

A

CANDIDATE INFORMATION GUIDE

FOR

FIRE FIGHTER/DRIVER OPERATOR

11681

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I. INTRODUCTION

The purpose of this booklet is to help you prepare for the written exam by providing you with information about the Fire Fighter/Driver Operator classification, the written multiple choice examination, and the scoring procedures. Read this booklet carefully so that you will know what is expected of you at the test site and during the exam.

- You will have 3 hours to complete the exam. If you cannot stay for the full time, do **not** come to the exam location.
- You must bring several sharpened #2 pencils with good erasers. It is also recommended that you bring at least one (1) highlighter pen.
- You may bring a calculator to use for the examination. Small solar powered or battery operated calculators that perform basic functions such as addition, subtraction, multiplication, division, square roots, or percentages are allowed. Calculators that plug-in, utilize tape, have word processing, spelling, thesauruses, or other storage and retrieval capabilities (except basic memory functions) are not allowed. **Calculators that are a feature on a cell phone are not permitted.** Calculators are subject to inspection by exam monitors. Applicants may not borrow or share calculators at the exam site.
- You will not be allowed to bring any other materials into the testing location. This includes your Candidate Information Guide. All of the materials that you will need except pencils will be provide at the test site.

REMEMBER!!!

Bring your test NOTIFICATION CARD and a PICTURE IDENTIFICATION when you come to the exam. This might be a valid driver's license, a military identification card, a student identification card, or some other form of picture identification. You only need to have one form of PICTURE IDENTIFICATION. You will not be allowed into the testing location without your NOTIFICATION CARD and PICTURE IDENTIFICATON.

II. JOB PREVIEW

Fire Fighter/Driver Operator positions are with the Military Department and are located in Montgomery and Birmingham.

The Fire Fighter/Driver Operator job is specialized protective service work in all phases of structural fire fighting and aircraft crash-fire-rescue and the operation of all equipment particular to these functions on an assigned shift. Employees in this class perform work in crash-fire-rescue and structural fire fighting duties involving intensive training and complete familiarity with the escape and rescue systems incorporated in the aerospace vehicles assigned to an air base. Employees must develop and maintain complete familiarization with all crash-fire-rescue equipment and the proper techniques for utilization of equipment in the crash-fire-rescue mission. The work may involve considerable personal danger and if necessary, require entering a burning structure or aircraft vehicle to rescue individuals. Employees work under the direct supervision of the Fire Chief, an Assistant Chief, or a Crew Leader.

III. HOW THE WRITTEN EXAMINATION WAS DEVELOPED

A study of the Fire Fighter/Driver Operator classification was conducted prior to developing the examination. A number of employees who work in this position and their supervisors participated in this study. Incumbents and supervisors determined what job duties are performed by Fire Fighter/Driver Operators and what knowledges and abilities a Fire Fighter/Driver Operator must possess in order to perform these job duties.

When the study was completed, the results showed that a new employee in the position of Fire Fighter/Driver Operator must be able to perform several important duties. These activities are listed below:

- Responds to structural and crash fire emergencies.
- Performs rescue procedures at fire/crash scenes.
- Maintains crash/fire/rescue (CFR) vehicles and equipment.
- Performs cleaning and maintenance duties.
- Operates the Fire Alarm Control Center (FACC).
- Participates in drills and training.
- Presents training courses to other Fire Fighters.
- Performs miscellaneous fire department activities.

The study also showed that the following knowledges and abilities are associated with the above activities. A Fire Fighter/Driver Operator must possess the knowledges and abilities listed below on their first day of work before training.

- **Knowledge of aircraft fire fighting procedures such as pre-fire planning and ingress and egress procedures to include fire suppression procedures, crash rescue, foam application, vehicle operation, vehicle position, hazards (i.e., munitions, hydrazine, inert flares, excess fuel, ejection seats, intake, exhaust), specialized equipment, proper use and wear of Personal Protective Equipment (PPE), shut down procedures, safety of aircraft (i.e., pins into gear, guns), ventilation, resupply procedures, and salvage and overhaul operations as needed to ensure successful fire suppression and safety of individuals and oneself.**
- **Knowledge of structural fire fighting procedures such as pre-fire planning to include water sources, vehicle position, structural hazards, facility contents, gas and power shut off, salvage and overhaul of shut off operations, hose evolutions, evacuation, protecting exposures, and ventilation as needed to save lives and protect property and the environment.**
- **Knowledge of wildland fire fighting procedures such as grass fires and forest fires to include water sources, fire suppression techniques, hand tools, and vehicle position as needed to surround and extinguish the fire.**
- **Knowledge of search procedures such as primary and secondary search to include techniques for search (i.e. on knees, close to wall), exit path, appropriate markings, and removal of victims (i.e., carry, drag, use stretcher) as needed to remove victims from danger.**
- **Knowledge of emergency first responder techniques to include triage, basic First Aid (i.e., shock, broken bones, cuts, bruises), wrapping/bandaging, carrying to ambulance, packaging to transport, and transporting as needed to ensure prompt medical attention to the injured.**
- **Knowledge of Cardiopulmonary Resuscitation (CPR) to include establishing an airway, ensuring victim has a pulse and respiration, and maintaining annual certification as needed to sustain basic life support to the injured and to teach CPR.**
- **Knowledge of standard fire equipment such as axes, hoses, hose clamps, spanner wrenches, pike poles, adapters, hand light, battery pliers, screwdrivers, gas and water cutoffs, bolt cutters, cotton hooks, air packs, and turnout gear to include procedures or techniques for operating, handling, and maintaining equipment as needed to extinguish fires, ventilate an area, force entry into buildings, turn water sources on and off, and protect self and others in dangerous situations.**

- **Knowledge of fire fighting tactics to include use of fog versus straight streams, fire size-up, use of line sizes, locating source of fire, ventilation, spray locations (distance from fire), how to maneuver or position body when spraying fire, forcible entry, and influences on fire spread (e.g., wind direction) as needed to extinguish fires quickly while rescuing individuals, minimizing damage, and protecting self, others, and property from fire hazards.**
- **Knowledge of fire suppression agents such as foam, water, dry powder, carbon dioxide, halon, wet water, and pressurized water to include determining which agent to use in different fire situations and understanding the conversion ratio as needed to prevent hazards due to improper application and prevent further damage due to the spread of fire.**
- **Knowledge of information sources and agencies such as CHEMTREC 1-800 number, rescue squads, utility companies, law enforcement agencies, railroad companies, volunteer fire departments, hazardous materials manual, emergency medical personnel, factory guidelines on chemicals stored in buildings, and IFSTA manuals as needed to contact other agencies to assist in fire fighting, to prevent loss of life or damage to property or the environment, to identify type of fire or chemical spill, and to extinguish chemical fires.**
- **Knowledge of building construction to include the effects of fire on building materials, building age, location of exits, and building design (i.e., fire walls, basement, stairwell, elevators, sprinklers, skylights) as needed to determine how rapidly a fire will burn and the most appropriate method to attack the fire.**
- Ability to operate different types of emergency vehicles such as rescue truck, crash truck, pumper, water distributors, and small/large fire engine to include functions, limitations, intended use, and characteristics as needed to effectively perform fire control and extinguishment.
- Ability to operate pumper to include understanding operation; using throttle, governor, and levers; interpreting dials and gauges; knowing when and how much to gate down pressure on a line; and hooking up lines to intake and outlet valves as needed to maintain an adequate supply of water to a fire scene.
- Ability to communicate orally with individuals such as co-workers, air traffic controllers, aircraft commander, city fire department personnel, military personnel, and tour groups to include adjusting communication to the level of the listener as needed to give tours, obtain necessary permission and clearance, and coordinate rescue efforts.

- **Ability to read and comprehend technical materials such as training materials, state and federal regulations or directives, equipment operation instructions, technical orders, SOPs, memos, and hazardous materials manuals to include location and applicability as needed to remain in compliance, ensure safety of self and others, and train firefighters.**
- **Ability to read and understand maps such as grid maps, topography, road maps, GPS (Global Positioning Systems), pre-fire plans, streets, alleys, block numbers, plugs, and dead ends to include understanding symbols, interpreting information and having a general familiarization with surrounding areas as needed to respond to on- and off-base incidents.**
- Ability to analyze emergency situations such as hot breaks, fuel spills, overheat conditions, hydrazine leak or EPU activation, hung munitions, and possible fire and medical situations to include determine type of extinguishing agents to use, appropriate tools, PPE needed, appropriate contact person, and method to contact as needed to save lives and protect property and the environment.
- Ability to perform CPR to include when to use AED (defibrillator) and procedure for infants, children and adults as needed to save lives.
- Ability to function under stress to include maintaining composure in dangerous or life-threatening situations as needed to respond to emergencies and save lives and property and protect the environment.
- **Ability to interpret characteristics of fires such as color of smoke and flames, presence of odors, smoke density (amount of smoke from building structure), location of fire, exposures, size of buildings, and size of fire to include identifying backdrafts, the presence and type of chemicals or gases, and indicators of arson, and determining rescue tactics as needed to attack fire appropriately by correctly applying the proper fire suppression agents.**

The examination for Fire Fighter/Driver Operator will measure the ten knowledges and three abilities that appear in **bold print** in the above list. The remaining knowledges and abilities cannot be measured by a written test and must be observed during the probationary period if you are hired as a Fire Fighter/Driver Operator.

IV. SOURCE MATERIALS

The following resources were used in the development of test questions:

Essentials of Fire Fighting, Third Edition

Aircraft Rescue and Fire Fighting, Third Edition

First Responder, A Skills Approach, Third Edition

1996 North American Emergency Response Guidebook

While the required experience and required certifications should be sufficient preparation for taking this examination, we want all candidates to have the opportunity to review these documents prior to test administration. Candidates must obtain their own copies of these documents for any study and review activities they choose to undertake. You will not be allowed to bring these documents to the test site, nor will these documents be provided for you during test administration.

V. SAMPLE TEST INSTRUCTIONS AND ITEMS

The thirteen knowledges and abilities being measured by this examination were grouped into three categories for the purposes of test development. Each category constitutes one section of the exam. The sections are entitled Situation Analysis, Reading and Interpreting Technical Information, and Fire Fighting Procedures.

Section I: Situation Analysis measures knowledge of search procedures, knowledge of emergency first responder techniques, knowledge of standard fire equipment, knowledge of fire fighting tactics, knowledge of fire suppression agents, knowledge of information sources and agencies, knowledge of building construction, and ability to interpret characteristics of a fire.

Section II: Reading and Interpreting Technical Information measures ability to read and comprehend technical materials and ability to read and understand maps.

Section III: Fire Fighting Procedures measures knowledge of aircraft fire fighting procedures, knowledge of structural fire fighting procedures, and knowledge of wildland fire fighting procedures.

The following pages contain instructions and sample questions for each section of the exam. These instructions and sample questions are taken directly from the examination booklet. Sample questions will not be scored, but they are representative of the exam questions found in each section.

Section I: Situation Analysis

Section I contains questions pertaining to situation analysis. This section was designed to measure your knowledge of search procedures, knowledge of emergency first responder techniques, knowledge of standard fire equipment, knowledge of fire fighting tactics, knowledge of fire suppression agents, knowledge of information sources and agencies, knowledge of building construction, and ability to interpret characteristics of a fire.

Read each question carefully, and select the most appropriate answer. Mark the corresponding space on your Scantron answer sheet.

Example:

OSHA requires workers to wear protective breathing equipment whenever entering an atmosphere that has an oxygen concentration of less than _____.

- A. 19 ½ percent
- B. 21 percent
- C. 25 percent
- D. 37 ½ percent

The correct answer is A. 19 ½ percent

Alternative A is correct. This question is taken from Essentials of Fire Fighting, Third Edition, page 64. The section entitled Oxygen Deficiency discusses the potential hazards associated with oxygen deficiency and outlines OSHA standards: “OSHA requires workers to wear protective breathing equipment whenever entering an atmosphere that has less than a 19 ½ percent oxygen concentration.”

Section II: Reading and Interpreting Technical Information

Section II contains questions pertaining to reading and interpreting technical information. This section was designed to measure your ability to read and comprehend technical materials and ability to read and understand maps.

Read each question carefully, and select the most appropriate answer. Mark the corresponding space on your Scantron answer sheet.

Example:

Below is a reading passage from Essentials of Fire Fighting, Third Edition. Read each section and respond to the questions using only the information contained in the passage. You should **NOT** base your answers on any prior knowledge of the issue addressed in the reading passage.

Reading Passage 1

Oxidation – The complex chemical reaction of organic materials with oxygen or other oxidizing agents resulting in the formation of more stable compounds. Organic materials are substances containing carbon such as all plant and animal material and hydrocarbon fuels. More stable compounds are simply those with less bound-up chemical energy. They become more stable by releasing some of their energy as heat and light during combustion.

Based on **Reading Passage 1**, which of the following statements is **NOT** correct?

- A. Oxidation is a chemical reaction.
- B. All plant and animal material contains carbon.
- C. Oxidation makes compounds less stable.
- D. Compounds become more stable by releasing energy.

The correct answer is C. Oxidation makes compounds less stable.

Alternative C is correct. According to the information provided, the statement “Oxidation makes compounds less stable” is not correct. Based on **Reading Passage 1**, the definition of oxidation is a “complex chemical reaction of organic materials with oxygen or other oxidizing agents resulting in the formation of more stable compounds.”

Section III: Fire Fighting Procedures

Section III contains questions pertaining to fire fighting procedures. This section was designed to measure your knowledge of aircraft fire fighting procedures, knowledge of structural fire fighting procedures, and knowledge of wildland fire fighting procedures.

Read each question carefully, and select the most appropriate answer. Mark the corresponding space on your Scantron answer sheet.

Example:

Which of the following statements, if any, is correct concerning ventilating an aircraft?

- I. An aircraft with an interior fire needs to be ventilated like an enclosed structure.
 - II. Cutting ventilation openings in an aircraft takes much longer than cutting vent holes in the roof of a structure.
-
- A. I only
 - B. II only
 - C. Both I and II
 - D. Neither I nor II

The correct answer is C. Both I and II

Alternative C is correct. This question is taken from the Aircraft Rescue and Fire Fighting, Third Edition, page 136. The section entitled Ventilation says that “an aircraft with an interior fire needs to be ventilated the same as any other enclosed structure” and that “cutting ventilation openings in an aircraft fuselage takes much longer than cutting vent holes in the roof of a structure.”

VI. STUDY SUGGESTIONS

You may find some of the following ideas helpful in preparing for the exam.

- Study the Sample Test Instructions and Items in this Candidate Information Guide. Become familiar with the instructions and examples so you will know what to expect on the examination.
- Think of possible test questions as you study. Anticipate what the test questions will be like based upon the sample questions and the knowledges and abilities being measured (listed on pages 5-7).
- While you study, pretend that you are in a real testing situation and try not to talk to anyone.
- Practice reading passages such as instruction manuals or “how-to” books you may have at home. Try to pick out the key information. Highlight important aspects of the sections and/or take brief notes.

VII. EXAM ADMINISTRATION

The following information relates to exam administration and addresses items that you should or should not bring to the exam location.

- Do **NOT** bring this booklet to the exam location. You will not be permitted to bring it in the testing room.
- Do **NOT** bring any of your study materials to the exam.
- You will **not be allowed** to enter the exam location or take the exam without your PICTURE IDENTIFICATION. To protect your own interests, you must bring one form of PICTURE IDENTIFICATION to the exam site. Examples of valid identification are a driver’s license, a military identification card, and a student identification card.
- Bring several No. 2 pencils with erasers to the exam. You may also bring a highlighter pen to use during the reading and interpreting technical information section of the test.

VIII. TAKING THE EXAM

You will have 3 hours to complete the exam. Be sure to keep track of the time, and use your time efficiently. Try to budget your time so you will be able to complete the entire exam. Think about each question carefully, but do not spend too much time on any one question. Try to work at a steady pace so you can finish as much of the test as possible.

Do not give up on difficult test questions. If the question or problem seems hard, many people do not even try. Attempt to get the right answer to every question, but do not spend too much time on any one question just because it is hard. This may not leave you enough time to answer questions later in the test that you know.

Use all of the time allowed to you. If you complete the exam early, review the questions and answers you have marked for accuracy. Be sure that you answered every question and all erasures are complete. Go back to questions that you were unsure about the answers. The exam is not a test of how quickly you can answer questions.

For every question, be sure to mark an answer on your Scantron answer sheet. If you do not know the answer, eliminate as many alternatives as possible, and then make a guess. You will not be penalized for guessing. Also, only the responses marked on the Scantron answer sheet will be scored. You will not receive credit for answers on scratch paper or in the test booklet.

Remember that the second section of the test consists of reading passages and maps as well as the related questions. This section of the test may take you longer to complete than the first and third sections. While reading the passages or maps, you may want to underline or highlight important information or take brief notes as you read or mark routes on the maps. If you choose to take notes, make sure they are very brief so you do not waste any time.

IX: TEST RESULTS

Four to six weeks after completing the exam, you will receive a Notice of Examination Results postcard in the mail. This postcard will identify your score, or Band placement, for the written exam. If you have not received your score within four to six weeks, you should call the State Personnel Department.

In addition to your Band placement, you may also obtain your standing, or rank on the register, online at www.personnel.alabama.gov. From the home page, you should click on “Applicants” and then “Register Standings”, and follow the instructions. For security purposes, you must now create an online profile in order to access your standing.

X: REASONABLE ACCOMMODATIONS

If you would like to request special testing accommodation or have any questions concerning the test site or testing conditions, please contact the State Personnel Department at (334) 242-3389.

XI: RESCHEDULING A WRITTEN EXAMINATION

If there is a conflict in your schedule, and you are unable to attend the written exam at the time and date for which you have been scheduled, you must resubmit your Application for Examination. The State Personnel Department will schedule you for the next available administration of this written test.