



FIRE APPARATUS AERIAL OPERATOR

PRACTICAL SKILLS CERTIFICATION EVALUATION PACKET (NFPA Standard 1002, 2014 Edition)

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AERIAL OPERATOR PRACTICAL SKILLS EVALUATION PACKET

AERIAL OPERATOR PRACTICAL SKILLS CORRELATION MAP

CORE JOB PERFORMANCE REQUIREMENTS

(NFPA 1002, 2014 Edition)

Skill Sheet #	NFPA Section-	Tasks	Certification Examination Requirements: 1- Locally Verified 4- Mandatory
Practical Skills Completed at Department Level for Application Packet Review			
AO 1	6.1.1 (B)	Perform Routine Maintenance Document Routine Maintenance Operate All Fixed Systems	Locally Verified
AO 2	6.2.1 (B)	Position and Stabilize Aerial Apparatus	Mandatory
AO 3	6.2.2 (B)	Maneuver and Position Aerial Device	Mandatory
AO 4	6.2.3 (B)	Lower Aerial Device Using Emergency Operating System	Mandatory
AO 5	6.2.4 (B)	Deploy and Operate Elevated Master Stream	Mandatory

Skill Sheet Packet Instruction

Purpose of the Skill Sheets

All skills listed in this packet are consistent with the 2014 edition of the NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications. The Alaska Fire Standards Council (AFSC) provides these skill sheets as the basis for Aerial Operator testing and certification. For certification purposes, the final skill examination will consist of a series of mandatory skill stations listed on the last page of this packet.

Description & Use

1. These skills sheets are designed for use by the Training Officer and Aerial Operator candidate. Use of this packet throughout a training program will assist in verifying candidate competency and completion of the Aerial operator Training Record.
2. For eligibility to complete the final certification examination, a candidate must demonstrate competency in all skills during training and satisfactorily compete all items on the Aerial Operator training record document.
3. This packet is designed to encompass the requisite skills for Aerial Operator these skill sheets are used for final testing and certification. Accreditation Managers/Training Officers and Aerial Operator course instructors should utilize this evaluation packet during a course to prepare candidates for the certification exam.
4. The final skills examination will consist of skills selected from this packet. Skills are selected from the mandatory skills categories. This packet contains a list of all mandatory skills that are used for the final examination.
5. The Certifying Officer will notify candidates which skills they will be required to complete at the start of the practical skills portion on the date of the examination.
6. The completion of the Aerial Operator Training Record establishes a candidate's eligibility to test. The Training Record document must be fully completed and signed by the Accreditation Manager/Training Officer or designee for each candidate before a candidate can begin the final skills examination. The Aerial Operator Training Record and the practical skills evaluation sheets shall become a permanent part of the candidate's local training record, and this information shall be kept on file in accordance with local fire department procedures.

Grading Criteria

1. It is expected that all of the listed skill sheet elements will be taught and evaluated by the Aerial Operator instructor throughout a course. During the final skills exam the candidate must be prepared to perform all the skills listed in this packet. There are no specific critical points designated within the practical skill sheets, and the Certifying Officer (CO) will require the candidate to repeat an individual practical skill station if *all* of the listed skill items on a selected sheet are not completed by the candidate.
2. This packet contains skill requirements that involve the demonstration of driver skills within simulated vehicle operation scenarios related to emergency response activities. When applicable, skill sheets specifically describe when simulated conditions are permitted for certification testing.
3. Regardless of which final examination skills are selected, there are critical performance items that must be followed for satisfactory performance. Examples of unsatisfactory performance can include:
 - a. Exceeding limitations: time, safety, and equipment limitations
 - b. Inadequate/insufficient personal protective equipment (lack of seatbelt[s], etc)
 - c. Lack of skill accuracy and task completion as defined on the skill evaluation sheet
 - d. Poor judgment in skill performance (i.e.- improper vehicle operation or equipment/safety violation)
 - e. Failure to appropriately apply basic driver knowledge (speeding or violation of traffic laws)
 - f. Not competent in the specified task or skill steps

- g. Outcome of the specified task is in doubt (i.e.- incorrectly performed or did not accomplish skill evaluation criteria)
- h. Need for Evaluator intervention (i.e.- imminent health or safety risk to candidate or others)
- i. Failure to adhere to basic safety principles or guidelines

Artificialities of Training and Testing

Training and testing for at this level can only approximate the on-the-job activities of an Aerial Operator. There are certain artificialities to training and testing that the candidate must be able to adapt to. Simulations during the final examination are often necessary to complete the required practical skill scenarios. For the best possible outcome during final skills examination the Aerial Operator course instructor must prepare the candidates to competently perform these skills under a variety of conditions.

Final Skills Evaluation

The AFSC designated Certifying Officer (CO) shall conduct the final evaluation and will utilize the practical skills evaluation sheets during the examination process. The CO has the overall test site authority and is required to perform his or her duties as outlined in the [Certifying Officer Manual](#).

For preparation of the final examination the designated CO must coordinate with the Accreditation Manager/Training Officer, or designee, to ensure an adequate test site location is available. The Accreditation Manager/Training Officer is responsible for preparation of all test site equipment/materials and arranging designated evaluators for the date of the practical examination. The CO must verify that all required elements are adequate for testing and will approve all designated Evaluators. Designated Evaluators shall receive training appropriate for the test site and are required to complete an [Evaluator Code of Ethics Compliance](#) agreement before testing begins.

The CO shall verify completion of the final skills examination packet, and the packet will be attached to the Aerial Operator Training Record as part of the candidate's permanent local training record.

Prerequisite Certification Requirements

For eligibility to certify at the Aerial Operator level, candidates must:

- *Meet all criteria for Driver Operator
- *Provide evidence of completion of Driver Operator skills while operating a fire department Aerial apparatus, as defined in section 4.2-4.7
- **Provide evidence of completion of Pump Operator skills while operating a fire department Aerial apparatus, as defined in section 5.1-5.2.4
 - *Conduct Driver Operator skills while operating an Aerial apparatus and attach completed Driver Operator Training Record*
 - **Conduct Pumper Operator skills while operating an Aerial apparatus and attach completed Driver Operator Training Record*

Additional Notes:

1. During the final practical examination it is expected that appropriate personal protective equipment (PPE) shall be worn for all skill stations, unless otherwise indicated within the skill evaluation sheet. When appropriate, candidates shall don *all* PPE appropriate for the scenario to maintain on-the-job conditions.
2. During some scenarios a candidate may be instructed to perform other Aerial Operator tasks not directly related to the specific skill sheet evaluation being tested. It is expected that the candidate shall perform all related skills correctly.
3. Some skills may include a time limit. An Evaluator may use a digital or analog watch/stopwatch for final skills evaluation. Prior to the start of the practical examination, the CO must inspect and approve all timing devices used during final skills evaluations.
4. Some skills require that equipment be prepared or assembled within the final skills examination. Unless otherwise indicated, it is permissible for the candidate to prepare or assemble the required equipment or devices at any time, provided that this does not interfere with the core skill, task, or evolution.
5. Candidates must be prepared to complete skills under a variety of conditions. Training and skills practice is often done during optimum conditions, but candidates must be prepared to adapt to changing conditions that can occur in on-the-job situations.
6. Candidates must identify and respond quickly and appropriately to equipment malfunctions, improper application of tool usage, or other changes within a given scenario. The Evaluator ultimately determines if the candidate has met the criteria specified on the skill(s) being evaluated.
7. For final examination, the performance of a skill, task, or evolution is not required to be done in the exact order of the steps (as outlined on the skill sheet), unless it is critical to a particular task. For example, a person must secure a safety restraint device before driving an apparatus.
8. Some skills may require that a candidate verbalizes information about a particular task or procedure. In such cases, any question(s) from the Evaluator to the candidate must be limited to those that satisfy the criteria listed on the skill sheet, and a question cannot exceed the scope the Aerial Operator requirements.

Aerial Operator Final Written and Practical Examinations

Following is a brief outline of the reference materials and documents that are used for an Aerial Operator final examination:

Aerial Operator Examination References

- a. NFPA 1002 Standard for Fire Officer Professional Qualifications, 2014 edition
- b. Text (any one of the following)
 - IFSTA, *Pumping and Aerial Apparatus Driver/Operator Handbook*, 3rd Edition
 - Jones and Bartlett *Fire Apparatus Driver/Operator: Pump, Aerial, Tiller, and Mobile Water Supply*, 2nd Edition
- c. Aerial Operator Practical Skills Evaluation Sheets (*this packet*)

Final Examination Steps

- a. *Driver Operator Training Record review (*this must be completed while operating a Aerial Apparatus and signed off by the **Accreditation Manager/Training Officer or designee** prior to the date of the final examination and reviewed by the CO to ensure all elements are complete.*)
- b. *Pumper Operator Training Record review (*this must be completed while operating an Aerial Apparatus and signed off by the **Accreditation Manager/Training Officer or designee** prior to the date of the final examination and reviewed by the CO to ensure all elements are complete.*)
- c. *Aerial Operator Training Record review (*this must be completed and signed off by the **Accreditation Manager/Training Officer or designee** prior to the date of the final examination and reviewed by the CO to ensure all elements are complete.*)
- d. Certifying Officer reviews and signs candidate Application for Certification
- e. Candidate completes the written examination administered by the CO
- f. Candidate completes the practical examination administered by the CO.
- g. Certifying Officer reviews completed Evaluator skill sheets and transfers information to the [Practical Examination Reporting Form](#) (PERF)
- h. Written exam, PERF, and signed application are forwarded to AFSC.
- i. AFSC Aerial Operator certificate is issued upon successful completion of the written and practical exam (*within approximately 30 days of test date*)

**Note: The candidate's completed Training Record and signed Final Examination skill sheets shall be placed in the candidate's local training file in accordance with fire department procedures*

AERIAL OPERATOR PRACTICAL SKILLS EVALUATION PACKET

NFPA 1002- 2014 Ed.

PRACTICAL SKILL REQUIREMENTS

[AO- 1a](#)

Candidate:	Date:
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STANDARD: NFPA 1002: 4.2.1 (B) 6.1.1 (B)	SKILL AREA: Perform Routine Tests
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TASK 6.1.1: Perform the routine tests, inspections, and servicing functions specified in the following list, so that the operational status of the aerial is verified.

PERFORMANCE OUTCOME: The candidate shall demonstrate the ability to: use hand tools and equipment; recognize system problems; correct any deficiency noted in accordance with policies and procedures; deploy, energize, and monitor the system or equipment and to recognize and correct system problems; and complete all related departmental forms.

EQUIPMENT: Fire aerial apparatus, department policies and procedures (SOP/SOG), forms/reports, maintenance log book/record, notepad or clipboard, and radio unit.

CONDITIONS: Given a fire department aerial, its manufacturer’s specifications, and maintenance inspection forms, the candidate shall demonstrate the ability to:

No.	TASK STEPS	TEST		RETEST 1		RETEST 2	
		P	F	P	F	P	F
	Perform routine tests, inspections and/or service functions on the following:						
1.	• Battery(ies)	<input type="checkbox"/>					
2.	• Braking system	<input type="checkbox"/>					
3.	• Coolant system	<input type="checkbox"/>					
4.	• Electrical system	<input type="checkbox"/>					
5.	• Fuel	<input type="checkbox"/>					
6.	• Hydraulic fluids	<input type="checkbox"/>					
7.	• Oil	<input type="checkbox"/>					
8.	• Tires	<input type="checkbox"/>					
9.	• Steering system	<input type="checkbox"/>					
10.	• Belts	<input type="checkbox"/>					
11.	• Tools, appliances, and equipment	<input type="checkbox"/>					
12.	Verify operational status of cable systems (if applicable)	<input type="checkbox"/>					
13.	Verify operational status of aerial device hydraulic systems	<input type="checkbox"/>					
14.	Verify operational status of sliders and rollers	<input type="checkbox"/>					
12.	Verify operational status of stabilizing systems	<input type="checkbox"/>					
13.	Verify operational status of aerial device safety systems	<input type="checkbox"/>					
14.	Verify operational status of breathing air systems	<input type="checkbox"/>					
15.	Verify operational status of communication systems	<input type="checkbox"/>					
16.	Appropriately recognize equipment/system problems or deficiencies	<input type="checkbox"/>					
17.	Correct any found deficiencies, or document /report them in accordance with departmental procedures	<input type="checkbox"/>					
18.	Complete inspection reports and all related vehicle maintenance forms in accordance with departmental procedures	<input type="checkbox"/>					

AERIAL OPERATOR PRACTICAL SKILLS EVALUATION PACKET

NFPA 1002- 2014 Ed.

PRACTICAL SKILL REQUIREMENTS

[AO-2](#)

Candidate:	Date:
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STANDARD: NFPA 1002: 6.2.1(B); 6.2.2(B)	SKILL AREA: Position and Stabilize Aerial Apparatus
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TASK-6.2.1: Maneuver and position an aerial apparatus, so that the apparatus is positioned for correct aerial device deployment.

TASK-6.2.2: Stabilize an aerial apparatus, so that power can be transferred to the aerial device hydraulic system and the device can be deployed.

PERFORMANCE OUTCOME: The candidate shall demonstrate the ability to: determine a correct position for the apparatus, maneuver apparatus into that position, and avoid obstacles to operations; and, transfer power from the vehicle's engine to the hydraulic system and operate vehicle stabilization devices.

EQUIPMENT: Aerial ground pads/plates, department policies and procedures (SOP/SOG), fire aerial apparatus, and radio unit.

CONDITIONS: Given a fully equipped fire aerial apparatus, an incident location, a situation description, and an assignment, the candidate shall demonstrate the ability to:

No.	TASK STEPS	TEST		RETEST 1		RETEST 2	
		P	F	P	F	P	F
1.	Maneuver and position the aerial as appropriate for objective	<input type="checkbox"/>					
2.	Perform power transfer from vehicle operations to aerial per manufacturer's recommendation	<input type="checkbox"/>					
3.	Engage the PTO per manufacturer recommendation	<input type="checkbox"/>					
4.	Properly position wheel chocks per manufacturer recommendation	<input type="checkbox"/>					
5.	Check for overhead obstructions and ensure proper apparatus placement	<input type="checkbox"/>					
6.	Check the expected travel path of the stabilizers for obstructions and/or limiting factors	<input type="checkbox"/>					
7.	Check the ground surface for stability and condition	<input type="checkbox"/>					
8.	Deploy and properly place the stabilizer ground pads	<input type="checkbox"/>					
9.	Properly deploy the stabilizers based on topography and conditions	<input type="checkbox"/>					
10.	Raise the apparatus to its working position and verify leveling indicators	<input type="checkbox"/>					
11.	Lock the stabilizers per manufacturer's recommendations (holding valves, interlock feature, safety pins, or combination of features)	<input type="checkbox"/>					

Evaluator:		<i>Retest Evaluator 1:</i>	
		<i>Retest Evaluator 2:</i>	

Comments:

_____ *Certifying Officer Name*

_____ *Date*

_____ *Certifying Officer Signature*

<u>Overall Skill Sheet Result:</u>
Pass (P): <input type="checkbox"/> Fail (F): <input type="checkbox"/>

AERIAL OPERATOR PRACTICAL SKILLS EVALUATION PACKET

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PRACTICAL SKILL REQUIREMENTS

AO-3

Candidate:	Date:
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STANDARD: NFPA 1002: 6.2.3(B)	SKILL AREA: Maneuver and Position Aerial Device
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TASK-6.2.3: Maneuver and position the aerial device from each control station, so that the aerial device is positioned to accomplish the assignment.

PERFORMANCE OUTCOME: The candidate shall demonstrate the ability to raise, rotate, extend, and position to a specified location, as well as lock, unlock, retract, lower, and bed the aerial device.

EQUIPMENT: Aerial ground pads/plates, department policies and procedures (SOP/SOG), fire aerial apparatus, and radio unit.

CONDITIONS: Given a fully equipped fire aerial apparatus, an incident location, a situation description, and an assignment, the candidate shall demonstrate the ability to:

No.	TASK STEPS	TEST		RETEST 1		RETEST 2	
		P	F	P	F	P	F
1.	Identify intended target based on assignment	<input type="checkbox"/>					
2.	Release the hold down locks and ensure all safety devices are in place and properly used (slide-out platforms, safety chains, guardrails, dead-man switches, etc)	<input type="checkbox"/>					
3.	Check the intended path of the aerial device for obstructions. (overhead, ladder cradle, cabinetry, accessories, personnel, etc)	<input type="checkbox"/>					
	Aerial device operations must follow manufacturer and local policy at all times						
4.	Raise the aerial device from bed to desired height	<input type="checkbox"/>					
5.	Rotate he aerial device towards intended target	<input type="checkbox"/>					
6.	Extend he aerial device towards the intended target.	<input type="checkbox"/>					
7.	Lower/position the aerial device to the objective according to department SOP's and manufacturers specifications	<input type="checkbox"/>					
8.	Align aerial device ladder rungs as necessary	<input type="checkbox"/>					
9.	Clear firefighters to safely climb the aerial ladder (if applicable)	<input type="checkbox"/>					
10.	Monitor apparatus stability and aerial loads during evolution	<input type="checkbox"/>					
11.	Maintain communication with aerial personnel throughout operation	<input type="checkbox"/>					
12.	Maintain smooth operation of aerial operations at all times	<input type="checkbox"/>					
13.	Return aerial device to bed and properly secure as per manufacturer recommendation	<input type="checkbox"/>					

Evaluator:		<i>Retest Evaluator 1:</i>	
		<i>Retest Evaluator 2:</i>	

Comments:

_____ Date

_____ Certifying Officer Name

_____ Certifying Officer Signature

<u>Overall Skill Sheet Result:</u>
Pass (P): <input type="checkbox"/> Fail (F): <input type="checkbox"/>

AERIAL OPERATOR PRACTICAL SKILLS EVALUATION PACKET

NFPA 1002- 2014 Ed.

PRACTICAL SKILL REQUIREMENTS

[AO- 5a](#)

Candidate:	Date:
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STANDARD: NFPA 1002: 6.2.5(B)	SKILL AREA: Deploy and Operate Elevated Master Stream
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TASK-6.2.5: Deploy and operate an elevated master stream so that the stream is effective and the aerial and master stream devices are operated correctly.

PERFORMANCE OUTCOME: The candidate shall demonstrate the ability to connect a water supply to a master stream device and control an elevated nozzle manually or remotely.

EQUIPMENT: Aerial ground pads/plates, department policies and procedures (SOP/SOG), fire hose supply line (min. 2 1/2"), fire pumper apparatus, hose tools and appliances, master stream device, and radio unit.

CONDITIONS: Given a fully equipped fire aerial apparatus, an aerial device, a master stream device, the candidate will demonstrate the proper procedures to safely raise the aerial device and position the waterway to flow _____ gpm using a _____ inch smooth bore nozzle/fog nozzle, _____ feet in elevation with the ladder extended to _____ feet in a defensive firefighting mode. The aerial operator must calculate and flow the correct pump pressure for the situation described. The candidate shall complete the following:

No.	TASK STEPS	TEST		RETEST 1		RETEST 2	
		P	F	P	F	P	F
1.	Demonstrate how to manually rotate the nozzle from side to side	<input type="checkbox"/>					
2.	Demonstrate how to manually raise and lower the nozzle	<input type="checkbox"/>					
3.	Demonstrate how to manually adjust the spray pattern of nozzle	<input type="checkbox"/>					
4.	Demonstrate how to change from a fog nozzle to a smooth bore tip with/without a stream straightener (Select the appropriate nozzle for the assigned task)	<input type="checkbox"/>					
5.	Demonstrate how to attach a portable ladder pipe/hose line, or adjust pinable waterway in the appropriate position (if applicable)	<input type="checkbox"/>					
6.	Connect an adequate water supply to the proper water inlet (per department SOP's and manufacturers specifications)	<input type="checkbox"/>					
7.	Maneuver and position the aerial device as appropriate for objective (<i>AFSC Skill Sheet AO3, steps 1-7</i>)	<input type="checkbox"/>					
8.	Smoothly open waterway discharge valve with minimal stress and movement of the aerial device and waterway	<input type="checkbox"/>					
9.	Discharges the correct gpm for the assigned task at _____ psi pump pressure	<input type="checkbox"/>					
10.	Smoothly closes waterway discharge valve with minimal stress and movement of the aerial device and waterway	<input type="checkbox"/>					
11.	Disengages pump	<input type="checkbox"/>					
12.	Close and disconnect water supply from fire apparatus	<input type="checkbox"/>					
13.	Opens waterway drain to drain waterway pipe completely prior to repositioning the ladder	<input type="checkbox"/>					
14.	Retract, rotate, and lower aerial device	<input type="checkbox"/>					
15.	Disassemble any portable ladder pipe, hoseline, and/or return waterway pin to its stowed position	<input type="checkbox"/>					
16.	Return the proper nozzle (per department SOP's) onto the aerial monitor and places the monitor in its correct stowed position	<input type="checkbox"/>					
17.	Properly bed the aerial device.	<input type="checkbox"/>					

AERIAL OPERATOR PRACTICAL SKILLS EVALUATION PACKET

NFPA 1002- 2014 Ed.

PRACTICAL SKILL REQUIREMENTS

AO- 5b

Evaluator:		<i>Retest Evaluator 1:</i>	
		<i>Retest Evaluator 2:</i>	
Comments:			

Certifying Officer Name

_____ *Date*

Certifying Officer Signature

<u>Overall Skill Sheet Result:</u>
Pass (P): <input type="checkbox"/> Fail (F): <input type="checkbox"/>

AERIAL OPERATOR PRACTICAL SKILLS EVALUATION PACKET

Fire Apparatus Aerial Operator Required Equipment/Material			Related Skill Sheet(s)
<input type="checkbox"/>	1	Aerial ground pads/plates	2-5
<input type="checkbox"/>	2	AHJ forms/reports	All
<input type="checkbox"/>	3	Appropriate personnel protective equipment	All
<input type="checkbox"/>	4	Fire hose supply line (minimum 2 1/2")	5
<input type="checkbox"/>	5	Hose tools and appliances	5
<input type="checkbox"/>	6	Maintenance log book/record	1
<input type="checkbox"/>	7	<u>NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications</u>	All
<input type="checkbox"/>	8	<u>NFPA 1500:Standards on Occupational Safety and Health Program</u>	All
<input type="checkbox"/>	9	Notebook/Clipboard	1
<input type="checkbox"/>	10	Radio unit	All
<input type="checkbox"/>	11	Standard Operating Procedures (SOP)/Standard Operating Guidelines (SOG)	All
<input type="checkbox"/>			

Fire Apparatus Aerial Operator Required Facility/Apparatus Checklist			Related Skill Sheet(s)
<input type="checkbox"/>	1	Aerial operations area (minimum 100' X 50')	2-5
<input type="checkbox"/>	2	Fire aerial apparatus: <ul style="list-style-type: none"> • equipped with appropriate safety restraints (seatbelts/aerial systems) • master stream device • pumping system • water tank 	All
<input type="checkbox"/>	3	Maintenance area/fire station bay	1
<input type="checkbox"/>	4	Pressurized water source (hydrant)	5
<input type="checkbox"/>			