

New Hampshire Fire Standards and Training Commission



Approved Curriculum

Airport Firefighter

NFPA 1010, 2024 (Chapter 8)

Approved by the New Hampshire Fire Standards and Training Commission

Commission Approval: _____ Date: _____



Curriculum Information Sheet

Course Title: Airport Firefighter

National Standard: NFPA® 1010, Chapter 8

Current Edition: 2024

Next Edition: 2029

Curriculum Components (All components are required by § Fire 402.03)

<input checked="" type="checkbox"/> Subject areas/modules	<input checked="" type="checkbox"/> Hours per module	<input checked="" type="checkbox"/> Content of module
<input checked="" type="checkbox"/> Teaching methodology	<input checked="" type="checkbox"/> Description of aids	<input checked="" type="checkbox"/> Description of references
<input checked="" type="checkbox"/> Required facilities	<input checked="" type="checkbox"/> Performance objectives	<input checked="" type="checkbox"/> Certification description
<input checked="" type="checkbox"/> Alignment with standard	<input checked="" type="checkbox"/> Student/Instructor ratio	<input checked="" type="checkbox"/> Min/max students
<input checked="" type="checkbox"/> Prerequisites	<input checked="" type="checkbox"/> Equipment list	

Administrative Information

Certification: NH FSTC Certification ProBoard® Accredited Certificate of Attendance

Class Size: Minimum: 6 Maximum: 20 S:I Ratio 5:1

Clock Hours: In-person: 48 Online: 0 Self-paced: 0

- Student Prerequisites:**
- Valid medical release
 - Firefighter II

- Approved References:**
- Fortney, J. (2015) Aircraft rescue and firefighting, 6th edition. Fire Protection Publications, Stillwater, OK

- Required Facilities:**
- Classroom
 - Aircraft spill pit
 - Specialized Aircraft Fire Trainer (SAFT) prop

- Description of Visual Aids:**
- PowerPoint slide decks
 - Online video media



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Process History

**FSTC Approves
Development:**

9/5/2024

Date of meeting in which minutes reflect the approved motion.

**Visiting Committee
Endorsement:**

No visiting committee seated

Date of meeting in which minutes reflect the approved motion.

**Curriculum Committee
Endorsement:**

Date of meeting in which minutes reflect the approved motion.

**NH FSTC Preliminary
Approval:**

Date of meeting in which minutes reflect the approved motion.

Daytime

Evening

Public Hearings:

Date, time, location

Date, time, location

**60-Day Public
Comment:**

Start date — End date

Note: The date of commission approval appears on the front cover of this document.



Curriculum History

A brief summary of the program including when it was first created and accredited, how often it has been run, how many times it has been updated, and what caused it to be updated this time. Include any initial development guidance from the FSTC and Curriculum Committees.

Summary of Changes

The consolidation of NFPA 1003 into NFPA 1010 did not change any job performance requirements for the Airport Firefighter standards. This curriculum represents an administrative update to the previous curriculum.

- Practical testing stations were renumbered and reorganized to reflect the manner in which they are commonly run. This does not change the content tested.
- Specific and measurable learning objectives were developed to assist instructors in preparing and delivering instruction and evaluation.

Learning Outcome

At the conclusion of this course, firefighters who may respond to airfield fire rescue incidents will be able to conduct aircraft crash rescue operations to suppress fire, mitigate hazards, and rescue victims or facilitate egress given airport firefighting apparatus, specialized equipment, and aircraft crash rescue scenarios, in accordance with NFPA 1010 Chapter 8.

Learning Objectives

Learning objectives are clear goals that help instructors plan lessons and activities to focus on the most important parts of the lesson. By having these goals set in the curriculum, instructors can adapt their lessons to meet the needs of their students and the constraints of the learning environment. Learning objectives help instructors and program coordinators measure how well students understand the material through formative evaluations and activities, ensuring students and instructors stays on track.

ID	Objective	Alignment
LO-01	Identify types of aircraft, given crash rescue scenarios, so that routes of access, systems, and hazards associated with the aircraft are recognized.	8.3.3, 8.3.5, 8.3.7, 8.4.1
LO-02	Navigate an airfield, given airfield lighting and marking systems, communication systems, so that clearance is obtained before movement, and emergency response operations are conducted in a safe manner within the established time.	8.2.1, 8.2.2, 8.2.3, 8.2.4
LO-03	Conduct aircraft crash rescue, given PPE and equipment, so that PPE is selected and donned correctly, and safety is maintained.	8.3.9, 8.3.10



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ID	Objective	Alignment
LO-04	Extinguish an aircraft fire, given PPE, tools, equipment, and apparatus, so that the appropriate extinguishing agent is selected, the appropriate strategy is selected, proper shutdown procedures are performed, means of egress are protected, victims are located and triaged, and incident command is informed of progress.	8.3.1, 8.3.2, 8.3.3, 8.3.4, 8.3.5, 8.3.6, 8.3.7, 8.4.1, 8.4.2, 8.4.3
LO-05	Perform a reservice, given an ARFF apparatus and extinguishing agent, so that all extinguishing agents are replenished, the apparatus is refueled, and returned to service within the specified time.	8.3.8

Skill Competencies

Skill competencies are specific abilities that students will develop during the program. Competencies help instructors plan lessons and activities. By understanding these competencies, instructors can adapt their lessons to meet the needs of their students and the constraints of the learning environment, including the use of different equipment, tools, or techniques. Skill competencies also help instructors measure how well students are developing their abilities through formative evaluations and practical activities, ensuring everyone stays on track. Students who can perform the skill competencies will demonstrate that they have achieved competence.

ID	Outcome	Alignment
C-01	Access an incident site within the allotted time	8.2.1
C-02	Provide accurate information to the incident commander	8.2.2
C-03	Obtain required clearances	8.2.3
C-04	Detect unsafe conditions	8.2.4
C-05	Reduce unsafe conditions	8.2.4
C-06	Apply agents using prescribed technique	8.3.1, 8.3.2, 8.3.3, 8.3.4, 8.3.5
C-07	Extinguish the fire	8.3.1, 8.3.2, 8.3.3, 8.3.4, 8.3.5, 8.3.6, 8.3.7
C-08	Use a dual-agent attack	8.3.3
C-09	Secure the fuel source	8.3.3
C-10	Maintain team integrity	8.3.4
C-11	Deploy the attack line for advancement	8.3.4
C-12	Use ladders or other means	8.3.4
C-13	Gain access into the fire area	8.3.4
C-14	Approach the fire	8.3.4
C-15	Employ attack techniques that facilitate suppression given the level of fire	8.3.4
C-16	Locate and control all fires	8.3.4, 8.3.10
C-17	Avoid or manage hazards	8.3.4
C-18	Shut down the APU/EPU	8.3.5
C-19	Create openings	8.3.7
C-20	Remove ventilation barriers	8.3.7
C-21	Release heat and other products of combustion	8.3.7



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ID	Outcome	Alignment
C-22	Ensure agents are available for application within the established time	8.3.8
C-23	Identify evidence	8.3.9
C-24	Protect evidence	8.3.9
C-25	Report evidence according to procedure	8.3.9
C-26	Accomplish a passenger evacuation and rescue	8.4.1
C-27	Free a person from entrapment	8.4.2
C-28	Evaluate victims according to protocol	8.4.3

Content Outline

A content outline is a detailed plan that lists all the modules, blocks (if applicable), lessons and/or evolutions that will be covered in a course. It helps instructors by organizing the course material in a logical order, defining the overall range of topics (scope) and the order in which they will be taught (sequence). It helps ensure that each topic builds on the previous one. This helps instructors make sure that they cover all necessary material and teach it in a way that makes sense, allowing students to build their knowledge step by step.

Topic and Learning Objectives	Std.	Resources
Module 1: PPE/Safety		
12 Hours Outline: <ol style="list-style-type: none"> 1. Qualifications for aircraft rescue and firefighting personnel 2. Safety and aircraft hazards 3. Communications 4. Apparatus 5. Driver/Operator 	LO-03 LO-05	PPE Communication equipment Visual media Classroom
Module 2: Aircraft Familiarization		
8 Hours Outline: <ol style="list-style-type: none"> 1. Types of aircraft 2. Major components of aircraft 3. Engine types and application 4. Aircraft construction and structural materials 5. Aircraft systems 	LO-01	Classroom Visual media or models
Module 3: Airport Familiarization		
8 Hours Outline: <ol style="list-style-type: none"> 1. Types and classifications of airport 2. Airport traffic patterns 3. Runway and taxiway designation systems 4. Airport lighting, marking, and signage 5. Airport emergency planning 	LO-02	Classroom Visual media
Module 4: Strategy and Tactics		



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Topic and Learning Objectives	Std.	Resources
20 Hours Outline: 1. Extinguishing agents 2. Fire suppression, ventilation, and overhaul 3. Strategic and tactical operations	LO-04	Fuel pit trainer SAF trainer ARFF apparatus PPE

Delivery Considerations

Students will bring their own PPE and SCBA.

Standards Map

This map shows where each applicable standard is covered within the curriculum.

NFPA® Standard, Chapter(s)	1	2	3	4
	8.2.1 Respond to day and night incidents ...	•		
8.2.2 Communicate critical incident information ...	•	•	•	•
8.2.3 Communicate with applicable air traffic control facilities	•	•	•	•
8.2.4* Perform an airport operation			•	•
8.3.1* Extinguish an aircraft fuel spill fire				•
8.3.2* Extinguish an aircraft fuel spill fire				•
8.3.3* Extinguish a three-dimensional aircraft fuel fire ...				•
8.3.4* Attack a fire on the interior of an aircraft ...		•		•
8.3.5* Attack an engine or auxiliary power ...		•		•
8.3.6 Attack a wheel assembly fire, as a member of a team		•		•
8.3.7* Ventilate an aircraft through available doors ...		•		•
8.3.8* Replenish extinguishing agents ...				•
8.3.9 Preserve the aircraft accident scene				•
8.3.10* Overhaul the accident scene		•	•	•
8.4.1* Gain access into and out of an aircraft...		•		•
8.4.2* Locate and disentangle an entrapped person ...				•
8.4.3 Implement initial triage of the victims of an aircraft accident			•	•

Table of Test Specifications

A table of test specifications allows the planning and organization of an accredited certification exam. It includes information to ensure the test is fair and comprehensive. The table lists the categories that will be tested, aligning each with the relevant standards. It shows the total number of questions on the test and the percentage of questions for each category, helping to balance the focus on different topics. Based on these percentages, the table also indicates the exact number of questions in each category. Additionally, it breaks down the questions by knowledge level, showing the percentage and number of questions that test basic recall of facts and those that require students to apply their knowledge. The topic areas listed should align with the topic areas presented in the NFPA professional qualification standards.



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	Items	Recall	Apply
	100	100%	0%
Category / Topic	Weight	Items	Items
Response			
8.2.1 Respond to day and night incidents ...	5%	5	0
8.2.2 Communicate critical incident information ...	6%	6	0
8.2.3 Communicate with applicable air traffic control facilities	8%	8	0
8.2.4* Perform an airport operation	5%	5	0
Fire Suppression			
8.3.1* Extinguish an aircraft fuel spill fire (hand line)	8%	8	0
8.3.2* Extinguish an aircraft fuel spill fire (vehicle turret)	8%	8	0
8.3.3* Extinguish a three-dimensional aircraft fuel fire ...	8%	8	0
8.3.4* Attack a fire on the interior of an aircraft ...	8%	8	0
8.3.5* Attack an engine or auxiliary power ...	8%	8	0
8.3.6 Attack a wheel assembly fire, as a member of a team	8%	8	0
8.3.7* Ventilate an aircraft through available doors ...	3%	3	0
8.3.8* Replenish extinguishing agents ...	2%	2	0
8.3.9 Preserve the aircraft accident scene	4%	4	0
8.3.10* Overhaul the accident scene	4%	4	0
Rescue			
8.4.1* Gain access into and out of an aircraft...	5%	5	0
8.4.2* Locate and disentangle an entrapped person ...	5%	5	0
8.4.3 Implement initial triage of the victims of an aircraft accident	5%	5	0



Practical Exam Specifications

The following practical skill sheets will be used to evaluate performance in accordance with the specified standards.

Station	Competencies	Alignment
AFF-01	Recognize Airport Grid Markings	8.2.1
AFF-02	Communicate with the Control Tower	8.2.3
AFF-03	Fire Suppression with a Vehicle Turret	8.3.1, 8.3.2
AFF-04	Extinguish an Engine or Auxiliary Power Unit Fire	8.3.1, 8.3.5
AFF-05	Extinguish a Wheel Assembly Fire	8.3.1, 8.3.6
AFF-06	Extinguish an Aircraft Interior Fire	8.2.1, 8.3.1, 8.3.4, 8.3.10
AFF-07	Replenish Extinguishing Agent	8.3.8
AFF-08	Triage Victims	8.4.3
AFF-09	Extinguish a 3 Dimensional Fire	8.3.1, 8.3.3
AFF-10	Incident Size-Up and Report	8.2.2, 8.2.4
AFF-11	Victim Rescue	8.3.9, 8.4.1, 8.4.2

The practical exam will consist of four stations, two with required skills, and two with a randomly selected skill. Skills will be selected before the testing process begins.

Station 1: Aircraft Fire with Victim Rescue

AFF-11 Victim Rescue

And one of the following, chosen at random.

- AFF-04 Extinguish an Engine or Auxiliary Power Unit Fire
- AFF-05 Extinguish a Wheel Assembly Fire
- AFF-06 Extinguish an Aircraft Interior Fire

Station 2: Aircraft Fire

AFF-02 Communicate with the Control Tower

AFF-10 Incident Size-Up and Report

And one of the following, chosen at random.

- AFF-03 Fire Suppression with a Vehicle Turret
- AFF-09 Extinguish a 3 Dimensional Fire

Station 3 and 4: Random Skill

For each station, choose one of the following.

- AFF-01 Recognize Airport Grid Markings
- AFF-07 Replenish Extinguishing Agent
- AFF-08 Triage Victims