

NFPA 1010: 2024 Edition, Chapter 16 Driver/Operator of Aircraft Rescue and Fire-Fighting Apparatus

Below please find what has been previously approved by the Committee on Accreditation (COA) for this level of certification. This example does not take into consideration “Document Review”, “Portfolio”, or “Other testing methods.”

If your agency selects completing their online Assessment Methodology Matrix (AMM) utilizing these test methods, our Technical Analysts may place your application under a COA meeting consent agenda bypassing the usual COA review.

The spaces identified below with an “X” must be replaced with the appropriate cognitive test item numbers (e.g. Questions 1,4,6,7,9, etc.) or the score sheet numbers under Product, Psychomotor/Process methods as score sheet numbers (e.g.- SS 101, 202, and 304, etc.).

Section	Knowledge-Based Assessments (graded after submission)		Performance-Based Assessments (graded in real-time as they are performed)	
	Cognitive (e.g. Multiple Choice, Short Answer, Discretionary Time with Resources)	Product (e.g., document or develop a budget, proposal, lesson plan)	Psychomotor (Primarily an observable physical task. e.g., don, doff)	Process (Primarily a mental or verbalized task. e.g., inspect)
16.2.1				
Perform the visual and operational checks on the systems and components specified in the following list, in addition to those in 11.2.1 , given an ARFF vehicle and the manufacturer’s servicing, testing, and inspection criteria; and policies and procedures of the authority having jurisdiction (AHJ), so that the operational status of the vehicle is verified:				
(1) Agent dispensing systems				
(2) Secondary extinguishing systems				
(3) Vehicle-mounted breathing air systems				
16.2.1				X
(A) Requisite Knowledge.				
Manufacturer's specifications and requirements, and policies and procedures of the AHJ.				
16.2.1 (A)	X			
(B) Requisite Skills.				

The ability to use hand tools, recognize system problems, and correct any deficiency noted according to policies and procedures.

[16.2.1](#)
(B)

X

16.3.1

Operate an ARFF vehicle, given a predetermined route on an airport that includes the maneuvers listed in [11.3.1](#), and operation in all aircraft movement areas, so that the vehicle is operated in compliance with all applicable federal, state/provincial, and local laws and departmental rules and regulations.

[16.3.1](#)

X

(A) Requisite Knowledge.

The effects on vehicle control of liquid surge, braking reaction time, and load factors; effects of high center of gravity on rollover potential, general steering reactions, speed, and centrifugal force; applicable laws and regulations; principles of skid avoidance, night driving, shifting, and gear patterns; negotiating intersections, railroad crossings, and bridges; weight and height limitations for both roads and bridges; identification and operation of automotive gauges; operational limits; hazards of driving through smoke; control tower light signals; airfield markings; runway and taxiway designations; air and vehicle traffic patterns; and all aircraft movements areas.

[16.3.1](#)
(A)

X

(B) Requisite Skills.

The ability to operate passenger restraint devices; maintain safe following distances; maintain control of the vehicle while accelerating, decelerating, and turning, given road, weather, and traffic conditions; operate under adverse environmental or driving surface conditions; and use automotive gauges and controls.

[16.3.1](#)
(B)

X

16.3.2

Operate an ARFF apparatus, given a predetermined route, off of an improved surface that incorporates the maneuvers and features that the driver/operator is expected to encounter during normal operations, so that the vehicle is operated in compliance with all applicable departmental rules and regulations and the design limitations of the vehicle.

[16.3.2](#)

X

(A) Requisite Knowledge.

The effects on vehicle control of braking reaction time and load factors; effects of high center of gravity on rollover potential, general steering reactions, speed, and centrifugal force; applicable laws and regulations; principles of skid avoidance, night driving, shifting, and gear patterns; negotiating intersections, railroad crossings, and bridges; weight and height limitations for both roads and bridges; identification and operation of automotive gauges; and operational limits.

16.3.2 (A)	X		
(B) Requisite Skills.			
The ability to operate passenger restraint devices; maintain safe following distances; maintain control of the vehicle while accelerating, decelerating, and turning, given road, weather, and traffic conditions; operate during nonemergency conditions; operate under adverse environmental or driving surface conditions; and use automotive gauges and controls.			
16.3.2 (B)			X
16.4.1			
Maneuver and position an ARFF vehicle, given an incident location and description that involves the largest aircraft that uses the airport, so that the vehicle is positioned for correct operation at each operational position for the aircraft.			
16.4.1			X
(A) Requisite Knowledge.			
Vehicle positioning for firefighting and rescue operations; tower light signals, aircraft recognition, airport markings, and capabilities and limitations of turret devices; and effects of topography, ground, and weather conditions on agent application, distribution rates, and density.			
16.4.1 (A)	X		
(B) Requisite Skills.			
The ability to determine a correct position for the apparatus, maneuver apparatus into that position, and avoid obstacles to operations.			
16.4.1 (B)			X
16.4.2			
Produce a fire stream while the vehicle is in both forward and reverse power modulation, given a discharge rate and intended target, so that the pump is engaged, the turrets are deployed, the agent is delivered to the intended target at the correct rate, and the apparatus is moved and monitored for potential problems.			
16.4.2			X
(A) Requisite Knowledge.			
Principles of agent management and application, effects of terrain and wind on agent application, turret capabilities and limitations, aircraft danger areas, theoretical critical fire area and practical critical fire area, aircraft entry and egress points, and correct apparatus placement.			

16.4.2 (A)	X		
(B) Requisite Skills.			
The ability to provide power to the pump, determine a correct position for the apparatus, maneuver apparatus into that position, avoid obstacles to operations, apply agent, and determine the length of time an extinguishing agent will be available.			
16.4.2 (B)			X
16.4.3			
Produce a fire stream, given a rate of discharge and water supplied from the sources specified in the following list, so that the pump is engaged, the turrets are deployed, the agent is delivered to the intended target at the correct rate, and the apparatus is monitored for potential problems:			
(1) The internal tank			
(2) Pressurized source			
(3) Static source in fire apparatus equipped with drafting capabilities			
16.4.3			X
(A) Requisite Knowledge.			
Principles of agent management and application, effects of terrain and wind on agent application, turret capabilities and limitations, tower light signals, airport markings, aircraft recognition, aircraft danger areas, theoretical critical fire area and practical critical fire area, aircraft entry and egress points, and correct apparatus placement.			
16.4.3 (A)	X		
(B) Requisite Skills.			
The ability to provide power to the pump, determine a correct position for the apparatus, maneuver apparatus into that position, avoid obstacles to operations, apply agent, and determine the length of time an extinguishing agent will be available.			
16.4.3 (B)			X