NFPA 1500, Standard on Fire Department Occupational Safety and Health Program; and applicable OSHA regulations define additional requirements for the officer who might be assigned those duties.
- **A-4.4.2** The following are some of the budgeting systems commonly used:
 - (a) Planning programming budgeting system (PPBS)
 - (b) Line item budgets
 - (c) Zero-based budgeting (ZBB)
 - (d) Program budgeting

APPENDIX C **1021–1**3

- (e) Performance budgeting
- (f) Matrix budgets

Appendix B Referenced Publications

B-1 The following documents or portions thereof are referenced within this standard for informational purposes only and are thus not considered part of the requirements of this standard unless also listed in Chapter 6. The edition indicated here for each reference is the current edition as of the date of the NFPA issuance of this standard.

B-1.1 NFPA Publications. National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101.

NFPA 1031, Standard for Professional Qualifications for Fire Inspector, 1993 edition.

NFPA 1033, Standard for Professional Qualifications for Fire Investigator, 1993 edition.

NFPA 1500, Standard on Fire Department Occupational Safety and Health Program, 1997 edition.

NFPA 1521, Standard for Fire Department Safety Officer, 1997 edition.

B-1.2 Other Publication.

Webster's Third New International Dictionary of the English Language, Unabridged, G. & C. Merriam Company.

Appendix C

This appendix is not a part of the requirements of this NFPA document but is included for informational purposes only.

C-1 Explanation of the Standard and Concepts of JPRs.

The primary benefit of establishing national professional qualification standards is to provide both public and private sectors with a framework of the job requirements for the fire service. Other benefits include enhancement of the profession, individual as well as organizational growth and development, and standardization of practices.

NFPA professional qualification standards identify the minimum job performance requirements for specific fire service positions. The standards can be used for training design and evaluation, certification, measuring and critiquing on-the-job performance, defining hiring practices, and setting organizational policies, procedures, and goals. (Other applications are encouraged.)

Professional qualification standards for a specific job are organized by major areas of responsibility defined as duties. For example, the fire fighter's duties might include fire suppression, rescue, and water supply; and the public fire educator's duties might include education, planning and development, and administration. Duties are major functional areas of responsibility within a job.

The professional qualification standards are written as JPRs. JPRs describe the performance required for a specific job. JPRs are grouped according to the duties of a job. The complete list of JPRs for each duty defines what an individual must be able to do in order to successfully perform that duty.

Together, the duties and their JPRs define the job parameters; that is, the standard as a whole is a description of a job.

C-2 Breaking Down the Components of a JPR. The JPR is the assembly of three critical components. (*See Table C-2.*) These components are as follows:

- (a) Task that is to be performed
- (b) Tools, equipment, or materials that must be provided to successfully complete the task
 - (c) Evaluation parameters and/or performance outcomes

The task to be performed. The first component is a concise, brief statement of what the person is supposed to do.

Tools, equipment, or materials that must be provided to successfully complete the task. This component ensures that all individuals completing the task are given the same minimal tools, equipment, or materials when being evaluated. By listing these items, the performer and evaluator know what must be provided in order to complete the task.

Evaluation parameters and/or performance outcomes. This component defines how well one must perform each task-for both the performer and the evaluator. The job performance requirements guide performance towards successful completion by identifying evaluation parameters and/or performance outcomes. This portion of the job performance requirements promotes consistency in evaluation by reducing the variables used to gauge performance.

Table C-2 Example of a JPR

- (a) Task
 (b) Tools, equipment, or materials
 (c) Evaluation parameters and performance outcomes
 (a) Ventilate a pitched roof
 (b) Given an ax, a pike pole, an extension ladder, and a roof ladder
 (c) So that a 4-ft × 4-ft hole is created; all ventilation barriers are removed; ladders are properly positioned for ventilation.
 - ventilation barriers are removed; ladders are properly positioned for ventilation; ventilation holes are correctly placed; and smoke, heat, and combustion by-products are released from the structure

In addition to these three components, the job performance requirements contain prerequisite knowledge and skills. Just as the term prerequisite suggests, these are the necessary knowledge and skills one must have prior to being able to perform the task. Prerequisite knowledge and skills are the foundation for task performance.

Once the components and prerequisites are put together, the job performance requirements might read as follows.

Example 1. The **Fire Fighter I** shall ventilate a pitched roof, given an ax, a pike pole, an extension ladder, and a roof ladder, so that a 4-ft \times 4-ft hole is created, all ventilation barriers are removed, ladders are properly positioned for ventilation, and ventilation holes are correctly placed.

(a) Prerequisite Knowledge: Pitched roof construction, safety considerations with roof ventilation, the dangers associated with improper ventilation, knowledge of ventilation tools, the effects of ventilation on fire growth, smoke movement in structures, signs of backdraft, and the knowledge of vertical and forced ventilation. (b) Prerequisite Skills: The ability to remove roof covering; properly initiate roof cuts; use the pike pole to clear ventilation barriers; use ax properly for sounding, cutting, and stripping; position ladders; and climb and position self on ladder.

Example 2. The **Fire Investigator** shall interpret burn patterns, given standard equipment and tools and some structural/content remains, so that each individual pattern is evaluated with respect to the burning characteristics of the material involved.

- (a) *Prerequisite Knowledge:* Knowledge of fire development and the interrelationship of heat release rate, form, and ignitability of materials.
- (b) *Prerequisite Skills:* The ability to interpret the effects of burning characteristics on different types of materials.

C-3 Examples of Potential Uses.

Certification. JPRs can be used to establish the evaluation criteria for certification at a specific job level. When used for certification, evaluation must be based on the successful completion of JPRs.

First, the evaluator would verify the attainment of prerequisite knowledge and skills prior to job performance requirements evaluation. This might be through documentation review or testing.

Next, the candidate would then be evaluated on completing the JPRs. The candidate would perform the task and be *evaluated* based on the evaluation parameters and/or performance outcomes. This performance-based evaluation can be either practical (for psychomotor skills such as "ventilate a roof") or written (for cognitive skills such as "interpret burn patterns").

NOTE: Psychomotor skills are those physical skills that can be demonstrated or observed. Cognitive skills (or mental skills) cannot be observed, but are rather evaluated on how one completes the task (process oriented) or the task outcome (product oriented).

Using **Example 1**, a practical performance-based evaluation would measure one's ability to "ventilate a pitched roof." The candidate passes this particular evaluation if the standard was met—that is, a 4-ft × 4-ft hole was created; all ventilation barriers were removed; ladders were properly positioned for ventilation; ventilation holes were correctly placed; and smoke, heat, and combustion by-products were released from the structure.

For **Example 2**, when evaluating the task "interpret burn patterns," the candidate could be given a written assessment in the form of a scenario, photographs, and drawings and then be asked to respond to specific written questions related to the JPR's evaluation parameters.

Remember, when evaluating performance, you must give the person the tools, equipment, or materials listed in the job performance requirements—for example, an ax, a pike pole, an extension ladder, and a roof ladder—before he or she can be properly evaluated.

C-4 Curriculum Development/Training Design and Evaluation.

The statements contained in this document that refer to job performance were designed and written as JPRs. While a resemblance to instructional objectives might be present, these statements should not be used in a teaching situation until after they have been modified for instructional use.

JPRs state the behaviors required to perform specific skill(s) on the job as opposed to a learning situation. These state-

ments should be converted into instructional objectives with behaviors, conditions, and standards that can be measured within the teaching/learning environment. A JPR that requires a fire fighter to "ventilate a pitched roof" should be converted into a measurable instructional objective for use when teaching the skill. [See Figure C-4(a).]

Using **Example 1**, a terminal instructional objective might read as follows:

The learner will ventilate a pitched roof, given a simulated roof, an ax, a pike pole, an extension ladder, and a roof ladder, so that 100-percent accuracy is attained on a skills checklist. (At a minimum, the skills checklist should include each of the measurement criteria from the job performance requirements).

Figure C-4(b) is a sample checklist for use in evaluating this objective.

While the differences between job performance requirements and instructional objectives are subtle in appearance, the purpose of each statement differs greatly. JPRs state what is necessary to perform the job in the "real world." Instructional objectives, however, are used to identify what students must do at the end of a training session and are stated in behavioral terms that are measurable in the training environment.

By converting JPRs into instructional objectives, instructors will be able to clarify performance expectations and avoid confusion related to using statements designed for purposes other than teaching. Additionally, instructors will be able to add local/state/regional elements of performance into the standards as intended by the developers.

Prerequisite skills and knowledge should be converted into enabling objectives. These help to define the course content. The course content would include each of the prerequisite knowledge and skills. Using the above example, the enabling objectives would be pitched roof construction, safety considerations with roof ventilation, removal of roof covering, properly initiated roof cuts, and so on. This ensures that the course content supports the terminal objective.

NOTE: It is assumed that the reader is familiar with curriculum development or training design and evaluation.

C-5 Other Uses. While the professional qualifications standards are principally used to guide the development of training and certification programs, there are a number of other potential uses for the documents. Because the documents are written using terms specific to job performance requirements, they lend themselves well to any area of the profession where a level of performance or expertise must be determined.

These areas might include the following.

Employee Evaluation/Performance Critiquing. The JPRs can be used as a guide by both the supervisor and the employee during an evaluation. The JPRs for a specific job define tasks that are essential to perform on the job as well as the evaluation criteria to measure when those tasks are completed.

Establishing Hiring Criteria. The professional qualifications standards can be used in a number of ways to further the establishment of hiring criteria. The authority having jurisdiction could simply require certification at a specific job level—for example, Fire Fighter I. The JPRs could also be used as the basis for pre-employment screening by establishing essential minimal tasks and the related evaluation criteria. An added benefit is that individuals interested in employment can work towards the minimal hiring criteria at local colleges.

APPENDIX C 1021–15

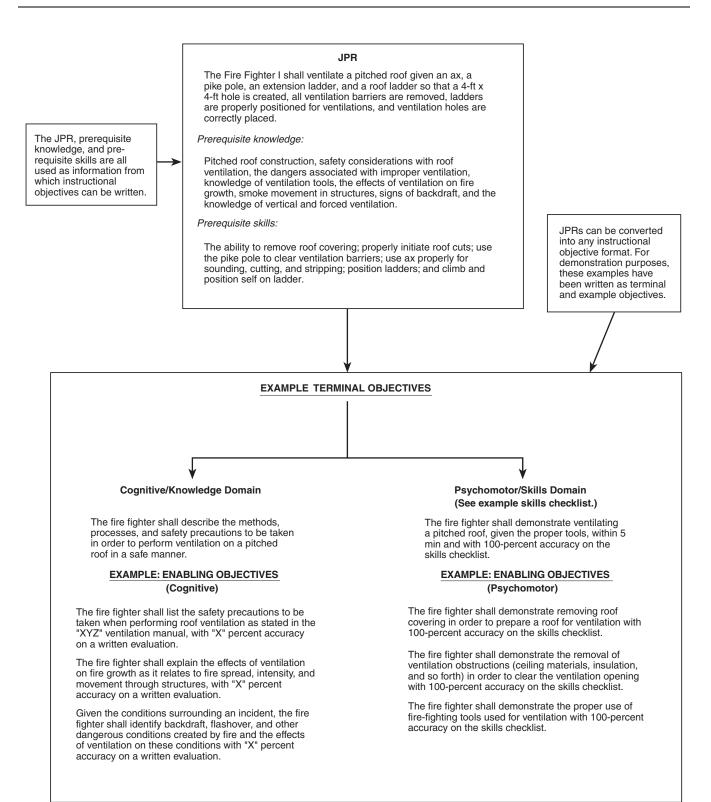


Figure C-4(a) Converting JPRs into instructional objectives.