



Second Correlating Revision No. 1-NFPA 1081-2023 [Chapter B]

Annex B Explanation of the Professional Qualifications Standards and Concepts of JPRs

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

B.1 Explanation of the Professional Qualifications Standards and Concepts of Job Performance Requirements (JPRs).

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

NFPA professional qualifications standards identify the minimum job performance requirements (JPRs) for specific emergency services levels and positions. The standards can be used for training design and evaluation, certification, measuring and critiquing on-the-job performance, defining hiring practices, job descriptions, and setting organizational policies, procedures, and goals.

Professional qualifications standards for specific jobs are organized by major areas of responsibility defined as *duties*. For example, the firefighter's duties might include fire department communications, fireground operations, and preparedness and maintenance, whereas the fire and life safety educator's duties might include education and implementation, planning and development, and evaluation. Duties are major functional areas of responsibility within a specific job.

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

B.2 The Parts of a JPR.

B.2.1 Critical Components.

The JPR comprises three critical components, which are as follows:

- (1) Task to be performed, partial description using an action verb (See Figure B.2.1 for examples of action verbs used in the creation of JPRs.)
- (2) Tools, equipment, or materials that are to be provided to complete the task
- (3) Evaluation parameters and performance outcomes

Figure B.2.1 Examples of Action Verbs.

Action Verb Progression	5	Creation and Evaluation		Analyze	Anticipate	Appraise	Assess	Classify	Compare	Conclude	Construct	Create	Critique	Design	Develop	Devise	Diagnose	Edit	Evaluate	Examine	Forecast	Generate	Interpret	Justify	Plan	Prescribe	Prevent	Project	Research	Summarize	
	4	Skills Bridging		Adapt	Adjust	Alter	Arrange	Breakdown	Categorize	Change	Combine	Complete	Convert	Correlate	Coordinate	Differentiate	Discover	Discriminate	Formulate	Integrate	Integrate	Modify	Negotiate	Organize	Relate	Reconcile	Reorganize	Replace	Revise	Separate	Survey
	3	Superior Skills		Administer	Advise	Approve	Apply	Calculate	Check	Coach	Conduct	Deliver	Detect	Diagram	Direct	Document	Enforce	Establish	Estimate	Execute	Facilitate	Manage	Monitor	Perform	Protect	Produce	Recall	Recomm	Schedule	Support	Teach
	2	Basic Skills Application		Advance	Apply	Assess	Assess	Calculate	Check	Coach	Conduct	Deliver	Detect	Diagram	Direct	Document	Enforce	Establish	Estimate	Execute	Facilitate	Manage	Monitor	Perform	Protect	Produce	Recall	Recomm	Schedule	Support	Teach
	1	Pre-operational		Associate	Begin	Cite	Define	Describe	Display	Distinguish	Explain	Express	Identify	Inventory	Label	List	Match	Name	Outline	Paraphrase	Proceed	Read	Recall	Recognize	Reproduce	Repeat	Repeat	Repeat	Repeat	Repeat	Repeat

Table B.2.1 gives an example of the critical components of a JPR.

Table B.2.1 Example of a JPR

(1) Task to be performed	(1) Perform overhaul at <u>Overhaul</u> a fire scene,
(2) Tools, equipment, or materials	(2) given PPE, attack line, hand tools, flashlight, and an assignment,
(3) Evaluation parameters and performance outcomes	(3) so that structural integrity is not compromised, all hidden fires are discovered, fire cause evidence is preserved, and the fire is extinguished.

B.2.1.1 The Task to Be Performed.

The first component is a concise statement of what the person is required to do. A significant aspect of that phrase is the use of an action verb, which sets the expectation for what is to be accomplished.

B.2.1.2 Tools, Equipment, or Materials That Should Be Provided for Successful Completion of the Task.

This component ensures that all the individuals completing the task are given the same tools, equipment, or materials when they are being evaluated. Both the individual and the evaluator will know what should be provided in order for the individual to complete the task.

B.2.1.3 Evaluation Parameters and Performance Outcomes.

This component defines — for both the performer and the evaluator — how well the individual should perform each task. The JPR guides performance toward successful completion by identifying evaluation parameters and performance outcomes. This portion of the JPR promotes consistency in evaluation by reducing the variables used to gauge performance.

B.2.2 Requisite Knowledge and Skills.

In addition to these three components, a JPR describes requisite knowledge and skills. As the term *requisite* suggests, these are the necessary knowledge and skills the individual should have prior to being able to perform the task. Requisite knowledge and skills are the foundation for task performance.

B.2.3 Examples.

With the components and requisites combined, a JPR might be similar to the two examples in B.2.3.1 and B.2.3.2.

B.2.3.1 Example: Firefighter I.

~~Perform overhaul at~~ Overhaul a fire scene, given PPE, attack line, hand tools, flashlight, and an assignment, so that structural integrity is not compromised, all hidden fires are discovered, fire cause evidence is preserved, and the fire is extinguished.

(A) Requisite Knowledge.

~~Knowledge of types~~ Types of fire attack lines and water application devices for overhaul, water application methods for extinguishment that limit water damage, types of tools and methods used to expose hidden fire, dangers associated with overhaul, signs of area of origin or signs of arson, and reasons for protection of fire scene.

(B) Requisite Skills.

The ability to deploy and operate an attack line; remove flooring, ceiling, and wall components to expose void spaces without compromising structural integrity; apply water for maximum effectiveness; expose and extinguish hidden fires in walls, ceilings, and subfloor spaces; recognize and preserve signs of area of origin and arson; and evaluate for complete extinguishment.

B.2.3.2 Example: Fire and Life Safety Educator II.

Prepare a written budget proposal for a specific program or activity, given budgetary guidelines, program needs, and delivery expense projections, so that all guidelines are followed and the budget identifies all ~~the~~ program needs.

(A) Requisite Knowledge.

~~Knowledge of budgetary~~ Budgetary process; governmental accounting procedures; federal, tribal, state, and local laws; organizational bidding process; and organization purchase requests.

(B) Requisite Skills.

~~The ability to estimate~~ Estimate project costs; complete budget forms; requisition/purchase orders; collect, organize, and format budgetary information; complete program budget proposal; and complete purchase requests.

B.3 Potential Uses for JPRs.

B.3.1 Certification.

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

The evaluator should verify the attainment of requisite knowledge and skills prior to JPRs evaluation. Verification could be through documentation review or testing.

The individual seeking certification should be evaluated on the completion of the JPRs. The individual should perform the task and be evaluated based on the evaluation parameters and performance outcomes. This performance-based evaluation is based on practical exercises for psychomotor skills and written examinations for cognitive skills.

Psychomotor skills are those physical skills that can be demonstrated or observed. Cognitive skills cannot be observed but rather are evaluated on how an individual completes a the task (process-oriented) or a task's outcome (product-oriented).

Performance evaluation requires that individuals be given the tools, equipment, or materials listed in the JPRs in order to complete the task.

Table B.3.1 provides examples of how assessment methodologies can be utilized by a certifying body.

Table B.3.1 Assessment Methodology Sample Utilization

<u>Assessment of...</u>	<u>How Assessed?</u>	<u>How Scored?</u>	<u>Methodology is Likely...</u>
Knowledge/facts <i>Action verb examples:</i> identify, define, list, cite, state, choose, name	A written test in which the candidate is required to provide specific answers to specific questions related to the JPRs <i>Examples:</i> multiple choice, sequencing, true/false, fill-in-the-blank	Responses are scored in relation to the answer that has been determined to be correct.	Cognitive
A manipulative skill in real time <i>Action verb examples:</i> climb, build, perform, raise, haul, don	A skills test to evaluate a candidate's ability to perform physical tasks in real time <i>Examples:</i> donning SCBA, raising ladders, tying rescue knots	The directly observed performance with the correct performance outcome of the skill is normally indicated as part of the yes/no or pass/fail scoring checklist.	Psychomotor (skills)
A cognitive skill that cannot be directly observed; the application of knowledge to yield a product <i>Action verb examples:</i> develop, create, write	A work product created by the candidate usually outside of the classroom setting <i>Examples:</i> creating a budget, report, proposal, lesson plan, incident action plan	Scoring rubric for expected responses evaluating how a candidate completes the task outcome after submission. Used to differentiate consistently between different degrees of candidate performance.	Product
A mental activity to perform a cognitive skill in real time that cannot be directly observed <i>Action verb examples:</i> inspect, investigate	Candidate performs the activity in the presence of the evaluator; the verbalization of mental thought "First, I..., then I..., " etc. <i>Examples:</i> performing an inspection, conducting an investigation	Scoring rubric with questions and expected verbal responses. Used to differentiate consistently between different degrees of candidate performance.	Process

<u>Assessment of...</u>	<u>How Assessed?</u>	<u>How Scored?</u>	<u>Methodology is Likely...</u>
Documentation of the candidate's experience, training, and education against all JPRs	A list of acceptable documents or items for each and every JPR	This portfolio is evaluated using criteria that have been identified by the agency.	Portfolio
<i>Action verb examples:</i> attend, participate, testify	<i>Examples:</i> coursework at training or college, participation in a certain number of investigations, testifying at court		

B.3.2 Curriculum Development and Training Design and Evaluation.

The statements contained in this document that refer to job performance were designed and written as JPRs. Although 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 skills on the job, as opposed to a learning situation. These statements should be converted into instructional objectives with behaviors, conditions, and the degree to be measured within the educational environment.

While the differences between JPRs and instructional objectives are subtle in appearance, their purposes differ. JPRs state what is necessary to perform the job in practical and actual experience. Instructional objectives, on the other hand, are used to identify what students should 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 would be able to clarify performance expectations and avoid confusion caused by ~~by the use of~~ using statements designed for purposes other than teaching. Instructors would also be able to add jurisdictional elements of performance into the learning objectives as intended by the developers.

Requisite skills and knowledge could be converted into enabling objectives, which would help to define the course content. The course content would include each item of the requisite knowledge and skills ensuring that the course content supports the terminal objective.

B.3.2.1 Example: Converting a Firefighter I JPR into an Instructional Objective.

The instructional objectives are just two of several instructional objectives that would be written to support the terminal objective based on the JPR.

JPR: Perform overhaul at a fire scene, given PPE, attack line, hand tools, flashlight, and an assignment, so that structural integrity is not compromised, all hidden fires are discovered, fire cause evidence is preserved, and the fire is extinguished.

Instructional Objective (Cognitive): The Firefighter I will identify and describe five safety considerations associated with structural integrity compromise during overhaul as part of a written examination.

Instructional Objective (Psychomotor): The Firefighter I will demonstrate the designed use of tools and equipment during overhaul to locate and extinguish hidden fires without compromising structural integrity.

B.3.2.2 Example: Converting a Fire and Life Safety Educator II JPR into an Instructional Objective.

This instructional objective is just one of several instructional objectives that could be written to support the terminal objective based on the JPR.

JPR: Prepare a written budget proposal for a specific program or activity, given budgetary guidelines, program needs, and delivery expense projections, so that all guidelines are followed and the budget identifies all program needs.

Instructional Objective (Cognitive): The Fire and Life Safety Educator II will list and describe the bidding process for the purchase of a published program using budgetary guidelines, program needs, and the guidelines established by local organizational procedures as part of a written examination.

Instructional Objective (Psychomotor): The Fire and Life Safety Educator II will lead in the purchase of a specific fire and life safety educational program by following the bidding process to completion, using local organizational guidelines, including budgetary procedures, program needs, and delivery expense projections.

B.4 Other Uses for JPRs.

While the professional qualifications standards are used to establish minimum JPRs for qualification, they have been recognized as guides for the development of training and certification programs, as well as a number of other potential uses.

These areas might include the following:

~~*Employee Evaluation/Performance Critiquing.* The professional qualifications standards 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 completion of the tasks.~~

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

~~*Employee Development.* The professional qualifications standards can be practical for both the employee and the employer in developing a plan for the employee's growth within the organization. The JPRs and the associated requisite knowledge and skills can be used as a guide to determine the additional training and education required for the employee to master the job or profession.~~

~~*Succession Planning.* Succession planning addresses the efficient placement of individuals into jobs in response to current needs and anticipated future needs. A career development path can be established for targeted employees to prepare them for growth within the organization. The JPRs and requisite knowledge and skills could then be used to develop an educational path to aid in the employee's advancement within the organization or profession.~~

~~*Establishing Organizational Policies, Procedures, and Goals.* The professional qualifications standards can be functional for incorporating policies, procedures, and goals into the organization or agency.~~

- (1) *Employee Evaluation/Performance Critiquing.* The professional qualifications standards 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 completion of the tasks.
- (2) *Establishing Hiring Criteria.* The professional qualifications standards can be helpful in a number of ways to further the establishment of hiring criteria. The authority having jurisdiction (AHJ) could simply require certification at a specific level — for example, Firefighter I. The JPRs could also be used as the basis for pre-employment screening to establish essential minimal tasks and the related evaluation criteria. An added benefit is that individuals interested in employment can work toward the minimal hiring criteria at local colleges.
- (3) *Employee Development.* The professional qualifications standards can be practical for both the employee and the employer in developing a plan for the employee's growth within the organization. The JPRs and the associated requisite knowledge and skills can be used as a guide to determine the additional training and education required for the employee to master the job or profession.
- (4) *Succession Planning.* Succession planning addresses the efficient placement of individuals into jobs in response to current needs and anticipated future needs. A career development path can be established for targeted employees to prepare them for growth within the organization. The JPRs and requisite knowledge and skills could then be used to develop an educational path to aid in the employee's advancement within the organization or profession.
- (5) *Establishing Organizational Policies, Procedures, and Goals.* The professional qualifications standards can be functional for incorporating policies, procedures, and goals into the organization or agency.

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Supplemental Information

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Committee Statement

Committee Statement: The correlating committee identified a number of updates to JPR examples and references to the "Explanation of the Professional Qualifications Standards and Concepts of JPRs" annex.

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