

State of Oregon
Department of Public Safety Standards and Training

**NFPA Aircraft Rescue and
Fire-Fighting Apparatus
Task Book**

Task Book Assigned To:

Name	DPSST Fire Service #
Agency Name	Date Initiated
Signature of Agency Head or Training Officer	Date Completed

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<http://oregon.gov/DPSST/FC/index.shtml>

Revised January 2018

Task Book Qualification Record Books (Task Books) have been developed for various certification levels within the Oregon Department of Public Safety Standards and Training (DPSST) system. Each Task Book lists the job performance requirements (JPRs) for the specific certification level in a format that allows a candidate to be trained then evaluated during separate evaluations. Successful performance of all tasks, as observed and recorded by a qualified and approved evaluator will result in the candidate's eligibility for DPSST certification.

To become certified at a specific level, the applicant must successfully complete the job performance requirements in sequence. Before a job performance evaluation can be taken, all requisite knowledge and skills must be satisfied. In addition, all relative Task Book evaluations must be checked off by the evaluator. When all prescribed requirements have been met, an application for certification will be forwarded to DPSST. All certificates are mailed to the Training Officer at his/her Fire Service Agency.

TASK BOOK SPECIFICATIONS:

To successfully complete a task book, only an evaluator certified at the candidate's specific level or higher may sign off on the JPR's. 'Requisite Knowledge' and 'Requisite Skills' sections may be completed during class and signed by the instructor. Evaluation must be completed at candidate's fire agency.

NFPA TASK BOOK INFORMATION:

The JPRs covered in this Task Book meet or exceed all NFPA published standards for this certification level at the time of this publication. Mention of NFPA and its standards do not, and are not intended as adoption of—or reference to—NFPA standards. For more information on the complete job performance requirements and data, see the individual DPSST Task Book for that certification level.

HOW TO EVALUATE PERFORMANCE:

Each JPR has one corresponding box to the right in which to confirm a candidate's success. The evaluator shall indicate successful passing by the candidate of each JPR by initialing and dating (see example below).

*A vertical line (|) to the left of the document indicates a change from the previous standard.

<p>4.2.2 Document the routine tests, inspections, and servicing functions, given maintenance and inspection forms, so that all items are checked for operation and deficiencies are reported.</p>	<p>ABC 3-1-16</p>	<p>ABC 3-5-16</p>	<p>XYZ 4-7-16</p>
<p>These skills are the job performance evaluations intended to be completed after the Requisite Knowledge and Requisite Skills have been successfully finished. This section should be accomplished during three separate dates at the firefighter's home department or, if no one at the home department is certified to sign off on the skills, at a neighboring department.</p>			
<p>(A) Requisite Knowledge. Departmental requirements for documenting maintenance performed and the importance of keeping accurate records.</p>	<p>NMO 2-4-16</p>		
<p>The Requisite Knowledge portions of the task book may be done during class and signed off by the instructor. Requisite Knowledge are the only JPR's that are intended to be signed off in class.</p>			
<p>(B) Requisite Skills. The ability to use tools and equipment and complete all related departmental forms.</p>	<p>ABC 2-9-16</p>		
<p>Requisite Skills are intended to be completed at the firefighter's home department or, if no one at the home department is certified to sign off on the skills, at a neighboring department.</p>			

TASK BOOK QUALIFICATION RECORD
FOR THE CERTIFICATION LEVEL OF
NFPA Aircraft Rescue and Fire-Fighting Apparatus

Prior to becoming certified in this position, the sample candidate must successfully complete the following Job Performance Requirements (JPR). The evaluator shall initial and date the appropriate box to indicate successful completion. For each JPR there are requisite knowledge and skill requirements. The evaluator must initial and date in the box provided to indicate the meeting of those requirements before the firefighter may proceed.

4.1 General.

Prior to operating fire department vehicles, the fire apparatus driver/operator shall meet the job performance requirements defined in Sections 4.2 and 4.3.

4.2 Preventive Maintenance.

4.2.1* Perform routine tests, inspections, and servicing functions on the systems and components specified in the following list, given a fire department vehicle, its manufacturer's specifications, and policies and procedures of the jurisdiction, so that the operational status of the vehicle is verified:

- 1) **Battery(ies)**
- 2) **Braking system**
- 3) **Coolant system**
- 4) **Electrical system**
- 5) **Fuel**
- 6) **Hydraulic fluids**
- 7) **Oil**
- 8) **Tires**
- 9) **Steering system**
- 10) **Belts**
- 11) **Tools, appliances, and equipment**
- 12) **Built-in safety features**

(A) Requisite Knowledge. Manufacturer specifications and requirements, policies, and procedures of the jurisdiction.

(B) Requisite Skills. The ability to use hand tools, recognize system problems, and correct any deficiency noted according to policies and procedures.

4.2.2 Document the visual and operational checks, given maintenance and inspection forms, so that all items are checked for operation and deficiencies are reported.

(A) Requisite Knowledge. Departmental requirements for documenting maintenance performed and the importance of keeping accurate records.

(B) Requisite Skills. The ability to use tools and equipment and complete all related departmental forms.

4.3 Driving/Operating.

4.3.1* Operate a fire apparatus, given a vehicle and a predetermined route on a public way 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 state and local laws and departmental rules and regulations.

(A) Requisite Knowledge. The importance of donning passenger restraint devices and ensuring crew safety; the common causes of fire apparatus accidents and the recognition that drivers of fire apparatus are responsible for the safe and prudent operation of the vehicle under all conditions; the effects on vehicle control of liquid surge, braking reaction time, and load factors; effects of high center of gravity on roll-over 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.

(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.

4.3.2* Back a vehicle from a roadway into restricted spaces on both the right and left sides of the vehicle, given a fire department vehicle, a spotter, and restricted spaces 3.7 m (12 ft) in width, requiring 90-degree right-hand and left-hand turns from the roadway, so that the vehicle is parked within the restricted areas without having to stop and pull forward and without striking obstructions.

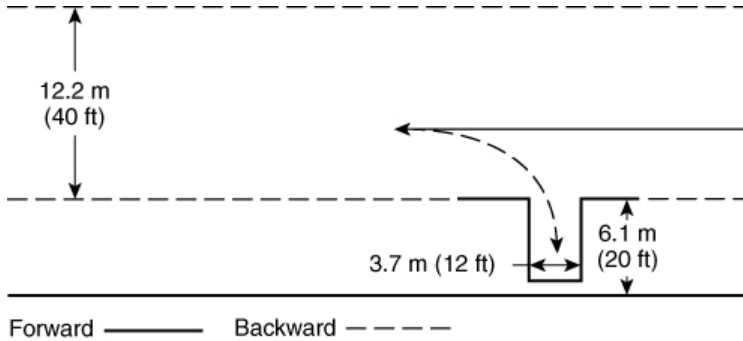
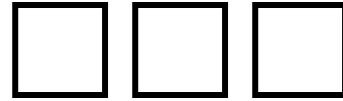


FIGURE A.4.3.2(a)
Alley Dock Exercise.

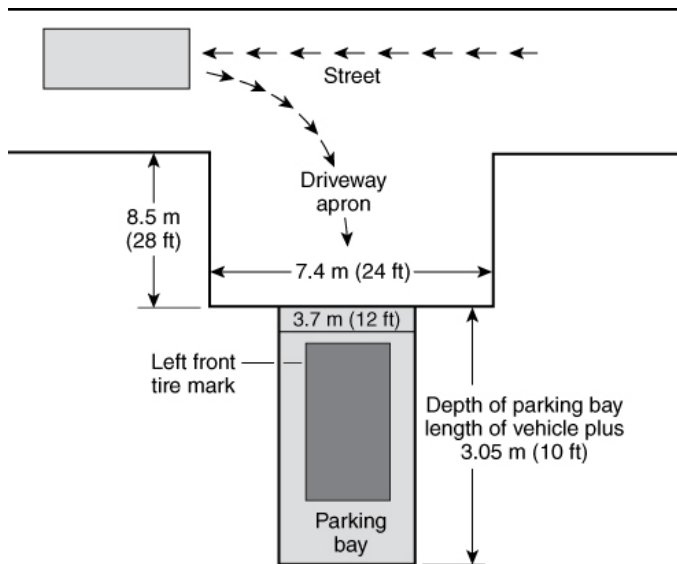


FIGURE A.4.3.2(b)
Station Parking Procedure Drill.

(A) Requisite Knowledge. Vehicle dimensions, turning characteristics, spotter signaling, and principles of safe vehicle operation.



(B) Requisite Skills. The ability to use mirrors and judge vehicle clearance.



4.3.3* Maneuver a vehicle around obstructions on a roadway while moving forward and in reverse, given a fire department vehicle, a spotter for backing, and a roadway with obstructions, so that the vehicle is maneuvered through the obstructions without stopping to change the direction of travel and without striking the obstructions.

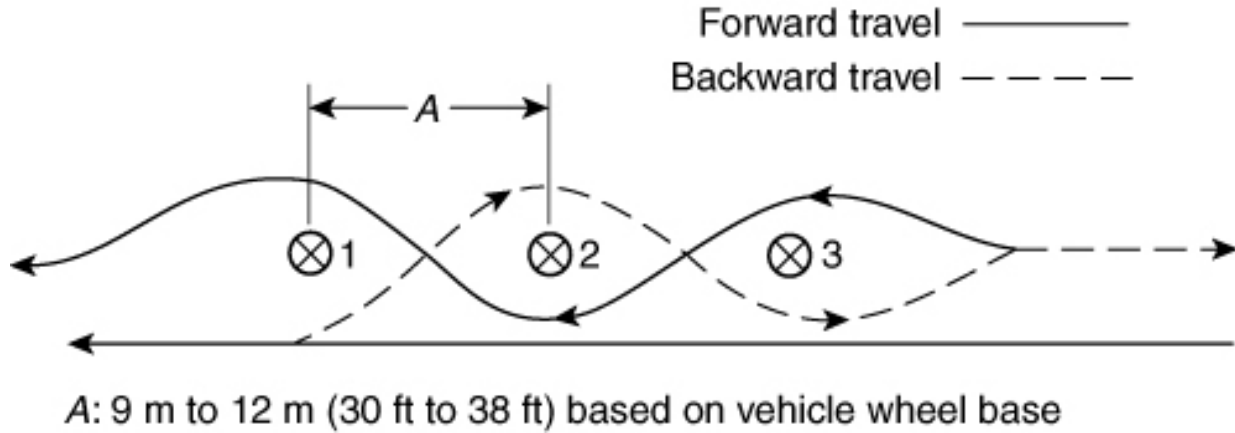
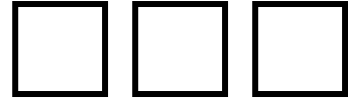


FIGURE A.4.3.3
Serpentine Exercise.

(A) Requisite Knowledge. Vehicle dimensions, turning characteristics, the effects of liquid surge, spotter signaling, and principles of safe vehicle operation.



(B) Requisite Skills. The ability to use mirrors and judge vehicle clearance.



4.3.4* Turn a fire apparatus 180 degrees within a confined space, given a fire department vehicle, a spotter for backing up, and an area in which the vehicle cannot perform a U-turn without stopping and backing up, so that the vehicle is turned 180 degrees without striking obstructions within the given space.

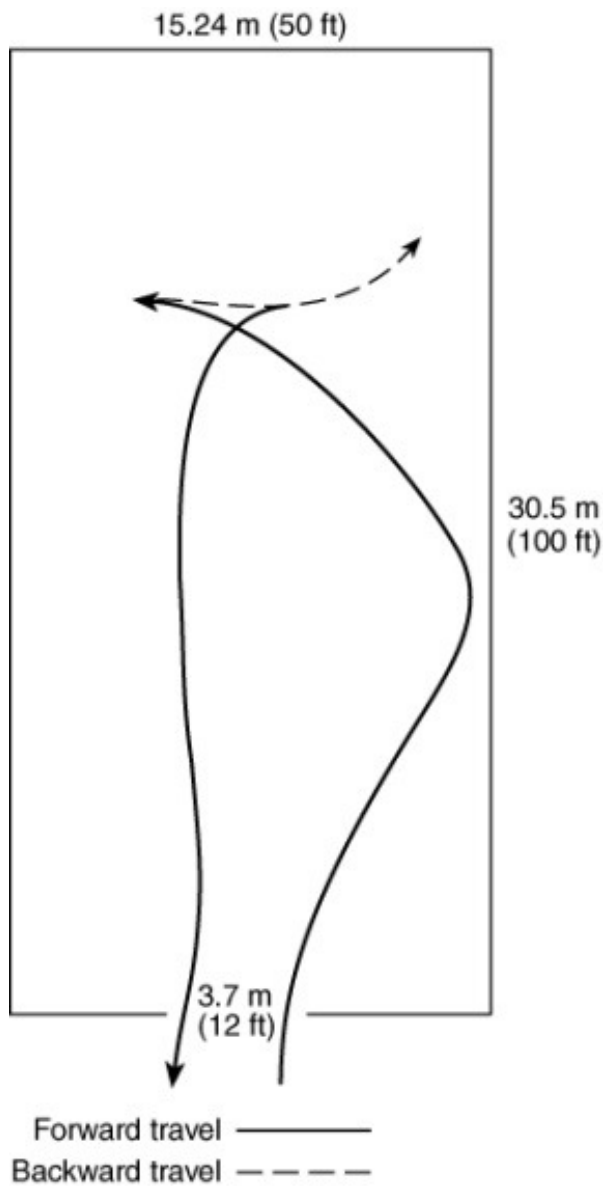
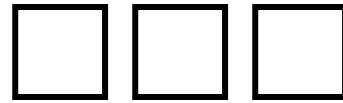


FIGURE A.4.3.4
Confined Space Turnaround.

(A) Requisite Knowledge. Vehicle dimensions, turning characteristics, the effects of liquid surge, spotter signaling, and principles of safe vehicle operation.

(B) Requisite Skills. The ability to use mirrors and judge vehicle clearance.

4.3.5* Maneuver a fire department vehicle in areas with restricted horizontal and vertical clearances, given a fire department vehicle and a course that requires the operator to move through areas of restricted horizontal and vertical clearances, so that the operator accurately judges the ability of the vehicle to pass through the openings and so that no obstructions are struck.

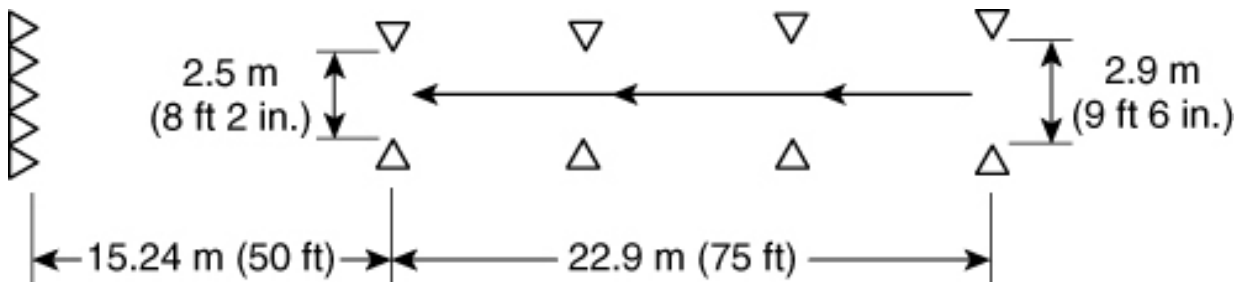
 

FIGURE A.4.3.5
Diminishing Clearance Exercise.

(A) Requisite Knowledge. Vehicle dimensions, turning characteristics, the effects of liquid surge, spotter signaling, and principles of safe vehicle operation.

(B) Requisite Skills. The ability to use mirrors and judge vehicle clearance.

4.3.6* Operate a vehicle using defensive driving techniques, given an assignment and a fire apparatus, so that control of the vehicle is maintained.

(A) Requisite Knowledge. The importance of donning passenger restraint devices and ensuring crew safety; the common causes of fire apparatus accidents and the recognition that drivers of fire apparatus are responsible for the safe and prudent operation of the vehicle under all conditions; the effects on vehicle control of liquid surge, braking reaction time, and load factors; the 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, gear patterns and automatic braking systems in wet and dry conditions; negotiation of intersections, railroad crossings, and bridges; weight and height limitations for both roads and bridges; identification and operation of automotive gauges; and operational limits.

(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.

4.3.7* Operate all fixed systems and equipment on the vehicle not specifically addressed elsewhere in this standard, given systems and equipment, manufacturer's specifications and instructions, and departmental policies and procedures for the systems and equipment, so that each system or piece of equipment is operated in accordance with the applicable instructions and policies.

(A) Requisite Knowledge. Manufacturer's specifications and operating procedures, and policies and procedures of the jurisdiction.

(B) Requisite Skills. The ability to deploy, energize, and monitor the system or equipment and to recognize and correct system problems.

4.4 Fire Department Communications

This duty shall involve initiating responses, receiving telephone calls, and using fire department communications equipment to correctly relay verbal or written information

4.4.1 Initiate the response to a reported emergency, given the report of an emergency, fire department SOPs, and communications equipment, so that all necessary information is obtained, communications equipment is operated correctly, and the information is relayed promptly and accurately to the dispatch center. [1001:5.2.1]

(A) Requisite Knowledge. Procedures for reporting an emergency; departmental SOPs for taking and receiving alarms, radio codes, or procedures; and information needs of dispatch center. [1001:5.2.1(A)]

(B) Requisite Skills. The ability to operate fire department communications equipment, relay information, and record information. [1001:5.2.1(B)]

4.4.2 Receive a telephone call, given a fire department phone, so that procedures for answering the phone are used and the caller's information is relayed. [1001:5.2.2]

(A) Requisite Knowledge. Fire department procedures for answering nonemergency telephone calls. [1001:5.2.2(A)]

(B) Requisite Skills. The ability to operate fire station telephone and intercom equipment. [1001:5.2.2(B)]

4.4.3 Transmit and receive messages via the fire department radio, given a fire department radio and operating procedures, so that the information is accurate, complete, clear, and relayed within the time established by the AHJ. [1001:5.2.3]

(A) Requisite Knowledge. Departmental radio procedures and etiquette for routine traffic, emergency traffic, and emergency evacuation signals. [1001:5.2.3(A)]

(B) Requisite Skills. The ability to operate radio equipment and discriminate between routine and emergency traffic. [1001:5.2.3(B)]

4.4.4 Activate emergency procedures, given an emergency situation and department SOPs, so that emergency actions can be initiated.

(A) Requisite Knowledge. Department SOPs and emergency communication procedures.

(B) Requisite Skills. The ability to activate emergency procedures in accordance with the department's SOPs.

9.1* General. The requirements of Fire Fighter II as specified in NFPA 1001, the requirements of Airport Fire Fighter as specified in NFPA 1003, and the job performance requirements defined in Sections 9.1 and 9.2 shall be met prior to qualifying as a fire department driver/operator — aircraft rescue and fire-fighting (ARFF) apparatus.

9.1.1 Perform the visual and operational checks on the systems and components specified in the following list, in addition to those in 4.2.1, given an ARFF vehicle and the manufacturer’s servicing, testing, and inspection criteria; and policies and procedures of the jurisdiction, so that the operational status of the vehicle is verified:

- 1) *Agent dispensing systems
- 2) *Secondary extinguishing systems
- 3) Vehicle-mounted breathing air systems

(A) Requisite Knowledge. Manufacturer's specifications and requirements, and policies and procedures of the jurisdiction.

(B) Requisite Skills. The ability to use hand tools, recognize system problems, and correct any deficiency noted according to policies and procedures.

9.1.2 Operate an ARFF vehicle, given a predetermined route on an airport that includes the maneuvers listed in 4.3.1, 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.

(A) Requisite Knowledge. The effects on vehicle control of liquid surge, braking reaction time, and load factors; effects of high center of gravity on roll-over 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.

(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.

9.1.3* 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.

(A) Requisite Knowledge. The effects on vehicle control of braking reaction time and load factors; effects of high center of gravity on roll-over 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.

(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.

9.2 Operations.

9.2.1 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.

(A) Requisite Knowledge. Vehicle positioning for fire-fighting 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.

(B) Requisite Skills. The ability to determine a correct position for the apparatus, maneuver apparatus into that position, and avoid obstacles to operations.

9.2.2 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.

(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.

(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.

9.2.3 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

(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.

(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.