



FIRE APPARATUS ENGINEER

Exam Code: 8FS04

Department(s):	Department of Forestry & Fire Protection
Opening Date:	March 2, 2018
Closing Date:	March 30, 2018
Type of Recruitment:	Open - Nonpromotional
Salary:	\$3,904.00 to \$4,700.00
Employment Type:	Limited Term Full-Time Permanent Full-Time
Exam Type:	Statewide

EEO

The State of California is an equal opportunity employer to all, regardless of age, ancestry, color, disability (mental and physical), exercising the right to family care and medical leave, gender, gender expression, gender identity, genetic information, marital status, medical condition, military or veteran status, national origin, political affiliation, race, religious creed, sex (includes pregnancy, childbirth, breastfeeding and related medical conditions), and sexual orientation.

DRUG FREE STATEMENT

It is an objective of the State of California to achieve a drug-free state work place. Any applicant for State employment will be expected to behave in accordance with this objective, because the use of illegal drugs is inconsistent with the law of the state, the rules governing civil service, and the special trust placed in public servants.

WHO SHOULD APPLY?

Applicants who meet the minimum qualifications. Applications will NOT be accepted on a promotional basis.

FILING INSTRUCTIONS

Final Filing Date: **March 30, 2018**

Examination/Employment Application (STD. 678) is available at the California Department of Human Resources' website at [State Application](#). Examination/Employment Application (STD. 678) may be submitted by mail or delivered in person.

SUBMIT BY MAIL:

Department of Forestry and Fire Protection
Examination Unit – (Attention: Julie Renteria)
P.O. Box 944246
Sacramento, CA 94244-2460

SUBMIT IN PERSON:

Department of Forestry and Fire Protection
Examination Unit – (Attention: Julie Renteria)
1300 U Street
Sacramento, CA 95818

Note: Applications **will not** be accepted via e-mail.

Applications postmarked or personally delivered after the final filing date, **March 30, 2018**, will not be accepted for any reason.

Dates printed on Mobile Bar Codes, such as the Quick Response (QR) Codes available at the USPS, are not considered Postmark dates for the purpose of determining timely filing of an application.

SPECIAL TESTING ARRANGEMENTS

If you have a disability and need special testing arrangements, mark the appropriate box on the application and/or contact the Department of Forestry and Fire Protection at (916) 445-7824.

SALARY INFORMATION

\$3,904.00 to \$4,700.00

ELIGIBLE INFORMATION

A Departmental eligible list will be established for the Department of Forestry and Fire Protection. This list will be abolished 12 months after it is established unless the needs of the service and conditions of the list warrant a change in this period.

REQUIREMENTS FOR ADMITTANCE TO THE EXAMINATION

All applicants must meet the education and/or experience requirements for this examination by the written examination date.

NOTE: Accepted applicants are required to bring either a photo identification card or two forms of signed identification to each phase of the examination.

All applications must include "from" and "to" employment dates (month/day/year), time base, and applicable civil service class titles as well as a detailed list of duties performed. Applications received without this information will be rejected.

MINIMUM QUALIFICATIONS

Possession of a valid driver license of the appropriate class issued by the Department of Motor Vehicles. Applicants who do not possess the license will be admitted to the examination but must secure the license prior to appointment.

and

Experience:

"Either" I

Eight months of fire-fighting experience. (Candidates who are within two months of satisfying the experience requirement will be admitted to the examination, but they must meet the experience requirement before being eligible for appointment.)

"Or" II

Enrollment in the California Fire Fighter Joint Apprenticeship Committee Preapprenticeship Outreach Program.

and

Three months of fire-fighting experience until December 31, 1983; six months of fire-fighting experience until December 31, 1984; or eight months' fire-fighting experience thereafter.

“Or” III

Two years of experience as a certified volunteer firefighter.

NOTE: Applicants applying under this pattern will be required to provide a copy of one of the following documents when submitting an Examination/Employment Application (STD 678) for hiring purposes:

California State Fire Marshal (SFM) Volunteer Fire Fighter Certificate

California SFM Fire Fighter I Certificate

Copy of an application for a California SFM Fire Fighter I Certification or SFM Volunteer Fire Fighter Certification signed by the Fire Chief or designee

A letter signed by the Fire Chief of your volunteer fire company stating that you have met all requirements necessary to receive either a California SFM Fire Fighter I certificate or a California SFM Volunteer Fire Fighter certificate

California SFM Fire Fighter I accredited Fire Academy certificate or equivalent

California Fire Fighter I Fire Academy certificate taught at a California College

A letter on official letterhead signed by the dean, registrar, or designee certifying successful completion of a California SFM accredited Fire Fighter I Fire Academy

Transcripts from a California college indicating completion of a SFM Fire Fighter I Academy

“Or” IV

Two years of experience as a Fire Prevention Specialist II and successful completion of the mandatory training courses prescribed for a Department of Forestry and Fire Protection Fire Fighter I.

POSITION DESCRIPTION

Fire Apparatus Engineers drive and operate fire apparatus during wildland and structural firefighting operations; lead an assigned crew in the performance of firefighting duties; maintain and make minor repairs on vehicles, equipment, and fire stations; perform fire prevention tasks; and may perform paramedic duties in emergency medical situations.

EXAMINATION INFORMATION

The examination will consist of a written test weighted 100%. The written examination will consist of predetermined job-related questions from the following categories:

- Administration
- Emergency Medical Services
- Emergency Operations
- Fire Behavior
- Grammar, Punctuation and Spelling
- Mathematics
- Mechanical Skills
- Mobile Equipment/Pumping
- Reading Comprehension
- Safety
- Tools and Equipment

In order to obtain a position on the eligible list, a minimum rating of 70% must be attained.

CANDIDATES WHO DO NOT APPEAR FOR THE WRITTEN EXAMINATION WILL BE DISQUALIFIED.

It is anticipated that the written examination will be held during **May/June 2018**.

KNOWLEDGE, SKILLS, AND ABILITIES

Scope:

Knowledge of:

1. Lookouts, Communication, Escape Routes, Safety Zones (LCES) to mitigate incidents safely.
2. Wildland firefighting safety rules of engagement for safe operations.
3. Factors affecting wildland fire behavior.
4. Principles and practices of emergency medical procedures; Cardiopulmonary Resuscitation (CPR); Automated External Defibrillator (AED); to safely respond to and render medical aid.
5. Patient assessment to effectively treat patients at the Basic Life Support (BLS) level.
6. Emergency scene safety practices to ensure the safety of the public and emergency response personnel.
7. Fire suppression principles for various types of fire to safely and effectively mitigate an incident.
8. Basic fire behavior to identify the most effective extinguishing methods.
9. Fire suppression practices and procedures for various types of fire to safely and effectively mitigate an incident.
10. Strategies and tactics used to safely and effectively suppress various types of fires.
11. Emergency operations to mitigate incidents in a safe and efficient manner.
12. Life hazard notification policies to ensure firefighter safety.
13. Safety gear to ensure compliance with safety rules, regulations, and personal safety.
14. Rescue, Exposure, Confinement, Extinguishment, Overhaul (RECEO) with salvage and ventilation procedures to effectively mitigate the incident.
15. Occupational Safety and Health Agency policies to ensure personnel safety and compliance with State and Federal law.
16. Wildland-urban interface strategies and tactics for structure defense to safely and adequately defend life, property, and resources.
17. Safety precautions to provide protection from communicable diseases.
18. Patient triage procedures and techniques to ensure appropriate treatment is administered.
19. Fire tools and equipment to ensure proper use and maintenance.
20. Fire apparatus and their capabilities for effective use and maintenance.
21. Incident accountability techniques to ensure personnel safety.
22. Command systems for proper organization and structure.
23. Rescue/extrication equipment to safely and effectively remove entrapped victims.
24. Basic vehicle maintenance and repair to ensure safety and operational readiness.
25. Fire ground hydraulics to provide safe and effective water use.
26. Mobile communication devices for effective communication.
27. Fire service ladders to ensure operational readiness and personnel and public safety.
28. Maintenance and operation of Department mobile equipment to ensure safe and effective utilization.
29. Building construction to determine appropriate fire suppression tactics and ensure firefighter safety.
30. Fire hose types to ensure appropriate use in fire suppression and other activities.
31. Rescue/extrication techniques to safely and effectively remove entrapped victims.
32. Structural chainsaw operations to ensure life, safety, and compliance with Department Chainsaw policy.
33. Maintenance and inspection methods for safety gear to ensure compliance with safety rules, regulations, and personal safety.
34. Various terminology to communicate effectively.
35. Hazardous material incident operations to analyze the situation and determine the appropriate actions to safely minimize and/or mitigate an incident.
36. Firing tools and equipment used during fire activities for safe and effective fire operations.
37. Extinguishing agents and their appropriate application during fire suppression.
38. Reference materials to ensure firefighter safety and survival.
39. Wildland chainsaw operations for fire control and firefighter safety per National Wildfire Coordinating Group (NWCG) and Department policy.
40. Specialized rescue procedures to safely and effectively rescue entrapped victims.
41. State-wide radio call plan to effectively communicate with Emergency Command Centers and other emergency responders.
42. Fire protection systems for preplanning and fire suppression.
43. Weather observation tools and techniques to obtain location specific weather information.
44. Basic mechanical systems for rescue operations.
45. Navigational aids for assistance in navigation and mapmaking.
46. Fire hose maintenance to ensure operational readiness and firefighter safety.

47. Tactics and techniques used in aerial firefighting to assist in fire suppression activities.
48. Applicable Department policies and procedures for effective job performance.
49. Federal, state, and local regulations affecting emergency plans to ensure personnel are in compliance during emergency operations.
50. Hazardous material incident command structure to safely mitigate an incident.
51. Department forms for effective job performance.
52. Various fire cause classifications for statistical and investigative purposes.
53. Departments' and cooperating agencies' communications systems to allow effective communications between agencies.
54. Fire prevention principles and practices to prevent fires and provide fire safety.
55. Direct Protection Areas to accurately and adequately suppress and manage incidents.
56. Hazardous material storage to ensure environmental safety and compliance with local, State, and Federal laws.
57. Helicopters and helitack equipment capabilities for use in air operations.
58. Agency responsibility as it relates to fiscal accountability.
59. Helicopter and helitack safety procedures to ensure the safety of personnel.
60. Fixed wing aircraft capabilities and limitations to assist with aerial firefighting suppression activities.
61. Fixed wing safety procedures to ensure the safety of personnel.
62. Basic construction for appropriate maintenance and project completion.
63. Mathematic calculations for effective job performance.

Skill to:

1. Operate Self Contained Breathing Apparatus equipment for effective operation and use.
2. Safely drive and operate emergency equipment through adverse conditions.
3. Render basic medical aid to stabilize patients.
4. Perform arduous physical activity in all conditions and terrain for effective job performance.
5. Operate medical devices to render medical aid.
6. Operate firefighting equipment for safe and effective use during fire suppression and training.
7. Operate various types of ladders for safe and effective operation.
8. Use extrication tools and equipment to rescue pinned or trapped victims.
9. Multi-task during emergency and non-emergency situations.
10. Speak to others to effectively convey information.
11. Manipulate various tools for safe and effective use.
12. Construct a fire line using tools to limit fire spread in various fuel types and conditions.
13. Use communication equipment for effective communication in emergency and non-emergency situations.
14. Tie knots to prepare patients, personnel, or equipment for movement and rescue.
15. Use navigation tools for assistance in navigation and mapmaking.
16. Produce written correspondence to effectively convey information.

Ability to:

1. Recognize life safety hazards and make appropriate decisions for resolution.
2. Adequately administer emergency medical care to ill or injured persons.
3. Communicate effectively in stressful situations.
4. Maintain situational awareness during stressful situations.
5. Communicate effectively in English.
6. Properly manage a firefighter emergency on wildland or structural incidents.
7. Perform arduous physical activity for effective job performance.
8. Recognize the characteristics of fire behavior to ensure firefighter and public safety.
9. Lead a fire suppression crew during an incident.
10. Recognize the characteristics of smoke.
11. Analyze situations for development and implementation of an effective course of action during emergency and non-emergency situations.
12. Lead personnel.
13. Safely use and maintain firefighting tools and equipment.
14. Determine appropriate route for response to emergency calls.
15. Communicate effectively using a variety of terminology.
16. Use mobile communication devices for effective communication.
17. Manage emergency incidents according to established procedures.
18. Accurately compute hydraulic calculations.
19. Evaluate operational resources for appropriate use and effectiveness.

20. Read and interpret reference materials for effective application.
21. Perform preventative maintenance on mobile equipment.
22. Identify the point of origin of a fire.
23. Solve mathematical problems.
24. Assist in personnel functions.
25. Conduct and document defensible space inspections according to Public Resource Code 4291.
26. Interpret applicable codes, laws, rules and regulations to ensure appropriate application in all administrative and firefighter activities.

VETERANS' PREFERENCE

Veterans' Preference will be granted for this examination. Effective January 1, 2014, in accordance with Government Codes 18973.1 and 18973.5, Veterans' Preference will be awarded as follows: 1) Any veteran, widow or widower of a veteran, or spouse of a 100 percent disabled veteran, who achieves a passing score in an entrance examination, shall be ranked in the top rank of the resulting eligibility list. Any veteran who has been dishonorably discharged or released is not eligible for Veterans' Preference. 2) An entrance examination is defined, under the law, as any open competitive examination. And 3) Veterans' Preference is not granted once a person achieves permanent civil service status. Veteran status is verified by the California Department of Human Resources (CalHR). Directions to apply for Veterans' Preference are on the Veterans' Preference Application (Std. Form 1093), which is available at <https://jobs.ca.gov/CalHRPublic/Landing/Jobs/VeteransInformation.aspx>, and the Department of Veterans Affairs.

CAREER CREDITS

Three career credits will be added to the final score of all competitors in this examination who qualify for the credits and attain a passing mark on the examination. (See "General Information" on this bulletin for information regarding career credits.)

SPECIAL PERSONAL CHARACTERISTICS

Willingness to have distant visual acuity (Snellen) of not less than 20/100 without corrective lenses in each eye, separately corrected to not less than 20/40 in one eye with corrective lenses; distant binocular acuity (Snellen) of at least 20/40 in both eyes with or without corrective lenses; color vision adequate to successfully perform the job as measured by the Ishihara Pseudo-Chromatic Plate Test or for persons failing the Ishihara, the Farnsworth D-15 Arrangement Test; hearing adequacy within speech frequencies (uncorrected); full use of both hands and both feet; physical strength and agility; weight in proportion to height; no more than a mild reaction to poison oak; perform arduous physical activity; cooperate with others; work in adverse conditions; comply with the Department's Code of Conduct; work in hazardous conditions; follow chain of command; participate in training sessions to increase technical, administrative, and manipulative skills; perform job duties for extended periods of time without rest; perform in high places; perform other duties as required; be exposed to medical hazards; to live and work in remote areas and on weekends and holidays; to remain on duty 24 hours a day, as required.

SPECIAL REQUIREMENTS

JOINT APPRENTICESHIP COMMITTEE PROGRAM

Eligibles selected for positions in this classification are placed in an apprenticeship program. Continued employment is conditional upon successful completion of the Fire Fighter and Company Officer Academies which are conducted at the Department of Forestry and Fire Protection (CAL FIRE) Academy.

BACKGROUND INVESTIGATION INFORMATION

Candidates selected for a permanent or limited-term appointment will be required to complete a Background Certification Statement regarding criminal convictions. A criminal conviction may preclude a candidate from employment; however, appointment commitments will be determined on a case-by-case basis.

MEDICAL EXAMINATION

A medical examination is conducted prior to appointment. Tests include a basic clinical examination, including medical history, visual acuity test, audiometry, pulmonary function test, and other tests as may be determined necessary. Any limitation which restricts a person from safely performing the duties of the position may constitute basis for removal of the candidate's name from the eligible list.

CANDIDATE PHYSICAL ABILITY TEST

Prior to appointment, candidates will be required to successfully pass a Candidate Physical Ability Test (CPAT) administered by the California Fire Fighter Joint Apprenticeship Committee (CFFJAC).

ADDITIONAL DESIRABLE QUALIFICATIONS

Education equivalent to completion of the twelfth grade.

CONTACT INFORMATION

Department of Forestry and Fire Protection
P.O. Box 944246
Sacramento, California 94244-2460
(916) 445-7824
CALFIREexams@fire.ca.gov

TDD is Telecommunications Device for the Deaf and is reachable only from phones equipped with a TDD Device

1 (800) 735-2929 (TT/TDD) 1 (800) 735-2922 (Voice)

STS is Speech-to-Speech Service for persons with a speech disability and is reachable at
1 (800) 854-7784 (California) or 1 (800) 947-8642 (Nationwide)

DISCLAIMER

Please go to the following website to review the official California Department of Human Resources (CalHR) class specification: <http://www.calhr.ca.gov/state-hr-professionals/pages/1077.aspx>

GENERAL INFORMATION

For an examination with a written feature, it is the candidate's responsibility to contact the Department of Forestry and Fire Protection, (916) 445-7824, three days prior to the written test date if he/she has not received his/her notice of appointment.

For an examination without a written feature, it is the candidate's responsibility to contact the Department of Forestry and Fire Protection three weeks after the final filing date if he/she has not received his/her notice.

If a candidate's notice of oral interview or performance test fails to reach him/her three days prior to their scheduled appointment due to a verified postal error, he/she will be rescheduled upon written request.

Examination Locations: When a written test is part of the examination, it will be given in such places in California as the number of candidates and conditions warrant. However, locations of interviews or performance evaluations may be limited or extended as conditions warrant.

Applications are available [online](#) at CalHR, local offices of the Employment Development Department and the testing Department on this job bulletin.

If you meet the requirements stated on this bulletin, you may take this examination, which is competitive. Possession of the entrance requirement does not assure a place on the eligible list. Your performance in the examination will be compared with the performance of the others who take this test, and all candidates who pass will be ranked according to their scores.

The testing Department reserves the right to revise the examination plan to better meet the needs of the service, if the circumstances under which this examination was planned change. Such revision will be in accordance with civil service laws and rules and all competitors will be notified.

General Qualifications: Candidates must possess essential personal qualifications including integrity, initiative, dependability, good judgment, and ability to work cooperatively with others; and a state of health consistent with the ability to perform the assigned duties of the classification. A medical examination may be required. In open examinations, investigation may be made of employment records and personal history and fingerprinting may be required.

Eligible Lists: Eligible lists established by competitive examination, regardless of date, must be used in the following order: 1) sub-divisional promotional, 2) Departmental promotional, 3) multi-Departmental promotional, 4) service-wide promotional, 5) Departmental open, 6) open. When there are two lists of the same kind, the older must be used first. Eligible lists will expire in one to four years unless otherwise stated on the bulletin.

Promotional Examinations Only: Competition is limited to employees who have a permanent civil service appointment and military veterans that meet all the minimum qualifications. Under certain circumstances, other employees may be allowed to compete under provisions of Rules 234, 235, and 235.2. State Personnel Board Rules 233, 234, 235, 235.2, and 237 contain provisions regarding civil service status and eligibility for promotional examinations. These rules may be reviewed at Departmental personnel offices or www.jobs.ca.gov.

If High School Equivalence is Required: Equivalence to completion of the 12th grade may be demonstrated in any one of the following ways: 1) passing the General Educational Development (GED) Test; 2) completion of 12 semester units of college work; 3) certification from the State Department of Education, a local school board, or high school authorities that the candidate is considered to have education equivalent to graduation from high school; 4) for clerical and accounting classes, substitution of business college work in place of high school on a year-for-year basis.

Veterans' Preference: Effective January 1, 2014, in accordance with Government Codes 18973.1 and 18973.5, Veterans' Preference will be awarded as follows: 1) Any veteran, widow or widower of a veteran, or spouse of a 100 percent disabled veteran, who achieves a passing score in an entrance examination, shall be ranked in the top rank of the resulting eligibility list. Any veteran who has been dishonorably discharged or released is not eligible for Veterans' Preference. 2) An entrance examination is defined, under the law, as any open competitive examination. And 3) Veterans' Preference is not granted once a person achieves permanent civil service status. Veteran status is verified by the California Department of Human Resources (CalHR). Directions to apply for Veterans' Preference are on the Veterans' Preference Application (Std. Form 1093), which is available at <https://jobs.ca.gov/CalHRPublic/Landing/Jobs/VeteransInformation.aspx>, and the Department of Veterans Affairs.

Career Credits: In open, non promotional examinations, career credits are granted to: 1) State employees with permanent civil service status, 2) full-time employees of the State who are exempt from State civil service pursuant to the provisions of Section 4 of Article VII of the California Constitution, and who meet all qualification requirement specified by the Board and have 12 consecutive months of service in an exempt position, and 3) individuals who have served one full year in, or are graduates of, the California Conservation Corps (eligibility shall expire 24 months after graduation from the California Conservation Corps). Three points are added to the final test score of those candidates who meet the above criteria, and who are successful in the examination. Such examinations cannot be for managerial positions described in Government Code Section 3513. Competitors not currently employed in State civil service who have mandatory reinstatement rights may also be eligible for career credits, but they must explain their service status in the appropriate section of the Examination/Employment Application. (STD. 678).

Felony Disqualification: You are disqualified from being employed as a peace officer if: 1) you have been convicted of a felony in California or any other State; 2) you have been convicted of any offense in any other State which would have been a felony if committed in California; 3) you have been charged with a felony and adjudged by a superior court to be mentally incompetent; 4) you have been adjudged addicted or in danger of becoming addicted to narcotics, convicted, and committed to a State institution. If you have been convicted of a felony, you may be allowed to participate in this examination if your conviction(s): 1) has/have been sealed under Penal Code Section 851.7, 851.8, 1203.45, or Health and Safety Code Section 11361.5; 2) has/have been expunged or is/are expugnable pursuant to Health and Safety Code Section 11361.5 regarding marijuana offenses; 3) was/were stipulated or designated to be a lesser included offense of marijuana possession under Health and Safety Code Section 11557 or 11366.

Confidentiality and Security: Pursuant to Government Code Sections 19680(c) and 19681(b) it is unlawful to copy and/or furnish confidential examination material for the purpose of either improving or injuring the chances of any person or to obtain examination questions or other examination material before, during, or after an examination. Every person violating these provisions is guilty of a misdemeanor, and adverse action will be pursued. This may result in the person being barred from competition in future examinations, withheld from certification lists, or cancellation of eligibility for employment in State civil service.