

Fire Apparatus Driver/Operator

(NFPA 1002: Fire Apparatus Driver/Operator Fire Pump, Aerial Device, Tiller, Wildland, Mobile Water Supply)

Certification Training Standards Guide (2017)



California Department of Forestry and Fire Protection
Office of the State Fire Marshal
State Fire Training

Fire Apparatus Driver/Operator

Certification Training Standards Guide (2017)

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This CTS guide utilizes the following NFPA standards to provide the qualifications for State Fire Training's Standard for Fire Apparatus Driver/Operator (2017) certification:

- *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*

State Fire Training coordinated the development of this CTS guide. Before its publication, the Statewide Training and Education Advisory Committee (STEAC) and the State Board of Fire Services (SBFS) recommended this CTS guide for adoption by the Office of the State Fire Marshal (OSFM).

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Table of Contents

Acknowledgements.....	1
How to Read a CTS Guide	2
Fire Apparatus.....	4
Section 1: Preventative Maintenance.....	4
1-1: Perform Visual and Operational Checks.....	4
1-2: Document Visual and Operational Checks	6
Section 2: Operations.....	7
2-1: Operate a Fire Apparatus	7
2-2: Back a Fire Apparatus from a Roadway into a Restricted Space.....	9
2-3: Maneuver a Fire Apparatus around Obstructions.....	11
2-4: Turn a Fire Apparatus 180 Degrees within a Confined Space	13
2-5: Maneuver a Fire Apparatus in Areas with Restricted Clearances	14
2-6: Operate All Fixed Systems and Equipment on a Fire Apparatus.....	16
Section 3: Fire Department Communications	17
3-1: Initiate the Response to a Reported Emergency.....	17
3-2: Receive a Telephone Call	18
3-3: Transmit and Receive Radio Messages	19
3-4: Activate Emergency Procedures.....	20
Pumping Apparatus	21
Section 4: Preventative Maintenance.....	21
4-1: Fire Pump Driver/Operator Roles and Responsibilities.....	21
4-2: Perform and Document Visual and Operational Checks.....	22
Section 5: Operations.....	24
5-1: Respond on an Apparatus to an Emergency Scene.....	24
5-2: Establish and Operate at Emergency and Nonemergency Scenes.....	25
5-3: Connect to a Water Supply.....	26
5-4: Produce Effective Hand Lines and Master Streams	27
5-5: Pump a Supply Line.....	29
5-6: Produce a Foam Fire Steam.....	31
5-7: Supply Water to Fire Sprinkler and Standpipe Systems	32
Aerial Apparatus	34
Section 6: Preventative Maintenance.....	34
6-1: Perform and Document Visual and Operational Checks.....	34
Section 7: Operations.....	36
7-1: Maneuver and Position an Aerial Apparatus.....	36
7-2: Stabilize an Aerial Apparatus.....	37
7-3: Maneuver and Position an Aerial Device from Each Control Station.....	38
7-4: Lower an Aerial Using the Emergency Operating System.....	40
7-5: Deploy and Operate an Elevated Master Stream.....	42

Table of Contents

Tillered Apparatus.....	43
Section 8: Preventative Maintenance.....	43
8-1: Perform and Document Visual and Operational Checks.....	43
Section 9: Operations.....	44
9-1: Perform Practical Driving Exercises.....	44
9-2: Operate a Tillered Apparatus	46
9-3: Position and Stabilize a Tillered Apparatus	48
Wildland Fire Apparatus	49
Section 10: Preventative Maintenance.....	49
10-1: Perform and Document Visual and Operational Checks.....	49
Section 11: Operations.....	51
11-1: Operate a Wildland Fire Apparatus.....	51
11-2: Produce Effective Fire Streams.....	53
11-3: Pump a Supply Line.....	55
11-4: Produce a Foam Fire Stream	57
Water Tender	58
Section 12: Preventative Maintenance.....	58
12-1: Perform and Document Visual and Operational Checks.....	58
Section 13: Operations.....	60
13-1: Operate a Water Tender.....	60
13-2: Maneuver and Position a Water Tender at a Water Shuttle Fill Site	62
13-3: Maneuver and Position a Water Tender at a Water Shuttle Dumpsite.....	64
13-4: Establish a Water Shuttle Dumpsite.....	65

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How to Read a CTS Guide

Overview

A certification training standard (CTS) guide lists the requisite knowledge, skills, and job performance requirements an individual must complete in order to become certified in a specific job function.

It also documents and justifies the OSFM-approved revisions to the certification's NFPA standard, and identifies where each certification training standard is taught (course plan), tested (skill sheets), and validated (task book).

Individuals aspiring to meet State Fire Training's certification training standards must do so in accordance with the codes, standards, regulations, policies, and standard operating procedures applicable within their own agency or jurisdiction.

Format

Each certification training standard is comprised of eight sections.

Section Heading

Training standards are grouped by section headings that describe a general category. For example, the Fire Fighter 1 CTS guide includes the following section headings: NFPA Requirements, Fire Department Communications, Fireground Operations, and Preparedness and Maintenance.

Training Standard Title

The training standard title provides a general description of the performance requirement contained within the individual standard.

Authority

The CTS guide references each individual standard with one or more paragraphs of the corresponding National Fire Protection Association (NFPA) Professional Qualifications. This ensures that each fire service function within California's certification system meets or exceeds NFPA standards.

When California requirements exceed the NFPA standard, the CTS guide cites the Office of the State Fire Marshal as the authority and prints the corresponding information in *italics*.

Job Performance Requirements

This segment includes a written statement that describes a specific job-related task, the items an individual needs to complete the task, and measurable or observable outcomes.

Requisite Knowledge

This segment lists the knowledge that an individual must acquire in order to accomplish the job performance requirement.

Requisite Skills

This segment lists the skills that an individual must acquire in order to accomplish the job performance requirement.

Content Modification

This table documents and justifies any revisions to the NFPA standard that the development or validation cadres make during the development of a CTS guide.

Cross Reference

This table documents where each training standard is taught (course plan), tested (skill sheets), and validated (task book).

Fire Apparatus

Section 1: Preventative Maintenance

1-1: Perform Visual and Operational Checks

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*
 - *Paragraph 4.2.1*

Job Performance Requirement

Perform visual and operational checks on the systems and components specified in the following list (battery(ies), braking system, coolant system, electrical system, fuel, hydraulic fluids, oil, tires, steering system, belts, tools, appliances, equipment, built-in safety features), given a fire *apparatus*, its manufacturer’s specifications, *tools and equipment*, and policies and procedures of the jurisdiction, so that the operational status of the vehicle is verified.

Requisite Knowledge

1. *Identify manufacturer specifications and requirements*
2. *Identify policies and procedures of the jurisdiction*

Requisite Skills

1. *Use tools and equipment*
2. *Recognize system problems and out-of-service criteria*
3. *Correct any deficiency noted according to policies and procedures and/or manufacturer specifications and requirements*

Content Modification

Block	Modification	Justification
JPR	Changes “fire department vehicle” to “fire apparatus”.	None given. (2014)
JPR	Added “tools and equipment”.	Required to perform operational checks. (2014)
RS1	Added “and equipment”.	Required to perform operational checks. (2014)
RS2	Added “and out-of-service criteria”.	None given. (2014)
RS3	Added “and/or manufacturer specifications and requirements”.	None given. (2014)

Cross Reference

Course Plan	Skill Sheets	Task Book
Fire Apparatus Driver/Operator 1A: Fire Apparatus Driver/Operator <ul style="list-style-type: none"> • Topic 2-1 	N/A	Pumping Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR 1</i> Aerial Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR 1</i> Tillered Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR1</i> Wildland Fire Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR1</i> Water Tender Driver/Operator <ul style="list-style-type: none"> • <i>JPR 1</i>

1-2: Document Visual and Operational Checks

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*
 - *Paragraph 4.2.2*

Job Performance Requirement

Document visual and operational checks, given maintenance and inspection forms, so that all items are checked for operation and deficiencies are reported.

Requisite Knowledge

1. *Identify AHJ requirements for documenting maintenance performed*
2. *Describe the importance of keeping accurate records*

Requisite Skills

1. *Use tools and equipment*
2. *Complete all related AHJ forms*

Content Modification

Block	Modification	Justification
RK1	Changed "departmental" to "AHJ".	None given. (2014)
RS2	Changed "departmental" to "AHJ".	None given. (2014)

Cross Reference

Course Plan	Skill Sheets	Task Book
Fire Apparatus Driver/Operator 1A: Fire Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>Topic 2-2</i> 	N/A	Pumping Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR 2</i> Aerial Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR 2</i> Tillered Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR 2</i> Wildland Fire Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR 2</i> Water Tender Driver/Operator <ul style="list-style-type: none"> • <i>JPR 2</i>

Section 2: Operations

2-1: Operate a Fire Apparatus

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*
 - *Paragraph 4.3.1*
 - *Paragraph 4.3.6*

Job Performance Requirement

Operate a fire apparatus *during emergency and non-emergency responses* using defensive driving techniques, given *an apparatus, an assignment, a predetermined route on a public way that incorporates the maneuvers and features that the driver/operator is expected to encounter during normal operations, and AHJ policies and procedures*, so that control of the apparatus is maintained and the *apparatus* is operated in compliance with all applicable state and local laws and *AHJ* rules and regulations.

Requisite Knowledge

1. *Describe the importance of donning passenger restraint devices and ensuring crew safety*
2. *Identify common causes of fire apparatus accidents*
3. *Recognize that fire apparatus driver/operators are responsible for the safe and prudent operation of the apparatus under all conditions*
4. *Describe the effects of liquid surge, braking reaction time, and load factors on apparatus control*
5. *Describe the effects of high center of gravity on rollover potential, general steering reactions, speed, and centrifugal force*
6. *Identify applicable laws and regulations*
7. *Describe principles of skid avoidance, night driving, shifting, and gear patterns*
8. *Describe how to apply automatic braking systems in wet and dry conditions*
9. *Describe how to negotiate intersections, railroad crossings, and bridges*
10. *Identify weight and height limitations for both roads and bridges*
11. *Describe how to identify and operate automotive gauges*
12. *Identify operational limits of different types of fire apparatus*

Requisite Skills

1. *Operate passenger restraint devices*
2. *Maintain safe following distances*
3. *Maintain control of the apparatus while accelerating, decelerating, and turning, given road, weather, and traffic conditions*
4. *Operate under adverse environmental or driving surface conditions*
5. *Use automotive gauges and controls*

Content Modification

Block	Modification	Justification
JPR	Changed “vehicle” to “apparatus”.	Changed for consistency. (2014)
JPR	Changed “departmental” to “AHJ”.	Changed for consistency. (2014)
JPR	Added “during emergency and non-emergency responses.”	None given. (2014)
JPR	Added “and AHJ policies and procedures”.	None given. (2014)
RK3	Changed word order.	Word order changed for grammar consistency. (2014)
RK3	Added “/operators”.	Added to match certification role. (2014)
RK3	Changed “vehicle” to “apparatus”.	Changed for consistency. (2014)
RK4	Changed “vehicle” to “apparatus”.	Changed for consistency. (2014)
RK12	Added “of different types of fire apparatus”.	Added to narrow scope of learning objective. (2014)
RS3	Changed “vehicle” to “apparatus”.	Changed for consistency. (2014)

Cross Reference

Course Plan	Skill Sheets	Task Book
Fire Apparatus Driver/Operator 1A: Fire Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>Topic 3-1</i> • <i>Topic 3-2</i> 	N/A	Pumping Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR 3</i> Aerial Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR 3</i> Tilled Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR 3</i> Wildland Fire Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR 3</i> Water Tender Driver/Operator <ul style="list-style-type: none"> • <i>JPR 3</i>

2-2: Back a Fire Apparatus from a Roadway into a Restricted Space

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*
 - *Paragraph 4.3.2*

Job Performance Requirement

Back a *fire apparatus* from a roadway into restricted spaces on both the right and left sides of the *apparatus*, given a fire apparatus, a spotter where the spotter assists the driver in performing the maneuver, and restricted spaces 12 ft (3.7 m) in width, requiring 90-degree right-hand and left-hand turns from the roadway, so that the vehicle is parked within the restricted areas without have to stop and pull forward and without striking obstructions.

Requisite Knowledge

1. *Identify fire apparatus dimensions*
2. *Describe turning characteristics*
3. *Describe spotter signaling*
4. *Describe principles of safe fire apparatus operation*

Requisite Skills

1. *Use mirrors*
2. *Judge fire apparatus clearance*

Content Modification

Block	Modification	Justification
JPR	Changed "vehicle" to "fire apparatus" and "apparatus".	Changed for consistency. (2014)
RK1	Changed "vehicle" to "fire apparatus".	Changed for consistency. (2014)
RK4	Changed "vehicle" to "fire apparatus".	Changed for consistency. (2014)
RS2	Changed "vehicle" to "fire apparatus".	Changed for consistency. (2014)

Cross Reference

Course Plan	Skill Sheets	Task Book
Fire Apparatus Driver/Operator 1A: Fire Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>Topic 3-3</i> 	N/A	Pumping Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR 4</i> Aerial Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR 4</i> Tillered Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR 4</i> Wildland Fire Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR 4</i> Water Tender Driver/Operator

Fire Apparatus
Section 2: Operations

		<ul style="list-style-type: none">• <i>JPR 4</i>
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2-3: Maneuver a Fire Apparatus around Obstructions

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*
 - *Paragraph 4.3.3*

Job Performance Requirement

Maneuver a *fire apparatus* around obstructions on a roadway while moving forward and in reverse, given a fire apparatus, a spotter where the spotter assists the driver in performing the maneuver, and a roadway with obstructions, so that the vehicle is maneuvered through the obstructions without stopping to change the direction of travel and without striking any obstructions.

Requisite Knowledge

1. *Identify fire apparatus dimensions*
2. *Describe turning characteristics*
3. *Describe the effects of liquid surge*
4. *Describe spotter signaling*
5. *Describe principles of safe fire apparatus operation*

Requisite Skills

1. *Use mirrors*
2. *Judge fire apparatus clearance*

Content Modification

Block	Modification	Justification
JPR	Changed "vehicle" to "fire apparatus".	Changed for consistency. (2014)
RK1	Changed "vehicle" to "fire apparatus".	Changed for consistency. (2014)
RK5	Changed "vehicle" to "fire apparatus".	Changed for consistency. (2014)
RS2	Changed "vehicle" to "fire apparatus".	Changed for consistency. (2014)

Cross Reference

Course Plan	Skill Sheets	Task Book
Fire Apparatus Driver/Operator 1A: Fire Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>Topic 3-4</i> 	N/A	Pumping Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR 5</i> Aerial Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR 5</i> Tillered Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR 5</i> Wildland Fire Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR 5</i> Water Tender Driver/Operator

Fire Apparatus
Section 2: Operations

		<ul style="list-style-type: none">• <i>JPR 5</i>
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2-4: Turn a Fire Apparatus 180 Degrees within a Confined Space

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*
 - *Paragraph 4.3.4*

Job Performance Requirement

Turn a fire apparatus 180 degrees within a confined space, given a fire apparatus, a spotter for backing up, and an area in which the *apparatus* cannot perform a U-turn without stopping and backing up, so that the *apparatus* is turned 180 degrees without striking obstructions within the given space.

Requisite Knowledge

1. *Identify fire apparatus dimensions*
2. *Describe turning characteristics*
3. *Describe the effects of liquid surge*
4. *Describe spotter signaling*
5. *Describe principles of safe fire apparatus operation*

Requisite Skills

1. *Use mirrors*
2. *Judge fire apparatus clearance*

Content Modification

Block	Modification	Justification
JPR	Changed "vehicle" to "apparatus".	Changed for consistency. (2014)
RK1	Changed "vehicle" to "apparatus".	Changed for consistency. (2014)
RK5	Changed "vehicle" to "apparatus".	Changed for consistency. (2014)
RS2	Changed "vehicle" to "apparatus".	Changed for consistency. (2014)

Cross Reference

Course Plan	Skill Sheets	Task Book
Fire Apparatus Driver/Operation 1A: Fire Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>Topic 3-1 (RK3)</i> • <i>Topic 3-5 (RK1, RK2, RK4, RK5, RS1, RS2)</i> 	N/A	Pumping Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR 6</i> Aerial Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR 6</i> Tillered Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR 6</i> Wildland Fire Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR 6</i> Water Tender Driver/Operator <ul style="list-style-type: none"> • <i>JPR 6</i>

2-5: Maneuver a Fire Apparatus in Areas with Restricted Clearances

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*
 - Paragraph 4.3.5

Job Performance Requirement

Maneuver a fire apparatus in areas with restricted horizontal and vertical clearances, given a fire apparatus and a course that requires the operator to move through areas of restricted horizontal and vertical clearances, so that the operator judges the ability of the *apparatus* to pass through the openings, *using continual motion*, and so that no obstructions are struck.

Requisite Knowledge

1. *Identify fire apparatus dimensions*
2. *Describe turning characteristics*
3. *Describe the effects of liquid surge*
4. *Describe spotter signaling*
5. *Describe principles of safe fire apparatus operation*

Requisite Skills

1. *Use mirrors*
2. *Judge fire apparatus clearance*

Content Modification

Block	Modification	Justification
JPR	Changed “vehicle” to “apparatus”.	Changed for consistency. (2014)
JPR	Added “using continual motion”.	Cadre asserts that this is the original intent of the skill. This needs to be accomplished without starting and stopping. Addition makes it consistent with all other JPRs in this chapter. (2021)
RK1	Changed “vehicle” to “apparatus.”	Changed for consistency. (2014)
RK5	Changed “vehicle” to “apparatus.”	Changed for consistency. (2014)
RS2	Changed “vehicle” to “apparatus.”	Changed for consistency. (2014)

Cross Reference

Course Plan	Skill Sheets	Task Book
Fire Apparatus Driver/Operation 1A: Fire Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>Topic 3-1 (RK3)</i> • <i>Topic 3-6 (RK1, RK2, RK4, RK5, RS1, RS2)</i> 	N/A	Pumping Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR 7</i> Aerial Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR 7</i> Tillered Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR 7</i> Wildland Fire Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR 7</i> Water Tender Driver/Operator <ul style="list-style-type: none"> • <i>JPR 7</i>

2-6: Operate All Fixed Systems and Equipment on a Fire Apparatus

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*
 - *Paragraph 4.3.7*

Job Performance Requirement

Operate all fixed systems and equipment on a *fire apparatus* not addressed elsewhere in this standard, given *fixed* systems and equipment, manufacturer's specifications *and requirements*, *and AHJ* policies and procedures for the systems and equipment, so that each system or piece of equipment is operated in accordance with the applicable instructions and policies.

Requisite Knowledge

1. *Describe manufacturer's specifications and operating procedures*
2. *Identify policies and procedures of the jurisdiction*

Requisite Skills

1. *Deploy, energize, and monitor the system or equipment*
2. *Recognize and correct system problems*

Content Modification

Block	Modification	Justification
JPR	Replaced "vehicle" with "fire apparatus".	Replaced for consistency. (2014)
JPR	Added "fixed".	None given. (2014)
JPR	Replaced "and instructions" with "and requirements".	None given. (2014)
JPR	Replaced "departmental" with "AHJ".	Replaced for consistency. (2014)

Cross Reference

Course Plan	Skill Sheets	Task Book
Fire Apparatus Driver/Operation 1A: Fire Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>Topic 3-7</i> 	N/A	Pumping Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR 8</i> Aerial Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR 8</i> Tillered Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR 8</i> Wildland Fire Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR 8</i> Water Tender Driver/Operator <ul style="list-style-type: none"> • <i>JPR 8</i>

Section 3: Fire Department Communications

3-1: Initiate the Response to a Reported Emergency

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*
 - *Paragraph 4.4.1*

Job Performance Requirement

Initiate the response to a reported emergency, given the report of an emergency, fire department SOPs, and communications equipment, so that all necessary information is obtained, communication equipment is operated correctly, and the information is relayed promptly and accurately to the dispatch center. [1001:5.2.1]

Requisite Knowledge

1. *Describe procedures for reporting an emergency*
2. *Identify departmental SOPs for taking and receiving alarms, radio codes, or procedures*
3. *Identify information needs of dispatch center*

Requisite Skills

1. *Operate fire department communications equipment*
2. *Relay information*
3. *Record information*

Content Modification

Block	Modification	Justification

Cross Reference

Course Plan	Skill Sheets	Task Book
Testing and validation for this standard is fulfilled through OSFM Fire Fighter 1 certification.	N/A	N/A

3-2: Receive a Telephone Call

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*
 - Paragraph 4.4.2

Job Performance Requirement

Receive a telephone call, given a fire department phone, so that procedures for answering the phone are used and the caller's information is relayed. [1001:5.2.2]

Requisite Knowledge

1. *Describe fire department procedures for answering nonemergency telephone calls.*

Requisite Skills

1. *Operate fire station telephone and intercom equipment*

Content Modification

Block	Modification	Justification

Cross Reference

Course Plan	Skill Sheets	Task Book
Testing and validation for this standard is fulfilled through OSFM Fire Fighter 1 certification.	N/A	N/A

3-3: Transmit and Receive Radio Messages

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*
 - *Paragraph 4.4.3*

Job Performance Requirement

Transmit and receive messages via the fire department radio, given a fire department radio and operating procedures, so that the information is accurate, complete, clear, and relayed within the time established by the AHJ. [1001:5.2.3]

Requisite Knowledge

1. *Describe departmental radio procedures and etiquette for routine traffic, emergency traffic, and emergency evaluation signals*

Requisite Skills

1. *Operate radio equipment*
2. *Discriminate between routine and emergency traffic*

Content Modification

Block	Modification	Justification

Cross Reference

Course Plan	Skill Sheets	Task Book
Testing and validation for this standard is fulfilled through OSFM Fire Fighter 1 certification.	N/A	N/A

3-4: Activate Emergency Procedures

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*
 - Paragraph 4.4.4

Job Performance Requirement

Activate emergency procedures, given an emergency situation and department SOPs, so that emergency actions can be initiated.

Requisite Knowledge

1. *Describe department SOPs and emergency communication procedures*

Requisite Skills

1. *Activate emergency procedures in accordance with the department's SOPs*

Content Modification

Block	Modification	Justification

Cross Reference

Course Plan	Skill Sheets	Task Book
Testing and validation for this standard is fulfilled through OSFM Fire Fighter 1 certification.	N/A	N/A

Pumping Apparatus

Section 4: Preventative Maintenance

4-1: Fire Pump Driver/Operator Roles and Responsibilities

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operators Professional Qualifications (2017)*
 - *Paragraph 5.1.1*

Job Performance Requirement

There is no job performance requirement for this standard. [1001:5.1.1]

Requisite Knowledge

1. *Describe the organization of the fire department*
2. *Describe the role of the driver/operator in the organization*
3. *Describe the mission of the fire service*
4. *Describe the fire department's standard operating procedures (SOPs) and rules and regulations as they apply to the driver/operator*
5. *Describe the value of fire and life safety initiatives in support of the fire department mission and to reduce fire fighter line-of-duty injuries and fatalities*
6. *Describe the role of other agencies as they relate to the fire department*
7. *Describe aspects of the fire department's member assistance program*
8. *Describe the importance of physical fitness and a healthy lifestyle to the performance of the duties of a fire fighter*
9. *Identify the critical aspects of NFPA 1500*

Requisite Skills

1. *None*

Content Modification

Block	Modification	Justification

Cross Reference

Course Plan	Skill Sheets	Task Book
Fire Apparatus Driver/Operator 1B: Pumping Apparatus Operations <ul style="list-style-type: none">• Topic 2-1	N/A	N/A

4-2: Perform and Document Visual and Operational Checks

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*
 - Paragraph 5.1.2

Job Performance Requirement

Perform *and document* visual and operational checks on the systems and components specified in the following list (water tank and other extinguishing agent levels (if applicable), pumping systems, foam systems) in addition to those in *NFPA 1002* 4.2.1, given a *pumping apparatus*, its manufacturer's specifications, and *AHJ* policies and procedures, so that the operational status of the *pumping apparatus* is verified.

Requisite Knowledge

1. *Identify manufacturer's specifications and requirements*
2. *Identify AHJ policies and procedures*

Requisite Skills

1. *Use hand tools and equipment*
2. *Recognize system problems and out-of-service criteria*
3. *Correct any deficiencies noted according to policies and procedures and/or manufacturer specification and requirements*

Content Modification

Block	Modification	Justification
JPR	Added "and document".	None given. (2014)
JPR	Added "NFPA 1002".	Added for clarification. (2017)
JPR	Changed "fire department pumper" to "pumping apparatus".	Changed for consistency. (2017)
JPR	Changed "of the jurisdiction" to "AHJ".	Changed for consistency. (2017)
JPR	Changed "pumper" to "pumping apparatus".	Changed for consistency. (2017)
RK2	Changed "of the jurisdiction" to "AHJ".	Changed for consistency. (2017)
RS1	Added "and equipment".	None given. (2014)
RS2	Added "and out-of-service criteria".	None given. (2014)
RS3	Added "and/or manufacturer specifications and requirements".	None given. (2014)

Cross Reference

Course Plan	Skill Sheets	Task Book
Fire Apparatus Driver/Operator 1B: Pumping Apparatus Operations <ul style="list-style-type: none">• Topics 3-1	N/A	Pumping Apparatus Driver/Operator <ul style="list-style-type: none">• <i>JPR 9</i>

Section 5: Operations

5-1: Respond on an Apparatus to an Emergency Scene

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*
 - *Paragraph 5.2.1*

Job Performance Requirement

Respond on an apparatus to an emergency scene, given safety equipment as provided by the AHJ, so that the apparatus is correctly mounted and dismounted and seat belts are used while the vehicle is in motion. [1001: 5.3.2]

Requisite Knowledge

1. *Describe mounting and dismounting procedures for riding a fire apparatus*
2. *Identify hazards and ways to avoid hazards associated with riding a fire apparatus*
3. *Identify prohibited practices*
4. *Describe types of department safety equipment the means for usage*

Requisite Skills

1. *Use each piece of provided safety equipment*

Content Modification

Block	Modification	Justification

Cross Reference

Course Plan	Skill Sheets	Task Book
Fire Apparatus Driver/Operator 1B: Pumping Apparatus Operations <ul style="list-style-type: none">• Topic 4-1	N/A	Testing and validation for this standard is fulfilled through OSFM Fire Fighter 1 certification.

5-2: Establish and Operate at Emergency and Nonemergency Scenes

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*
 - Paragraph 5.2.2

Job Performance Requirement

Establish and operate in work areas at emergency and nonemergency scenes, given safety equipment, traffic and scene control devices, emergency and nonemergency scenes, traffic and other hazards, an assignment, and SOPs, so that procedures are followed, safety equipment is utilized, protected work areas are established as directed using traffic and scene control devices, and the driver/operator performs assigned tasks only in established, protected work areas.

Requisite Knowledge

1. *Identify potential hazards involved in operation on emergency and nonemergency scenes including vehicle traffic, utilities, and environmental conditions*
2. *Describe proper procedures for dismounting apparatus in traffic*
3. *Describe procedures for safe operation at emergency and nonemergency scenes*
4. *Identify safety equipment available for members on emergency and nonemergency scenes*

Requisite Skills

1. *Use safety equipment*
2. *Deploy traffic and scene control devices*
3. *Dismount apparatus*
4. *Establish and operate in the protected work areas as directed*

Content Modification

Block	Modification	Justification

Cross Reference

Course Plan	Skill Sheets	Task Book
Fire Apparatus Driver/Operator 1B: Pumping Apparatus Operations <ul style="list-style-type: none">• Topic 4-2	N/A	Testing and validation for this standard is fulfilled through OSFM Fire Fighter 1 certification.

5-3: Connect to a Water Supply

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*
 - Paragraph 5.2.3

Job Performance Requirement

Connect a *pumping apparatus* to a water supply as a member of a team, given supply or intake hose, hose tools, and a fire hydrant or static water source, so that connections are tight and water flow is unobstructed. [1001: 5.3.15]

Requisite Knowledge

1. *Describe loading and off-loading procedures for mobile water supply apparatus*
2. *Describe fire hydrant operations*
3. *Identify suitable static water supply sources*
4. *Describe procedures and protocol for connecting to various water sources*

Requisite Skills

1. *Hand lay a supply hose*
2. *Connect and place hard suction hose for drafting operations*
3. *Deploy portable water tanks as well as the equipment necessary to transfer water between and draft from them*
4. *Make hydrant-to-apparatus hose connections for forward and reverse lays*
5. *Connect supply hose to a hydrant*
6. *Fully open and close the hydrant*

Content Modification

Block	Modification	Justification
JPR	Changed “fire department pumper” to “pumping apparatus”.	Changed for consistency. (2017)
RS4	Changed “pumper” to “apparatus”.	Changed for consistency. (2017)

Cross Reference

Course Plan	Skill Sheets	Task Book
Fire Apparatus Driver/Operator 1B: Pumping Apparatus Operations <ul style="list-style-type: none">• Topic 4-3	N/A	Testing and validation for this standard is fulfilled through OSFM Fire Fighter 1 certification.

5-4: Produce Effective Hand Lines and Master Streams

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*
 - Paragraph 5.2.4

Job Performance Requirement

Produce effective hand *lines and* master streams, given the sources specified in the following list (internal tank, pressurized source, static source, transfer from internal tank to external source), so that the pump is engaged, all pressure control and *apparatus* safety devices are set, the rated flow of the nozzle is achieved and maintained, and the apparatus is monitored for potential problems.

Requisite Knowledge

1. *Describe hydraulic calculations for friction loss and flow using both written formulas and estimation methods*
2. *Describe the safe operation of the pump*
3. *Identify problems related to small-diameter or dead-end mains*
4. *Describe low-pressure and private water supply systems*
5. *Describe hydrant coding systems*
6. *Describe the reliability of static sources*

Requisite Skills

1. *Position a pumping apparatus to operate at a fire hydrant*
2. *Position a pumping apparatus to operate at a static water source*
3. *Transfer power from apparatus engine to pump*
4. *Draft*
5. *Operate apparatus pressure control systems*
6. *Operate the volume/pressure transfer valve (multistate pumps only)*
7. *Operate auxiliary cooling systems*
8. *Make the transition between internal and external water sources*
9. *Assemble hose lines, nozzles, valves, and appliances*

Content Modification

Block	Modification	Justification
JPR	Changed “hand [streams]” to “hand lines”.	Changed to correct terminology. (2017)
JPR	Changed “or” to “and”.	Candidates must be able to do both, not just one or the other. (2017)
JPR	Changed “vehicle” to “apparatus”.	Changed for consistency. (2014)
RS1	Changed “fire department pumper” to “pumping apparatus”.	Changed for consistency. (2014)

Pumping Apparatus
Section 5: Operations

RS2	Changed "fire department pumper" to "pumping apparatus".	Changed for consistency. (2014)
RS5	Changed "pumper" to "apparatus".	Changed for consistency. (2017)

Cross Reference

Course Plan	Skill Sheets	Task Book
Fire Apparatus Driver/Operator 1B: Pumping Apparatus Operations <ul style="list-style-type: none"> • Topic 4-4 	N/A	Pumping Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR 10 (hand line / internal tank)</i> • <i>JPR 11 (master stream / internal tank)</i> • <i>JPR 12 (hand line / pressurized source)</i> • <i>JPR 13 (master stream / pressurized source)</i> • <i>JPR 14 (hand line / static source)</i> • <i>JPR 15 (master stream / static source)</i> • <i>JPR 16 (hand line / internal to external transfer)</i> • <i>JPR 17 (master stream / internal to external transfer)</i>

5-5: Pump a Supply Line

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*
 - Paragraph 5.2.5

Job Performance Requirement

Pump a supply line of 2½ in. (65 mm) or larger, given a relay pumping evolution the length and size of the line and the desired flow and intake pressure, so that the correct pressure and flow are provided to the next *pumping apparatus* in the relay.

Requisite Knowledge

1. *Describe hydraulic calculations for friction loss and flow using both written formulas and estimation methods*
2. *Describe the safe operation of the pump*
3. *Identify problems related to small-diameter or dead-end mains*
4. *Describe low-pressure and private water supply systems*
5. *Describe hydrant coding systems*
6. *Describe the reliability of static sources*

Requisite Skills

1. *Position a pumping apparatus to operate at a fire hydrant*
2. *Position a pumping apparatus to operate a static water source*
3. *Transfer power from pumping apparatus engine to pump*
4. *Draft*
5. *Operate apparatus pressure control systems*
6. *Operate the volume/pressure transfer valve (multistate pumps only)*
7. *Operate auxiliary cooling systems*
8. *Make the transition between internal and external water sources*
9. *Assemble hose lines, nozzles, valves, and appliances*

Content Modification

Block	Modification	Justification
JPR	Changed “vehicle” to “apparatus”.	Changed for consistency. (2014)
RS1	Changed “fire department pumper” to “pumping apparatus”.	Changed for consistency. (2014)
RS2	Changed “fire department pumper” to “pumping apparatus”.	Changed for consistency. (2014)
RS5	Changed “pumper” to “apparatus”.	Changed for consistency. (2017)

Cross Reference

Course Plan	Skill Sheets	Task Book
Fire Apparatus Driver/Operator 1B: Pumping Apparatus Operations (2017) <ul style="list-style-type: none">• Topic 4-4 (RK2, RK3, RK4, RK5, RK6, RS9)• Topic 4-5 (RK1, RS1, RS2, RS3, RS4, RS5, RS6, RS7, RS8)	N/A	Pumping Apparatus Driver/Operator <ul style="list-style-type: none">• <i>JPR 18</i>

5-6: Produce a Foam Fire Steam

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*
 - Paragraph 5.2.6

Job Performance Requirement

Produce a foam fire stream, given foam-producing equipment *and manufacturer's specifications and requirements*, so that proportioned foam is provided.

Requisite Knowledge

1. *Describe proportioning rates and concentrations*
2. *Describe equipment assembly procedures*
3. *Identify foam system limitations*
4. *Identify manufacturer's specifications and requirements*

Requisite Skills

1. *Operate foam proportioning equipment*
2. *Connect foam stream equipment*

Content Modification

Block	Modification	Justification
JPR	Added "and manufacturer's specifications and requirements".	Used in Requisite Knowledge but not included in the JPR given. (2014)
RK4	Added "and requirements".	None given. (2014)

Cross Reference

Course Plan	Skill Sheets	Task Book
Fire Apparatus Driver/Operator 1B: Pumping Apparatus Operations (2017) <ul style="list-style-type: none">• Topic 4-6	N/A	Pumping Apparatus Driver/Operator <ul style="list-style-type: none">• <i>JPR 19</i>

5-7: Supply Water to Fire Sprinkler and Standpipe Systems

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*
 - Paragraph 5.2.7

Job Performance Requirement

Supply water to fire sprinkler and standpipe systems, given specific system information, a *pumping apparatus, and sprinkler and standpipe systems*, so that the water is supplied at the correct volume and pressure.

Requisite Knowledge

1. *Describe how to calculate pump discharge pressure*
2. *Describe hose layouts*
3. *Identify the location of fire department connections*
4. *Describe alternative supply procedures if fire department connection is not usable*
5. *Describe operating principles of sprinkler systems as defined in NFPA 13, NFPA 13D, and NFPA 13R*
6. *Describe fire department operations in sprinklered properties as defined in NFPA 13E*
7. *Describe the operating principles of standpipe systems as defined in NFPA 14*

Requisite Skills

1. *Position a pumping apparatus to operate at a fire hydrant*
2. *Position a pumping apparatus to operate at a static water source*
3. *Transfer power from pumping apparatus engine to pump*
4. *Draft*
5. *Operate apparatus pressure control systems*
6. *Operate the volume/pressure transfer valve (multistage pumps only)*
7. *Operate auxiliary cooling systems*
8. *Make the transition between internal and external water sources*
9. *Assemble hose lines, nozzles, valves, and appliances*

Content Modification

Block	Modification	Justification
JPR	Changed “fire department pumper” to “pumping apparatus”.	Changed for consistency. (2014)
JPR	Added “sprinkler and standpipe systems”.	None given. (2014)
RS1	Changed “fire department pumper” to “pumping apparatus”.	Changed for consistency. (2014)
RS2	Changed “fire department pumper” to “pumping apparatus”.	Changed for consistency. (2014)
RS5	Changed “pumper” to “apparatus”.	Changed for consistency. (2017)

Cross Reference

Course Plan	Skill Sheets	Task Book
Fire Apparatus Driver/Operator 1B: Pumping Apparatus Operations (2017) <ul style="list-style-type: none">• Topic 4-7	N/A	Pumping Apparatus Driver/Operator <ul style="list-style-type: none">• <i>JPR 20</i>

Aerial Apparatus

Section 6: Preventative Maintenance

6-1: Perform and Document Visual and Operational Checks

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*
 - *Paragraph 6.1.1*

Job Performance Requirement

Perform *and document* the visual and operation checks on the system and components specified in the following list (cable systems (if applicable), aerial device hydraulic systems, slides and rollers, stabilizing systems, aerial device safety systems, breathing air systems, communication systems) in addition to those specified in *NFPA 1002* 4.2.1, given a fire department aerial apparatus, and policies and procedures of the jurisdiction, so that the operational readiness of the aerial apparatus is verified.

Requisite Knowledge

1. *Identify manufacturer specifications and requirements*
2. *Identify policies and procedures of the jurisdiction*

Requisite Skills

1. *Use hand tools and equipment*
2. *Recognize system problems and out-of-service criteria*
3. *Correct any deficiency noted according to policies and procedures and/or manufacturer specifications and requirements*

Content Modification

Block	Modification	Justification
JPR	Added "and document".	None given. (2014)
JPR	Added "NFPA 1002".	Added for clarification. (2014)
RS1	Added "and equipment".	Required to perform operational checks. (2014)
RS2	Added "and out-of-service criteria".	None given. (2014)
RS3	Added "and/or manufacturer specifications and requirements".	None given. (2014)

Cross Reference

Course Plan	Skill Sheets	Task Book
Fire Apparatus Driver/Operator 1C: Aerial Apparatus Operations <ul style="list-style-type: none">• <i>Topic 2-1</i>	N/A	Aerial Apparatus Driver/Operator <ul style="list-style-type: none">• <i>JPR 9</i>

Section 7: Operations

7-1: Maneuver and Position an Aerial Apparatus

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*
 - Paragraph 6.2.1

Job Performance Requirement

Maneuver and position an aerial apparatus, given an aerial apparatus, an incident location, a situation description, and an assignment, so that the apparatus is positioned for correct aerial device deployment.

Requisite Knowledge

1. *Identify* capabilities and limitations of aerial devices related to reach, tip load, angle of inclination, and angle from chassis axis
2. *Describe the* effects of topography, ground, and weather conditions on deployment
3. *Describe* uses of an aerial device

Requisite Skills

1. *Determine a correct position for the apparatus*
2. *Maneuver apparatus into the correct position*
3. *Avoid obstacles to operations*

Content Modification

Block	Modification	Justification
RS2	Changed “that” to “the correct”.	Grammar fix to properly reference RS1. (2014)

Cross Reference

Course Plan	Skill Sheets	Task Book
Fire Apparatus Driver/Operator 1C: Aerial Apparatus Operations <ul style="list-style-type: none">• <i>Topic 3-1</i>	N/A	Aerial Apparatus Driver/Operator <ul style="list-style-type: none">• <i>JPR 10</i>

7-2: Stabilize an Aerial Apparatus

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*
 - Paragraph 6.2.2

Job Performance Requirement

Stabilize an aerial apparatus, given a positioned *aerial apparatus* and the manufacturer's *specifications and requirements*, so that power can be transferred to the aerial hydraulic system and the *aerial* can be deployed.

Requisite Knowledge

1. *Describe* aerial apparatus hydraulic systems
2. *Identify* manufacturer's specifications for stabilization
3. *Identify* stabilization requirements
4. *Describe* the effects of topography and ground conditions on stabilization

Requisite Skills

1. *Transfer power from the aerial apparatus engine to the hydraulic system*
2. *Operate aerial apparatus stabilization devices.*

Content Modification

Block	Modification	Justification
JPR	Replaced "vehicle" with "aerial apparatus".	Changed for consistency. (2014)
JPR	Replaced "recommendations" with "specifications and requirements".	None given. (2014)
JPR	Changed "aerial device hydraulic" to "aerial hydraulic".	To clarify that we mean the ladder and not the vehicle. (2017)
JPR	Changed "device" to "aerial".	To clarify that we mean the ladder and not the vehicle (2017)
RS1	Replaced "vehicle" with "aerial apparatus".	Changed for consistency. (2014)
RS2	Replaced "vehicle" with "aerial apparatus".	Changed for consistency. (2014)

Cross Reference

Course Plan	Skill Sheets	Task Book
Fire Apparatus Driver/Operator 1C: Aerial Apparatus Operations <ul style="list-style-type: none"> • <i>Topic 3-2</i> 	N/A	Aerial Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR 11</i>

7-3: Maneuver and Position an Aerial Device from Each Control Station

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*
 - Paragraph 6.2.3

Job Performance Requirement

Maneuver and position the aerial device from each control station (*if applicable*), given a *stabilized aerial apparatus*, an incident location, a situation description, and an assignment, so that the aerial is positioned to accomplish the assignment.

Requisite Knowledge

1. Describe aerial hydraulic systems
2. Describe hydraulic pressure relief systems
3. Identify gauges and controls
4. Describe cable systems
5. Describe communications systems
6. Describe electrical systems
7. Describe emergency operating systems
8. Explain locking systems
9. Describe manual rotation and lowering systems
10. Describe stabilizing systems
11. Describe aerial safety systems
12. Describe system overrides and the hazards of using overrides
13. Describe safe operational limitations of the given aerial
14. Describe safety procedures specific to the aerial
15. Describe operations near electrical hazards and overhead obstructions

Requisite Skills

1. Raise, rotate, extend, and position to a specified location
2. Lock, unlock, retract, rotate, lower, and bed the aerial device

Content Modification

Block	Modification	Justification
JPR	Added "(if applicable)".	Most apparatus don't have multiple stations anymore.
JPR	Added "a stabilized aerial apparatus".	Required to complete JPR. (2014)
JPR	Removed "device".	To clarify that we mean the ladder and not the vehicle. (2017)
RK1	Removed "device".	To clarify that we mean the ladder and not the vehicle. (2017)

Aerial Apparatus
Section 7: Operations

RK11	Removed "device".	To clarify that we mean the ladder and not the vehicle. (2017)
RK13	Removed "device".	To clarify that we mean the ladder and not the vehicle. (2017)
RK14	Changed "device" to "aerial".	To clarify that we mean the ladder and not the vehicle. (2017)
RS2	Changed "device" to "aerial".	To clarify that we mean the ladder and not the vehicle. (2017)

Cross Reference

Course Plan	Skill Sheets	Task Book
Fire Apparatus Driver/Operator 1C: Aerial Apparatus Operations <ul style="list-style-type: none"> • <i>Topic 3-3</i> 	N/A	Aerial Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR 12</i>

7-4: Lower an Aerial Using the Emergency Operating System

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*
 - Paragraph 6.2.4

Job Performance Requirement

Lower an aerial using the emergency operating system, given an aerial, so that the aerial is lowered to its bedded position.

Requisite Knowledge

1. *Describe aerial hydraulic systems*
2. *Describe hydraulic pressure relief systems*
3. *Identify gauges and controls*
4. *Describe cable systems*
5. *Describe communications systems*
6. *Describe electrical systems*
7. *Describe emergency operating systems*
8. *Describe locking systems*
9. *Describe manual rotation and lowering systems*
10. *Describe stabilizing systems*
11. *Describe safety systems specific to aerial overside systems*
12. *Identify hazards of using overrides*
13. *Describe safe operational limitations of the given aerial*
14. *Describe safety procedures specific to the aerial*
15. *Describe operations near electrical hazards and overhead obstructions*

Requisite Skills

1. Rotate and position to center
2. Unlock, retract, rotate lower, and bed the aerial device using the emergency operating system

Content Modification

Block	Modification	Justification
JPR	Removed "device" in three places.	To clarify that we mean the ladder and not the vehicle. (2017)
RK1	Removed "device".	To clarify that we mean the ladder and not the vehicle. (2017)
RK11	Removed "device".	To clarify that we mean the ladder and not the vehicle. (2017)
RK11	Added "specific to aerial override systems".	Added to clarify scope of "safety systems". (2017)

Aerial Apparatus
Section 7: Operations

RK13	Removed "device".	To clarify that we mean the ladder and not the vehicle. (2017)
RK14	Changed "device" to "aerial".	To clarify that we mean the ladder and not the vehicle. (2017)

Cross Reference

Course Plan	Skill Sheets	Task Book
Fire Apparatus Driver/Operator 1C: Aerial Apparatus Operations <ul style="list-style-type: none"> • <i>Topic 3-3 (RK1, RK2, RK3, RK4, RK5, RK6, RK8, RK13, RK15)</i> • <i>Topic 3-4 (RK7, RK9, RK10, RK11, RK12, RK14, RS1, RS2)</i> 	N/A	Aerial Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR 13</i>

7-5: Deploy and Operate an Elevated Master Stream

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*
 - Paragraph 6.2.5
2. *Office of the State Fire Marshal*

Job Performance Requirement

Deploy and operate an elevated master stream, given a *stabilized* aerial, a master stream device, and a desired flow, so that the stream is effective.

Requisite Knowledge

1. *Explain* nozzle reaction
2. *Explain* range of operation
3. *Identify* weight limitations
4. *Describe* a removeable/temporary ladder pipe master stream

Requisite Skills

1. *Connect* a water supply to a master stream device
2. *Control* an elevated nozzle

Content Modification

Block	Modification	Justification
JPR	Added “stabilized”.	None given. (2014)
JPR	Removed “device”.	To clarify that we mean the ladder and not the vehicle. (2017)
RK4	Added new item.	This is what most ladders are using right now. They don’t have a fixed waterway anymore. (2017)

Cross Reference

Course Plan	Skill Sheets	Task Book
Fire Apparatus Driver/Operator 1C: Aerial Apparatus Operations <ul style="list-style-type: none">• <i>Topic 3-5</i>	N/A	Aerial Apparatus Driver/Operator <ul style="list-style-type: none">• <i>JPR 14</i>

Tillered Apparatus

Section 8: Preventative Maintenance

8-1: Perform and Document Visual and Operational Checks

Authority

1. *Office of the State Fire Marshal*

Job Performance Requirement

Perform and document the visual and operational checks on the system and components unique to a tillered apparatus, given a tillered apparatus, tools and equipment, maintenance and inspection forms, manufacturer specifications and requirements, and policies and procedures of the jurisdiction, so that the operational readiness of the tillered apparatus is verified.

Requisite Knowledge

1. *Identify manufacturer specifications and requirements*
2. *Identify AHJ policies and procedures including documentation requirements*
3. *Identify vehicle systems and components*
4. *Describe systems and components unique to a tillered apparatus*

Requisite Skills

1. *Use hand tools and equipment*
2. *Inspect tillered apparatus and components*
3. *Recognize system problems and out-of-service criteria*
4. *Correct any deficiency noted according to policies and procedures and/or manufacturer specifications and requirements*

Content Modification

Block	Modification	Justification
CTS	Added a new standard.	NFPA does not have a maintenance standard for tillered apparatus, but they still required maintenance.

Cross Reference

Course Plan	Skill Sheets	Task Book
Fire Apparatus Driver/Operator 1D: Tillered Apparatus Operations <ul style="list-style-type: none">• <i>Topic 2-1</i>	N/A	Tillered Apparatus Driver/Operator <ul style="list-style-type: none">• <i>JPR 9</i>

Section 9: Operations

9-1: Perform Practical Driving Exercises

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*
 - *Paragraph 7.2.1*
2. *Office of the State Fire Marshal*

Job Performance Requirement

Perform the practical driving exercises specified in *NFPA 1002* 4.3.2 through 4.3.5 from *the tractor and the tiller position*, given a qualified driver/operator, a fire department aerial apparatus equipped with a tiller, *manufacturer requirements and specifications*, and *AHJ policies and procedures*, so that each exercise is performed without striking the *apparatus* or obstructions.

Requisite Knowledge

1. *Describe the capabilities and limitations of tiller aerial device related to reach, tip load, angle of inclination, and angle from chassis axis*
2. *Identify the effects of topography, ground, and weather conditions on safe deployment*
3. *Describe how to use a tiller aerial device*
4. *Describe the tiller operator's responsibility*
5. *Identify the methods of communication with the apparatus driver/operator*
6. *Explain the effects of general steering reactions on tiller control*
7. *Describe the manufacturer's operation limitations*

Requisite Skills

1. *Determine a correct position for the tiller*
2. *Maneuver the tiller into the correct position*
3. *Communicate with the apparatus driver/operator*
4. *Avoid obstacles to operations*

Content Modification

Block	Modification	Justification
JPR	Added "NFPA 1002".	Added for clarification. (2014)
JPR	Added "the tractor and".	Understanding how to drive from the front is just as important as from the back. It's a team effort and the driver/operator needs to know how to do both positions.
JPR	Added "/operator".	Added for consistency with certification title. (2014)
JPR	Removed "spotter for backing up".	This is a safety issue. The candidates are not experienced enough to safely not hit the spotter at this point.

Tillered Apparatus
Section 9: Operations

JPR	Added “manufacturer requirements and specifications”.	Required to perform JPR. (2014)
JPR	Added “and AHJ policies and procedures”.	Required to perform JPR. (2014)
RK4	Added new RK item.	Added by 2014 cadre. 2017 cadre opted to keep. (2017)
RK5	Added new RK item.	Added by 2014 cadre. 2017 cadre opted to keep. (2017)
RK6	Added new RK item.	Added by 2014 cadre. 2017 cadre opted to keep. (2017)
RK7	Added new RK item.	Added by 2014 cadre. 2017 cadre opted to keep. (2017)
RS2	Replaced “that” with “the correct”.	Revised for pronoun clarification. (2014).
RS3	Added new RS item.	NFPA does not address communications.

Cross Reference

Course Plan	Skill Sheets	Task Book
Fire Apparatus Driver/Operator 1D: Tillered Apparatus Operations <ul style="list-style-type: none"> • <i>Topic 3-1</i> 	N/A	Tillered Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR 10</i>

9-2: Operate a Tillered Apparatus

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*
 - Paragraph 7.2.2
2. *Office of the State Fire Marshal*

Job Performance Requirement

Operate a fire department aerial apparatus equipped with a tiller from the tiller *and the tractor* position over a predetermined route on a public way *that incorporates the maneuvers and features that the driver/operator is expected to encounter during normal operations (NFPA 1002 paragraph 4.3.1)*, given *another driver/operator and a fire department aerial apparatus equipped with a tiller*, so that the apparatus is operated in compliance with all applicable state and local laws, and policies and procedures of the jurisdiction.

Requisite Knowledge

1. *Describe* principles of tiller operation
2. *Describe* methods of communication with the driver
3. *Explain* the effects on *tiller* control on general steering reactions, night driving, and negotiating intersections
4. *Describe* manufacturer operation limitations

Requisite Skills

1. *Operate the communication system between the tiller operator's position and the driver's compartment*
2. *Operate passenger restraint devices*
3. *Maintain control of the tiller while accelerating, decelerating, and turning*
4. *Operate the tiller during nonemergency conditions*
5. *Operate under adverse environmental or driving surface conditions*

Content Modification

Block	Modification	Justification
JPR	Added "and the tractor".	Understanding how to drive from the front is just as important as from the back. It's a team effort and the driver/operator needs to know how to do both positions.
JPR	Added "that incorporates the maneuvers and features that the driver/operator is expected to encounter during normal operations (NFPA 1002 paragraph)".	This spells out the requirements specified in 4.3.1 so the user does not have to look it up to complete this JPR.

Tillered Apparatus
Section 9: Operations

JPR	Removed “and spotter for backing up”.	This is a safety issue. The candidates are not experienced enough to safely not hit the spotter at this point.
JPR	Replaced “a qualified” with “another”.	There is no guarantee that the other driver/operator will be qualified, especially during training and testing.
JPR	Added “/operator”.	Added for consistency with certification title. (2014)
RK3	Replaced “vehicle” with “tiller”.	Changed for consistency. (2014)
RS4	Replaced “vehicle” with “tiller”.	Changed for consistency. (2014)

Cross Reference

Course Plan	Skill Sheets	Task Book
Fire Apparatus Driver/Operator 1D: Tillered Apparatus Operations <ul style="list-style-type: none"> • <i>Topic 3-2</i> 	N/A	Tillered Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR 11</i>

9-3: Position and Stabilize a Tillered Apparatus

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*
 - *Paragraph 7.2.3*
2. *Office of the State Fire Marshal*

Job Performance Requirement

Position a fire department aerial apparatus equipped with a tiller from the *tractor and the tiller* position, given *an aerial apparatus equipped with a tiller, another driver/operator, the apparatus operating instructions, an incident location, a situation description, and an assignment*, so that the aerial device is positioned and stabilized to accomplish the assignment.

Requisite Knowledge

1. *Explain* principles of positioning and stabilizing an aerial apparatus from the tiller position

Requisite Skills

1. Determine a correct position for the tiller
2. Maneuver the tiller into *the correct* position
3. Avoid obstacles to operations

Content Modification

Block	Modification	Justification
JPR	Added “tractor and the”.	Understanding how to drive from the front is just as important as from the back. It’s a team effort and the driver/operator needs to know how to do both positions.
JPR	Added “an aerial apparatus equipped with a tiller.”	Required to complete JPR. (2014)
JPR	Added “another driver/operator”.	Added for consistency with other JPR givens. (2014)
RK2	Replaced “that” with “the correct”.	Revised for pronoun clarification. (2014).

Cross Reference

Course Plan	Skill Sheets	Task Book
Fire Apparatus Driver/Operator 1D: Tillered Apparatus Operations <ul style="list-style-type: none"> • <i>Topic 3-3</i> 	N/A	Tillered Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR 12</i>

Wildland Fire Apparatus

Section 10: Preventative Maintenance

10-1: Perform and Document Visual and Operational Checks

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*
 - *Paragraph 8.1.1*
2. *Office of the State Fire Marshal*

Job Performance Requirement

Perform *and document* the visual and operational checks on the systems and components specified in the following list (water tank and/or other extinguishing agent levels (if applicable), pumping systems, foam systems, *four-wheel drive system*), in addition to those in *NFPA 1002 4.2.1*, given a wildland fire apparatus, *tools and equipment*, manufacturer specifications, and policies and procedures of the jurisdiction, so that the operational status is verified.

Requisite Knowledge

1. *Describe manufacturer's specifications and requirements*
2. *Describe policies and procedures of the jurisdiction, including documentation requirements*

Requisite Skills

1. *Use hand tools and equipment*
2. *Recognize system problems and out-of service criteria*
3. *Correct any deficiency noted according to policies and procedures and/or manufacturer specifications and requirements*

Content Modification

Block	Modification	Justification
JPR	Added "four-wheel drive system".	None given. (2014)
JPR	Added "NFPA 1002".	Added for clarification. (2014)
JPR	Added "tools and equipment".	Required to complete JPR. (2014)
RS1	Added "and equipment".	Required to complete JPR. (2014)
R2	Added "and out-of-service criteria".	None given. (2014)
RS3	Added "and/or manufacturer specifications and requirements."	Included in Requisite Knowledge. (2014)

Cross Reference

Course Plan	Skill Sheets	Task Book
Fire Apparatus Driver/Operator 1E: Wildland Fire Apparatus Operations <ul style="list-style-type: none">• <i>Topic 2-1</i>	N/A	Wildland Fire Apparatus Driver/Operator <ul style="list-style-type: none">• <i>JPR 9</i>

Section 11: Operations

11-1: Operate a Wildland Fire Apparatus

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*
 - *Paragraph 8.1.2*
2. *Office of the State Fire Marshal*

Job Performance Requirement

Operate a wildland fire apparatus, given *a wildland fire apparatus*, a predetermined route off of a public way that incorporates the maneuvers and features that the driver/operator is expected to encounter during normal operations, *applicable laws and regulations, and AHJ policies and procedures*, so that the vehicle is operated in compliance with all applicable *jurisdictional* rules and regulations and *operational* limitations of the apparatus.

Requisite Knowledge

1. *Explain* the effects on vehicle control of braking reaction time and load factors
2. *Explain the* effects of high center of gravity on roll-over potential, general steering reactions, speed, and centrifugal force
3. *Identify* applicable laws and regulations
4. *Describe the* principles of skid avoidance, night driving, shifting, and gear patterns
5. *Describe how to* negotiate intersections, railroad crossings, and bridges
6. *Identify* weight and height limitations for both roads and bridges
7. *Describe how to* identify and operate automotive gauges
8. *Explain* operational limits

Requisite Skills

1. Operate passenger restraint devices
2. Maintain safe following distances
3. Maintain control of the *wildland fire apparatus* while accelerating, decelerating, and turning, given road, weather, and traffic conditions
4. Operate during nonemergency conditions
5. Operate under adverse environmental or driving surface conditions
6. Use automotive gauges and controls

Content Modification

Block	Modification	Justification
JPR	Added "a wildland fire apparatus".	Required to complete JPR. (2014)
JPR	Added "applicable laws and regulations".	None given. (2014)
JPR	Added "and AHJ policies and procedures".	None given. (2014)
JPR	Replaced "departmental" with "jurisdictional".	None given. (2014)

Wildland Fire Apparatus
Section 11: Operations

JPR	Replaced “design” with “operational”.	None given. (2014)
RS3	Replaced “vehicle” with “wildland fire apparatus”.	Replaced for consistency. (2014)

Cross Reference

Course Plan	Skill Sheets	Task Book
Fire Apparatus Driver/Operator 1E: Wildland Fire Apparatus Operations <ul style="list-style-type: none"> • <i>Topic 3-1</i> 	N/A	Wildland Fire Apparatus Driver/Operator <ul style="list-style-type: none"> • <i>JPR 10</i>

11-2: Produce Effective Fire Streams

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*
 - Paragraph 8.2.1
2. *Office of the State Fire Marshal*

Job Performance Requirement

Produce effective fire streams, given a *wildland fire apparatus* and the sources specified in the following list (water tank, pressurized *water* source, static *water* source) so that the pump is engaged, all pressure control and vehicle safety devices are set, the rated flow of the nozzle is achieved, and the apparatus is monitored for potential problems.

Requisite Knowledge

1. *Describe* hydraulic calculations for friction loss and flow using both written formulas and estimation methods
2. *Describe* safe operation of the pump
3. *Describe* correct apparatus placement
4. *Describe* personal safety considerations
5. *Identify* problems related to small diameter or dead-end mains and low-pressure and private water supply systems
6. *Identify* the reliability of static sources

Requisite Skills

1. *Position* a *wildland fire apparatus* to operate at a fire hydrant and at a static water source
2. *Position* apparatus for fire attack
3. *Transfer* power from vehicle engine to pump
4. *Draft*
5. *Operate* apparatus pressure control systems
6. *Operate* the volume/pressure transfer valve (*multistage pumps only*)
7. *Operate* auxiliary cooling systems
8. *Make the transition* between internal and external water sources
9. *Assemble* hose lines, nozzles, valves, and appliances

Content Modification

Block	Modification	Justification
JPR	Added "a wildland fire apparatus".	Required to complete JPR. (2014)
JPR	Added "water" in two places.	Added for clarification. (2014)
RK	Removed RK item "Describe hydrant coding systems".	Too specific to be applicable in this course. This would be taught at the Firefighter level within the candidate's agency.
RS2	Replaced "place" with "position".	None given. (2014)

Wildland Fire Apparatus
Section 11: Operations

RS5	Replaced “pumper” with “apparatus”.	Changed for consistency. (2017)
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Cross Reference

Course Plan	Skill Sheets	Task Book
Fire Apparatus Driver/Operator 1E: Wildland Fire Apparatus Operations <ul style="list-style-type: none">• <i>Topic 3-2</i>	N/A	Wildland Fire Apparatus Driver/Operator <ul style="list-style-type: none">• <i>JPR 11 (tank)</i>• <i>JPR 12 (pressurized source)</i>• <i>JPR 13 (static source)</i>

11-3: Pump a Supply Line

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*
 - Paragraph 8.2.2
2. *Office of the State Fire Marshal*

Job Performance Requirement

Pump a supply line, given a *wildland fire apparatus* and a relay pumping evolution the length and size of the line and pumping flow and desired intake pressure, so that correct intake pressures and flow are provided to the next *pumping apparatus* in the relay.

Requisite Knowledge

1. *Describe* hydraulic calculations for friction loss and flow using both written formulas and estimate methods
2. *Describe* safe operation of the pump
3. *Identify* problems related to small diameter or dead-end mains and low-pressure and private water supply systems
4. *Describe* hydrant coding systems
5. *Identify* the reliability of static sources

Requisite Skills

1. *Position a wildland fire apparatus to operate at a fire hydrant and at a static water source*
2. *Transfer power from vehicle engine to pump*
3. *Draft*
4. *Operate apparatus pressure control systems*
5. *Operate volume/pressure transfer valve (multistage pumps only)*
6. *Operate auxiliary cooling systems*
7. *Make the transition between internal and external water sources*
8. *Assemble hose lines, nozzles, valves, and appliance*

Content Modification

Block	Modification	Justification
JPR	Added "a wildland fire apparatus".	Required to complete JPR. (2014)
JPR	Changed "pumper" to "pumping apparatus".	Changed for consistency. (2017)
RS1	Added "fire".	Added for consistency. (2014)
RS4	Changed "pumper" to "apparatus".	Changed for consistency. (2017)

Cross Reference

Course Plan	Skill Sheets	Task Book
Fire Apparatus Driver/Operator 1B: Pumping Apparatus Operations <ul style="list-style-type: none">• <i>Topic 4-5</i>	N/A	Wildland Fire Apparatus Driver/Operator <ul style="list-style-type: none">• JPR 14

11-4: Produce a Foam Fire Stream

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*
 - *Paragraph 8.2.3*

Job Performance Requirement

Produce a foam stream, given foam-producing equipment, so that the correct proportion of foam is provided.

Requisite Knowledge

1. *Describe* proportioning rates and concentrations
2. *Describe* equipment assembly procedures
3. *Describe* foam systems limitations
4. *Identify* manufacturer specifications

Requisite Skills

1. *Operate foam proportioning equipment*
2. *Connect foam stream equipment*

Content Modification

Block	Modification	Justification

Cross Reference

Course Plan	Skill Sheets	Task Book
Fire Apparatus Driver/Operator 1B: Pumping Apparatus Operations <ul style="list-style-type: none">• <i>Topic 4-6</i>	N/A	Wildland Fire Apparatus Driver/Operator <ul style="list-style-type: none">• JPR 15

Water Tender

Section 12: Preventative Maintenance

12-1: Perform and Document Visual and Operational Checks

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*
 - *Paragraph 10.1.1*
2. *Office of the State Fire Marshal*

Job Performance Requirement

Perform *and document* visual and operational checks on the systems and components specified in the following list (water tank and other extinguishing agent levels (if applicable), pumping system (if applicable), rapid dump system (if applicable)) in addition to those specified in *NFPA 1002 4.2.1*, given a *water tender, tools and equipment, manufacturer specifications and requirements, maintenance and inspection forms*, and policies and procedures of the jurisdiction, so that the operational readiness of the *water tender* is verified.

Requisite Knowledge

1. *Identify manufacturer specifications and requirements*
2. *Identify policies and procedures of the jurisdiction, including documentation requirements*

Requisite Skills

1. *Use tools and equipment*
2. *Recognize system problems and out-of-service criteria*
3. *Correct any deficiency noted according to policies and procedures and/or manufacturer specifications and requirements*

Content Modification

Block	Modification	Justification
JPR	Added "and document".	None given. (2014)
JPR	Added "NFPA 1002".	Added for clarification. (2014)
JPR	Replaced "mobile water supply apparatus" with "water tender".	Replaced for consistency. (2014)
JPR	Added "tools and equipment".	Required to complete JPR. (2014)
JPR	Added "manufacturer specifications and requirements".	Included in Requisite Knowledge. (2014)
JPR	Added "maintenance and inspection forms".	None given. (2014)
JPR	Replaced "mobile water supply" with "water tender".	Replaced for consistency. (2014)

Water Tender

Section 12: Preventative Maintenance

RK2	Added "including documentation requirements".	None given. (2014)
RS2	Added "and out-of-service criteria".	None given. (2014)
RS3	Added "and/or manufacturer specifications and requirements".	Included in Requisite Knowledge. (2014)

Cross Reference

Course Plan	Skill Sheets	Task Book
Fire Apparatus Driver/Operator 1F: Water Tender Operations <ul style="list-style-type: none">• <i>Topic 2-1</i>	N/A	Water Tender Driver/Operator <ul style="list-style-type: none">• <i>JPR 9</i>

Section 13: Operations

13-1: Operate a Water Tender

Authority

1. *Office of the State Fire Marshal*

Job Performance Requirement

Operate a water tender, given a water tender, a predetermined route off of a public way that incorporates the maneuvers and features that the driver/operator is expected to encounter during normal operation, applicable laws and regulations, and AHJ policies and procedures, so that the water tender is operated in compliance with all applicable jurisdictional rules and regulations and operational limitations of the water tender.

Requisite Knowledge

1. *Recognize water tender resource typing*
2. *Explain the effects on vehicle control of braking reaction time and load factors*
3. *Explain the effects of high center of gravity on roll-over potential, general steering reactions, speed, and centrifugal force*
4. *Identify policies and procedures of the jurisdiction*
5. *Describe principles of skid avoidance, night driving, shifting, and gear patterns*
6. *Describe how to negotiate intersections, railroad crossings, soft shoulders, grade, and bridges*
7. *Identify weight and height limitations for both roads and bridges*
8. *Explain operational limits*
9. *Identify off-pavement water tender emergencies*

Requisite Skills

1. *Operate passenger restraint devices*
2. *Maintain safe following distances*
3. *Maintain control of the water tender while accelerating, decelerating, and turning, given road, weather, and traffic conditions*
4. *Operate the tender under adverse environmental or driving surface conditions*
5. *Use automotive gauges and controls*

Content Modification

Block	Modification	Justification
CTS	Added a new certification training standard.	Not addressed in NFPA. (2014)

Cross Reference

Course Plan	Skill Sheets	Task Book
Fire Apparatus Driver/Operator 1F: Water Tender Operations <ul style="list-style-type: none">• <i>Topic 3-1</i>	N/A	Water Tender Driver/Operator <ul style="list-style-type: none">• <i>JPR 9</i>

13-2: Maneuver and Position a Water Tender at a Water Shuttle Fill Site

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*
 - Paragraph 10.2.1
2. *Office of the State Fire Marshal*

Job Performance Requirement

Maneuver and position a *water tender* at a water shuttle fill site, given a *water tender*, fill site location, and one or more supply hose, so that the *water tender* is positioned, supply hoses are attached to the intake connections without having to stretch additional hose, and no objects are struck at the fill site.

Requisite Knowledge

1. *Describe* local procedures for establishing a water shuttle fill site
2. *Describe how to correctly position a water tender at a water shuttle fill site*
3. *Describe how to mark the stopping position of the water tender*
4. *Describe how to locate the water tank intakes on the water tender*
5. *Describe how to attach supply hose(s) to the intake connector*

Requisite Skills

1. *Determine a correct position for the water tender*
2. *Maneuver water tender into correct position*
3. *Avoid obstacles to operations*

Content Modification

Block	Modification	Justification
JPR	Replaced “mobile water supply apparatus” with “water tender”.	Replaced for consistency. (2014)
JPR	Added “water tender”.	Required to complete JPR. (2014)
JPR	Replaced “apparatus” with “water tender”.	Replaced for consistency. (2014)
RK2	Added “Describe how to correctly position a water tender at a water shuttle fill site”.	None given. (2014)
RK3	Replaced “apparatus” with “water tender”.	Replaced for consistency. (2014)
RK4	Replaced “apparatus” with “water tender”.	Replaced for consistency. (2014)
RK5	New RK item.	Training needed to meet JPR. (2017)
RS1	Replaced “apparatus” with “water tender”.	Replaced for consistency. (2014)
RS2	Replaced “apparatus” with “water tender”.	Replaced for consistency. (2014)
RS2	Replaced “that” with “correct”.	Replaced for clarity. (2014)

Cross Reference

Course Plan	Skill Sheets	Task Book
Fire Apparatus Driver/Operator 1F: Water Tender Operations <ul style="list-style-type: none">• <i>Topic 3-2</i>	N/A	Water Tender Driver/Operator <ul style="list-style-type: none">• <i>JPR 11</i>

13-3: Maneuver and Position a Water Tender at a Water Shuttle Dumpsite

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*
 - Paragraph 10.2.2
2. *Office of the State Fire Marshal*

Job Performance Requirement

Maneuver and position a *water tender* at a water shuttle dumpsite, given a *water tender*, a dump site, and a portable water tank, so that all of the water being discharged from the *water tender* enters the portable tank and no objects are struck at the dumpsite.

Requisite Knowledge

1. *Describe* local procedures for operating a *water tender* at a water shuttle dumpsite
2. *Identify how to* locate water tank discharges on the *water tender*

Requisite Skills

1. *Determine a correct position for the water tender*
2. *Maneuver water tender into correct position*
3. *Avoid obstacles to operations*
4. *Operate fire pump or rapid water dump system*

Content Modification

Block	Modification	Justification
JPR	Replaced “mobile water supply apparatus” with “water tender”.	Replaced for consistency. (2014)
JPR	Added “a water tender”.	Required to complete JPR. (2014)
JPR	Replaced “apparatus” with “water tender”.	Replaced for consistency. (2014)
RK1	Added “a water tender at”.	None given. (2014)
RK2	Replaced “apparatus” with “water tender”.	Replaced for consistency. (2014)
RS1	Replaced “apparatus” with “water tender”.	Replaced for consistency. (2014)
RS2	Replaced “apparatus” with “water tender”.	Replaced for consistency. (2014)
RS2	Replaced “that” with “correct”.	Replaced to clarify pronoun. (2014)

Cross Reference

Course Plan	Skill Sheets	Task Book
Fire Apparatus Driver/Operator 1F: Water Tender Operations <ul style="list-style-type: none">• <i>Topic 3-4</i>	N/A	Water Tender Driver/Operator <ul style="list-style-type: none">• <i>JPR 12</i>

13-4: Establish a Water Shuttle Dumpsite

Authority

1. *NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)*
 - *Paragraph 10.2.3*

Job Performance Requirement

Establish a water shuttle dumpsite, given *one or more water tenders*, two or more portable water tanks, low-level strainers, *hard suction hose*, fire hose, and a fire apparatus equipped with a fire pump, so that the tank being drafted from is kept full at all times, the tank being dumped into is emptied first, and the water is transferred from one tank to the next.

Requisite Knowledge

1. *Describe* local procedures for establishing a water shuttle dumpsite
2. *Describe* principles of water transfer between multiple portable water tanks

Requisite Skills

1. *Deploy portable water tanks*
2. *Connect and operate water transfer equipment*
3. *Connect a strainer and suction hose to the fire pump*

Content Modification

Block	Modification	Justification
JPR	Added "one or more water tenders".	Required to complete JPR. (2014)
JPR	Replaced "water transfer equipment" with "hard suction hose".	None given. (2014)

Cross Reference

Course Plan	Skill Sheets	Task Book
Fire Apparatus Driver/Operator 1F: Water Tender Operations <ul style="list-style-type: none">• <i>Topic 3-3</i>	N/A	Water Tender Driver/Operator <ul style="list-style-type: none">• <i>JPR 13</i>