Contents of This Guide

This Examination Preparation Guide is intended to help you prepare for your upcoming H-6 Investigator promotional examination. It will cover the following:

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1. INTRODUCTION

This guide is intended to help prepare you for your upcoming H-6 Investigator examination. A general description of the test is provided, along with sample test instructions and questions, so that you have a general idea as to what to expect on the day of the test.¹ The Department of Human Resources Public Safety Team (PST) has also included some suggestions, tips, and recommendations that have been known to help candidates here in San Francisco and elsewhere. Of course, the PST cannot guarantee that following these suggestions and tips will automatically result in a high test score. Preparing for a test is ultimately each candidate’s responsibility. In fact, many successful candidates often go well beyond what is suggested in this guide to prepare.

Candidates are reminded that the exam process is ultimately governed by the job announcement and official documents such as Civil Service Rules. Many of these regulations are available on the City’s websites, www.sfdhr.org/ and www.sfgov.org/civilservice/.

If you have any questions after reading this Preparation Guide, please send them to dhr-publicsafety@sfgov.org. Your email must be received no later than 4:00 PM Pacific time on February 18, 2019. Please include “H-6 candidate question” in the email’s subject line. In order to be fair, the PST will share answers to individual questions with all candidates. PST responses to relevant questions will be emailed to candidates and also posted on the DHR website no later than 5:00 PM on March 1, 2019. We will not answer questions that might compromise the security or integrity of the test.

It is each candidate’s responsibility to provide a current, valid e-mail address to the PST to which to send all official notifications. If you changed your e-mail address or name after filing your application, you must visit www.jobaps.com/sf and select “Update My Contact Info”.

We wish you the best of luck as you prepare for and participate in this promotional process.

¹ The PST reserves the right to make changes to this guide, if necessary. If modifications are required at a later date, the PST will notify you of the revision as soon as possible prior to the test.
2. Overview of the 2019 Promotional Process

The primary focus of this guide is to help you prepare for the two test components: the Investigation Exercise (IE), and the Communication Exercise (CE). In this guide, you will learn about the IE and CE test format and instructions, and tips that could help you to do your best on the day of the assessment.

Read through the entire guide carefully. By learning the process through which your assessment is being developed and conducted, as described within this study guide, you can better understand how to use the remainder of your pre-assessment preparation time to be ready for this process.

2.1 The Test Components

As indicated above, the H-6 Investigator test process will include two components: an Investigation Exercise and a Communication Exercise. The component weights are established based on the knowledge areas and abilities that each component will measure and the value assigned to those knowledge areas and abilities by the subject matter experts (SMEs) during job analysis. The component weights for this selection process are:

- Investigation Exercise = 41%
- Communication Exercise = 59%

Both components are designed to measure basic knowledge, skills, and abilities (KSAs) necessary to perform the tasks required of an H-6 Investigator. All candidates will be scheduled to take the IE on the same day, tentatively scheduled for administration on March 12, 2019. All candidates will complete the CE on the same day, tentatively scheduled for administration on March 13, 2019.
3. Test Development Process

3.1 Job Analysis

Job analysis is the process of studying a job to determine the specific tasks that employees in that position perform, as well as the competencies (i.e., KSAs) needed to perform those tasks. Results from job-analysis studies often yield job descriptions and lists of KSAs and other attributes that may be required of individuals who perform the job being studied. For the current H-6 Investigator promotional process, information gathered from the most current job analysis completed in 2018 was used to identify the tasks and KSAs that serve as the foundation of the testing process.

3.1.1 Results

The following sections present tasks (organized by major duty area), abilities, and knowledge areas that were determined by the job analysis to be important to the H-6 Investigator position.

3.1.1(a) Tasks

<table>
<thead>
<tr>
<th>Investigating Fire Scenes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Works as a member of a two-person team assigned to determine the origin and cause of certain types of fire (e.g., where death or serious injury has occurred; incendiary fires; greater-alarm fires; suspicious fires or fires of undetermined origin; explosions).</td>
</tr>
<tr>
<td>Reports to the Incident Commander upon arriving at the scene of a fire that he or she has been assigned to investigate.</td>
</tr>
<tr>
<td>Receives briefing (e.g., from Incident Commander, Incident Support Specialist/Company Commander, or both) upon arriving at the scene of a fire.</td>
</tr>
<tr>
<td>Inspects the scene of the fire and/or interviews witnesses after being briefed upon arrival at the scene.</td>
</tr>
<tr>
<td>Attempts to identify and get to the area of origin of the fire in order to preserve that area.</td>
</tr>
<tr>
<td>Works from the area of least involvement to the area of greatest involvement while investigating the scene of a fire.</td>
</tr>
<tr>
<td>Follows burn, heat, and smoke patterns to identify the area of origin of the fire.</td>
</tr>
<tr>
<td>Clears Fire Department personnel from the area of origin of the fire until crews are needed for further assistance.</td>
</tr>
<tr>
<td>Provides an estimate of the time that Fire Department personnel will need to remain out of the area of origin of a fire.</td>
</tr>
<tr>
<td>Ensures that coroner is called to the scene if fire has resulted in a death.</td>
</tr>
<tr>
<td>Evaluates the area of origin for heat/fire damage, point of origin, cause of fire, and potential ignition sources.</td>
</tr>
<tr>
<td>Analyzes all potential ignition/sources to rule out possible causes of fire (e.g., if point of origin is in a bedroom, eliminates kitchen appliances, hot water heater), to determine ignition</td>
</tr>
<tr>
<td>Bureau of Fire Investigation</td>
</tr>
<tr>
<td>-----------------------------</td>
</tr>
<tr>
<td><strong>sources and, eventually, identify the cause of the fire.</strong></td>
</tr>
<tr>
<td><strong>Identifies and preserves evidence at the scene of a fire.</strong></td>
</tr>
<tr>
<td><strong>Collects evidence in accordance with Bureau of Fire Investigation standard procedures or what has been found to be acceptable in court (e.g., unit guidelines, standard procedures, etc.)</strong></td>
</tr>
<tr>
<td><strong>Collects evidence if the incident is an incendiary fire or if evidence of criminal activity is present.</strong></td>
</tr>
<tr>
<td><strong>Interviews Fire Department personnel at the scene of fires for relevant information (e.g., situation upon arrival, whether building was secured upon arrival, firefighters' method of entry, whether firefighters encountered building occupants or noticed anything unusual).</strong></td>
</tr>
<tr>
<td><strong>Identifies himself or herself to persons who may have relevant information prior to interviewing them.</strong></td>
</tr>
<tr>
<td><strong>Puts interviewees at ease by providing a calming influence.</strong></td>
</tr>
</tbody>
</table>
Provides his or her identification and phone number to interviewees, so that they can contact the investigator later if necessary.

Determines whether an interviewee is giving conflicting information by comparing notes with the information previously given to self or partner.

Attempts to resolve any apparent conflict in information given by persons interviewed.

Determines whether any person at the scene of a fire is a suspect, based upon the questioning of those who have relevant information.

Determines whether a suspect should be detained or arrested (if probable cause has been demonstrated).

Canvasses the neighborhood (i.e., knocks on doors and identifies self to occupants) to find witnesses and/or identify the circumstances that preceded the fire.

Displays respect for sick and injured victims when conducting an investigation.

Takes the initiative to get tasks done at fire scenes.

### Report Writing

- Prepares SFFD Fire Investigation Report (BFI Form 1 -- dispatch, diagram, and sketch of scene)
- Prepares SFFD Fire Investigation Report (BFI Form 2 -- narrative sheet for documenting nine-step category reporting system)
- Prepares Arson Task Force Evidence Report.
- Prepares SFFD Photo Control Sheet.
- Prepares SFFD Greater Alarm Report.
- Prepares news release information sheet.
- Prepares SFPD Chronological Report of Investigation (SFPD 298).
- Prepares NFIRS Incident Reports including Casualty Reports as necessary.

### Communicating with or Disseminating Information to Others

Communicates orally (via telephone or face to face) with Chief Officer, company officer, firefighters, supervisors, Public Information Officer, police officers, and Fire Marshal, regarding fire investigation activities.
Provides Chief of Department with a briefing regarding the outcome of an investigation.
Communicates with Public Information Officer regarding the basic details of a fire.
Communicates to supervisors (i.e., lieutenants, captains) the particulars of an incident for purposes of coordinating fire investigation.
Communicates with Incident Commander and police officers for purposes of follow up in an investigation.
Briefs Fire Marshal on the particulars of an incident.
Effectively communicate with Incident Commander, witnesses, firefighters, and others at fire scenes to facilitate the investigation.
Communicates (gives information) effectively with superiors and peers from different cultures and backgrounds.
Accepts information from peers who have specialized expertise.
Communicates verbally with distraught persons (e.g., victims, victims' relatives or friends, witnesses, etc.) at fire scenes as part of the investigation.
Calms sick and injured persons, relatives, friends, and bystanders at emergency incidents.
Communicates to victims what they need to do next (e.g., notify their insurance company).
Informs victims what the Bureau of Fire Investigation will be doing next.
Tells victims the status of a case to the greatest extent possible.
Shares pertinent information with the insurance company private fire investigators.
Accepts information collected by the insurance company.
Makes presentations to community groups.
At presentations to community groups, stresses the importance of cooperation from communities in fire safety activities.
Communicates details of a fire to the Bureau of Alcohol, Tobacco, and Firearms agent assigned to assist in the investigation, and requests a computer model.

**Handling Subpoenas**

Accepts subpoenas for documents that may or may not be related to a fire investigation.
Ensures that Fire Department records that have been subpoenaed are accurate and that all necessary records have been provided.
Obtains subpoenaed documents that the Bureau of Fire Investigation possesses.
Refers subpoenaed documents to other appropriate agencies where the documents reside.
Accepts fees for responding to subpoenas (for both records and court appearances).
Receives via email or regular mail subpoenas to testify in cases concerning fire investigation (e.g., preliminary hearing in criminal cases; jury phase of criminal trials; civil matters; juvenile hearings; and depositions).
Fills out log to record subpoenas issued for court appearance of H-6 Arson Investigators.
Contacts the appropriate District Attorney to acknowledge receipt of subpoenas.

**Participating in Legal Proceedings Related to Fire Investigations**

Discusses with the District Attorney the contents of the investigative report in the legal case.
Establishes with the District Attorney a time schedule for giving testimony (i.e., must he or she be present in the courtroom, or will he or she be on standby?).
Discusses with the District Attorney the preparation of evidence for trial (e.g., has physical evidence been sent through the crime lab for testing; have photographs been developed and prints obtained?).

Discusses with the District Attorney whether additional information is needed for trial.

Participates in face-to-face pretrial conference with District Attorney to prepare and discuss investigator's testimony (e.g., what questions are likely to be asked in court?).

Responds under oath to questions asked at trial (in direct testimony and on cross-examination) regarding fire investigation.

Ensures that his or her curriculum vitae is kept up to date to support qualifications as an expert.

Communicates to the court his or her qualifications as an expert witness.

Explains actions taken at the scene of the fire (e.g., what was done to determine where the fire started and to identify its cause).

Communicates details of a fire to the Bureau of Alcohol, Tobacco, and Firearms agent assigned to assist in the investigation.

### Working with Others (Human Relations)

- Actively attempts to carry out his or her work assignments.
- Attempts to carry out case assignments completely.
- Attempts to overcome obstacles or problems that may occur while working on a case assignment.
- Attempts to judge superiors, subordinates, and peers on the basis of their performance, not perceptions (e.g., rumor or pre-judgments).
- Helps investigators overcome difficulties (or deficiencies) with regard to their work.
- Demonstrates to peers how investigative tasks should be done.
- Shares his or her investigative experience with peers.
- Offers appropriate support to civilians who are in grief at emergency incidents.
- Assists fire and police personnel in removing relatives of sick and injured persons to the periphery of a scene without upsetting them unnecessarily.
- Takes a leadership role to accomplish work tasks as appropriate.
- Allows peers to take a leadership role to accomplish work tasks as appropriate.
- Overcomes (resolves) differences with peers without creating conflicts.
- Contributes to a pleasant atmosphere at the Bureau of Fire Investigation.
- Identifies issues to peers and subordinates that he or she finds offensive, without being offensive toward those peers and subordinates.
- Interacts with persons from different backgrounds, cultures, and lifestyles in a positive way.
- Attempts to improve self to perform the job better.

### Assisting in the Execution of Search and/or Arrest Warrants

- Assists with arrests by directing police officers to the suspect.
- Assists with arrests by handcuffing suspects.
- Assists with arrests by reciting Miranda warnings to suspects.
- Conducts interviews of persons in custody.
Searches premises as part of the execution of search warrants.
Identifies and Collects evidence at premises being searched pursuant to a search warrant.
Documents evidence at premises being searched pursuant to a search warrant.
Packages and transports evidence at premises being searched.

### 3.1.1(b) Abilities

<table>
<thead>
<tr>
<th>Physical Abilities</th>
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</thead>
<tbody>
<tr>
<td>Physical ability necessary to move about in a building affected by fire.</td>
</tr>
<tr>
<td>Physical ability necessary to identify and access the area of origin of a fire under conditions of poor lighting.</td>
</tr>
<tr>
<td>Physical ability necessary to determine whether an area in a building affected by fire is safe and to take action to make the area safe, if required.</td>
</tr>
<tr>
<td>Physical abilities necessary to move fire debris (e.g., collapsed walls, sheet rock, studs, etc.).</td>
</tr>
<tr>
<td>Ability to use Fire Department equipment properly (e.g., power tools, saws, axe, portable drill, generator, lighting equipment, ventilations fans, etc.) in delaring, deconstructing or reconstructing a scene during the investigation.</td>
</tr>
<tr>
<td>Ability to use hand tools, trowels, and rakes properly and in a manner that does not destroy evidence.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Resource Management</th>
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</thead>
<tbody>
<tr>
<td>Ability to work as an effective team member at the scene when there are time-sensitive activities to be accomplished (e.g., prioritizing tasks, coordinating activities).</td>
</tr>
<tr>
<td>Ability to place his or her individuality secondary to achieving team objectives.</td>
</tr>
<tr>
<td>Ability to coordinate with personnel from other agencies.</td>
</tr>
<tr>
<td>Ability to share workload and to recognize the need for workload sharing.</td>
</tr>
<tr>
<td>Ability to recognize when his or her own work is deficient.</td>
</tr>
<tr>
<td>Ability to accept responsibility when his or her work needs improvement.</td>
</tr>
<tr>
<td>Ability to share work information that may be of value to peers.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Detention and Arrest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to recognize the level of force required to effect an arrest.</td>
</tr>
<tr>
<td>Skill in the accurate use of firearms.</td>
</tr>
<tr>
<td>Skill in the use of self-defense techniques.</td>
</tr>
<tr>
<td>Skill in the use of arrest techniques (e.g., handcuffing, restraint).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Analyzing Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to make observations regarding burn patterns.</td>
</tr>
<tr>
<td>Ability to recognize and interpret burn patterns (i.e., to use inductive reasoning).</td>
</tr>
<tr>
<td>Ability to recognize what information is needed (i.e., to ask questions based upon the evolving circumstances and new information).</td>
</tr>
</tbody>
</table>
### Communication

| Ability to listen to and understand oral reports (e.g., from department personnel, building representatives, victims, witnesses, etc.) |
| Ability to recognize conflicts in oral information. |
| Ability to use language that is appropriate to the intended audience. |
| Ability to communicate effectively via radio or telephone to present an accurate verbal picture of conditions at the scene. |
| Ability to explain the reasons for the actions of Fire Department personnel (e.g., tearing down a wall). |
| Ability to recognize the potential effect of gender on communication. |
| Ability to communicate effectively in writing. |

### Interpersonal

| Ability to recognize whether or not a person (e.g., a victim, witness, bystander, etc.) is telling the truth. |
| Ability to calm people and to put them at ease. |
| Ability to recognize and respect cultural differences within the community. |
| Ability to interact effectively with persons of different backgrounds. |
| Ability to demonstrate tolerance for persons from different cultures or backgrounds. |
| Ability to recognize when situational or cultural factors may cause persons to be more or less cooperative with an investigation. |
| Ability to recognize that some persons may be more or less responsive to a male or female investigator (e.g., a husband may want to take charge and speak to a male investigator). |
| Ability to recognize the legitimacy of the viewpoints of others. |
| Ability to demonstrate respect for the opinions of others. |
| Ability to withstand the pressure of having his or her work (actions) critiqued in an appropriate manner by supervisors or peers. |
| Ability to accept constructive criticism from peers when appropriate. |

### 3.1.1(c) Knowledge Areas

#### Knowledge of Investigation Techniques

- Knowledge of what constitutes evidence in a fire investigation.
- Knowledge of techniques for preserving and processing evidence (as contained in the text *Kirk's Fire Investigation*, 8th edition).
- Knowledge of the Bureau of Alcohol, Tobacco, and Firearms *Arson Investigative Guide*.
- Knowledge of the law as it relates to fire investigation (e.g., penal code).
- Knowledge of fire behavior (e.g., from observing a fire burning; from lighting fires in controlled settings to observe patterns of burn; from completing State Fire Marshal's certification cause
Fire Investigation 1A; and/or from completing Fire Investigation 1B, Techniques of Investigation).

Knowledge of the Scientific Method as it relates to investigating the fire scene and in writing Fire Investigation reports.

Knowledge of Investigation Policy and Procedures

Knowledge of the material contained in the Bureau of Fire Investigation Policy Manual.


Knowledge of department rules and regulations regarding equipment usage (e.g., to drive a department vehicle to the scene of a fire).

Knowledge of proper written communication (grammar, syntax, spelling, paragraph structure, etc.) to produce a comprehensible and legally defensible fire investigation report.

Knowledge of Law Enforcement

Knowledge of the factors needed to establish probable cause for an arrest.

Knowledge of procedures for securing a fire scene (e.g., getting police assistance, putting up barriers).

Knowledge of options for appropriate use of force.

Knowledge of laws related to search and seizure.

Knowledge of Mechanical Systems

Knowledge of building construction techniques as presented in the department's Building Construction Manual.

Knowledge of fire protection systems.

Knowledge of HVAC systems.

3.1.2 How does this help you?

As mentioned above, job analysis information is used to support the development of test components used in the selection process. The development of the test components is intended to approximate behaviors that H-6 Investigators currently perform. To help better prepare for the upcoming test components, you may want to first review and familiarize yourself with the job tasks, knowledge areas, and abilities listed above.

For example, you may want to carefully read through the tasks associated with the various duty areas and then assess your personal level of comfort and understanding of the behaviors that would be required of you if you were to perform those job duties. Such a review may help you to identify those job tasks for which you may need further preparation. Similarly, review the knowledge areas and abilities to identify areas where you may wish to improve. [See 4.5 Suggested Reference List for possible source material associated with relevant knowledge areas.] Then, create a study checklist of the subjects or topics that you feel you should learn or “brush-up” on. Mapping out a schedule or plan as to when you can review each of these areas prior to the exam can be reassuring to you, as you will have given some thought regarding how to maximize your time to study subjects for which you might most benefit in mastering. Some
subjects may just require a quick review and other subjects may require that you devote more time to learn. Your studying schedule should take these differences into account. As you approach the test date, check off the subjects that you had originally identified in your personal checklist of subjects to review. It is also recommended that you familiarize yourself with the test component descriptions below to help identify the parts of the job that we will be measuring in the exam.

3.2 Test Content Development and Review

Although the content of a test may not be known in advance, how tests are created should not be altogether mysterious. Test content is derived from the job’s major or important work areas. These work areas are often conceptualized from the task groups that are created in association with the job analysis questionnaire.

In the development of test components, the PST works closely with SMEs at the rank of H-6 or higher to identify scenarios and other work behaviors that can be simulated in the assessment. The PST and SMEs collaborate to refine the scenarios by adding or removing information, and otherwise make the scenarios appropriate for use in the assessment. With complete and accurate scenario information for each test item, the PST and SMEs, again collaborate to identify the response options (e.g., “positive courses of action” to be taken) for each test item.

4. YOUR TEST COMPONENTS

Take time to familiarize yourself with the information presented below regarding the IE and CE.

4.1 Overview of the IE

In this exercise, you will assume the role of H-6 Investigator, “Chris Candidate”. The IE consists of Part 1 and Part 2.

- In Part 1 you will “investigate” and answer questions about three fire scenes. The fire scenes will be presented via written information and photos.

- In Part 2 you will be presented with a Fire investigation report completed by a peer. Your task will be to review the report and identify any missing or incorrect information.

You will type your responses to both parts of the exercise into documents in Microsoft Word.

You will be allotted three (3) hours to review the materials and complete your responses in Microsoft Word. You should budget your time carefully so that you are able to complete Parts 1 & 2 of this exercise during the three-hour time period. If you finish before the three-hour time limit, you will be allowed to leave the test site.
4.2 Sample Exercise Instructions and Test Items

**Investigation Exercise**

The sample candidate materials contained herein are similar to the materials that you will receive on the day of the test.

**Sample Candidate Instructions**

You have three (3) hours to complete this exercise. Your task is to review and answer a series of questions about three fire scene investigations and to review a fire investigation report completed by a peer. All of the information that you have available on each fire is contained in the respective Fire Scene envelope.

In the envelope for each fire scenario, you have materials such as: a copy of the dispatch for the fire, personal statements and/or background information, photographs taken at the fire scene, and a diagram of the fire scene.

Your task is to review the materials and information provided for each fire scene, then type answers to questions presented in the Question and Answer document for that fire scene. The materials that have been provided are for your use in answering the questions to the fire scenes.

It is recommended that you work on one scene at a time to ensure that you write your answers in the correct Question and Answer document, and to avoid confusing the fire scenes. If you finish before the time period expires, raise your hand and a proctor will collect your test materials and dismiss you.

As you work on the exercises, remember the following:

- Be sure your response is typed in the correct Question and Answer document.
- Each fire scene is independent of the others.
- All reference materials and/or background information needed to complete the exercise have been provided to you, and you may refer to those materials at any time throughout the exercise.
- You may make notes or marks on the notepaper or on any of the exercise materials, but only your responses that are typed in the Question and Answer documents will be scored.
Sample Test Materials

Sample Fire Scene Investigation 2019 – PART 1

Personal Statements

The statements are accurate and include all pertinent information that the individual could recall at that moment.

Engine 53 first on scene:

“Upon arrival, the vehicle, a black Saab, 2-door coupe was fully involved with fire coming from all windows. It took a fire hose to extinguish the fire. We checked for fire extension and found a red plastic gas can in the trunk area. We placed the red plastic gas can on the sidewalk. We proceeded to call SFPD and waited until the arrival of 4710. The vehicle license plate is 3PVX414, and SFPD Officer Lee (Star #696) provided case number 190-003-187.”

Grace Gomez, 1843 Texas Ave., witness:

“I was asleep until I heard a loud boom. I looked outside and saw a car on fire. I immediately called 911.”
<table>
<thead>
<tr>
<th>LETTER</th>
<th>NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Driver side of vehicle</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Engine compartment</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Plate Number</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Trunk interior of vehicle</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Driver side interior</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>From behind driver seat</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Front seat compartment</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Rear windshield into interior</td>
<td></td>
</tr>
</tbody>
</table>
Photos Taken at a Secured Storage Facility
SAMPLE FIRE SCENE DIAGRAM
SAMPLE QUESTION AND ANSWER DOCUMENT

**Texas Avenue / Shell Street**

Answer the following five (5) questions in narrative or bullet format:

**Question 1:** To further investigate this fire scene, with whom, if anyone, would you interview or re-interview (e.g., witnesses, suspects, agencies, owners, etc.), and what question(s) would you ask?

*911 Caller: Follow up and additional information*

Registered Owner of Vehicle:
- When did you last see the vehicle?
- When did you last drive the vehicle?
- Who drives the vehicle?
- Did you report the vehicle stolen?
- How did you learn of the fire?
- What time do you go to bed?
- Did you make or receive any calls?
- Do you have the keys and how many sets?
- Are you insured?
- What is the coverage on the vehicle?
- Who is your agent?
- How did the vehicle run and when was it last serviced?
- Where was the vehicle serviced?
- Have you ever been involved in a fire before?
- Who could have done this?

*SFPD:*
- Check the criminal history of registered owner
- Obtain police report number and reporting officer’s name and star number

**Question 2:** To further investigate this fire scene, what search and seizure issues, if any, do you see?

*Exigent circumstances exist to determine the cause of the fire. Neither owner’s permission nor a search warrant is required*

**Question 3:** To further investigate this fire scene, what, if any, evidence would you collect, how would it be collected, and what would you do with the evidence once collected?

*Response may be in bullet format.*
Digital photographs documenting vehicle stored on secure hard drive.

Red plastic fuel container:
- Don latex gloves
- Photograph fuel container in place
- Collect fuel container and check for ignitable liquid.
- Collect three samples of ignitable liquid in glass vial and store in evidence can
- Discard excess liquid from container
- Place plastic fuel container, evidence can, and latex gloves in an evidence container
- Contact SFPD CSI to process evidence
- Log evidence into secure storage locker

Question 4: Based on the information available, what do you determine to be the area of origin of the fire and why?

After an examination of all compartments of the vehicle the greatest area of fire damage was the passenger compartment of the vehicle. The vehicle’s battery was intact and damage to the engine compartment originated from the passenger compartment. The vehicle trunk was free of damage. The passenger compartment was an area of near total fire involvement and greatest area of damage.

Question 5: Based on the information available, what do you determine to be the cause of the fire and why? If you determined this to be an incendiary fire, list the factors that support probable cause for an arrest.

Based on physical evidence at the fire scene, witness statements, and the presence of an ignitable liquid, this was determined to be an incendiary fire.
Communication Exercise

These sample candidate instructions are similar to the materials that you will receive on the day of the test. There is no sample response provided for the CE.

Sample Candidate Instructions

In this exercise you will play the role of Chris Candidate, an Investigator with the Bureau of Fire Investigation. Your task for this exercise is to complete an investigation of a fire scene, including an interview with a witness while you are at the fictitious fire scene. You are being provided with the materials listed below related to the fire. You have 30 minutes to review these materials to prepare for your interview with the witness. Following your interview of the witness, you will complete BFI Forms 1 and 2 to document your findings.

Fire Scene Materials
- CAD
- Witness statements
- Photo log
- Photographs
- Incomplete Incident Diagram (to be reviewed for accuracy and completeness)
- SFPD Incident Report
- BFI Procedure Guide

If you believe you are missing any of the following materials, immediately alert the proctor.

The witness will be brought to you. You should ask any questions that you feel are relevant. You will have 15 minutes to conduct the interview with the witness. You may use the notepaper provided at any time, including upon which to make notes during the meeting.

After meeting with the witness you will be taken to another room, along with all of your test materials. You will complete BFI Form 1 by entering information in the appropriate cells with a pencil and Form 2 in Microsoft Word. You will also complete the Incident Diagram with a pencil. You will have all of the materials provided to you, including your notepaper, for reference. You will have two (2) hours to complete both forms and the Incident Diagram.

In summary, the exercise will be administered in the following format:

1. You will read these instructions and review the reference materials provided in preparation for your meeting with the witness.

   TIME LIMIT: 30 minutes
• If you finish preparing before your 30 minutes expire, you must remain in the test room; the role player will be brought to you only after the timer has sounded.

2. You will meet with the witness and conduct the interview regarding the fire.

**TIME LIMIT: 15 minutes**

• This portion of the exercise will be video-recorded.
• If you finish the interview before your 15 minutes expire, you may use the time to continue your preparation for completing the BFI forms and the Incident Diagram.

3. You will be taken to another room where you will complete BFI Form 1 & Form 2 in Microsoft Word, and complete the Incident Diagram.

**TIME LIMIT: 2 hours**

• If you complete BFI Form 1 and Form 2 and the Incident Diagram before your two (2) hours expire, inform the proctor. The proctor will print a copy of the documents, make a copy of your incident diagram and ask you to certify by signing that it is a true and correct copy of your work. When the proctor confirms that all of your test materials have been collected, you will be sent to reception to obtain your ID and any personal belongings, and then directed to leave the test site.

**Important Notes:**
• For the purpose of this exercise, today’s date is March 13, 2019.
• You may refer to the test materials at any time during the exercise.

4.4 What do the Exercises measure?

The goal of the test exercises is to evaluate candidates’ abilities to apply their knowledge of department policies, procedures, best practices, and operations. This hopefully will produce an eligible list that reflects candidates’ relative abilities and readiness to perform if appointed to an H-6 position. Again, these attributes were identified in the job analysis (see section 3.1 Job Analysis above) as important and required to perform the job of an H-6 Investigator. In other words, they link directly back to the job analysis information.

The competencies that MAY be measured by the IE are linked to the following clusters:

• Investigating Fire Scenes
• Report Writing
• Analyzing Information
• Knowledge of Investigation Techniques
• Knowledge of Investigation Policy and Procedures
The competencies that MAY be measured by the CE are linked to the following clusters:

- Investigating Fire Scenes
- Report Writing
- Communicating with or Disseminating Information to Others
- Analyzing Information
- Communication
- Knowledge of Investigation Techniques
- Knowledge of Investigation Policy and Procedures
- Knowledge of Law Enforcement

4.5 Suggested Reference List

Candidates should be familiar with the references listed below so that they are able to quickly locate relevant information in response to the five (5) fire scenes.

1. Kirk’s Fire Investigation, 8th Edition, 2018
4. Bureau of Fire Investigation Procedure Guide*
5. California Penal Code Sections 450-457.1
6. San Francisco Fire Department General Orders

*Information relevant to completion of BFI Forms 1 & 2 is contained in the Bureau of Fire Investigation Procedure Guide; there is no Reference Booklet of Report Completion Instructions as cited in the job announcement.

You will not be allowed to bring any reference materials with you to the test. However, relevant excerpts from the above materials will be provided to you on the days of the exam.

To prepare for the examination, it is recommended that you familiarize yourself with the content of the reference materials listed in Section 4.5 above, as well as the sample test materials contained in this manual.

5. Administration of the H-6 Investigator Test

5.1 Location and Sign-in

The IE is tentatively scheduled to be administered on Tuesday, March 12, 2019. The CE (Role Play) is tentatively scheduled to be administered on Wednesday, March 13, 2019. All H-6
candidates will be scheduled on the same day and will receive their test appointment notices via email approximately ten (10) days before the component is administered. Both exercises will be held at:

City and County of San Francisco Test Center
1740 Cesar Chavez St.
San Francisco, CA 94124

At sign-in, your identity will be verified against your picture identification [either Driver License or Department ID]. Your picture ID will be collected, and returned following your participation in the test.

5.2 Applicants with Disabilities

Applicants with disabilities requiring a reasonable accommodation for this examination process must contact PST as soon as possible, but no later than 5:00 PM on March 4, 2019 by email to dhr-publicsafety@sfgov.org or by phone at (415)551-8943 or, if hearing impaired (415)557-4810 (TDD).

5.3 Video Recording

Your meeting with the witness will be video-recorded so that assessors can evaluate your performance at a later date. A proctor will be present in the test room during the CE to operate and address any technical issues involving the video equipment, should they occur. In the event that there is a technical problem during your test administration, testing staff will investigate and resolve the matter as soon as possible. In some cases, the only reasonable remedy might be to re-record a candidate’s performance immediately following discovery of the technical problem.

5.4 Prohibited Items

Certain items are prohibited during the assessment and any sequester period, including any and all electronic communication devices (this includes cellular phones, tablets, iPods, smart watches, recording devices, etc.), any large bags or portfolios (including backpacks and the like where paperwork or electronic devices could be hidden) and paperwork of any kind (e.g., policy manuals, previously prepared notes, notepads, etc.).

You are prohibited from videotaping, audiotaping or taking pictures as these methods capture test content and thus violate the integrity of the test. Please notify PST staff if you have any of these items as they can be stored until you are discharged from the test center. You must turn off your devices. You may place smaller devices in lockers. For larger devices, a note with your name will be attached via rubber band to the device. These items will be placed on a “prohibited items” table that will likely be located at reception, and not in a secure area. For this reason, it is highly recommended that you leave such items at home.
The City and County of San Francisco will not be responsible for any lost or damaged devices. Anyone who is caught with a prohibited item during testing is subject to disqualification and other penalties up to and including departmental disciplinary action and ineligibility for future promotional opportunities. Having a device in one’s possession that is “turned off” does not exempt a candidate from such consequences. You may not use any materials/devices during the test other than what is provided to you by PST, including any external documents or notes.

A regular wristwatch is acceptable to wear, but you may not use any watch that has an audible alarm or tone that could distract others. As indicated above, watches with advanced capabilities are not allowed.

5.5 Test Rules and Confidentiality

You should, of course, maintain silence with other candidates during the actual test to avoid the appearance of improper behavior. You should have on your desk only the materials that you need to take the test (e.g., a writing tool, notepaper). If you have to leave the test room for any reason, obtain the proctor’s permission. Do not bring any food or drinks (water is the only exception) into the test room unless you have received specific permission from the PST.

Since the content and nature of the assessment components are confidential, you will be required to sign a confidentiality agreement prior to the test in order to participate in the test. There will be no exceptions. By participating in the promotional process you must agree to keep the contents of the assessment confidential. Also, you may not take any of your notes or exercise materials with you when you leave the test site. You must turn in all materials once you have completed your test. Failure to do so may result in disqualification.

You should not discuss the contents of the assessment with anyone after the test, including other candidates (even those who have already participated) or individuals of a differing rank (whether they are participating or not). If any proctor, fire department employee or City employee observes you discussing the content of the assessment with another candidate, you may be disqualified from the current and future promotional opportunities.

5.6 Dress Code

Because the IE will not be recorded, no uniform is required. However, for the CE you will be on camera and must be in white shirt, black tie, and dark trousers.

6. RATINGS OF YOUR RESPONSES

6.1 Assessors

Your test responses will be evaluated by a panel of assessors from outside agencies. PST will train with the selected assessors prior to their participation in rating candidate responses. Assessor training covers the role of H-6 Investigator, the agency and the specific nuances of the
examination. The training also covers a great deal of information on the rating process and various facets of documentation, observation, and rating. Finally, assessors are thoroughly trained on how to apply the scoring criteria to make accurate and effective ratings.

6.2 What will the assessors see?

For the IE, the assessors will evaluate the Question and Answer document for each scenario that you complete in Microsoft Word. For the CE, the assessors will evaluate your role play video for verbal and non-verbal communication skills, along with your completed Form 1, Form 2 and Incident Diagram.

7. Preparation Methods

In addition to reviewing job areas important to the H-6 position and the reference material previously mentioned (as well as references or books relating to supervision, etc.), it also may be helpful for you to prepare by using one of the approaches discussed below.

7.1 Informal Study Group Method

Study groups are often helpful for this type of assessment because group members can brainstorm and create various types of “mock” or hypothetical test scenarios or incidents (involving various types of problems or challenges) that could be possible test material because they are highly relevant to the job in question. The study group could also create questions related to these situations/incidents and share their ideas as to how one should answer or respond to the situations/incidents. The benefit of group study is that it gives one an opportunity to explore perspectives that one might otherwise not consider when addressing a test question/situation. In other words, it often allows group members to compile the “best” available information since it is coming from multiple sources and discussed by individuals with different perspectives.

Sometimes such a study group might divide responsibilities among group members. For example, they might assign the creation of hypothetical test scenarios to particular group members who show an interest or skill in this type of activity. The person could also outline general questions related to the scenarios. The same person or other group members could be assigned to the task of researching and/or documenting appropriate answers or responses to the hypothetical test scenarios/situations. These study group members, in turn, could then submit their scenarios and questions to an administrative lead whose job would be to compile the scenarios into a study guide.

The group then might meet to discuss the scenarios. This part of the process is critical. Individuals should share, discuss, and debate their responses. This is a process where real “learning” often occurs, as group members can gain the perspective of others in the group (e.g., regarding how they would address a given scenario).
Taking notes during these discussions is highly recommended. Leave plenty of room when taking notes so that you can fill in details or make comments later. The sooner you review your notes after meeting with your study group, the better. If possible, you should review your notes several times a week, as well as days before the test. This repeated review will help to ingrain in your mind the points that you have made in your notes so that you can better recall them during the actual test.

### 7.2 Individual Study Method

Some candidates may be good test takers or believe they have greater mastery of testable subjects than other candidates. Consequently, they may not want to engage in study groups because they believe that sharing what they know would only help their “competition.” Other candidates may simply not have the time or flexible schedule to meet with others for study test preparation purposes. Regardless of the reason, there is of course nothing wrong in deciding to study alone. In fact, many of the recommendations included in the study group method also apply to individual preparation. For example, one could brainstorm scenarios, outline responses related to the scenarios, research the appropriate responses to these scenarios, and take notes, etc., in order to prepare for the test.

If you choose to prepare on your own but still want to network in some limited capacity (e.g., with others who might have prepared the same way as you did), that “hybrid” option also is a possibility. That is, you could share your notes or final study guide with others in advance of the assessment administration and review their material, in turn.

### 7.3 General Strategies

1. **Expectations of an SFFD H-6 Investigator.** Familiarize yourself with the roles and responsibilities of an SFFD H-6 Investigator. Review the job analysis section presented earlier in this guide. This will help you learn as much as you can about the position and what would be expected of someone working in this position.
2. **Reference List.** Review the suggested reference list as this may help you learn proper ways to respond to various situations that may be presented in the test.
3. **Practice.** Practice by creating hypothetical test scenarios/questions, either alone or with a group, and preparing your responses and answers to those questions/situations.

Diligent preparation for this assessment will help you succeed; however, there are other considerations that can affect your performance on the day of the assessment such as:

1. **Your Physical Well-being.** If you can, do your best to eat right and get a good night’s rest before the test. Avoid drugs, alcohol and sleeping medication the night before. In fact, physical exercise or physical activity can help take your mind off the test the day before and help to relieve some stress. Avoid conflicts or emotional upsets. In other words, you want to be in the best possible condition, both physically and mentally, on the day
of the test. Unfortunately, candidates in public safety promotional processes across the
country often must work the day before or even the day of a test. Therefore, plan
accordingly and think how you can best prepare yourself if you will be facing such
circumstances.

☐ **Arrive Early.** Make all necessary arrangements to ensure that you arrive early at the test
site. It would be wise to anticipate traffic delays in traveling to the site and to allocate
extra travel time to ensure an early arrival even with delays, especially due to the
limited parking in the neighborhood of the test center.

☐ **Controlling Anxiety and Stress.** Many candidates experience anxiety as a result of the
stress and pressure to perform well on the assessment. This is common and natural.
Acknowledging your anxious feelings may help you to relax and put yourself in a better
mindset for taking the assessment. As much as possible, try to have a positive attitude
on the day of the test. Engage in positive self-talk and relaxation breathing. Get rid of
excess body tension by tensing and relaxing your muscles. If at all possible, try to keep
your mind clear, calm and uncluttered.

### 7.4 General Test Taking Strategies

There are several strategies and tips to keep in mind when taking the test to achieve a test
score that accurately reflects your level of knowledge about the job.

1. **Listen carefully.** The exam administrator will provide you with complete instructions for
taking the exam. Be sure to pay close attention to all test instructions. It is extremely
important that you completely understand the directions before the exam begins.

2. **Ask questions.** If there are instructions that you do not understand or if something is not
clear, please feel free to ask for clarification before the exam begins.

3. **Keep track of time.** Budget your time and pace yourself. You must track your time so that
you are able to pace yourself throughout the exam. You do not want to run out of time and
leave parts of the test unaddressed. You should allot a few minutes of time for one last
review of your work at the end of the exam. The test administrator will make
announcements regarding remaining test time for the IE and the report completion portion
of the CE. For the CE preparation period and interview, you will have a timer in front of you.

4. **Remain calm.** It is important that you remain calm throughout this exam so that you are
able to work most effectively. You can’t allow yourself to become nervous or confused by a
few difficult or challenging items.

5. **Review all written material carefully.** Scan all the material before you start. This may
include the instructions, the test stimulus material and test questions. Then read
everything carefully. Underline key words and/or phrases. Be sure that you understand
what you are being required to do.
6. **Extra time.** If you finish the exam before the time period is over, review your work and make any changes that are necessary. Be sure that you have attempted to address every question and/or issue.