

Fire Apparatus Driver/Operator – Wildland Fire Apparatus

Certification Training Standards Guide August 2015



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

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This CTS guide utilizes NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications (2014) to provide the qualifications for State Fire Training's Fire Apparatus Driver/Operator – Wildland Fire Apparatus certification.

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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State Fire Training

Mission

To enable the California Fire Service to safely protect life and property through education, training, and certification.

The California Fire Service Training and Education System

The California Fire Service Training and Education System (CFSTES) was established to provide a single statewide focus for fire service training in California. CFSTES is a composite of all the elements that contribute to the development, delivery, and administration of training for the California fire service. The authority for the central coordination of this effort is vested in the Training Division of the California State Fire Marshal's Office with oversight provided by the State Board of Fire Services.

CFSTES facilitates, coordinates, and assists in the development and implementation of standards and certification for the California fire service. CFSTES:

1. Administers the California Fire Academy System
2. Provides accredited courses leading to certification and approved standardized training programs for local and regional delivery
3. Administers the national accreditation process in California
4. Publishes certification training standards, course plans, and a certification task book for each certified level in the California fire service

CFSTES is a fire service system developed by the fire service, for the fire service. It is only as successful and effective as the people involved in it.

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How to Read a CTS Guide

State Fire Training develops a Certification Training Standards (CTS) Guide for a variety of job functions in the fire service such as firefighter, driver/operator, fire instructor, and company officer. The CTS guide lists the requisite knowledge and skills and the job performance requirements a person is expected to complete in order to become certified in a specific function. CTS guides are appropriate for fire service personnel and individuals in related occupations pursuing State Fire Training certification.

Each CTS guide serves as a foundation for the certification programs recommended for adoption by the Office of the State Fire Marshal. Any certification program must be based on job-related knowledge and measurable performance standards. To master the knowledge and skills needed for specialized operations, individuals will require additional training to augment the performance standards included in the CTS guide.

Within the CTS guide, it is impossible to capture the different policies and procedures of each organization in the California fire service. 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 departments or jurisdictions.

Format

Each certification training standard included in the CTS guide includes the following:

Section Heading

The section heading describes a general category for a group of training standards. For example, the Fire Marshal CTS includes the following sections: Administration, Risk Management, Community Relations, Professional Development, Regulatory Programs, Fire and Life Safety, and Investigation. Each section contains one or more individual training standards.

Training Standard Title

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

Authority

The CTS guide references each 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*.

Given

This section lists the objects, equipment, materials, or facilities an individual needs in order to acquire the requisite knowledge and skills or to accomplish the job performance requirement(s) within a training standard.

Requisite Knowledge and Skills

This section lists the knowledge and skills that an individual must acquire in order to accomplish the job performance requirement(s) within a training standard.

This section does not include NFPA requisite knowledge or skills that are too general to teach or that individuals should develop through life experiences. For example, a training standard would not list “communicate orally and in writing” or “ability to relate interpersonally” unless they specifically apply to a job performance requirement about acquiring communication skills or developing interpersonal relationships.

Job Performance Requirements

This section includes one or more written statements that describe a specific job-related task and define measurable or observable outcomes. After an individual completes all coursework and requisite requirements, the certification task book process verifies completion of job performance requirements.

Content

In addition to the individual certification training standards, the CTS guide also includes State Fire Training Revisions and Errata pages.

State Fire Training Content

Located at the back of the CTS guide, this table documents any significant revisions made by State Fire Training to the NFPA standards in the development of this CTS guide. This table is used to justify content additions and advise the course plan development team.

Errata

Located at the back of the CTS guide, this page documents any changes made to the CTS guide outside of the five-year NFPA revision cycle.

Fire Apparatus Driver/Operator – Wildland Fire Apparatus

Section 1: Preventive Maintenance

1-1: Perform and Document Routine Tests, Inspections, and Servicing Functions Unique to a Wildland Fire Apparatus

Authority

NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications (2014)

- Paragraph 8.1.1

Office of the State Fire Marshal

Given

1. Wildland fire apparatus
2. *Tools and equipment*
3. Manufacturer's specifications *and requirements*
4. *Maintenance and inspection forms*
5. Policies and procedures of the jurisdiction

Requisite Knowledge and Skills

1. *Explain* manufacturer's specifications and requirements
2. *Discuss* the policies and procedures of the jurisdiction, *including documentation requirements*
3. Use *tools and equipment*
4. Recognize system problems *and out-of service criteria*
5. Correct any deficiency noted according to policies and procedures *and/or manufacturer specifications and requirements*

Job Performance Requirements

Perform and document routine tests, inspections, and servicing functions on the systems and components unique to wildland fire apparatus, in addition to those in NFPA 1002 Paragraph 4.2.1, to verify their operational status.

Section 2: Operations

2-1: Operate a Wildland Fire Apparatus

Authority

NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications (2014)

- Paragraph 8.1.2

Office of the State Fire Marshal

Given

1. Wildland fire apparatus
2. *Applicable laws and regulations*
3. *Policies and procedures of the jurisdiction*
4. Predetermined route off of a public way that incorporates the maneuvers and features that the driver/operator is expected to encounter during normal operations

Requisite Knowledge and Skills

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. *Discuss* applicable laws and regulations
4. *Describe the* principles of skid avoidance, night driving, shifting, and gear patterns
5. *Discuss* negotiating intersections, railroad crossings, and bridges
6. *Describe* weight and height limitations for both roads and bridges
7. *Describe* automotive gauges *and their* operation
8. *Explain* operational limits
9. Operate passenger restraint devices
10. Maintain safe following distances
11. Maintain control of the *wildland fire apparatus* while accelerating, decelerating, and turning, given road, weather, and traffic conditions
12. Operate the *wildland fire apparatus* during nonemergency conditions
13. Operate the *wildland fire apparatus* under adverse environmental or driving surface conditions
14. Use automotive gauges and controls

Job Performance Requirements

Operate a wildland fire apparatus in compliance with all applicable jurisdictional rules and regulations and operational limitations of the apparatus.

2-2: Produce an Effective Fire Stream

Authority

NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications (2014)

- Paragraph 8.2.1

Office of the State Fire Marshal

Given

1. *Wildland fire apparatus*
2. Water tank
3. Pressurized *water* source
4. Static *water* source

Requisite Knowledge and Skills

1. *Explain* hydraulic calculations for friction loss and flow using both written formulas and estimation methods
2. *Describe the* safe operation of the pump
3. *Discuss* correct apparatus placement
4. *Describe* personal safety considerations
5. *Discuss* the reliability of static *water* sources
6. Position a wildland fire apparatus to operate at a fire hydrant and at a static water source
7. *Position* apparatus for fire attack
8. Transfer power from vehicle engine to pump
9. Draft
10. Operate pumper pressure control systems
11. Operate the volume/pressure transfer valve (multistage pumps only)
12. Operate auxiliary cooling systems
13. Make the transition between internal and external water sources
14. Assemble hose lines, nozzles, valves, and appliances

Job Performance Requirements

Produce an effective fire stream by engaging the pump, setting all pressure control and vehicle safety devices, and achieving the rated flow of the nozzle while monitoring the apparatus for potential problems.

State Fire Training Content

Code Key

Blocks

- G = Given
- RKS = Requisite Knowledge and Skills
- JPR = Job Performance Requirements
- NCTS = New certification training standard

Certification: Fire Apparatus Driver/Operator – Wildland Fire Apparatus

CTS	Block	Addition	Justification	Source/Reference
1-1	G	Tools and equipment	Needed to perform the JPR	N/A
1-1	G	Maintenance and inspection forms	Needed to perform the JPR	N/A
2-1	G	Applicable laws and regulations	Needed to perform the JPR	N/A
2-2	G	Wildland fire apparatus	Needed to perform the JPR	N/A