

**ISSUED:** December 6, 2023 (ABR)

	STATE OF NEW JERSEY
n the Matter of Steven Fostek, Jr., attalion Fire Chief (PM3384C), larrison	FINAL ADMINISTRATIVE ACTION OF THE CIVIL SERVICE COMMISSION
SC Docket Nos. 2024-244 and 2024- 9 :	Examination Appeal

Steven Fostek, Jr. appeals the multiple-choice portion of and seniority scoring for the promotional examination for Battalion Fire Chief (PM3384C), Harrison.

The appellant took a make-up of the subject promotional examination, which was administered on January 27, 2022, and six candidates passed. This two-part examination consisted of an integrated system of simulations designed to generate behavior similar to that required for success on the job. The first part consisted of multiple-choice items that measured specific work components identified and weighted by the job analysis. The second part consisted of three oral scenarios: Supervision, Administration and Incident Command. The examination was based on a comprehensive job analysis conducted by the Civil Service Commission (Commission), which identified the critical areas of the job. The weighting of the test components was derived from the job analysis data.

In order to preserve the relative weighting of each of the components of the examination, the ratings for each portion were adjusted by a well-recognized statistical process known as "standardization." Under this process, the ratings are standardized by converting the raw scores to z-scores, an expression of the deviation of the score from the mean score of the group in relation to the standard deviation of scores for the group. Each portion of the examination had a relative weight in its relation to the whole examination. Thus, the z-score for the multiple-choice portion was multiplied by a test weight of 36.53%, the oral technical scores were multiplied

by a test weight of 53.91% and the oral communication scores were multiplied by a test weight of 9.56%. The weighted z-scores were summed and this became the overall final test score. This was weighted and added to the weighted seniority score. The result was standardized, then normalized, and rounded up to the third decimal place to arrive at a final average.

The appellant challenges his scores for the written portion of the subject examination and the seniority scores of all candidates. Specifically, with regard to the written portion of the subject examination, the appellant challenges Questions 11, 17, 26, 45, 51, 56 and 64. As to the portion of his challenge related to seniority scores, he complains that he was not afforded an opportunity to review his seniority score and that prior changes to the promotional fire title series by the appointing authority may have impacted the seniority scores of candidates<sup>1</sup>. Specifically, he indicates that the appointing authority demoted incumbents in the title of Fire Captain to the title of Fire Lieutenant in 2012 and reduced their salaries<sup>2</sup>. The appellant states that after subsequent collective negotiations, the appointing authority effectuated a number of promotions to the title of Fire Captain in 2019 and that he and two other employees were promoted to the title of Fire Captain in 2020<sup>3</sup>.

## CONCLUSION

Questions 1 through 11 involve a response to a fire at a church where the candidate is the first arriving officer on scene and establishes command. The scenario states that the pastor of the church reports that no one should be inside of the building.

Question 11 indicates that after the fire has been extinguished, flames are still found to be burning from a broken pipe. The question then asks for the best way to extinguish the flames. The keyed response is option b, to shut off the gas and protect exposures. The appellant argues that the best response was option a, to shut off the

<sup>&</sup>lt;sup>1</sup> The appellant also raises issues related to compensation and collective negotiations in 2019 for which he requests a hearing. It is noted that in local service, compensation plans are established by appointing authorities. *See N.J.A.C.* 4A:3-4.1. Since the Commission has limited authority in matters of compensation for employees in local government and such issues fall outside of the scope of the scoring of the appellant's examination, they will not be addressed further in this matter. *See In the Matter of Bernice Hansen* (MSB, decided May 25, 1993) (Commission has limited authority in matters concerning salaries of employees in local government, but ordered County to establish specific salaries and/or salary guidelines for part-time non-competitive employees).

<sup>&</sup>lt;sup>2</sup> Agency records indicate that in July 2011, the Harrison Fire Department underwent layoff proceedings and established the rank of Fire Lieutenant, which had not been previously used. As a result, the Fire Lieutenant title became the first-level supervisor, the Fire Captain became the second-level supervisor, and the title of Battalion Fire Chief was eliminated. The restructuring was acknowledged by the Division of State and Local Operations (predecessor to the Division of Agency Services) on December 8, 2011. *See In the Matter of Joseph Lang, et al.* (CSC, decided December 3, 2014).

<sup>&</sup>lt;sup>3</sup> Agency records indicate that the appellant was promoted to the title of Fire Captain, effective March 2, 2020.

gas and use a hoseline on the flames. In support, he cites the statement in John Norman, *Fire Officers Handbook of Tactics* 504 (5<sup>th</sup> ed. 2019), that "[t]he gas should only be extinguished when control of flow is assured. Preferably, the fire will be extinguished by turning off the supply, but if necessary to save a life, water streams, dry chemicals, or  $CO_2$  may be used . . ." The appellant asserts that the scenario does not specify whether any lives were at risk. He also avers that while the *New Jersey Fire Fighter Skills Addendum* says to turn off the gas and let it burn out, because Norman's book is nationally recognized, option a should at least be double keyed with option b.

In response, Vincent Dunn, *Collapse of Burning Buildings* 323 (2<sup>nd</sup> ed. 2010) states:

If flames are discovered still burning at a gas meter or broken pipe after the fire has been knocked down, do not extinguish the flame. Let the fire burn, protect exposures with a hose stream, and alert command to shut off the gas at the cellar or street control valve. Be patient and wait for the flame to self extinguish once the residual gas in the pipes has burned away.

Based upon the foregoing, it would not be advisable to extinguish the flames with the hoseline. As a result, option a is incorrect. Further, the scenario where the passage from *Fire Officers Handbook of Tactics* states that water streams, dry chemicals or carbon dioxide *may* be used is "if necessary to save a life." Contrary to the appellant's assertion, the fact pattern for the scenario indicates that no lives are at risk. Therefore, the record supports Question 11, as keyed.

Questions 12 through 23 involve a response to a fire at a high-rise commercial office building. The candidate is the first arriving officer on scene and establishes command. One person fleeing the building informs the candidate that the fire is on the tenth floor. Other bystanders report smoke on floors 9 through 13.

Question 17 provides that the candidate has determined that crews should use the elevators in order to best access the fire area and it asks which floor is the best for crews to exit the elevators. The keyed response is option a, the seventh floor. On appeal, the appellant argues that the best response was option b, the eighth floor. In this regard, he maintains that based upon Norman, *supra* at 469, because the eighth floor was two floors below the fire, the eighth floor was the best answer.

In reply, Norman, *supra* at 468, states "[a]ttempt to determine the fire floor accurately before selecting an elevator bank to use. Where smoke is reported on several floors, get off two floors below the lowest reported floor...Get off at least two floors below the lowest level of the access stairs if they also sever the reported fire floor." Here, since the lowest reported floor with smoke was the ninth floor, per Norman, *supra*, the seventh floor is the floor where firefighters should exit the elevators. Therefore, the Commission finds that Question 17 is correct as keyed.

Questions 24 through 36 involve a fire at a one-story warehouse built using tilt-slab construction and composed of pre-cast, pretensioned concrete walls and a flat metal deck roof.

Question 26 indicates that cathodic protection has been installed on Side D near the fire department connection (FDC) and asks what this indicates. The keyed response is option d, that concrete has deteriorated. On appeal, the appellant argues that the question is "a bad question as written" because its written as "cathodic protection has been installed," but the answer refers to deterioration.

In reply, Glenn P. Corbett and Francis L. Brannigan, *Building Construction* for the Fire Service 338 (6<sup>th</sup> ed. 2021), states, in pertinent part:

Deteriorated concrete, spalling that exposes reinforcing rods, and cracks in concrete that can admit corrosive moisture to the reinforcing rods are indication that the building is in distress. Many chemical processes give off fumes that can damage or destroy concrete

\* \* \*

Aluminum also reacts with concrete - aluminum electrical conduit buried in concrete caused severe damage to a sports stadium. Parking garages in areas where salt is used to melt snow and ice are particularly vulnerable to corrosion

\* \* \*

Rehabilitation of concrete has included removal and replacement, installation of cathodic protection, and using additional steel beams to shorten the span of concrete slabs.

Thus, the statement about cathodic protection clearly conveyed that concrete had deteriorated on Side D. Accordingly, the appellant has failed to sustain his burden of proof for Question 26.

Questions 37 through 48 present a situation where the candidate is the first arriving officer who establishes command at a movie theater after a reported explosion.

Question 45 asks that as savable victims are found at the theater, what should be done first? The keyed response is option b, to treat life-threatening injuries. On appeal, the appellant argues that the best response was option a, to decontaminate the victims, because of a possible hazmat situation. In support, the appellant cites Gregory Noll and Michael Hildebrand, *Hazardous Materials: Managing the Incident* 411-12 (4<sup>th</sup> ed. 2014), which states that decontamination "[i]s used when emergency responders encounter a life-threatening situation that requires some type of decontamination; e.g., they are exhibiting signs and symptoms of a chemical exposure. The victims may be either emergency responders or civilians."

In reply, the Commission finds that keyed response is the best answer. Earlier questions in this portion of the test state that radioactivity is detected but the scenario and the prior question do not indicate biological or chemical contamination is present at the scene. Under this set of facts, Norman, *supra*, at 605 observes that "[u]nlike contamination with biological or chemical agents, there is little danger to rescuers who do not inhale [] radioactive materials. Treat the patient's life-threatening injuries first, then decontaminate them." Further, Norman indicates, in pertinent part:

Large number of casualties require the response of a large number of responders capable of administering the ABCs of first aid . . . that is, stop life-threatening bleeding . . . Triage of critical patients is vital, since resources will most likely not permit sufficient numbers of personnel to perform intensive life support for large numbers of patients.

Norman, supra at 612.

Thus, based upon the foregoing, the appellant has not sustained his burden of proof and the keyed response to Question 45 remains the best response.

Questions 49 through 58 involve a fire at a one-story, noncombustible supermarket with a large parapet wall. The candidate, as the first arriving officer and the incident commander, hears an employee in the crowd mention "there are piles of cardboard on fire around a freezer that is also involved."

Question 51 asks, based upon the description in the scenario, what type of fire is described. The keyed response is option b, a Class C fire. On appeal, the appellant argues that the correct response is option a, a Class A fire because a book cardboard fire is considered a Class A fire and the freezer would not burn because it is metal. He adds that the scenario does not state that the motor/compressor of the freezer is burning. He further contends that burning foam insulation and the food and cardboard contents of the freezer further support the determination that this is a Class A fire. Finally, he suggests that because the scenario doesn't say the fire started with the freezer being the source and that it could have spread from elsewhere, Class A is the correct choice based on what is burning. Alternatively, the appellant argues that Question 51 should be double keyed with options a and b as correct responses. In response, the *New Jersey Fire Fighter Skills Addendum, supra* at 137, states that "the common use of the term 'electrical fire' (Class 'C') refers to a fire involving electricity. Once the electricity is disconnected the fire becomes a Class 'A' or 'B'. Small Class 'C' fires can be extinguished safely with carbon dioxide, dry chemical or halon extinguishers. Water in the form of fog is also safe." Here, since it is reported that an electrical appliance—a freezer—is involved and there is no indication that the electricity has been disconnected, it is a fire involving electricity and, thus, a Class C fire. Only after the electricity is disconnected would the fire be classified as a Class A fire based on the remaining materials that are burning.<sup>4</sup>

Question 56 provides that an engine crew member radios the candidate, stating that they have located a trapped firefighter near the backroom. It then asks what should be done first. The keyed response is option b, to ask the crew member to perform a rapid assessment on the trapped firefighter's condition. On appeal, the appellant argues that the correct response is option a, to deploy a rapid intervention crew (RIC) to the location. In support, he cites two statements to argue that the request for resources must precede request for an assessment. Specifically, he cites a section regarding the Incident Commander's duties from *Norman, supra* at 317, and the following statement from the *New Jersey Fire Fighter Skills Addendum, supra* at 47:

The person making the "emergency traffic" or "mayday" call shall respond to the incident commander by repeating "emergency traffic" or "mayday," shall identify themselves, their unit and assignment, shall report the nature of the situation including resources needed and shall give their location (LUNAR-location, unit, name or number, assignment and resources needed). Repeating the "emergency traffic" or "mayday" radio transmission shall give any emergency personnel monitoring the radio frequency that may have missed the first transmission an opportunity to hear and react to the "emergency traffic" or "mayday" call accordingly.

In reply, the Commission finds that the keyed response is the correct response. It is noted that the second step on the list of the Incident Commander's duties cited by the appellant from Norman, *supra* at 317, is to "gather information about the identity of the distressed member, location and nature of the situation," while the third step is to "[a]ssign appropriate resources to remove the unconscious or trapped member." Clearly, the condition of the trapped firefighter is important information that would dictate the resources needed. A further reading of Norman, *supra*, and other sources supports this assessment. Specifically, Norman, *supra* at 307, states that communication with the trapped members should be established first and that "[o]nce communication with the trapped members has been established, the IC must

<sup>&</sup>lt;sup>4</sup> See New Jersey Fire Fighter Skills Addendum, supra at 170.

immediately be advised of the number of trapped members and, if known, their condition. Then necessary resources such as multiple advanced life support (ALS; paramedic) ambulances, or additional ladders can be special-called." Further, International Association of Fire Chiefs and National Fire Protection Association, *Fundamentals of Fire Fighter Skills and Hazardous Materials Response* 716 (4th ed. 2019) provides that "[w]hen you reach a downed fire fighter, the first step is to assess the fire fighter's condition. Is the fire fighter conscious and breathing? Does he or she have a pulse? Is the firefighter trapped or injured? Make a rapid assessment, and notify the IC of your situation and location. Have the RIC deployed to your location and quickly determine the additional resources needed." Thus, based upon the foregoing, the Commission finds Question 56 correct as keyed.

Questions 59 to 70 pertain to a fire at an abandoned residential building built in 1982 which was made of wood-frame construction and featured vinyl siding and an attic space.

Question 64 ask what the candidate can expect the structural members of the roof to do once exposed to fire. The keyed response is option d, to fail in less than ten minutes. On appeal, the appellant contends that the best response is option b, to maintain their integrity. In this regard, he contends that Norman, *supra* at 546, provides that "[t]he standard wood-frame home, building with dimensional lumber, is more likely to burn through, chasing personnel out, before it collapses. This statement only applies to standard construction methods . . ." He also cites Francis Brannigan, *Building Construction for the Fire Service* 183 (4th ed. 2008)<sup>5</sup>, which states that:

Solid-sawn wood contains "fat" wood not necessary to carry the imposed load. When only this part of the wood is burning, roof strength is not greatly affected. As it continues to burn, however, the beam gradually weakens, and the roof becomes spongy.

\* \* \*

When exposed to NFPA 215 Standard Fire Exposure test, solid sawn beam lasted about 5 mins per inch of thickness.

<sup>&</sup>lt;sup>5</sup> The appellant cited to Francis Brannigan, *Building Construction for the Fire Service* at 181 without specifying which edition he consulted. The 2022 2<sup>nd</sup> Level Fire Supervisor Orientation Guide indicated that Francis Brannigan, *Building Construction for the Fire Service* 183 (6th ed. 2021) was among the sources that would be used to assist in the development of the subject examination. However, the 4<sup>th</sup> edition, *supra*, is the most recent version of the text that contains the full language quoted by the appellant.

The appellant further contends that Norman, *supra*, and a June 11, 2013, *Fire Engineering Magazine* article<sup>6</sup> set forth that forces should be pulled from wood frame building approximately 20 minutes from receipt of the alarm, but that new lightweight wood construction has changed this timeframe. The appellant contends that because the question does not indicate when the Type V frame was constructed or state that lightweight material was used, his answer of option b was correct and the keyed response was not.

In reply, the Commission notes that the prompt for Questions 59 through 70 conveys that the residential structure could be one built using lightweight construction based upon the 1982 construction date<sup>7</sup> and the use of vinyl siding noted. Further, it is observed that Norman, *supra* at 341-42, states:

Firefighters, who have gained their knowledge of fire and building behavior from standard roof and floor systems, must be aware that the time frames and danger signs to which they are accustomed are no longer reliable. No longer do they have 10-20 minutes in which to search, rescue, and attack before they notice the floor or roof sagging. Many of the new systems fail in less than ten minutes, dropping their entire load, often without any noticeable sag prior to snapping.

Moreover, the appellant's citation of Brannigan is flawed for several reasons. The passage the appellant quotes comes from a chapter about ordinary construction, which is a different type of construction (Type III) than wood frame construction (Type V). The appellant's citation is also problematic because he selectively quoted from the source and the passage in its full context undermines the appellant's argument. Specifically, it provides, in relevant part:

When exposed to the NFPA 215 standard fire exposure test, solid sawn beams lasted about 5 minutes per inch of thickness. That is not to be used as a rule of thumb. Today's fires deliver fire loads much more intense than the standard test. The incident commander is rarely aware of how long the beams have been burning. The intermittent impact of load of a working fire fighter will almost certainly stress the structure more than the distributed static load applied in the typical fire test.

Brannigan (4th ed. 2008), supra at 183.

<sup>&</sup>lt;sup>6</sup> This publication was not on the suggested reading list contained in the Orientation Guide for the subject examination and the appellant has not furnished a copy of this article on appeal.

<sup>&</sup>lt;sup>7</sup> Lightweight building construction can be "traced back to the early 1980s, when builders and developers found they could save costs by using lightweight construction materials, such as plywood, light wood supports and vinyl siding." Hal Bruno, *Confronting the Dangers of Lightweight Construction*, Firehouse.com (Jul. 1, 2008), https://www.firehouse.com/leadership/article/10502670/confronting-the-dangers-of-lightweight-construction.

By failing to specify a timeframe, option b suggests that the structural members will indefinitely maintain their integrity once exposed to fire. The aforementioned sources clearly do not support such a finding. Given these considerations, option b was not the best response and it was reasonable for candidates to anticipate that the structure members would not maintain their integrity and could be expected to fail in less than ten minutes. Accordingly, the Commission finds that Question 64 is correct as keyed.

With regard to seniority, the information provided by the appellant pertaining to collective negotiations between the appointing authority and the negotiations representative relates to salary and does not indicate any differential treatment with respect to seniority for affected employees. It is noted that the appellant bears the burden of proof in these types of matters. *See N.J.A.C.* 4A:4-6.3(b). Accordingly, because the appellant has not provided any arguments or information which demonstrate that the seniority scores were calculated in error by this agency, he has failed to sustain his burden of proof with respect to this issue.

Finally, the Division of Test Development, Analytics and Administration has advised that the appellant will receive a final score on the subject examination following the disposition of the instant appeal and that he can request an opportunity to review his seniority score after he receives a notice with his final score.

A thorough review of the appellant's submissions and the test materials reveals that the validity of the keyed responses to the challenged questions are amply supported by the record and the appellant has failed to meet the burden of proof in this matter.

## ORDER

Therefore, it is ordered that this appeal be denied.

This is the final administrative determination in this matter. Any further review should be pursued in a judicial forum.

DECISION RENDERED BY THE CIVIL SERVICE COMMISSION ON THE 6<sup>TH</sup> DAY OF DECEMBER, 2023

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