CERTIFICATION CURRICULUM MANUAL

CHAPTER SEVEN

DRIVER/OPERATOR PUMPER & AERIAL

NFPA 1010, 2024 Edition

Effective January 1, 2027

Texas Commission on Fire Protection
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COURSE OVERVIEW

The **Driver/Operator – Pumper** candidate is required to meet the Job Performance Requirements (JPRs) of Chapters 11 and 12 of National Fire Protection Association (NFPA) 1010, *Standard on Professional Qualifications for Firefighters*, 2024 edition.

The **Driver/Operator – Aerial** candidate is required to meet the Job Performance Requirements (JPRs) of chapters 11 and 13 of National Fire Protection Association (NFPA) 1010, *Standard on Professional Qualifications for Firefighters*, 2024 edition.

The following items are included in Chapter 7 of this certification curriculum manual:

- Course Overview
- Course Outline (establishes the recommended hours for teaching this course)
- Reference List (textbooks and other recommended course materials)
- Equipment List
- Course Instructor Information
- Performance Skills List

Driver/Operator – Pumper
This is a voluntary (non-mandatory) certification; therefore, a formal "curriculum" is not provided. Please use chapters 11 and 12 of NFPA 1010 as a guide when creating your own course curriculum. NFPA 1010 JPRs 12.2.1, 12.2.2, 12.4.1, 12.4.2, and 12.4.3 are taught in the Basic Fire Suppression Curriculum (which is a prerequisite to Driver/Operator).

Driver/Operator – Aerial
This is a voluntary (non-mandatory) certification, therefore a formal "curriculum" is not provided. Please use chapters 11 and 13 of NFPA 1010 as a guide when creating your own course curriculum.

Performance skills are available in Chapter 7 of the Performance Skills Manual.

All documents in this curriculum manual, and in the skills manual, are available free of charge to download, copy and distribute as necessary. The TCFP does not provide printed copies.

Definition of a Driver/Operator
A Driver/Operator is an individual who has met the requirements of NFPA 1010, *Standard on Professional Qualifications for Firefighters*, 2024 edition, and has the knowledge, skills, and abilities to drive and operate an apparatus by having and maintaining a knowledge of:

- Apparatus inspections and basic maintenance
- Best practices for ensuring the safety of all personnel riding in the apparatus while it's in motion
- Techniques for safe driving of an apparatus to and from an incident scene

- Appropriate positioning of the apparatus to maximize effectiveness
- Techniques for safe operation of apparatus equipment and components

CURRICULUM OUTLINE

D/O – PUMPER		
SECTION	**SUBJECT**	**RECOMMENDED HOURS**
11.1	General	2
11.2	Preventative Maintenance	8
11.3	Driving	16
12.1	General	4
12.3	Preventative Maintenance	4
12.4	Operations	26
	TOTAL RECOMMENDED HOURS*	**60**

D/O – AERIAL		
SECTION	**SUBJECT**	**RECOMMENDED HOURS**
11.1	General	2
11.2	Preventative Maintenance	8
11.3	Driving	16
13.1	General	4
13.2	Preventative Maintenance	4
13.3	Operations	16
	TOTAL RECOMMENDED HOURS*	**50**

* Actual hours required will depend on the number of students, the number of examiners, availability of equipment, and the student skill level. Time for performance skill testing is included in the recommended hours.

REFERENCE LIST

DRIVER/OPERATOR – PUMPER & AERIAL

This Reference List is provided as a general guide for both instructors and students to locate information pertaining to the specific objectives in the TCFP Curriculum. This list is not all inclusive and does not in any way limit TCFP development and use of questions to test the objectives of the curriculum:

Required References

Certified Training Facilities approved to teach this curriculum must have the following reference materials:

Fire Apparatus Driver/Operator (4th ed.) (2025). Burlington, MA: Jones & Bartlett Learning.

Pumping and Aerial Apparatus Driver/Operator Handbook (4th ed.) (2024). Stillwater, OK: Fire Protection Publications. International Fire Service Training Association.

NFPA 1010: Standard on Professional Qualifications for Firefighters (2024 ed.). Quincy, MA: National Fire Protection Association. NFPA Publications.

Standards Manual for Fire Protection Personnel. Austin, TX: Texas Commission on Fire Protection.

Recommended References

The most current edition of the following publications is recommended (not required) supplemental material for program use.

NFPA 1900, Standard for Aircraft Rescue and Firefighting Vehicles, Automotive Fire Apparatus, Wildland Fire Apparatus, and Automotive Ambulances (2024 ed.). Quincy, MA: National Fire Protection Association. NFPA Publications.

EQUIPMENT LIST

DRIVER/OPERATOR – PUMPER

- Appropriate safety equipment (gloves, eye and ear protection, etc.)
- Two fire department pumping apparatus
- Tools and equipment for tests, inspections, and servicing functions
- Policies and procedures of the jurisdiction
- Area to perform driving skills
- Spotter
- Cones
- Vertical clearance crossbar prop
- Simulated emergency conditions
- Static water source
- Pressurized water source
- Foam or practice foam
- Foam educator or inline foam system
- Sprinkler/standpipe prop
- FDC

DRIVER/OPERATOR – AERIAL

- Appropriate safety equipment (gloves, eye and ear protection, etc.)
- Fire department aerial apparatus
- Tools and equipment for tests, inspections, and servicing functions
- Policies and procedures of the jurisdiction
- Area to perform driving skills
- Spotter
- Cones
- Vertical clearance crossbar prop
- Simulated emergency conditions
- Master stream device
- Water supply
- Pumper (if required)

COURSE INSTRUCTOR INFORMATION
Driver/Operator

Instructor Qualifications
Driver/Operator courses must be taught by a person meeting the requirements described in Chapter §427.307 of the TCFP Standards Manual.

Supplemental Information
Instructors are expected to provide supplemental information if the main reference text does not cover all of the knowledge requirements set forth in the NFPA standard.

Certification Testing
Testing for certification in the state of Texas will be based on the knowledge and skills requirements of National Fire Protection Association (NFPA) 1010, *Standard on Professional Qualifications for Firefighters ,* 2024 edition. Chapters 11 and 12 will be used for Driver/Operator – Pumper. Chapters 11 and 13 will be used for Driver/Operator – Aerial. All training programs must strictly adhere to the NFPA standard.

All test questions and performance skills evaluations will be based on the NFPA Job Performance Requirements (JPRs), requisite knowledge objectives, and requisite skills objectives found in the NFPA standard. Additionally, questions and performance skill evaluations may include information found in, or derived from, the NFPA standard annex, particularly Annex A, which includes explanatory material that may further clarify JPRs. The following is an example from NFPA 1010, JPR 11.3.6:

NFPA Standard/Curriculum		Explanation
11.3.6	Operate a vehicle using defensive driving techniques, given an assignment and a fire apparatus, so that control of the vehicle is maintained.	NFPA JPR number 11.3.6
	(A) Requisite Knowledge: The importance of donning passenger restraint devices and ensuring crew safety; the common causes of fire apparatus accidents and the recognition that drivers of fire apparatus are responsible for the safe and prudent operation of the vehicle under all conditions; the effects of liquid surge on vehicle control; factors that make up total stopping distance; load factors; the effects of a high center of gravity on rollover potential, laws of inertia, general steering reactions, and speed; applicable laws and regulations; principles of skid avoidance, night driving, shifting, gear patterns, and automatic braking systems in wet and dry conditions; negotiation of intersections, railroad crossings, and bridges; weight and height limitations for both roads and bridges; identification and operation of automotive gauges; and operational limits.	Requisite knowledge objectives for 11.3.6 Written test questions and/or performance skills will be used to test these knowledge components on the state certification exam.

(B) Requisite Skills: The ability to operate passenger restraint devices; maintain safe following distances; maintain control of the vehicle while accelerating, decelerating, and turning, given road, weather, and traffic conditions; operate under adverse environmental or driving surface conditions; and use automotive gauges and controls.	Requisite skills objectives for 11.3.6 Only performance skills will be used to test these objectives on the state certification exam.
Instructor Note A.11.3.6 Simulated emergency driving conditions should be restricted to a controlled area. Public ways should not be used for these activities.	Annex A: Explanatory Material for 11.3.6

NFPA Annex B Information

Refer to *Annex B: Explanation of the Professional Qualifications Standards and Concepts of JPRs* in the NFPA Standard for an explanation of the NFPA Professional Qualifications Standards, the concepts of JPRs, and the process for converting JPRs into instructional objectives.

Requisite Skills

NFPA Requisite Skill requirements are addressed in the corresponding Performance Skill Sheets.

TCFP Standards Manual

It is critical that the Course Instructor review the chapters in the TCFP Standards Manual that apply to this curriculum. Of primary importance are the following chapters:

- Chapter 421, *Standards for Certification*
- Chapter 427, *Training Facility Certification*
- Chapter 433, *Minimum Standards for Driver/Operator*
- Chapter 435, *Fire Fighter Safety*
- Chapter 437, *Fees*
- Chapter 439, *Examinations*

These chapters do not address every issue that could impact this curriculum; therefore, the Course Instructor is encouraged to become familiar with the TCFP Standards Manual.

Descriptions of Certification Levels

For additional information, see Chapter 433 of the Texas Commission on Fire Protection Standards Manual for Fire Protection Personnel.

PERFORMANCE SKILLS LIST

DRIVER/OPERATOR – PUMPER			
Category	**Skill #**	**Skill Name**	**NFPA JPR #**
Preventive Maintenance	1	Routine Tests, Inspections, and Servicing Functions	11.2.1, 11.2.2
General	2	Routine Tests, Inspections, and Servicing Functions	11.2.2, 12.1.1
Driving	3	Non-Emergency Driving on Public Roadway	11.3.1
Driving	4	Backing from a Roadway Into Restricted Spaces	11.3.2
Driving	5	Maneuvering Around Roadway Obstructions	11.3.3
Driving	6	Turning Vehicle 180 Degrees Within a Confined Space	11.3.4
Driving	7	Maneuver Vehicle Through Restricted Horizontal and Vertical Clearances	11.3.5
Driving	8	Driving Defensively	11.3.6
Driving	9	Operating Apparatus Fixed Systems and Equipment	11.3.7
Operations	10	Producing Effective Streams	12.4.4
Operations	11	Relay Pumping	12.4.5
Operations	12	Producing a Foam Fire Stream	12.4.6
Operations	13	Supplying Water to a Fire Sprinkler System	12.4.7
Operations	14	Supplying Water to a Standpipe System	12.4.7

Performance skills are available in Chapter 7 of the Performance Skills Manual.

DRIVER/OPERATOR – AERIAL			
Category	**Skill #**	**Skill Name**	**NFPA JPR #**
Preventive Maintenance	1	Routine Tests, Inspections, and Servicing Functions	11.2.1, 11.2.2
General	2	Routine Tests, Inspections, and Servicing Functions	11.2.2, 13.2.1
Driving	3	Non-Emergency Driving on Public Roadway	11.3.1
Driving	4	Backing from a Roadway Into Restricted Spaces	11.3.2
Driving	5	Maneuvering Around Roadway Obstructions	11.3.3
Driving	6	Turning Vehicle 180 Degrees Within a Confined Space	11.3.4
Driving	7	Maneuver Vehicle Through Restricted Horizontal and Vertical Clearances	11.3.5
Driving	8	Driving Defensively	11.3.6
Driving	9	Operating Apparatus Fixed Systems and Equipment	11.3.7
Operations	10	Maneuver and Position Aerial Apparatus	13.3.1, 13.3.2, 13.3.3
Operations	11	Emergency Operating System	13.3.4
Operations	12	Elevated Master Stream	13.3.5

Performance skills are available in Chapter 7 of the Performance Skills Manual.

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