

**SAN FRANCISCO FIRE DEPARTMENT  
2024 FIRE LIEUTENANT (H020) WRITTEN EXAM**

**CANDIDATE TEST PREP GUIDE**



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# Candidate Information

## Introduction

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Ergometrics & Applied Personnel Research, Inc., is a human resource management firm specializing in personnel selection and training. Established over 40 years ago, Ergometrics has designed the most comprehensive, award-winning, video testing and job simulation testing programs in the nation. We have provided personnel testing services for over 2,500 clients in the U.S. and Canada, including many local entities.

The San Francisco Department of Human Resources (DHR) has contracted Ergometrics to assist with the development, validation, and administration of the H020 Fire Lieutenant 2024 promotional process. DHR and Ergometrics partnered with many members of the San Francisco Fire Department (SFFD) during the development and validation of the exam. The purpose of this guide is to provide uniform information to all candidates regarding the H020 Lieutenant examination process.

Thank you for participating in the 2024 Lieutenant promotional process. You have already performed highly responsible work in your current position. Should you be promoted, your performance will impact many more people both inside and outside the department. You will manage subordinate activities, assuming all supervisory responsibility, and serve as a role model for many in the department.

***Disclaimer:*** *The information provided in this handout is meant to be helpful and prepare you for the general nature of the exam. It is not meant to advise you of every question that will be asked. It is expected that candidates at the level of Lieutenant will be able to flexibly adjust to conditions that are not exactly as they may have expected.*

## Test Components, Date, and Location

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Test Component	Tentative Date	Location
Written Exam	November 19, 2024	San Francisco, CA 94109*

*\*Exact date and location will be confirmed by DHR prior to the exam.*

## Reference List

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Candidates should be familiar with the Fire Department manuals and other references listed below. This is a suggested reference list only. Test material may be drawn from the materials listed below. Refer to the most recent editions of any materials listed [e.g., Department Policies, Department Rules and Regulations, Department Manuals, etc.] published/issued prior to September 30, 2023. It may also be based on the collective Fire Service experience of subject matter experts.

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- Apparatus Inventory Manual
- Breathing Apparatus Manual
- Building Construction Manual (IFSTA) (Plus Study Guide)
- Command Post Operations
- Communications Manual
- Disaster Manual
- SFFD Drill Manual
- Extinguisher Manual
- Fire Boat Manual
- Fire Investigation Manual
- Forcible Entry Manual
- Hazardous Materials Operations Guide
- High Rise Manual
- Hose and Hose Appliance Manual
- Hotel and Apartment Inspection (R1 and R2) Operating Guide
- Incident Command System Manual
- Injury/Illness Prevention Program Manual
- Managing Employee Performance Manual and Procedures Guidebook
- The North American Emergency Response Guidebook/DOT
- National Fire Incident Reporting System-Quick Reference Guide
- National Fire Incident Reporting System -The Basics
- Pump Operations Manual
- Rapid Intervention Crews
- Risk Management
- Rules and Regulations and revisions to Article 39 and 40
- Salvage Practices Manual
- Solar Photovoltaic (PV) System Safety and Fire Ground Procedures
- Standard Rope Practices Manual
- Transit Manual
- Truck and Ladder Manual
- Valve Operating Unit Manual
- Vehicle Operations Manual
- Ventilation Manual
- Water Rescue Operations Manual
- Water Supply Manual
- Wildland Urban Interface Manual
- The Reference Booklet of Sample Reports
- Department General Orders
- Current Department Training Bulletins
- CD2 Memos

SFFD manuals are available for purchase at the Division of Training. Contact the Division of Training for the availability of non-SFFD references. It is an applicant's responsibility to update

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the publications listed as suggested reading materials by acquiring any Department-authorized revisions, supplements, and/or replacements.

**Analysis of Results**

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Following the administration of the Administrative and Management and Fire Tactical Incident Following the administration of the Written Exam, Ergometrics will score the exam using evaluation standards that were developed, reviewed, and finalized by SFFD subject matter experts. Candidates who pass the exam will be eligible to move forward to the assessment center.

**Protest**

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Under the Civil Service Rule 311 (see below), candidates have the right to file protests related to allegations of bias, malfeasance, or misfeasance by the exam administrators. The protest process will follow the guidelines set out in Rule 311.

**Rule 311 Examinations**

**Article III: Inspection and Appeal Procedure**

**Applicability:** Article III, Rule 311 shall apply to all classes of the Uniformed Ranks of the San Francisco Fire Department.

**Sec. 311.10 Rating Keys**

Rating keys shall not be available for review or inspection, except as otherwise provided in Section 311.10.1. Protests of questions or answers on any examination shall not be allowed.

**311.10.1 Release of Examination Questions and Rating Key**

Notwithstanding any other provision of this Rule 300 series, the test questions, rating keys, and similar information pertaining to the H020 Lieutenant examination administered in 2024 may be disclosed by the Director of Human Resources subject to Civil Service Commission approval, on a nondiscriminatory basis to persons scheduled to take a subsequent H020 Lieutenant examination to be administered following adoption of this provision.

**Sec. 311.11 Protests and Appeals – Examination Administration**

**311.11.1**

All protests regarding the administration of an examination component must be filed in writing with the Fire Department Examination Unit within seven (7) calendar days of the administration of that specific examination component. A day the Examination Unit is closed shall not be counted as a calendar day. Protests shall be limited to allegations of bias, malfeasance, or misfeasance by exam administrators.

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**311.11.2**

All protests properly filed under this section shall be resolved in accordance with the provisions of these Rules. The decision of the Human Resources Director on these protests may be appealed to the Civil Service Commission. Appeals of the Human Resources Director's decisions must be filed as provided elsewhere in these Rules.

# Test Security and Confidentiality

You will be required to sign a copyright and nondisclosure agreement stating that you have not and will not violate test security. Breach of this agreement is subject to prosecution under federal copyright law and would be viewed as an unacceptable integrity failure for an employee, particularly a management candidate. Additionally, to maintain test security, there are specific devices not allowed in the testing session due to test security, confidentiality, and laws associated with this testing. These include cellular phones, pagers, audio/radio headsets, cameras, recording devices, or other electronic communication devices.

## Sample Agreement

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### Copyright and Nondisclosure Agreement

I understand that I am being exposed to confidential information and/or material and that absolute confidentiality is required. Improper use of these materials may permanently compromise the value of tests and is strictly prohibited. Any person who attempts to violate the copyright or confidentiality of these tests and all associated information and materials may be subject to civil damages.

I understand the copyright and nondisclosure requirements and the necessity for confidentiality of these materials and agree not to discuss or otherwise disclose information about them with anyone, or reproduce them in any way, either from memory or otherwise during or following this exam.

I certify to the truth of the above statements.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name (*Please Print*): \_\_\_\_\_

## General Test Information

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- You will be responsible for monitoring your own time during the exam. A countdown timer will be on the screen to assist you. No smart watches are allowed.
- Candidates are prohibited from receiving/sending pages, texts, or phone calls during any part of the promotional process. **No electronic communication devices are allowed** at the testing site.
- Get rest and a good night's sleep prior to your exam.
- Arrive early. This is one of the easiest and most effective ways to minimize stress.
- Candidates are prohibited from removing any material from the testing site.
- There is no dress code for the written exam. Feel free to dress as you would like.

The loss or disclosure of examination information or material, unintentional or otherwise, is a very serious matter as it can render a test invalid and useless. Because examinations represent a significant investment in time and money to develop and administer, and in candidate time spent preparing, any loss of test security can be very costly, disruptive, and harmful to the operations of the Fire Department.

Sec. 311.7 of the Civil Service Rules states that: *[...] Any person cheating, attempting to cheat or assisting other persons in cheating in any phase of the examination process shall be prosecuted to the full extent of the Charter and other laws. Actions to be taken include elimination from the examination process, dismissal and ineligibility for future employment.*

Charter Sec. 10.101 notes that: *The [Civil Service] Commission shall have power to institute and prosecute legal proceedings for violations of any civil service merit system or Department of Human Resources provisions of this Charter. [...] In any hearing conducted by the Commission or by any hearing officer it appoints pursuant to this section, the Commission or the hearing officer shall have the power to subpoena and require the attendance of witnesses and the production of records.*

## How You Can Help

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You can help contribute to a professional testing program by avoiding situations that might be misinterpreted by other candidates. Forming study groups with other candidates is considered acceptable, but otherwise, refrain from discussing the test as this type of communication can be misinterpreted by others as unethical behavior. Additionally, refrain from asking questions of those experts who participated in the development or validation process, even if they are general questions. All participating experts signed a detailed confidentiality agreement, and it is inappropriate to ask them questions as it places the expert in a difficult conflict of interest situation.



# Questions and Requests for Additional Information

Ergometrics and DHR are committed to providing as much information as is feasible and appropriate to candidates. As such, you will be able to submit questions regarding the contents of this prep guide to DHR. However, DHR cannot answer one candidate's question without sharing the information with everyone -- the goal is to share the same information with candidates at the same time. Therefore, phone calls, e-mails, and any other forms of inquiry from individuals will not be answered to the individual. Rather, information will be shared with all candidates using parallel channels, such as an e-mail notification, Department Bulletins, postings on the intranet, or group announcements.

Some information cannot be shared due to the following reasons: (a) providing the information would jeopardize test security or the confidentiality of results, (b) continued work on the test or on the scoring of results is occurring, (c) the information will be shared only after it has been shared with all candidates, or (d) an answer is not available at that time. Due to the sensitivity of the information, Ergometrics and DHR are reluctant to speculate, offer an opinion, or answer hypothetical questions.

Please submit your questions regarding the prep guide to [dhr-publicsafety@sfgov.org](mailto:dhr-publicsafety@sfgov.org) by **October 28<sup>th</sup>, 2024**, and write "H020" in the subject line. Responses to all relevant questions will be emailed to you and posted on the DHR website (<http://www.sfdhr.org>) no later than November 4<sup>th</sup>, 2024. For obvious reasons, we cannot answer questions that might compromise the security or validity of the test. Again, submit your questions to [dhr-publicsafety@sfgov.org](mailto:dhr-publicsafety@sfgov.org).

It is important that we have a current valid email address to send all official notifications. If you change your email address or name after filing your application, please log into your SmartRecruiters profile and select "Update My Contact Info."

## Written Exam Overview

For the written exam, candidates will be presented with scenario that a San Francisco Fire Lieutenant will experience on the job. After reading the scenario, you will be provided with 4 possible responses to the situation and asked to select the BEST answer and the WORST answer from the choices provided. The test questions are based on the reading list (above) that was published by the department. The following is additional information about the written exam:

- The Book-Referenced Exam consists of 80 questions.
- Candidates will be given three (3) hours to take the exam.
- Candidates will be provided with a machine-scored answer sheet on which to mark their answers during the exam.
- The exam is a closed-book exam. Candidates are not allowed to bring any material from the reading list to the testing site.
- Only the answer sheets will be scored. Candidates are allowed to make notes in the test booklet; however, test booklets will not be reviewed.
- Two pencils per candidate will be provided for the exam.

### Example Written Exam Questions

Note: These sample items have been developed from the San Francisco Fire Department Rules and Regulations (Revised 2024).

#### **Sample Scenario 1**

*You are a Lieutenant responding to a structure fire where access is needed through a locked, electrically operated (automated) overhead garage door of single-piece construction. There are no immediate life hazards, but entry is necessary for fire attack. The power to the building has been cut. What is the most effective and least effective approach to gain entry in this scenario?*

**Option A:** *Use a chainsaw to cut a "V" in the door, detaching the metal track arm from the garage door.*

**Option B:** *Attempt to use a San Francisco Ceiling Hook to pry open the door from the bottom, trying to disengage the locking mechanism.*

**Option C:** *Use an axe or sledgehammer to break through the panel, creating an opening large enough for firefighters to enter.*

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**Option D:** *Employ a power saw to make two vertical cuts on one side of the door, then use a battering ram to drive the cut-away portion into the garage.*

1. What is the most effective response in this scenario?

- A) Option A
- B) Option B
- C) Option C
- D) Option D

2. What is the least effective response to this scenario?

- A) Option A
- B) Option B
- C) Option C
- D) Option D

**Sample Scenario 2**

*You are the Lieutenant of a Ladder Company, and you are on the scene of a building fire. Your Company has been assigned by the Incident Commander to ventilate the roof. While on the roof, one of your experienced firefighters suggests a different ventilation technique that he believes would be more effective in this situation. What is the most effective and least effective response to this situation?*

**Option A:** *Stick to the original plan as ordered by the Incident Commander.*

**Option B:** *Allow the firefighter to implement their suggested technique immediately.*

**Option C:** *Quickly assess the firefighter's suggestion and, if you agree, request permission from the Incident Commander to modify the approach.*

**Option D:** *Acknowledge the firefighter's input but instruct the team to continue with the original plan, noting to discuss improvement suggestions in the post-incident review.*

3. What is the most effective response in this scenario?

- A) Option A
- B) Option B
- C) Option C
- D) Option D

4. What is the least effective response to this scenario?

- A) Option A
- B) Option B
- C) Option C
- D) Option D

The written exam is based on a job analysis. A job analysis is the specific and systematic analysis of the tasks associated with a job, as well as the Knowledge, Skills, and Abilities (KSAs) required to perform the job. The written exam has been developed and reviewed by a panel of San Francisco Fire Department subject matter experts (SMEs). Following is some information that will assist you in preparing for the written exam.

### **Knowledge, Abilities, and Skills**

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The written exam is based specifically on Department General Orders, Department Bulletins, or Department Manuals. The exam may also reflect the combined experience of the test development subject matter experts. The knowledge, abilities, and skills *which may be* evaluated in the written exam are listed below:

#### **Knowledge of Principles and Responsibilities of Supervision & Management:**

Knowledge of responsibilities involved in training probationary firefighters. Knowledge of where to refer personnel for personal or work-related problems, such as the Behavioral Unit. Knowledge of the SFFD Injury/Illness Prevention Program Manual (2008) and all relevant GOs, and the information contained therein. Knowledge of the SFFD Managing Employee Performance Manual and Procedures Guidebook (2008) and the information contained therein. Knowledge of Department computer software [e.g., HRMS, etc.] to efficiently perform on-line aspects of job. Knowledge of the specific criteria for the monthly inspection of stations and personnel. Knowledge of SFFD formal investigation procedures, including the appropriate reports and documentation. Knowledge of capabilities of crew [including technical skills unrelated to their primary job] that can be used at a later time. Knowledge of whom to inform and contact for emergency or routine events. Knowledge of departmental staff and their functions. Knowledge of reports that need to be completed, and when, for each event. Knowledge of appropriate ICS forms to complete following an incident.

**Knowledge of Codes, Regulations, Policies, Procedures, and Laws:** Knowledge of rules and regulations regarding responsibilities of company officers. Knowledge of the contents of Department General Orders. Knowledge of the SFFD Rules, Regulations, and Procedures Guide. Knowledge of the traffic laws pertaining to emergency response procedures. Knowledge of the Department's policies regarding vehicle operation in an emergency response. Knowledge of the Department's radio

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procedures. Knowledge of the policies, general orders, and relevant department procedures and manuals in pre-fire planning. Knowledge of fire codes regarding fire suppression systems. Knowledge of search procedures used by SFFD. Knowledge of the Building Code regarding the types of building exits. Knowledge of turnoff procedures for all utilities (electrical, gas, and water). Knowledge of operation of sprinkler systems and how to operate shutoff valves. Knowledge of alarm systems and how to reset them. Knowledge of procedures for inspecting hydrants and emergency water supply. Knowledge of first responder procedures and equipment. Knowledge of procedures, practices, and policies for operation, inspection, maintenance, and repair of tools and equipment. Knowledge of first alarm area (e.g., streets, construction activity, type of area-residential or business). Knowledge of the Building Code with regard to the occupancy associated with various types of buildings. Knowledge of the Fire and Building Codes regarding types of standpipe systems. Knowledge of the types of sprinkler systems found in San Francisco. Knowledge of departmental policies and procedures for training and instruction during drills. Knowledge of procedures in handling racial and sexual harassment issues. Knowledge of the Department's policies regarding personal appearance. Knowledge of the Department's policies regarding uniforms and protective clothing. Knowledge of the Department's staffing policy regarding the appropriate level of staffing in fire suppression units. Knowledge of emergency medical treatment procedures to assist victims. Knowledge of firefighting SOGs for successive companies responding to an incident. Knowledge of SOGs for overhaul following extinguishment of a fire. Knowledge of the Department's rules and regulations regarding tardiness. Knowledge of the Department's rules and regulations regarding absenteeism. Knowledge of the Department's rules and regulations regarding failure to report. Knowledge of the Department's rules and regulations regarding sick leave and disability rules.

**Knowledge of Firefighting & Suppression Equipment & Resources:** Knowledge of firefighting equipment, its uses, capabilities, and limitations. Knowledge of tools and equipment, and their operation, maintenance, and repair procedures. Knowledge of general principles of hydraulics, water supply, friction loss, back pressure, and hose equipment required to deliver fire stream. Knowledge of nozzles, their use, and adjustments. Knowledge of the SFFD Hose and Hose Appliance Manual and the information contained therein. Knowledge of hose leads and their use. Knowledge of building construction to enable use of firefighting facilities and equipment in building. Knowledge of fire extinguishers, their appropriate use, and their capabilities (e.g., how long they can be used and how far they will spray). Knowledge of the capabilities of fire trucks and engines. Knowledge of hydrant types (single, double, high/low pressures). Knowledge of ladders (sizes and operation) in order to choose appropriate one in firefighting situations. Knowledge of ladder-raising procedures in order to determine where ladders should be placed. Knowledge of the different types of water supply [high and low pressure systems]. Knowledge of the type of firefighting equipment that is available in each structure/building. Knowledge of building materials, in order to

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choose appropriate tools for overhaul procedures. Knowledge of what ventilation tools to use. Knowledge of the capabilities and availability of support units in order to determine which support units need to be called after sizing up fire. Knowledge of SFFD first aid resources available and those on the way (e.g., what assistance is provided by other units). Knowledge of the violations that are to be referred to other agencies. Knowledge of communications systems, equipment, and procedures used by other groups (e.g., Coast Guard, Law Enforcement, ambulance, mutual aid agreements) that affect how SFFD will proceed in its approach to an emergency. Knowledge of traffic patterns at various times of the day to select the fastest route to emergency incidents. Knowledge of SFFD organizational structure to provide useful information to those outside the Department. Knowledge of where to refer questions from the public (e.g., different agencies in the City). Knowledge of special units which can provide assistance at emergency incidents [e.g., cliff rescue, Coast Guard].

**Knowledge of Fire Science:** Knowledge of the behavior, spread, and characteristics of fire. Knowledge of smoke and heat and how they travel (e.g., backdraft). Knowledge of hazardous materials, their implications for firefighting, and their effect on the crew and environmental safety. Knowledge of fire ignition sequence. Knowledge of common electrical hazards (e.g., frayed wires, multiple outlets, pennies in fuse boxes) that would suggest the cause of the fire. Knowledge of probable causes of fire in varying circumstances. Knowledge of arson devices/accelerants and traps and trailers that would suggest the cause of the fire. Knowledge of common arson techniques. Knowledge of common violations that may exist in buildings (e.g., blocked accessed, illegal wiring). Knowledge of various methods of tampering with or bypassing meters and distribution panels (gas and electric).

**Knowledge of References Including SFFD Manuals:** Knowledge of all the standard drills. Knowledge of the Reference Booklet of Sample Reports to complete required forms. Knowledge of city streets and direct routes to emergency incidents. Knowledge of maps and Thomas Guides to city. Knowledge of the IFSTA Building Construction Manual (IFSTA)(Plus Study Guide) and the information contained therein. Knowledge of building construction (e.g., type of building, composition) to determine structural integrity and possible spread of fire. Knowledge of building construction (e.g., type of wall - I to IV) to determine how to ventilate and to assess cause of fire. Knowledge of construction methods, to direct firefighters to overhaul relevant parts of building. Knowledge of building construction, such as plumbing, electricity, and gas, in order to work safely within the building in firefighting situation. Knowledge of the current North American Emergency Response Guidebook/DOT and the information contained therein. Knowledge of the National Fire Incident Reporting System-The Basics and the information contained therein. Knowledge of the National Fire Incident Reporting System-Quick Reference Guide and the information contained therein. Knowledge of the SFFD Hose Appliance Manual (2008) and the information contained therein. Knowledge of the SFFD High-Rise Manual (2008) and the information contained therein.

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Knowledge of the SFFD Transit Manual (2008) regarding operational procedures for BART emergency incidents and MUNI emergency incidents. Knowledge of the Wildland Urban Interface Manual (2008) and the information contained therein. Knowledge of the Incident Command System (ICS) Manual (2008) in order to perform duties at an emergency incident. Knowledge of the SFFD Water Supply Manual (2008) and the information contained therein. Knowledge of the SFFD Drill Manual and the information contained therein. Knowledge of the First Responder's Pocket Guide to Hazmat Emergency Response and the information contained therein. Knowledge of the SFFD Hazardous Materials Operating Guide (2008) and the information contained therein. Knowledge of the SFFD Pump Operations Manual (2008) and the information contained therein. Knowledge of the SFFD Salvage Practices Manual (2008) and the information contained therein. Knowledge of the SFFD Truck and Ladder Manual (2008) and the information contained therein. Knowledge of the SFFD Ventilation Manual (2008) and the information contained therein. Knowledge of the SFFD Fire Boat Manual (2008) regarding waterfront and shipboard fires. Knowledge of the SFFD Disaster Operations Manual (1999) and the information contained therein. Knowledge of the SFFD Apparatus Inventory Manual (2009) and the information contained therein. Knowledge of the SFFD Breathing Apparatus Manual (2008) and the information contained therein. Knowledge of the SFFD Communications Manual (2008) and the information contained therein. Knowledge of the SFFD Extinguisher Manual (2008) and the information contained therein. Knowledge of the SFFD Fire Investigation Operation Guide (2008) and the information contained therein. Knowledge of the SFFD Forcible Entry Manual (2005) and the information contained therein. Knowledge of the SFFD Hotel and Apartment Inspection (R1 and R2) Operating Guide (2008) and the information contained therein. Knowledge of the SFFD Standard Rope Practices Manual (2008) and the information contained therein. Knowledge of the SFFD Valve Operating Unit Manual (2008) and the information contained therein. Knowledge of the SFFD Vehicle Operations Manual (2008) and the information contained therein. Knowledge of the SFFD Water Rescue Operations Manual (2008) and the information contained therein. Knowledge of current departmental training bulletins and the information contained therein. Knowledge of most current departmental rules and regulations (2024).

**Leadership Abilities:** Ability to take command of a situation. Ability to direct others in accordance with plans. Ability to take initiative in making decisions. Ability to carry out activities in a manner that serves as a model for other personnel, presenting a positive command image to subordinates. Ability to creatively address obstacles and problems. Ability to explain reasons for action so that all will cooperate. Ability to keep others informed of developments at the station that affect them or the company. Ability to develop and maintain the respect, trust, confidence and cooperation of subordinates and peers. Ability to fairly and consistently apply rules and policies. Ability to encourage open and honest communications with subordinates. Ability to be honest with others. Ability to follow through on promises. Ability to control personal feelings and to demonstrate respect for others and their opinions. Ability to adapt to the changing of

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personnel within the Department (e.g., to a more culturally diverse, male/female environment). Ability to adapt or improvise methods at the scene of a fire or other emergency situation. Ability to remain calm and to carry out orders when under pressure or in an emergency. Ability to modify opinion when presented with new and relevant facts. Ability to complete work assignments in a thorough manner, with integrity and enthusiasm. Ability to maintain one's personal skill levels in order to participate in and contribute meaningfully to team activities in firefighting situations. Ability to recognize when his or her work is deficient. Ability to accept responsibility when his or her work needs improvement. Ability to place his or her individuality secondary to achieving team objectives. Ability to accept criticism when critiqued in an appropriate manner. Ability to control and direct a training session so that all are participating. Ability to utilize a variety of learning tools, including personal experience, in effectively managing employees. Ability to mitigate conflict at the onset before it escalates into larger problems. Ability to speak clearly at all times, but particularly when under pressure.

**Oral Communication Abilities:** Ability to interact effectively with people from wide variety of backgrounds. Ability to question victims and others in tactful way to get medical history, problem being experienced, and other information needed to help. Ability to relay information that can be understood by people who are upset, distressed, and anxious. Ability to interact with public to explain hazards, so that they know why correction is needed and how they will benefit. Ability to communicate with, comfort and calm victims and their friends or relatives. Ability to listen, even when people are angry and venting. Ability to understand verbal communications from others. Ability to discuss emotionally charged issues with discretion and sensitivity. Ability to understand oral instructions or oral information from superiors, peers or subordinates at the scene of emergency incidents. Ability to communicate verbally information about fire or other emergency to team members. Ability to verbally explain information and procedures in manuals and books to crew. Ability to transmit messages clearly, concisely, and according to proper procedure, using equipment such as radio or telephone. Ability to question individuals who are having difficulties to determine why problems are occurring. Ability to communicate problems with equipment to others. Ability to explain technical information in a way that is understood by those who need to know. Ability to verbally express clearly to firefighters the expected standards of performance. Ability to coordinate emergency response activities with personnel from other departments (e.g., police, ambulance, highway patrol, or Red Cross).

**Critical Thinking Ability:** Ability to assess multiple events and circumstances and to coordinate a response. Ability to relate characteristics of fire to type of occupancy and location of facility. Ability to visualize spread of fire, based upon understanding of construction of building and the characteristics of its contents, in order to determine approach to firefighting activity. Ability to recognize the potential for the emergency to spread and the need for additional resources or assistance. Ability to evaluate



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spread of fire and extent of damage on scene and decide whether to extinguish the fire or protect an exposure. Ability to assess smoke characteristics such as color of smoke during daylight, volume of smoke production, pressure of smoke, and amount of flame production, in order to know stage of fire, firefighting strategy, and when/how to ventilate. Ability to assess situation at emergency scene in order to instruct company where to position apparatus. Ability to estimate or gauge distances/heights so as to order appropriate ladder for fire escapes or to place aerial ladder. Ability to evaluate the information obtained from fire fighters at emergency incidents in order to determine what needs to be done. Ability to retain and describe circumstances, conditions, and events that are noticed at the outset of an emergency. Ability to select, organize, and present pertinent information in logical order. Ability to assess the risk involved in rescue operations, and to perform accordingly. Ability to recognize dangerous situations involving crowds. Ability to recognize a hazardous materials incident and respond appropriately. Ability to evaluate extent of injuries in determining rescue operations (e.g., whether to apply first aid or remove victim from problem area. Ability to assess severity of injuries, and to decide whom to treat first, in multiple-injury accidents. Ability to assess the safety characteristics of the roof structure. Ability to recognize condition of the building on fire by feel or touch (e.g., that roof is "spongy"). Ability to recognize and understand fire-ground hand signals. Ability to recognize and preserve a potential piece of evidence for determining the cause of fire. Ability to formulate procedures for collecting and combining information from various reports. Ability to draw logical conclusions from a body of facts (e.g., in initial size-up of fire or emergency situation). Ability to integrate information from non-SFFD sources (e.g., BART, hospital) with SFFD rules, regulations, and procedures. Ability to remember special features of building layout learned from inspections (e.g., location of doors, fire equipment) in order to use later in firefighting situation. Ability to read and interpret floor plans. Ability to apply information gathered from floor plans in one location to a different location in same building. Ability to recognize implications of floor plans of building in order to use them in firefighting situation. Ability to remember locations of buildings, streets, fire hydrants, etc., based on frequent observations of the area. Ability to determine which equipment should be used in firefighting activities. Ability to recognize which objects in salvage should be saved. Ability to recognize what material needs to be removed from the premises. Ability to determine which areas of building need to be checked for fire damage. Ability to recognize signs of suspicious origin of fire. Ability to relate first observations (e.g., conditions at outset of fire) to later needs (e.g., determining the cause of fire). Ability to distinguish between what is said by witnesses and what is found on the scene. Ability to recognize unusual, suspicious, or irrational behavior on the part of occupants or witnesses. Ability to recall and record events accurately that occurred at scene for making journal entries during the shift. Ability to observe and evaluate physical evidence as part of investigating incidents. Ability to detect deficiencies and problems in apparatus and equipment under inspection. Ability to analyze and to interpret information from a fire scene for instructional purposes. Ability to

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understand implications of technical information being presented by non-firefighting personnel such as engineers or inspectors. Ability to evaluate the seriousness of a hazardous situation and when it should be corrected, or if Bureau of Fire Prevention should be notified. Ability to read and interpret written messages and dispatches. Ability to extract and comprehend information from manuals and to apply to maintenance, training, and firefighting activities. Ability to read and interpret written material available in manuals and in material found at fire scenes. Ability to read at a level sufficient to become a technical expert in areas critical to the unit. Ability to read and interpret maps in order to locate address, cisterns, etc. Ability to recognize training needs from observation, on-the-job performance, and performance in drills. Ability to share work information that may be of value to peers. Ability to sense cues that indicate that personnel problems may arise. Ability to incorporate new material (e.g., regarding a new piece of equipment). Ability to prioritize tactical response to critical incident events.

**Tactical Operations Abilities (Planning & Execution/Application):** Ability to sense heat, sounds, winds, etc., and to evaluate situation before taking action at fire scene. Ability to coordinate and communicate fire attack through clear and concise orders. Ability to allocate resources according to the needs of the situation. Ability to anticipate outcomes and to redirect attack or approach to emergency. Ability to anticipate changes in conditions and circumstances and plan accordingly. Ability to integrate information gathered from visual, aural, and other senses and to act accordingly. Ability to adapt to changing conditions in weather, fire, extent of damage, and exposure. Ability to revise existing plans and shifting priorities to meet changing conditions. Ability to choose ventilation position based on heat, fire, and smoke. Ability to recognize information that will be useful to the firefighting situation. Ability to apply general principles of mechanics to maintenance, training, and firefighting activities. Ability to adapt or improvise methods, equipment, and salvage procedures to the requirements of the situation. Ability to determine the optimal use of overhaul equipment. Ability to decide quickly how to rescue victims, crew, or self. Ability to select hose and nozzle type appropriate to the situation. Ability to select rescue tools and procedures appropriate to the situation. Ability to quickly decide course of action when under pressure or in response to fire or other emergency. Ability to judge speed necessary to execute an activity in question (e.g., emergency response overhaul). Ability to apply appropriate emergency medical treatment. Ability to apply general principles of hydraulics to maintenance, training, and firefighting activities. Ability to apply general electrical principles to maintenance, training, and firefighting activities.

**Management Abilities:** Ability to coordinate activities with other firefighters. Ability to recognize limitations of authority and act accordingly. Ability to determine whether firefighters understand officer's directions by observing firefighters' behaviors. Ability to assess capabilities of crew from observation of training. Ability to evaluate and critique training exercises. Ability to recognize individual differences in personnel in

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order to get maximum effort and productivity from personnel. Ability to delegate tasks and responsibilities to crew members. Ability to recognize different resources and equipment and assign and delegate appropriately. Ability to accept and share the less desirable roles at the fire station. Ability to maintain good relations with outside departments/agencies.

**Supervision Abilities:** Ability to demonstrate procedures in training and in fire practices, and to explain procedures clearly. Ability to assess capabilities of crew to assign them, giving them appropriately challenging assignments. Ability to assess whether member of crew is having difficulties that require help or referral. Ability to recognize infractions by crew members that are violations of rules and procedures. Ability to provide constructive feedback so the individual is willing to improve. Ability to encourage subordinates to come up with solutions to problems. Ability to determine when counseling is needed. Ability to determine when behavioral issues should be referred up the chain of command. Ability to recognize when personal problems may be interfering with job performance. Ability to advise and counsel firefighters who are having difficulties about how they can improve. Ability to develop plans to address training needs.

**Written Communication Abilities:** Ability to maintain a daily journal in a legible, concise, and chronological order. Ability to follow instructions to complete forms, supply orders, and reports, including those on-line, in a timely, concise, and accurate manner. Ability to present information clearly in a written report or letter (e.g., general form reports, injury reports, reports on personnel problems, or activities while on tour for next officer). Ability to use proper English grammar, spelling, punctuation and structure in written communications. Ability to review written reports and identify deficiencies. Ability to use common computer technology (e.g., e-mail, word processing, internet). Ability to use current SFFD reporting software (e.g., HRMS, NFIRS, AO reports).

**Interpersonal Abilities:** Ability to resolve disputes among crew or between self and crew. Ability to recognize the legitimacy of the viewpoints of others. Ability to get along with others in a community-living environment. Ability to demonstrate tolerance for persons from different cultures or backgrounds. Ability to work as part of a team and to carry one's load. Ability to be supportive of peers and subordinates who are under pressure, during training and at the scene of emergencies. Ability to evaluate superiors, peers and subordinates based on performance, not on perceptions, rumor or pre-judgment. Ability to resolve differences with peers without creating conflicts. Ability to accept information from peers or subordinates who have specialized expertise. Ability to listen to and show empathy toward patients/victims. Ability to provide appropriate and factual information regarding victims' situation or needs.

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**Decision Making Abilities:** Ability to apply general rules to specific problems to produce answers that make sense. Ability to combine pieces of information to form general rules or conclusions. Ability to process contextual information and known objectives while weighing various options and their respective outcomes to make the best decision. Ability to make decisions based on all relevant information and then commit to those decisions with confidence. Ability to use information gathered on scene, experience, and knowledge to select or change tactics as the scene evolves. Ability to make sound decisions under stress.

**Physical Fitness & Manual Dexterity Abilities:** Ability to operate hand-held portable tools effectively in firefighting activities. Ability to improvise tools to respond in unusual situations, in ways equipment was not designed to be used (e.g., use a pry bar in an unconventional manner). Ability to work off ladder up to heights of 100 feet while using equipment (e.g., saws, axes, or ceiling hooks). Ability to work at heights with limited amount of safety equipment (e.g., on roofs, side of building). Ability to perform firefighting activities while wearing air pack and equipment (e.g., hose bundle). Ability to tie knots and to determine when to use them. Ability to use muscular force to lift, push, pull, drag, carry, or lower objects, materials, and equipment. Ability to apply muscular force quickly to objects and equipment in order to start or shut off action (e.g., starting a chain saw or removing a ladder from ladder rack). Ability to apply muscular force over time or over a number of repetitions (e.g., forcing entry or using ceiling hook during overhaul). Ability to withstand overall body fatigue while physically working for periods of time in uncomfortable environmental conditions (e.g., while holding and aiming charged hose, or during overhaul operations, or during cliff rescues). Ability to bend or stretch the body limbs and work in awkward or contorted positions while performing firefighter functions (e.g., working off ladders or during ventilation activities). Ability to maintain the body in a stable position and resist forces that would result in loss of balance (e.g., holding a charged hose). Ability to perform coordinated, steady, and accurate actions precisely that involve arms, wrists, hands, fingers, legs and/or body (e.g., using ax or ceiling hook). Ability to perform CPR.

# Test Preparation Strategies

Higher-level positions call for extensive knowledge of technical and management topics. This exam covers important issues from the assigned study material. Questions are designed to help the department identify the best potential managers and supervisors. The department is interested in promoting future leaders who will do the necessary studying and be able to apply the information on the job. You are competing for promotion with other qualified members of the department. This test is your opportunity to demonstrate your study ethic and personal effectiveness. The references assigned for this exam represent only a small portion of the formal study materials that will be required upon promotion.

*\*The preparation strategies below are suggestions only. Individuals are personally responsible for determining which preparation strategies and tips are appropriate for them.*

## Prepare

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Studying the publications assigned is one way to improve your chances of ultimately being the top competitor. There are many different approaches that you can take to studying. An excellent way to prepare for this type of test is to read each publication twice. First, read it straight through so that you understand the general focus as a whole. Next, reread the publication, making notes and highlighting the most important points that you see in each section. Other strategies are to use acronyms for remembering information or to form a study group. In the end, the choice is personal.

- **Understand the Job:** Understanding the job itself is the most important way to improve your competitiveness for promotion. The more you understand about supervision, management, department practices, and organizational goals, the better you will be able to answer potential questions relating to the job and organization. Expand your understanding of management issues and solutions through study and seeking mentors. Even reading one management book can give you more depth.
- **Familiarize Yourself with Instructions:** Carefully read and become familiar with the instructions that are described in this guide. You will feel more comfortable during the examination if you are familiar with the instructions prior to the actual test administration. Try to imagine what scenarios may be presented to you. Practice how you would respond to these scenarios on your own and with others. Becoming familiar with the mechanics of taking the test will save time and ease anxiety on test day.
- **Minimize environmental distractions:** Try to limit the number of distractions in your environment when studying. Distractions include, but are not limited to, email, cell phones, and even other people. Eliminating distractions will allow you to concentrate more easily so you can retain the information you are studying.
- **Avoid burning the midnight oil:** Retaining information is difficult for many people when they are tired. If possible, try to study when you are well-rested and ready to

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concentrate.

- **Review chapter overviews or summaries:** Chapter overviews and summaries typically provide information on the most important points in a chapter. Oftentimes, reviewing these areas before reading a chapter helps you determine and understand the important topics in the chapter. After reading the chapter, you can use overviews and summaries to test yourself on critical knowledge from the chapter.
- **Quiz yourself:** After reading a chapter or section, quiz yourself on important topics, definitions, etc. You can also use headings and specific terms to develop questions prior to reading the material. Afterward, while reading the section or chapter, you can try to answer those questions.
- **Have someone quiz you:** After you read a text, a great way to see if you have retained information is to have someone ask you questions regarding the material you just read.
- **Avoid cramming:** Spreading your studying out over time will help you concentrate and retain the information you read.
- **Look up words or phrases you don't know:** Have a computer or dictionary available when studying so that you can look up words and phrases that you aren't familiar with.
- **Mark it up:** Highlight and/or underline important sections of the text while you study. Marking up the text will help you concentrate on important topics and also make it easier to review the material again later.
- **Take notes:** Taking notes of the important topics you read in the text can be an efficient study aid to help you remember what you read.

### **Taking the Exam**

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The written exam items each have four answer choices. Be sure to read all answers before deciding on your final answer. Don't focus on a choice that is not given to you. Don't get distracted by thinking of other possible responses that are not among the choices presented. Don't get stuck on the idea that you want to combine two responses. Demonstrate your judgment by picking the one answer that, by itself, is better than any other answer, by itself.

Prepare yourself physically for this exam as you would prepare yourself for any special assignment that requires concentration. Unusual preparation may cause you problems. Eat and drink beverages as you usually would. For example, consuming more caffeine than usual can make you jittery; less than usual can leave you listless. Get the amount of sleep that leaves you most alert. Bring whatever personal items you need, such as eyeglasses or tissues.

Here are some additional tips to help you during the book-referenced exam. These simple procedures will help you avoid marking the wrong answer when you know the right one.

- **Listen to the instructions:** Before you begin the exam, it is important that you read and/or listen to all instructions carefully. Ensure you know how to correctly fill out the answer sheet.
- **Get familiar with your test:** When you begin the written exam, glance through it to acquaint yourself with the task ahead of you. You do not have to go through the

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questions in the order you find them.

- **Check the time.** Check your watch periodically throughout the exam so that you know how much time you have remaining.
- **Don't spend too much time on one question:** If you have a difficult time with a question, go on and come back to that question later. Do make a note to come back to it, though. You may come back with a fresh approach, and a question you had trouble with earlier may seem easy.
- **Read thoroughly:** Read every question carefully before you attempt to answer it. This advice may sound too simple, but it is important. The main reason people miss questions when they know the material is that they do not read the question completely.
- **Circle or underline key words:** When you read a question, circle or underline key words that are important to the question stem. This approach will both help you focus on the critical aspects of what is being asked, as well as help you remember the important aspects of the question if you need to skip it and return to it later in the test session.
- **Break a sentence up if you don't understand it:** Sometimes, sentences in a question stem can be long. If you don't understand the sentence, use slash marks to break it into smaller sections to better understand the sentence.
- **Read all of the answers before choosing one:** The most common answer people choose is a, whether it is right or wrong. The reason is that they think the first answer looks plausible, so they stop reading. Don't make the mistake of not reading all the answers before making a selection. Even if a looks like a really good answer, one of the other answers may be better. When you read the alternatives, you may think of something you had missed at first.
- **Use the process of elimination:** If you aren't sure of the correct answer, use process of elimination. Eliminate answer choices that you know are definitely wrong. Then focus on selecting the best answer from the choices remaining.
- **Do not read something into the question that is not there:** When reading a situational question, assume that everything is normal, unless the question tells you differently. When something is amiss, the question will tell you. Stick to the facts of the questions.
- **Answer every question:** There is no penalty for guessing. Even if you don't know the correct answer, you have one chance in four of choosing the right one. If you can eliminate one or two of the alternatives, your chances are even better.
- **Fill out your answer sheet correctly:** In marking the answer sheet, be sure to fill in the blank that corresponds to the answer you have chosen. If you skip a question, make sure you skip to the right space on the answer sheet. If you mark the wrong answer and want to change it, erase your first mark completely. Remember to mark only one answer per question.

# Examination Day

## Exam Ground Rules

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To participate in the exam, you will be required to check in using your Driver's license or SFFD identification card and then review and sign the copyright non-disclosure agreement. At the examination site, you will be required to sign the agreements before participating in the examination, and you will be expected to abide by the Ground Rules below.

During the examination, the vast majority of candidates behave in a professional manner. However, it takes only one individual to disrupt an examination. Please understand the goal is to ensure fair and consistent treatment of all candidates.

As a reminder, if you require reasonable accommodation for this exam, you must contact DHR via e-mail at [dhr-publicsafety@sfgov.org](mailto:dhr-publicsafety@sfgov.org) by **October 28<sup>th</sup>, 2024.**

## ***Ground Rules***

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**Electronic Devices.** Possession of any electronic devices that transmit and/or store information are prohibited during the test in order to protect the security of the testing process. Therefore, you will be required to relinquish all such devices before taking the examination, including pagers. There will be no exceptions to this rule. Because we will not be responsible for these collected devices, we strongly recommend that you leave these devices at home or in another secure location.

**Materials or Writing Utensils.** We will provide pencils. Do not bring writing utensils, paper, calculators, highlighters, stopwatches, or any other devices or materials to the test site.

**Standard Watches.** A regular wristwatch is okay to wear, but you may not use any "smart" watch or watch that has an audible alarm or tone that could distract others.

**Leaving the Test Site.** If you leave the building during the examination process, you will not be allowed to return. No one will be allowed to leave the test site to smoke, eat, or "get some fresh air."

**Food.** No chewing gum or food of any kind will be allowed in the examination facility. You may bring bottles of water. There are water stations available in the facility.

**Talking.** During the exam, absolute silence is required so other candidates can concentrate. The only exceptions to this rule are during the questions period. To ask a question, raise your hand. Anyone disrupting the test environment will be warned once and then disqualified from the



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selection process if the problem continues. Any candidate who withdraws or is disqualified will be sequestered in another room until his or her group of candidates is released.

**Restroom Breaks.** You will be given an opportunity to use the restroom just prior to registration. There will **not** be a formal restroom break built into the test.

**Illness or Emergency.** In the event of a medical emergency, medical assistance will be called. In the unlikely event of an evacuation notice, please remain seated or stay in your test room. We have an established protocol to handle the situation, and it will take only a minute to provide specific instructions. The protocol will protect the integrity of the examination and ensure an orderly evacuation.

*Good luck to you in the promotional process! If you have any questions about the process, please contact the San Francisco Department of Human Resources.*