



Office of Training
and Certification

New Jersey Division of Fire Safety

BASIC PRACTICAL SKILLS EXAMINATION REPORT

Skill sheet #
ARFF
00

Certification title
AIRCRAFT RESCUE FIREFIGHTER

Applicant Information

Candidate name	DFS ID #	Course #
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Evaluation

Standard:	Task
NFPA 1003, 2019 Edition N.J.A.C. SUBCHAPTER #10 5:73-10.1 thru 10.6	Evaluator: AIRCRAFT RESCUE FIREFIGHTER <p>This standard identifies the minimum job performance requirements (JPRs) for Airport Fire Fighters. The purpose of this standard is to specify the minimum job performance requirements (JPRs) for service as an Airport Fire Fighter. This standard shall define Airport Fire Fighters. The intent of this standard shall be to ensure that personnel serving as Airport Fire Fighters are qualified and shall not address organization or management responsibility. It is not the intent of this standard to restrict any jurisdiction from exceeding or combining these minimum requirements. The JPRs for each level and position are the tasks personnel shall be able to perform in order to carry out the job duties. Airport Fire Fighters shall remain current with the general knowledge and skills and JPRs addressed for each level or position of qualification. The application of this standard is to specify which requirements within the document shall apply to Airport Fire Fighters.</p> <p>The JPRs shall be accomplished in accordance with the requirements of the NJ Division of Fire Safety Office of Training and Certification. (NJDFSOTC) and all applicable NFPA standards. Performance of each requirement of this standard shall be evaluated by personnel approved by the (NJDFSOTC). The JPRs for each level or position shall be completed in accordance with recognized practices and procedures or as defined by law or by the (NJDFSOTC) . Personnel assigned the duties of Airport Fire Fighters shall meet all the requirements defined in Chapter 4 prior to being qualified. The (AHJ) shall provide personal protective clothing and the equipment necessary to conduct assignments. JPRs involving exposure to products of combustion shall be performed in approved PPE. Prior to training to meet the requirements of this standard, personnel shall meet the following requirements:</p> <ol style="list-style-type: none"> (1) Educational requirements established by the (NJDFSOTC) (2) Age requirements established by the (NJDFSOTC) (3) Medical requirements established by the AHJ (4) Job-related physical performance requirements established by the AHJ

Evaluator signature & comments, Test #1		Evaluator signature & comments, Retest #1		Evaluator signature & comments, Retest #2	
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New Jersey Division of Fire Safety

PREREQUISITE REPORT

Skill sheet #

**ARFF
01**

Certification title

4.1.1 Qualifications. To be qualified as an airport fire fighter, the candidate shall meet the requirements for Fire Fighter II as defined in NFPA 1001, NFPA 1072 Hazardous Material Awareness and Operation and the requirements for airport firefighter defined in standard NFPA 1003.

Applicant Information

Candidate name

DFS ID #

Course #

Evaluation

Standard:
NFPA 1003, 2019 Edition

Task

4.1.1

Evaluator: Ensure documents are correct for all prerequisite of NFPA Standard 1003 for this candidate
Order not critical

Conditions and Outcome

Must have completed NJ Firefighter II per NFPA 1001
Have current certificates for Hazmat Awareness and Operation per NFPA 1072

Number	Task Steps	First Test		Retest #1		Retest #2	
		Pass	Fail	Pass	Fail	Pass	Fail
1	NJ Firefighter II Certificate						
2	Hazmat Awareness Certificate						
3	Hazmat Operations Certificate						
Final Result for Entire Task							

Evaluator signature & comments, Test #1		Evaluator signature & comments, Retest #1		Evaluator signature & comments, Retest #2	
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Office of Training
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New Jersey Division of Fire Safety

Basic Practical skills examination report

Skill sheet #

**ARFF
02**

Certification title

**ARFF
General Knowledge Requirements-
DON PPE**

Applicant Information

Candidate name

DFS ID #

Course #

Evaluation

Standard:
NFPA 1003, 2019 Edition

4.1.1.4

Task

Evaluator: Don ARFF personal protective equipment within one (1) minute: doff personal protective clothing and prepare for reuse Order not critical

Conditions and Outcome

Given personal protective equipment (boots, pants, coat, hood, gloves and helmet). The candidate shall demonstrate the ability to properly don personal protective clothing in one minute and prepare the personal protective clothing for reuse. **The candidate will complete this task with a minimum of 5 items answered correctly.**

Number	Task Steps	First Test		Retest #1		Retest #2	
		Pass	Fail	Pass	Fail	Pass	Fail
	DONNING						
1	Don pants and boots- with all fasteners secured and suspenders in place						
2	Don hood covering ears, head, and neck						
3	Don Coat- including storm flaps closed and collar up and secured						
4	Don helmet and secure with chinstrap						
5	Don gloves with no skin exposed						
	DOFFING						
6	Place all equipment in a ready state for reuse						
Final Result for Entire Task							

Evaluator signature & comments, Test #1		Evaluator signature & comments, Retest #1		Evaluator signature & comments, Retest #2	
Evaluator signature	Date	Evaluator signature	Date	Evaluator signature	Date
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Office of Training
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New Jersey Division of Fire Safety

Basic Practical skills examination report

Skill sheet #

ARFF
03

Certification title

ARFF

**General Knowledge Requirements-
AIRPORT FAMILIARIZATION**

Applicant Information

Candidate name

DFS ID #

Course #

Evaluation

Standard:
NFPA 1003, 2019 Edition

Task

4.2.1

Evaluator: Airport familiarization given an Airport Grid map Order not critical

Conditions and Outcome

Respond to day and night incidents on and adjacent to the airport, given an assignment, operating conditions, a location, a grid map, a vehicle, and a prescribed response time, so that the route selected and taken provides access to the site within the allotted time.

Number

Task Steps

First Test

Retest #1

Retest #2

Pass

Fail

Pass

Fail

Pass

Fail

Mapping

- 1** Demonstrates /describes runways and taxiways designations
- 2** Frangible gate locations, airport markings, lights, ILS units
- 3** Fire-fighting access areas
- 4** Vehicular traffic controls on airfield
- 5** Bridge load limits; controlled access points; aircraft traffic patterns and taxi routes; fuel storage and distribution locations;
- 6** Airport and immediate local area topographic layout, drainage Systems, water supplies, airport facilities, and security.
- 7** Read, interpret, and take correct action related to grid maps, water distribution maps, airport markings, and lights.

Final Result for Entire Task

Evaluator signature & comments, Test #1

Evaluator signature & comments, Retest #1

Evaluator signature & comments, Retest #2

Evaluator signature

Date

Evaluator signature

Date

Evaluator signature

Date

**Candidate signature & acknowledgement,
Test #1**

**Candidate signature & acknowledgement,
Retest #1**

**Candidate signature & acknowledgement,
Retest #1**

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Candidate signature

Date

Candidate signature

Date

Candidate signature

Date



Office of Training
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New Jersey Division of Fire Safety

Basic Practical skills examination report

Skill sheet #

ARFF
05

Certification title

ARFF

General Knowledge Requirements- AIRPORT RESPONSE

Applicant Information

Candidate name

DFS ID #

Course #

Evaluation

Standard:

NFPA 1003, 2019 Edition
4.2.3

Task

Evaluator: Communicate critical incident information **Order not critical**

Conditions and Outcome

Communicate with applicable air traffic control facilities, given a response destination on or adjacent to an airport and radio equipment, so that all required clearances are obtained

Number	Task Steps	First Test		Retest #1		Retest #2	
		Pass	Fail	Pass	Fail	Pass	Fail
1	Demonstrate knowledge of airport communications systems with the tower						
2	Demonstrate /describe avoiding runway/aircraft movement area incursion						
3	Describe communications equipment and frequencies and tower light signals						
4	Demonstrate knowledge and Describe aviation terminology, and phonetic alphabet						
Final Result for Entire Task							

Evaluator signature & comments, Test #1		Evaluator signature & comments, Retest #1		Evaluator signature & comments, Retest #2	
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Office of Training
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New Jersey Division of Fire Safety

Basic Practical skills examination report

Skill sheet #

ARFF
06

Certification title

ARFF

**General Knowledge Requirements-
AIRPORT RESPONSE**

Applicant Information

Candidate name

DFS ID #

Course #

Evaluation

Standard:
NFPA 1003, 2019 Edition
Chapter 4.2.4,
4.4.1,4.4.2

Task

Evaluator: Airport Hazardous Conditions Order not critical

Conditions and Outcome

Perform an airport operation, given an assignment, a hazardous condition, and the airport policies and procedures, so that unsafe conditions are detected and reduced in accordance with the airport policies and procedures.

Number	Task Steps	First Test		Retest #1		Retest #2	
		Pass	Fail	Pass	Fail	Pass	Fail
1	Demonstrate knowledge of airport communications systems with the tower						
2	Recognize hazardous conditions and initiate corrective action						
3	Describe Airport/aircraft policies and procedures for hazardous conditions.						
4	Describe your actions for foreign object debris (FOD)						
5	Describe your actions during fueling operations with passengers on board (bounding and grounding)						
6	Describe knowledge of fuel cell maintenance on aircraft						
7	Describe knowledge of Fuel Farms and fuel hydrant servicing of aircraft						
Final Result for Entire Task							

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Plan of Instruction

Instructor Guide

Goal

To acquaint the instructor with the scope and format of the course, and other pertinent information required to deliver a course that meets the learning objectives, engages the participants, and prepares each participant for Airport Fire Fighter certification.

Instructor Information

Welcome to the Aircraft Rescue and Fire Fighting course. This course is designed to prepare the student for the Airport Fire Fighter certification process. The course can also be used, in whole or part, as refresher training. As the course instructor, you have an essential role in ensuring the success of the training experience for each participant. This Plan of Instruction (POI) is intended to provide you with the background information required to be successful in your role as the instructor.

The POI reflects the requirements and information provided in the curriculum. It is your responsibility to make any needed revisions based on the requirements of your organization or the authority having jurisdiction. In addition, it is your responsibility to revise the student course syllabus as needed to match the POI.

You are strongly encouraged to review all the information in this plan of instruction, the instructor lesson plans, and any supplemental materials prior to delivering the course. In addition, you should read the text so that you are familiar with all the content that is going to be presented.

General information about the course is provided below.

- This course is based on the content in the IFSTA manual *Aircraft Rescue and Fire Fighting, 6th Edition*.
- The course meets or exceeds the requirements of the National Fire Protection Association® (NFPA®) 2017 edition of the professional qualifications standard 1003, *Standard for Airport Fire Fighter Professional Qualifications* for Airport Fire Fighter certification. Additional material addresses airport fire fighting apparatus requirements covered in Chapter 9 of the 2019 edition of 1002, *Standard on Fire Apparatus Driver/Operator Professional Qualifications*. By completing all of the lessons the student should be prepared for the Airport Fire Fighter certification process.
- The course evaluation strategy includes a quiz and test for each chapter in the course. In addition, Chapter 12 has five learning activity sheets that can be used to evaluate students' cognitive performance. Chapters 6, 8, 9, and 10 also include skill sheets that can be used to evaluate students' skills performance.
- A student Exam Prep is available which provides additional review of the course content. All the questions in the Exam Prep are multiple choice, similar to the questions used in certification exams. The Exam Prep is available in a print version, an electronic version, and as an app for Apple or Android devices.

Scope Statement

This course addresses the requirements of the NFPA® 1003, 2019 edition, *Standard for Airport Fire Fighter Professional Qualifications*, as well as Chapter # 4 & 9 of NFPA® 1002, 2017 edition, *Standard for Fire Apparatus Driver/Operator Professional Qualifications*.

The target audience includes, but is not limited to:

- Fire Service
- First Responders
- Industrial First Responders

Course Description

This is a 5 day. The course is designed to prepare students to successfully complete certification as an Airport Fire Fighter.

Course Outline

The following is the instructional overview (course outline) for the course. As mentioned previously, the course is delivered in 5 full-day sessions based on the scheduling needs of the sponsoring organization. In addition, one of the days the schedule includes night pit fires.

In addition to the information in the course outline, the instructor should cover and discuss information given in tables in the manual.

The times listed include the time required to administer a quiz and test for each chapter and time for breaks. The times are suggested times only. **The actual instructional times will depend on the experience of the students, the needs of the organization, and the instructional approach taken by the sponsoring agency.** Required instructional times may, in some instances, be significantly less than or greater than listed in the lesson plan.

<u>Chapter</u>	Chapter Title	Suggested Time	Text Reference	Learning Activities or Skill Sheets
1	Qualifications for Aircraft Rescue and Fire Fighting Personnel	1 hours	10-35	
2	Airport Familiarization	2 hours	36-70	
3	Aircraft Familiarization	2 hours	72-135	
4	Safety and Aircraft Hazards	2 hours	136-189	
5	Communications	2 hours	190-210	
6	Rescue	8 hours	212-275	Skill Sheet 6-1through 6-8
7	Extinguishing Agents	4 hours	276-310	
8	Apparatus	1 hours	312-352	Skill Sheet 8-1through 8-3
9	Fire Suppression, Ventilation, and Overhaul	4 hours	354-393	Skill Sheet 9-1through 9-7
10	Driver/Operator	2 hours	394-473	Skill Sheet 10-1through 10-4
11	Airport Emergency Planning	4 hours	474-515	
12	Strategic and Tactical Operations	8 hours	516-574	Learning Activity 12-1 through 12-5

Course Schedule

The following course schedule is recommended for a course which includes Chapters 1-12.

	Training Day 1	Training Day 2	Training Day 3	Training Day 4	Training Day 5
AM	Ch. 1	Ch. 2	Ch. 3.	Ch. 3 cont.	Ch. 4
PM	Ch. 1	Ch. 2	Ch. 3	Ch. 3	Ch. 4
	Training Day 6	Training Day 7	Training Day 8	Training Day 9	Training Day 10
AM	Ch. 4 cont.	Ch. 5	Ch. 6 cont.	Ch. 7	Ch. 8 cont.
PM	Ch. 4	Ch. 6	Ch. 6	Ch. 7	Ch. 8
	Training Day 11	Training Day 12	Training Day 13	Training Day 14	Training Day 15
AM	Ch. 9	Ch. 10	Ch. 10 cont.	Ch. 10 cont.	Ch. 11
PM	Ch. 9	Ch. 10	Ch. 10	Ch. 11	Ch. 11
	Training Day 6	Training Day 7	Training Day 8	Training Day 9	Training Day 10
AM	Ch. 11	Ch. 12 cont.	Ch. 12 cont.	Ch. 12 cont.	Certification Testing
PM	Ch. 12	Ch. 12	Ch. 12		Certification Testing

Learning Objectives

This course is designed to meet the learning objectives/performance objectives specified by NFPA® 1003 and Chapter 9 of NFPA® 1002. Those objectives are listed on the following pages. Beginning on page 12, a matrix is provided which correlates the learning objectives and the chapter(s) in the course.

Course Learning Objectives

Chapter 1

1. Explain the mission of ARFF personnel. *[NFPA® 1003, 4.1.1.1]*
2. Describe the history of Aircraft Rescue and Fire Fighting.
3. Identify organizations that deal with air transportation.
4. Identify roles and responsibilities of ARFF team members. *[NFPA® 1003, 4.1.1.1, 4.1.1.2]*
5. Identify elements of ARFF training programs.

Chapter 2

1. Describe airport familiarization training. *[NFPA® 1003, 4.2.1, 4.2.2, 4.2.3]*
2. Explain different airport types and classifications. *[NFPA® 1003, 4.2.1, 4.2.2, 4.2.3]*
3. Compare the different legs of a typical traffic pattern. *[NFPA® 1003, 4.2.1]*
4. Recognize systems used to designate runways and taxiways. *[NFPA® 1003, 4.2.1, 4.2.2, 4.2.3]*
5. Identify airport markings, lighting, and signage. *[NFPA® 1003, 4.2.1, 4.2.2, 4.2.3]*
6. Determine the impact of airport design on ARFF responses. *[NFPA® 1003, 4.1.1.3, 4.2.1]*
7. Explain the importance of a central location for airport fire stations. *[NFPA® 1003, 4.2.1]*

Chapter 3

1. Identify types of aircraft. *[NFPA® 1003, 4.1.1.3, 4.2.2, 4.3.4, 4.4.1]*
2. Describe the major components of fixed-wing and rotary-wing aircraft. *[NFPA® 1003, 4.1.1.3, 4.4.1]*
3. Identify types of and hazards associated with various aircraft engines. *[NFPA® 1003, 4.1.1.3, 4.4.1]*
4. Explain aircraft construction, structural materials, and hazards as they relate to ARFF training and operations. *[NFPA® 1003, 4.1.1.3, 4.3.6, 4.3.7, 4.4.1]*
5. Describe potential aircraft system hazards that firefighters may encounter. *[NFPA® 1003, 4.1.1.3, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.3.6, 4.3.7, 4.4.1]*

Chapter 4

1. Identify components of an airport safety program. *[NFPA® 1003, 4.2.4]*
2. Recognize the importance of firefighter safety as it relates to aircraft fire fighting. *[NFPA® 1003, 4.1.1.3, 4.2.4, 4.4.1, 4.4.2]*
3. Describe the various types of personal protective equipment with which ARFF firefighters are equipped. *[NFPA® 1003, 4.1.1.3, 4.1.1.4, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.3.6, 4.3.7, 4.3.10, 4.4.1, 4.4.2, 4.4.3]*
4. Discuss the different types of hazards associated with aircraft emergencies. *[NFPA® 1003, 4.1.1.3, 4.2.4, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.3.6, 4.3.7, 4.4.1, 4.4.2]*
5. Identify special hazards of military aircraft. *[NFPA® 1003, 4.1.1.3, 4.2.4, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.3.6, 4.3.7, 4.4.1, 4.4.2]*
6. Identify indications of a possible terrorist incident. *[NFPA® 1003, 4.2.4]*

Chapter 5

1. Describe types of airport alerts. *[NFPA® 1003, 4.2.2, 4.2.3]*
2. Explain the functions of an Emergency Operations Center and Mobile Command Posts. *[NFPA® 1003, 4.2.2, 4.2.3]*
3. Identify airport communication systems. *[NFPA® 1003, 4.2.2, 4.2.3]*
4. Describe airport communication procedures. *[NFPA® 1003, 4.2.2, 4.2.3]*
5. Explain light and hand signals used in ARFF communications. *[NFPA® 1003, 4.2.2, 4.2.3]*

Chapter 6

1. Recognize safety considerations for the use of ARFF rescue tools and equipment. *[NFPA® 1003, 4.3.7, 4.4.1, 4.4.2]*
2. Identify tools and equipment used in ARFF rescue operations. *[NFPA® 1003, 4.3.7, 4.4.1, 4.4.2]*
3. Describe procedures for ARFF rescue in various environments. *[NFPA® 1003 4.3.2, 4.4.2]*
4. Describe tactics for ARFF rescue operations. *[NFPA® 1003, 4.4.2]*
5. Identify procedures for accessing the interior of an aircraft. *[NFPA® 1003, 4.1.1.3, 4.1.1.4, 4.3.4, 4.3.7, 4.4.1]*
6. Explain ways to safely and shut down an aircraft. *[NFPA® 1003 4.1.1.4, 4.3.5, 4.4.1]*
7. Describe the components of victim rescue in an ARFF response. *[NFPA® 1003 4.4.2, 4.4.3]*
8. Stabilize an aircraft using webbing, ropes, chains or a come-along (cable winch). *[NFPA® 1003, 4.4.1, 4.4.2; Skill Sheet 6-1]*
9. Deploy an air stairs unit (aircraft passenger stairs). *[NFPA® 1003, 4.4.1; Skill Sheet 6-2]*
10. Open aircraft doors and hatches. *[NFPA® 1003, 4.3.7; Skill Sheet 6-3]*
11. Cut an access opening in the skin of an aircraft (power saw). *[NFPA® 1003, 4.4.1, 4.4.2; Skill Sheet 6-4]*
12. Use hydraulic tools (cutters and /or spreaders) to open a hole in the side of an aircraft. *[NFPA® 1003, 4.4.1, 4.4.2; Skill Sheet 6-5]*
13. Perform operations to safely and shut down an aircraft. *[NFPA® 1003, 4.4.1, 4.4.2; Skill Sheet 6-6]*
14. Demonstrate the procedure for conducting a primary search of an aircraft after self-evacuation. *[NFPA® 1003, 4.4.2; Skill Sheet 6-7]*
15. Use a hydraulic device to remove a seat from an aircraft. *[NFPA® 1003, 4.4.1, 4.4.2; Skill Sheet 6-8]*

Chapter 7

1. Explain the use of primary and complementary extinguishing agents in ARFF operations. *[NFPA® 1003, 4.1.1.3, 4.1.1.4, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.3.6, 4.3.10]*
2. Describe the use of water as an extinguishing agent in ARFF operations. *[NFPA® 1003, 4.1.1.3, 4.1.1.4, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.3.6, 4.3.10]*
3. Explain the principles of foam used to combat aircraft and fuel fires. *[NFPA® 1003, 4.1.1.3, 4.1.1.4, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.3.6, 4.3.10]*
4. Identify categories and characteristics of foam concentrates. *[NFPA® 1003, 4.1.1.3, 4.1.1.4, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.3.6, 4.3.10]*
5. Explain how foam is proportioned. *[NFPA® 1003, 4.1.1.3, 4.1.1.4, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.3.6, 4.3.8, 4.3.10]*
6. Identify various devices used for foam application. *[NFPA® 1003, 4.1.1.3, 4.1.1.4, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.3.6, 4.3.10]*
7. Describe types of dry chemicals and their applications in ARFF operations. *[NFPA® 1003, 4.1.1.3, 4.1.1.4, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.3.6]*
8. Describe types of clean agents and their applications in ARFF operations. *[NFPA® 1003, 4.1.1.3, 4.1.1.4, 4.3.1, 4.3.3, 4.3.4, 4.3.5, 4.3.6]*
9. Explain methods of conserving and resupplying extinguishing agents used in ARFF responses. *[NFPA® 1003, 4.1.1.3, 4.1.1.4, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.3.6, 4.3.8]*

Chapter 8

1. Explain how to determine the number and appropriate types of ARFF apparatus required at an airport.
2. Describe the various types and capabilities of ARFF apparatus. *[NFPA® 1003, 4.3.2]*
3. Identify the features and options included on ARFF apparatus.
4. Describe types of fire suppression equipment found on ARFF apparatus. *[NFPA 1003, 4.1.1.3, 4.1.1.4, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.3.6, 4.3.10]*
5. Identify methods of resupplying extinguishing agent to an ARFF apparatus. *[NFPA® 1003, 4.1.1.3, 4.1.1.4, 4.3.8]*
6. Explain procedures for ARFF apparatus maintenance.
7. Resupply an ARFF vehicle with water. *[NFPA® 1003, 4.3.8; Skill Sheet 8-1]*
8. Resupply an ARFF vehicle with foam. *[NFPA® 1003, 4.3.8; Skill Sheet 8-2]*
9. Resupply an ARFF vehicle with dry chemical agent. *[NFPA® 1003, 4.3.8; Skill Sheet 8-3]*

Chapter 9

1. Identify fire suppression techniques. *[NFPA® 1003, 4.1.1.3, 4.1.1.4, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.3.6, 4.3.10, 4.4.1]*
2. Describe methods of ventilation in an aircraft fire. *[NFPA® 1003, 4.3.7]*
3. Describe overhaul operations after an aircraft incident/accident. *[NFPA® 1003, 4.3.10]*
4. Explain the importance of evidence preservation during overhaul operations. *[NFPA® 1003, 4.3.9]*
5. Secure fuel sources. *[NFPA® 1003, 4.3.3, 4.4.2; Skill Sheet 9-1]*
6. Extinguish a fuel spill using an ARFF vehicle turret. *[NFPA® 1003, 4.3.2, 4.3.9, 4.3.10; Skill Sheet 9-2]*
7. Deploy and operate an ARFF vehicle handline to extinguish a fuel spill fire. *[NFPA® 1003, 4.3.1, 4.3.9, 4.3.10; Skill Sheet 9-3]*
8. Extinguish a three-dimensional fuel fire with handline(s). *[NFPA® 1003, 4.3.3, 4.3.9, 4.3.10; Skill Sheet 9-4]*
9. Attack an interior fire. *[NFPA® 1003, 4.3.4, 4.3.7, 4.3.9, 4.3.10; Skill Sheet 9-5]*
10. Extinguish an APU/EPU or engine fire. *[NFPA® 1003, 4.3.5, 4.3.9, 4.3.10; Skill Sheet 9-6]*
11. Extinguish a wheel assembly fire with a handline. *[NFPA® 1003, 4.3.6, 4.3.9, 4.3.10; Skill Sheet 9-7]*

Chapter 10

1. Identify components of an ARFF driver/operator training program. *[NFPA® 1002, 9.1.2, 9.1.3]*
2. Describe routine inspection, testing, and service procedures for ARFF vehicles. *[NFPA® 1002, 9.1.1]*
3. Identify the principles of safe vehicle operation. *[NFPA® 1002, 9.1.2, 9.1.3, NFPA® 1003, 4.1.1.3, 4.1.1.4, 4.2.1, 4.2.4]*
4. Explain ARFF vehicle operational considerations in various environments. *[NFPA® 1002, 9.2.1, 9.2.2, 9.2.3; NFPA® 1003 4.1.1.3, 4.1.1.4, 4.2.1, 4.2.4]*
5. Describe agent systems and discharge. *[NFPA® 1002, 9.2.2, 9.2.3; NFPA® 1003 4.1.1.3, 4.1.1.4, 4.2.4, 4.3.2, 4.3.3, 4.3.5]*
6. Explain agent resupply of ARFF vehicles. *[NFPA® 1002, 9.1.1; NFPA® 1003, 4.3.8]*
7. Perform a routine walk-around maintenance inspection of an ARFF apparatus. *[NFPA® 1002, 9.1.1; Skill Sheet 10-1]*
8. Perform an engine compartment inspection and routine preventative maintenance of an ARFF apparatus. *[NFPA® 1002, 9.1.1; Skill Sheet 10-2]*

Chapter 11

1. Describe administrative responsibilities in relation to ARFF services. *[NFPA® 1003, 4.2.2]*
2. Identify the components of an Airport/Community Emergency Plan. *[NFPA® 1003, 4.2.2]*
3. Explain factors to consider when developing an Airport/Community Emergency Plan. *[NFPA® 1003, 4.2.2, 4.2.3, 4.2.4]*
4. Identify emergency response considerations. *[NFPA® 1003, 4.1.1.3, 4.2.2, 4.2.3, 4.2.4]*
5. Describe procedures for ARFF response to various emergencies. *[NFPA® 1003 4.1.1.3, 4.2.4, 4.3.9, 4.3.10, 4.4.1, 4.4.2]*
6. Explain training considerations for mutual aid and support personnel and joint training exercises. *[NFPA® 1003 4.3.1, 4.3.4, 4.3.5, 4.3.7]*
7. Identify the components of an Airport/Community Emergency Plan review.

Chapter 12

1. Identify components of and training for the National Incident Management System-Incident Command System (NIMS-ICS). *[NFPA® 1003, 4.2.2]*
2. Describe strategies and tactics for various in-flight emergencies. *[NFPA® 1003, 4.2.4, 4.3.6]*
3. Describe strategies and tactics for various ground emergencies. *[NFPA® 1003, 4.2.4, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.3.6, 4.3.7]*
4. Identify types and characteristics of low-impact crashes. *[NFPA® 1003, 4.2.4, 4.4.1, 4.4.2]*
5. Identify types and characteristics of high-impact crashes. *[NFPA® 1003, 4.2.4, 4.4.1, 4.4.2]*
6. Explain procedures for aircraft emergency responses. *[NFPA® 1003, 4.1.1.3, 4.2.2, 4.2.4, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.3.6, 4.3.7, 4.3.8, 4.3.9, 4.3.10, 4.4.1, 4.4.3]*
7. Explain actions to take and factors to consider when responding to accidents involving military aircraft. *[NFPA® 1003, 4.1.1.3, 4.2.2, 4.2.3, 4.2.4, 4.3.1, 4.3.2, 4.3.3, 4.4.1]*
8. Explain considerations for responding to aircraft accidents/incidents involving hazardous materials. *[NFPA® 1003, 4.2.4]*
9. Learning Activity 12-1: Use a grid map to respond to the site of an aircraft incident/accident. *[NFPA® 1003, 4.2.1]*

10. Learning Activity 12-2: Obtain a clearance from ground control using phonetic alphabet and aviation terminology. *[NFPA® 1003, 4.2.3]*
11. Learning Activity 12-3: Communicate an accurate situation report about an aircraft incident/accident to an incident commander using incident management system (IMS) protocol. *[NFPA® 1003, 4.2.2]*
12. Learning Activity 12-4: Recognize hazardous conditions at an aircraft incident/accident and initiate corrective action. *[NFPA® 1003, 4.2.4]*
13. Learning Activity 12-5: Implement initial triage of the victims of an aircraft accident or incident. *[NFPA® 1003, 4.4.3]*

Learning Objectives Correlation Matrix

NFPA® 1003 Standard (2015)	Chapter References	Learning Objectives	Skills and/or Learning Activities
4.1.1.1	1	1, 4	
4.1.1.2	1	4	
4.1.1.3	2	6	
	3	1, 2, 3, 4, 5	
	4	2, 3, 4, 5	
	6	5	
	7	1, 2, 3, 4, 5, 6, 7, 8, 9	
	8	4, 5	
	9	1	
	10	3, 4, 5	
	11	4, 5	
	12	6, 7	
4.1.1.4	4	3	
	6	5, 6	
	7	1, 2, 3, 4, 5, 6, 7, 8, 9	
	8	4, 5	
	9	1	
	10	3, 4, 5	
4.2.1	2	1, 2, 3, 4, 5, 6, 7	

NFPA® 1003 Standard (2015)	Chapter References	Learning Objectives	Skills and/or Learning Activities
	10	3, 4	
	12	9	Learning Activity 12-1
4.2.2	2	1, 2, 4, 5	
	3	1	
	5	1, 2, 3, 4, 5	
	11	1, 2, 3, 4	
	12	1, 6, 7, 11	Learning Activity 12-3
4.2.3	2	1, 2, 4, 5	
	5	1, 2, 3, 4, 5	
	11	3, 4	
	12	7, 10	Learning Activity 12-2
4.2.4	4	1, 2, 4, 5	
	10	3, 4, 5	
	11	3, 4, 5	
	12	2, 3, 4, 5, 6, 7, 8, 12	Learning Activity 12- 4
4.3.1	3	5	
	4	3, 4, 5	
	7	1, 2, 3, 4, 5, 6, 7, 8, 9	
	8	4	
	9	1, 7	Skill Sheet 9-3

NFPA® 1003 Standard (2015)	Chapter References	Learning Objectives	Skills and/or Learning Activities
	11	6	
	12	3, 6, 7	
4.3.2	3	5	
	4	3, 4, 5	
	6	3	
	7	1, 2, 3, 4, 5, 6, 7, 9	
	8	2, 4	
	9	1, 6	Skills Sheet 9-2
	10	5, 18, 19	Skill Sheets 10-12, 10-13
	12	3, 6, 7	
4.3.3	3	5	
	4	3, 4, 5	
	7	1, 2, 3, 4, 5, 6, 7, 8, 9	
	8	4	
	9	1, 5, 8	Skill Sheet 9-1, 9-4
	10	5	
	12	3, 6, 7	
4.3.4	3	1, 5	
	4	3, 4, 5	
	6	5	

NFPA® 1003 Standard (2015)	Chapter References	Learning Objectives	Skills and/or Learning Activities
	7	1, 2, 3, 4, 5, 6, 7, 8, 9	
	8	4	
	9	1, 9	Skill Sheet 9-5
	11	6	
	12	3, 6	
4.3.5	3	5	
	4	3, 4, 5	
	6	6	
	7	1, 2, 3, 4, 5, 6, 7, 8, 9	
	8	4	
	9	1, 10	Skill Sheet 9-6
	10	5	
	11	6	
	12	3, 6	
4.3.6	3	4, 5	
	4	3, 4, 5	
	7	1, 2, 3, 4, 5, 6, 7, 8, 9	
	8	4	
	9	1, 11	Skill Sheet 9-7
	12	2, 3, 6	

NFPA® 1003 Standard (2015)	Chapter References	Learning Objectives	Skills and/or Learning Activities
4.3.7	3	4, 5	
	4	3, 4, 5	
	6	1, 2, 5, 10	Skill Sheet 6-3
	9	2, 9	Skill Sheet 9-5
	11	6	
	12	3, 6	
4.3.8	7	5, 9	
	8	5, 7, 8, 9	Skill Sheet 8-1, 8-2, 8-3
	10	6	
	12	6	
4.3.9	9	4, 6, 7, 8, 9, 10, 11	Skill Sheet 9-2, 9-3, 9-4, 9-5, 9-6, 9-7
	11	5	
	12	6	
4.3.10	4	3	
	7	1, 2, 3, 4, 5, 6	
	8	4	
	9	1, 3, 6, 7, 8, 9, 10, 11	Skill Sheet 9-2, 9-3, 9-4, 9-5, 9-6, 9-7
	11	5	
	12	6	
4.4.1	3	1, 2, 3, 4, 5	

NFPA® 1003 Standard (2015)	Chapter References	Learning Objectives	Skills and/or Learning Activities
	4	2, 3, 4, 5	
	6	1, 2, 5, 6, 8, 9, 11, 12, 13, 15	Skill Sheet 6-1, 6-2, 6-4, 6-5, 6-6, 6-8
	9	1	
	11	5	
	12	4, 5, 6, 7	
4.4.2	4	2, 3, 4, 5	
	6	1, 2, 3, 4, 7, 8, 11, 12, 13, 14, 15	6-1, 6-4, 6-5, 6-6, 6- 7, 6-8
	9	5	Skill Sheet 9-1
	11	5	
	12	4, 5	
4.4.3	4	3	
	6	7	
	12	6, 13	Learning Activity 12-5

NFPA® 1002 Standard (2014)	Chapter References	Learning Objectives	Skills and Learning Activities
9.1.1	10	2, 6, 7, 8, 9, 17	Skill Sheet 10-1, 10- 2, 10-3, 10-11
9.1.2	10	1, 3, 10, 11, 12, 14	10-4
9.1.3	10	1, 3, 13	
9.2.1	10	4, 15	

NFPA® 1002 Standard (2014)	Chapter References	Learning Objectives	Skills and Learning Activities
9.2.2	10	4, 5, 15, 16, 19	
9.2.3	10	4, 5, 18	

Level of Learning

The level of learning for the overall course is application. The level of learning for each individual chapter is listed in the instructor guide for that chapter.

Instructor-to-Participant Ratio

The instructor-to-participant ratio may vary based on the experience of the participants and the ability of the instructor. However, a ratio of 20:1 is recommended for classroom instruction.

Practical Exercises and Skills

There are five learning activities in the course. Learning activities are designed to apply the concepts and skills in chapter 12. The learning activities are described below.

- Learning Activity 12-1** **Use a grid map to respond to the site of an aircraft incident/accident. [NFPA® 1003, 4.2.1]**
- Learning Activity 12-2** **Obtain a clearance from ground control using phonetic alphabet and aviation terminology. [NFPA® 1003, 4.2.3]**
- Learning Activity 12-3** **Communicate an accurate situation report about an aircraft incident/accident to an incident commander using incident management system (IMS) protocol. [NFPA® 1003, 4.2.2]**
- Learning Activity 12-4** **Recognize hazardous conditions at an aircraft incident/accident and initiate corrective action. [NFPA® 1003, 4.2.4]**
- Learning Activity 12-5** **Implement initial triage of the victims of an aircraft accident or incident. [NFPA® 1003, 4.4.3]**

There are also 31 skill applications in the course. The skill applications are designed to apply the concepts and skills in chapters 6, 8, 9, and 10. The skill applications may be stations where an instructor provides coaching and demonstration and an individual skill is performed. The skill applications are listed below.

Skill Sheet 6-1:	Stabilize an aircraft using webbing, ropes, chains or a come-along (cable winch). [NFPA® 1003, 4.4.1, 4.4.2]
Skill Sheet 6-2:	Deploy an air stairs unit (aircraft passenger stairs). [NFPA® 1003, 4.4.1]
Skill Sheet 6-3:	Open aircraft doors and hatches. [NFPA® 1003, 4.3.7]
Skill Sheet 6-4:	Cut an access opening in the skin of an aircraft (power saw). [NFPA® 1003, 4.4.1, 4.4.2]
Skill Sheet 6-5:	Use hydraulic tools (cutters and /or spreaders) to open a hole in the side of an aircraft. [NFPA® 1003, 4.4.1, 4.4.2]
Skill Sheet 6-6:	Perform operations to safety and shut down an aircraft. [NFPA® 1003, 4.4.1, 4.4.2]
Skill Sheet 6-7:	Demonstrate the procedure for conducting a primary search of an aircraft after self-evacuation. [NFPA® 1003, 4.4.2]
Skill Sheet 6-8:	Use a hydraulic device to remove a seat from an aircraft. [NFPA® 1003, 4.4.1, 4.4.2]
Skill Sheet 8-1:	Resupply an ARFF vehicle with water. [NFPA® 1003, 4.3.8]
Skill Sheet 8-2:	Resupply an ARFF vehicle with foam. [NFPA® 1003, 4.3.8]
Skill Sheet 8-3:	Resupply an ARFF vehicle with dry chemical agent. [NFPA® 1003, 4.3.8]
Skill Sheet 9-1:	Secure fuel sources. [NFPA® 1003, 4.3.3, 4.4.2]
Skill Sheet 9-2:	Extinguish a fuel spill using an ARFF vehicle turret. [NFPA® 1003, 4.3.2, 4.3.9, 4.3.10]
Skill Sheet 9-3:	Deploy and operate an ARFF vehicle handline to extinguish a fuel spill fire. [NFPA® 1003, 4.3.1, 4.3.9, 4.3.10]
Skill Sheet 9-4:	Extinguish a three-dimensional fuel fire with handline(s). [NFPA® 1003, 4.3.3, 4.3.9, 4.3.10]
Skill Sheet 9-5:	Attack an interior fire. [NFPA® 1003, 4.3.4, 4.3.7, 4.3.9, 4.3.10]

Skill Sheet 9-6:	Extinguish an APU/EPU or engine fire. [NFPA® 1003, 4.3.5, 4.3.9, 4.3.10]
Skill Sheet 9-7:	Extinguish a wheel assembly fire with a handline. [NFPA® 1003, 4.3.6, 4.3.9, 4.3.10]
Skill Sheet 10-1:	Perform a routine walk-around maintenance inspection of an ARFF apparatus. [NFPA® 1002, 9.1.1]
Skill Sheet 10-2:	Perform an engine compartment inspection and routine preventative maintenance of an ARFF apparatus. [NFPA® 1002, 9.1.1]
Skill Sheet 10-3:	Perform an in-cab operational inspection of an ARFF apparatus. [NFPA® 1002, 9.1.1]
Skill Sheet 10-4:	Start, idle, and shut down an ARFF apparatus. [NFPA® 1002, 9.1.2]

Evaluation Strategy

Evaluation of learning is accomplished by a combination of formal and informal methods. Formative evaluation is accomplished during each chapter through questions by the instructor and a written quiz at the conclusion of each chapter. The instructor guide for each chapter lists specific questions to be asked which will evaluate participant understanding of the skills and concepts.

Summative evaluation of each chapter is accomplished through a multiple choice test administered at the end of each chapter. The participant is required to score 70% or greater on each test to progress.

Resources Required

The following resources are required to deliver this course. It is the responsibility of the lead instructor to ensure all resources are obtained for his/her delivery.

- Computer
- Projector
- Projector screen
- Aircraft Rescue and Fire Fighting Visuals (PowerPoint® Presentation)
- Easel pad and marker

Exam prep

The exam prep is designed to prepare a student or candidate to successfully pass a written exam based on the content of this course. The written exam may be a chapter

test, final course exam, promotional exam, or a certification test based on the NFPA® 1003, *Standard for Airport Fire Fighter Professional Qualifications*, as well as Chapter 9 of NFPA® 1002, *Standard for Fire Apparatus Driver/Operator Professional Qualifications*. The exam prep consists only of multiple-choice questions as this is the most common type of question used in fire service certification exams. The exam prep is a student tool, is not used as part of classroom instruction, and is seldom a requirement of the instructor. In other words, it is an independent study tool used by the student or candidate. For this reason, the answers to the questions are provided to the user.



Office of Training
and Certification

New Jersey Division of Fire Safety

Basic Practical skills examination report

Skill sheet #

ARFF
07

Certification title

ARFF

General Knowledge Requirements- AIRPORT FIRE SUPPRESSION

Applicant Information

Candidate name

DFS ID #

Course #

Evaluation

Standard:
NFPA 1003, 2019 Edition
4.3.1

Task

Evaluator: Fire Suppression. This duty involves the attack, control, and extinguishment of fires involving aircraft, aircraft cargo, airport facilities **Order not critical**

Conditions and Outcome

This duty involves the attack, control, and extinguishment of fires involving aircraft, aircraft cargo, airport facilities, and other equipment related to airport operations and property conservation. The primary purpose of this duty is to protect lives and property.

Number	Task Steps	First Test		Retest #1		Retest #2	
		Pass	Fail	Pass	Fail	Pass	Fail
1	Demonstrate extinguishing an aircraft fuel spill fire given approved PPE, an assignment. Agent application procedures a firefighting vehicle hand line flowing a minimum of 95 GPM (359 L/min) of approved foam extinguishing agent, and a fire sized to the flow rate used, so that the agent is applied using the prescribed techniques and the fire is extinguished as required by the AHJ.						
2	Describe fire behavior of aircraft fuels in pools						
3	Describe the physical properties and characteristics of aircraft fuel, and agent application rates and densities.						
4	Operate fire streams from a hand line and extinguisher to apply agent to a spill fire						
Final Result for Entire Task							

Evaluator signature & comments, Test #1		Evaluator signature & comments, Retest #1		Evaluator signature & comments, Retest #2	
Evaluator signature	Date	Evaluator signature	Date	Evaluator signature	Date
Candidate signature & acknowledgement, Test #1		Candidate signature & acknowledgement, Retest #1		Candidate signature & acknowledgement, Retest #1	
By my signature below I acknowledge I have read and understood the evaluation results and evaluator comments		By my signature below I acknowledge I have read and understood the evaluation results and evaluator comments		By my signature below I acknowledge I have read and understood the evaluation results and evaluator comments	
Candidate signature	Date	Candidate signature	Date	Candidate signature	Date



Office of Training
and Certification

New Jersey Division of Fire Safety

Basic Practical skills examination report

Skill sheet #

ARFF
08

Certification title

ARFF

General Knowledge Requirements- AIRPORT FIRE SUPPRESSION

Applicant Information

Candidate name

DFS ID #

Course #

Evaluation

Standard:
NFPA 1003, 2019 Edition

Task

4.3.2

Evaluator: Fire Suppression. This duty involves the attack, control, and extinguishment of fires involving aircraft, aircraft cargo, airport facilities **Order not critical**

Conditions and Outcome

Extinguish an aircraft fuel spill fire, given an assignment, approved PPE, an ARFF vehicle turret flowing the approved minimum required flow, a fire sized to the approved flow rate used, and the procedures for agent application, so that the agent is applied according to procedures and the fire is extinguished as required by the NJ Division of Fire Safety Office of Training and Certification. (NJDFSOTC)

Number	Task Steps	First Test		Retest #1		Retest #2	
		Pass	Fail	Pass	Fail	Pass	Fail
1	Demonstrate extinguishing an aircraft fuel spill fire while Operating an ARFF vehicle agent delivery systems, the fire behavior of aircraft fuels in pools, physical properties and characteristics of aircraft fuel, the procedures for agent application, and agent application rates and densities.						
2	Properly apply fire-fighting agents and streams using ARFF vehicle main and bumper turrets						
3	Describe the physical properties and characteristics of the different types of extinguishing agents and there effects AFFF,						
4	Describe the physical properties and characteristics of the different types of extinguishing agents and there effects PKP						
5	Describe the physical properties and characteristics of the different types of extinguishing agents and there effects Halon						
Final Result for Entire Task							

Evaluator signature & comments, Test #1		Evaluator signature & comments, Retest #1		Evaluator signature & comments, Retest #2	
Evaluator signature	Date	Evaluator signature	Date	Evaluator signature	Date
Candidate signature & acknowledgement, Test #1		Candidate signature & acknowledgement, Retest #1		Candidate signature & acknowledgement, Retest #1	
By my signature below I acknowledge I have read and understood the evaluation results and evaluator comments		By my signature below I acknowledge I have read and understood the evaluation results and evaluator comments		By my signature below I acknowledge I have read and understood the evaluation results and evaluator comments	
Candidate signature	Date	Candidate signature	Date	Candidate signature	Date



Office of Training
and Certification

New Jersey Division of Fire Safety

Basic Practical skills examination report

Skill sheet #

ARFF
09

Certification title

ARFF

**General Knowledge Requirements-
AIRPORT FIRE SUPPRESSION**

Applicant Information

Candidate name

DFS ID #

Course #

Evaluation

Standard:
NFPA 1003, 2019 Edition

Task

Evaluator: Fire Suppression. This duty involves the attack, control, and extinguishment of fires involving aircraft, aircraft cargo, airport facilities **Order not critical**

4.3.3

Extinguish a three-dimensional aircraft fuel fire as a member of a team, given a team, approved PPE, an assignment, fire-fighting vehicle hand line(s) using primary and secondary agents, and agent application procedures, so that a dual-agent attack is used, the agent is applied according to procedures, the fire is extinguished, and the fuel source is secured

Number	Task Steps	First Test		Retest #1		Retest #2	
		Pass	Fail	Pass	Fail	Pass	Fail
1	Demonstrate extinguishing a three-dimensional aircraft fuel fire as a member of a team, given a team, approved PPE, an assignment, fire-fighting vehicle hand line(s) using primary and secondary agents, and agent application procedures, so that a dual-agent attack is used, the agent is applied according to procedures, the fire is extinguished, and the fuel source is secured						
2	Properly apply fire-fighting agents and streams using ARFF vehicle main and bumper turrets						
3	Describe the physical properties and characteristics of the different types of extinguishing agents and there effects AFFF,						
4	Describe the physical properties and characteristics of the different types of extinguishing agents and there effects PKP						
5	Describe the physical properties and characteristics of the different types of extinguishing agents and there effects Halon						
Final Result for Entire Task							

Evaluator signature & comments, Test #1		Evaluator signature & comments, Retest #1		Evaluator signature & comments, Retest #2	
Evaluator signature	Date	Evaluator signature	Date	Evaluator signature	Date
Candidate signature & acknowledgement, Test #1		Candidate signature & acknowledgement, Retest #1		Candidate signature & acknowledgement, Retest #2	
By my signature below I acknowledge I have read and understood the evaluation results and evaluator comments		By my signature below I acknowledge I have read and understood the evaluation results and evaluator comments		By my signature below I acknowledge I have read and understood the evaluation results and evaluator comments	
Candidate signature	Date	Candidate signature	Date	Candidate signature	Date



Office of Training
and Certification

New Jersey Division of Fire Safety

Basic Practical skills examination report

Skill sheet #

ARFF
10

Certification title

ARFF

General Knowledge Requirements- AIRPORT FIRE SUPPRESSION

Applicant Information

Candidate name

DFS ID #

Course #

Evaluation

Standard:
NFPA 1003, 2019 Edition

Task

4.3.4

Evaluator: Fire Suppression. This duty involves the attack, control, and extinguishment of fires involving aircraft, aircraft cargo, airport facilities **Order not critical**

Attack a fire on the interior of an aircraft while operating as a member of a team, given a team, approved PPE, an assignment, a fire-fighting vehicle hand line, an extinguishing agent, and a ladder or other means of accessing the aircraft, so that team integrity is maintained, the attack line is deployed for advancement, ladders or other means are used, access is gained into the fire area, effective agent application practices are used, the fire is approached, attack techniques facilitate suppression given the level of the fire, hidden fires are located and controlled, hazards are avoided or managed, and the fire is brought under control.

Number	Task Steps	First Test		Retest #1		Retest #2	
		Pass	Fail	Pass	Fail	Pass	Fail
1	Demonstrate Techniques for accessing the aircraft interior according to the aircraft type, methods for advancing hand lines from a fire-fighting vehicle, precautions to be followed when advancing hose lines to a fire,						
2	Demonstrate observable results that a fire stream has been applied, dangerous structural conditions created by fire, principles of exposure protection, potential long-term consequences of exposure to products of combustion, physical states of matter in which fuels are found,						
3	Explain common types of accidents or injuries and their causes						
4	Demonstrate the role of the backup team in fire attack situations, attack and control techniques, and techniques for exposing hidden fires						
5	Properly deploy the fire-fighting vehicle hand line on an interior aircraft fire; gain access to aircraft interior; open, close, and adjust nozzle flow and patterns; apply agent using direct, indirect, and combination attacks; advance charged and uncharged hose lines up ladders and up and down interior and exterior stairways; and locate and suppress interior fires.						
Final Result for Entire Task							

Evaluator signature & comments, Test #1		Evaluator signature & comments, Retest #1		Evaluator signature & comments, Retest #2	
Evaluator signature	Date	Evaluator signature	Date	Evaluator signature	Date
Candidate signature & acknowledgement, Test #1		Candidate signature & acknowledgement, Retest #1		Candidate signature & acknowledgement, Retest #1	
By my signature below I acknowledge I have read and understood the evaluation results and evaluator comments		By my signature below I acknowledge I have read and understood the evaluation results and evaluator comments		By my signature below I acknowledge I have read and understood the evaluation results and evaluator comments	
Candidate signature	Date	Candidate signature	Date	Candidate signature	Date



Office of Training
and Certification

New Jersey Division of Fire Safety

Basic Practical skills examination report

Skill sheet #

ARFF
11

Certification title

ARFF

**General Knowledge Requirements-
AIRPORT FIRE SUPPRESSION**

Applicant Information

Candidate name

DFS ID #

Course #

Evaluation

Standard:
NFPA 1002 2017 & 1003
2019 Editions
9.2.3/4.3.5

Task

Evaluator: Fire Suppression. This duty involves the attack, control, and extinguishment of fires involving aircraft, aircraft cargo, airport facilities **Order not critical**

Attack an engine or auxiliary power unit/emergency power unit (APU/EPU) fire on an aircraft while operating as a member of a team, given approved PPE, an assignment, fire-fighting vehicle hand line or turret, a correct agent, and agent application procedures, so that agent application procedures are followed, the fire is extinguished, and the engine or APU/EPU is shut down.

Number	Task Steps	First Test		Retest #1		Retest #2	
		Pass	Fail	Pass	Fail	Pass	Fail
1	Demonstrate Techniques for accessing the aircraft engines and APU/EPUs, operation of on-board aircraft fire-fighting systems and potential hazards, safety procedures, methods for advancing hand line from a fire-fighting vehicle, methods for operating turrets, and methods for shutting down engine and APU/EPU operation.						
2	Deploy and operate fire-fighting vehicle hand line, operate turrets, gain access to aircraft engine and APU/EPU, and shut down engine and APU.						
Final Result for Entire Task							

Evaluator signature & comments, Test #1		Evaluator signature & comments, Retest #1		Evaluator signature & comments, Retest #2	
Evaluator signature	Date	Evaluator signature	Date	Evaluator signature	Date
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Office of Training
and Certification

New Jersey Division of Fire Safety

Basic Practical skills examination report

Skill sheet #

ARFF
12

Certification title

ARFF
General Knowledge Requirements-
AIRPORT FIRE SUPPRESSION

Applicant Information

Candidate name

DFS ID #

Course #

Evaluation

Standard:
NFPA 1003, 2019 Edition

Task

Evaluator: Fire Suppression. This duty involves the attack, control, and extinguishment of fires involving aircraft, aircraft cargo, airport facilities **Order not critical**

4.3.6

Attack a wheel assembly fire, as a member of a team, given PPE, a team, an assignment, an ARFF vehicle hand line, and correct agent, so that the fire is extinguished

Number	Task Steps	First Test		Retest #1		Retest #2	
		Pass	Fail	Pass	Fail	Pass	Fail
1	Demonstrate Techniques required for agent selection and application procedure, special safety considerations, and the characteristics of combustible metals						
2	Approach the fire in accordance with safety procedures, select and apply agent.						
Final Result for Entire Task							

Evaluator signature & comments, Test #1		Evaluator signature & comments, Retest #1		Evaluator signature & comments, Retest #2	
Evaluator signature	Date	Evaluator signature	Date	Evaluator signature	Date
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Form DFS-SS-1 3/18

Approved by NJ SME Committee on 4/01/2022



Office of Training
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New Jersey Division of Fire Safety

Basic Practical skills examination report

Skill sheet #

ARFF
12

Certification title

ARFF

**General Knowledge Requirements-
AIRPORT FIRE SUPPRESSION**

Applicant Information

Candidate name

DFS ID #

Course #

Evaluation

Standard:
NFPA 1003, 2019 Edition

Task

Evaluator: Fire Suppression. This duty involves the attack, control, and extinguishment of fires involving aircraft, aircraft cargo, airport facilities **Order not critical**

4.3.6

Attack a wheel assembly fire, as a member of a team, given PPE, a team, an assignment, an ARFF vehicle hand line, and correct agent, so that the fire is extinguished

Number	Task Steps	First Test		Retest #1		Retest #2	
		Pass	Fail	Pass	Fail	Pass	Fail
1	Demonstrate Techniques required for agent selection and application procedure, special safety considerations, and the characteristics of combustible metals						
2	Approach the fire in accordance with safety procedures, select and apply agent.						
Final Result for Entire Task							

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New Jersey Division of Fire Safety

Basic Practical skills examination report

Skill sheet #

ARFF
13

Certification title

ARFF

**General Knowledge Requirements-
AIRPORT FIRE SUPPRESSION**

Applicant Information

Candidate name

DFS ID #

Course #

Evaluation

Standard:
NFPA 1003, 2019 Edition

Task

Evaluator: Fire Suppression. This duty involves the attack, control, and extinguishment of fires involving aircraft, aircraft cargo, airport facilities **Order not critical**

4.3.7/ 4.1.1.4

Ventilate an aircraft through available doors and hatches while operating as a member of a team, given PPE, an assignment, tools, and mechanical ventilation devices, so that openings are created, all ventilation barriers are removed, and the heat and other products of combustion are released

Number	Task Steps	First Test		Retest #1		Retest #2	
		Pass	Fail	Pass	Fail	Pass	Fail
1	Demonstrate knowledge of aircraft access points; principles, advantages, limitations, and effects of mechanical ventilation, the methods of heat transfer; the principles of thermal layering within an aircraft on fire; and the techniques and safety precautions for venting aircraft						
2	Demonstrate operating doors, hatches, and forcible entry tools; operate mechanical ventilation devices; and remove barriers						
Final Result for Entire Task							

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Evaluator signature	Date	Evaluator signature	Date	Evaluator signature	Date
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Basic Practical skills examination report

Skill sheet #

ARFF
14

Certification title

ARFF

**General Knowledge Requirements-
AIRPORT FIRE SUPPRESSION**

Applicant Information

Candidate name

DFS ID #

Course #

Evaluation

Standard:
NFPA 1002 2017 & 1003
2019 Editions

9.2.3/4.3.8

Task

Evaluator: Fire Suppression. This duty involves the attack, control, and extinguishment of fires involving aircraft, aircraft cargo, airport facilities **Order not critical**

Replenish extinguishing agents while operating as a member of a team, given an assignment, a fire-fighting vehicle, a fixed or mobile water source, a supply of agent, and supply lines and fittings, so that agents are available for application by the fire-fighting vehicle within the time established by the authority having jurisdiction and (NJDFSOTC) .

Number	Task Steps	First Test		Retest #1		Retest #2	
		Pass	Fail	Pass	Fail	Pass	Fail
1	Demonstrate knowledge of resupply procedures during an incident and operation procedures for fire-fighting vehicle replenishment						
2	Demonstrate operation of connect hose lines and operate valves for resupply						
Final Result for Entire Task							

Evaluator signature & comments, Test #1		Evaluator signature & comments, Retest #1		Evaluator signature & comments, Retest #2	
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New Jersey Division of Fire Safety

Basic Practical skills examination report

Skill sheet #

ARFF
15

Certification title

ARFF
General Knowledge Requirements-
AIRPORT FIRE SUPPRESSION

Applicant Information

Candidate name

DFS ID #

Course #

Evaluation

Standard:
NFPA 1003, 2019 Edition

Task

Evaluator: Fire Suppression. This duty involves the attack, control, and extinguishment of fires involving aircraft, aircraft cargo, airport facilities **Order not critical**

4.3.9

Preserve the aircraft accident scene, given an assignment and procedures, so that evidence is identified, protected, and reported according to procedures.

Number	Task Steps	First Test		Retest #1		Retest #2	
		Pass	Fail	Pass	Fail	Pass	Fail
1	Demonstrate knowledge of airport emergency plan requirements for preservation of the scene, evidence identification, evidence protection, and evidence reporting procedures.						
2	Demonstrate preserving the scene for investigators, and identify, protect, and report evidence						
Final Result for Entire Task							

Evaluator signature & comments, Test #1		Evaluator signature & comments, Retest #1		Evaluator signature & comments, Retest #2	
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New Jersey Division of Fire Safety

Basic Practical skills examination report

Skill sheet #

ARFF
16

Certification title

ARFF

**General Knowledge Requirements-
AIRPORT FIRE SUPPRESSION**

Applicant Information

Candidate name

DFS ID #

Course #

Evaluation

Standard:
NFPA 1003, 2019 Edition

Task

Evaluator: Fire Suppression. This duty involves the attack, control, and extinguishment of fires involving aircraft, aircraft cargo, airport facilities **Order not critical**

4.3.10

Overhaul the accident scene, given PPE, an assignment, hand lines, and property conservation equipment, so that all fires are located, exposed, and extinguished and all property is protected from further damage.

Number	Task Steps	First Test		Retest #1		Retest #2	
		Pass	Fail	Pass	Fail	Pass	Fail
1	Demonstrate Methods of complete extinguishment and prevention of re-ignition, reasons for conservation, operating procedures for property conservation equipment, overhaul procedures, signs of a hidden fire, methods of detecting hidden fires, and tools and equipment used for overhaul						
2	Demonstrate the use property conservation equipment; detect hidden fires, and use tools and equipment to expose hidden fires.						
Final Result for Entire Task							

Evaluator signature & comments, Test #1		Evaluator signature & comments, Retest #1		Evaluator signature & comments, Retest #2	
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Basic Practical skills examination report

Skill sheet #

ARFF
17

Certification title

ARFF
**General Knowledge Requirements-
RESCUE**

Applicant Information

Candidate name

DFS ID #

Course #

Evaluation

Standard:
NFPA 1003, 2019 Edition

Task

Evaluator: Rescue. This duty involves gaining access to an aircraft and assisting in the evacuation process, performing disentanglement, and initial triage. **Order not critical**

4.4.1

Gain access into and out of an aircraft through normal entry points and emergency hatches, secure and shut down the aircraft, and assist in the evacuation process while operating as a member of a team, given approved PPE and an assignment, so that passenger evacuation and rescue can be accomplished.

Number	Task Steps	First Test		Retest #1		Retest #2	
		Pass	Fail	Pass	Fail	Pass	Fail
1	Demonstrate knowledge Aircraft familiarization, including materials used in construction, aircraft terminology, automatic explosive devices, hazardous areas in and around aircraft, aircraft egress/ingress (hatches, doors, and evacuation chutes), military aircraft systems and associated hazards; capabilities and limitations of manual and power rescue tools and specialized high-reach devices, aircraft shutdown and safetying procedures						
2	Demonstrate the operation power saws and cutting tools, hydraulic devices, pneumatic devices, and pulling devices; operate specialized ladders and high-reach devices; secure aircraft safety and shutdown.						
Final Result for Entire Task							

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New Jersey Division of Fire Safety

Basic Practical skills examination report

Skill sheet #

ARFF
18

Certification title

ARFF
**General Knowledge Requirements-
RESCUE**

Applicant Information

Candidate name

DFS ID #

Course #

Evaluation

Standard:
NFPA 1003, 2019 Edition

Task

Evaluator: Rescue. This duty involves gaining access to an aircraft and assisting in the evacuation process, performing disentanglement, and initial triage. **Order not critical**

4.4.2

Locate and disentangle an entrapped person from an aircraft as a member of a team, given approved PPE, a team, an assignment, and rescue tools, so that the person is freed from entrapment without undue further injury and hazards are managed.

Number	Task Steps	First Test		Retest #1		Retest #2	
		Pass	Fail	Pass	Fail	Pass	Fail
1	Demonstrate knowledge of the capabilities and limitations of rescue tools, search procedures, hazard identification, and control methods.						
2	Demonstrate and perform search procedures, control hazards, remove victims, and operate rescue tools.						
Final Result for Entire Task							

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New Jersey Division of Fire Safety

Basic Practical skills examination report

Skill sheet #

**ARFF
19**

Certification title

**ARFF
General Knowledge Requirements-
RESCUE**

Applicant Information

Candidate name

DFS ID #

Course #

Evaluation

Standard:
NFPA 1003, 2019 Edition
4.4.3

Task

Evaluator: Rescue. This duty involves gaining access to an aircraft and assisting in the evacuation process, performing disentanglement, and initial triage. **Order not critical**

Implement initial triage of the victims of an aircraft accident, given PPE, an assignment, and the triage protocol of the AHJ, and (NJDFSOTC) so that each victim is evaluated and correctly categorized according to protocol.

Number	Task Steps	First Test		Retest #1		Retest #2	
		Pass	Fail	Pass	Fail	Pass	Fail
1	Demonstrate knowledge of the categories of triage according to the triage protocol of the AHJ, and methods of assessment						
2	Demonstrate and perform triage of patients per protocol.						
Final Result for Entire Task							

Evaluator signature & comments, Test #1		Evaluator signature & comments, Retest #1		Evaluator signature & comments, Retest #2	
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