FIRE APPARATUS
PUMPER OPERATOR

PRACTICAL SKILLS
CERTIFICATION EVALUATION PACKET

(NFPA Standard 1002, 2017 Edition)

Department of Public Safety
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V-22

PUMPER OPERATOR PRACTICAL SKILLS CORRELATION MAP

CORE JOB PERFORMANCE REQUIREMENTS

(NFPA 1002, 2017 Edition)

Skill Sheet #	NFPA Section	Tasks	Certification Examination Requirements: 1- Locally Verified 2- Type I Random 2- Type II Random
Practical Skills Completed at Department Level for Application Packet Review			
PO 1	5.1.2	Perform Visual and Operational Checks	**Dept. Verified**
Type I Practical Skills			
PO 2	5.2.1	Respond on an Apparatus	**Random**
PO 3	5.2.2	Establish and Operate at Emergency Scenes	**Random**
PO 4	5.2.3	Connect a Fire Department Pumper to a Water Supply	**Random**
PO 5	5.2.4 (1)	Pump From Internal Tank	**Random**
PO 6	5.2.4 (2)	Pump From Pressurized Water Source	**Random**
PO 7	5.2.4 (3)	Pump From Static Water Source	**Random**
PO 8	5.2.4 (4)	Transfer Internal/External Water Source	**Random**
Type II Practical Skills			
PO 9	5.2.5	Relay Pumping	**Random**
PO 10	5.2.6	Produce Foam Fire Stream	**Random**
PO 11	5.2.7	Supply Water to Fire Sprinkler and Standpipe Systems	**Random**

Skill Sheet Packet Instruction

Purpose of the Skill Sheets

All skills listed in this packet are consistent with the 2017 edition of NFPA 1002: *Standard for Fire Apparatus Driver/Operator Professional Qualifications*. The Alaska Fire Standards Council (AFSC) provides these skill sheets as the basis for Pumper Operator testing and certification.

For certification purposes, the final skill examination will consist of a series of random skill stations listed on page 2 of this packet.

Description & Use

1. These skills sheets are designed for use by the Training Officer and Pumper Operator candidate. Use of this packet throughout a training program will assist in verifying candidate competency and completion of the Pumper 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 Pumper Operator training record document.

3. This packet is designed to encompass the requisite skills for Pumper Operator. These skill sheets are used for final testing and certification. Accreditation Managers/Training Officers and Pumper Operator course instructors should utilize this evaluation packet during a course to prepare candidates for the certification exam. For a candidate's final skills evaluation, she or he must successfully perform each skill while being evaluated on performance competency by an AFSC examination representative.

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 random 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 Pumper 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 Pumper 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 accreditation procedures.

Grading Criteria

1. It is expected that all of the listed skill sheet elements will be taught and evaluated by the Pumper 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: safety, efficiency, 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 a Pumper 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 Pumper 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 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 Certification Policy 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 Pumper Operator Training Record as part of the candidate's permanent local training record.

Prerequisite Certification Requirements

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

- Be 18 years of age; and
- *Meet all criteria for Driver Operator; and
- *Provide evidence of completion of Driver Operator skills while operating a fire department pumper apparatus, as defined in section 4.2 - 4.4
- Meet the medical requirement as specified in NFPA 1500 (10.1.1, 10.1.2, 10.1.3, 10.1.5)

**Conduct Driver Operator skills while operating a pumper 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 Pumper 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 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.

4. 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.

5. Candidates must identify and respond quickly and appropriately to equipment malfunctions, improper application of tool usage, or other changes within a given scenario. The Certifying Officer ultimately determines if the candidate has met the criteria specified on the skill(s) being evaluated.

6. 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.

7. Some skills may require that a candidate verbalize 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 Pumper Operator requirements.

Pumper Operator Final Written and Practical Examinations

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

Pumper Operator Written ExaminationReferences

a. NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications, 2017 edition
b. Text
   - IFSTA, *Pumping Apparatus Driver/Operator Handbook,* 3rd Edition
   - Jones and Bartlett *Fire Apparatus Driver/Operator: Pump, Aerial, Tiller, and Mobile Water Supply, 3rd Edition*
c. Pumper Operator Practical Skills Evaluation Sheets (*this packet*)

Final Examination Steps

a. *Driver Operator Training Record review (*this must be completed while operating a Pumper 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 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. Certifying Officer reviews and signs candidate Application for Certification
d. Candidate completes the written examination administered by the CO
e. Candidate completes the practical examination administered by the CO.
f. Certifying Officer reviews completed evaluator skill sheets and transfers information to the Practical Examination Reporting Form (PERF)
g. Written exam, PERF, and signed application are forwarded to AFSC.
h. AFSC Pumper 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 accreditation procedures.*

NFPA 1002 - 2017 Ed. **PRACTICAL SKILL REQUIREMENTS** PO 1

Candidate:	**Date:**

STANDARD: NFPA 1002: 5.1.2	**SKILL AREA:**	**Perform Visual and Operational Checks**

TASK: Perform the visual and operational checks, inspections and servicing functions specified in the following list, so that the operational status of the pumper 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 pumper apparatus, department policies and procedures (SOP/SOG), forms/reports, maintenance log book/record, notepad or clipboard, and radio unit.

CONDITIONS: Given a fire department pumper, equipment on-board the apparatus, and 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)	☐	☐	☐	☐	☐	☐
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.	Verify operational level of water tank and other extinguishing agent levels (if applicable)	☐	☐	☐	☐	☐	☐
13.	Verify operation of pumping systems	☐	☐	☐	☐	☐	☐
14.	Verify operation of foam systems	☐	☐	☐	☐	☐	☐
15.	Deploy, energize and monitor fixed equipment not otherwise specified (i.e. generators, floodlights, air compressors, etc)	☐	☐	☐	☐	☐	☐
16.	Appropriately recognize equipment/system problems or deficiencies	☐	☐	☐	☐	☐	☐
17.	Correct any found deficiencies, or document /report them in accordance with departmental procedures	☐	☐	☐	☐	☐	☐
18.	Complete inspection reports and all related vehicle maintenance forms in accordance with departmental procedures	☐	☐	☐	☐	☐	☐

NFPA 1002 - 2017 Ed. **PRACTICAL SKILL REQUIREMENTS** Continue PO 1

Candidate:	**Date:**

Evaluator:		***Retest Evaluator 1:***	
		Retest Evaluator 2:	

Comments:

_____ _____
Certifying Officer Name *Date*

_____
Certifying Officer Signature

Overall Skill Sheet Result:

Pass (P): ☐ **Fail (F):** ☐

NFPA 1002 - 2017 Ed. **PRACTICAL SKILL REQUIREMENTS** PO 2

Candidate:	**Date:**

STANDARD: NFPA 1002: 5.2.1	**SKILL AREA: Apparatus Response**
TASK: Respond on an apparatus to an emergency scene, so that the apparatus is correctly mounted and dismounted, seat belts are used while the vehicle is in motion, and other personal protective equipment is correctly used.	
PERFORMANCE OUTCOME: The candidate shall be able to respond safely in a fire department apparatus and to safely dismount at the emergency scene while demonstrating the ability to use each piece of provided safety equipment.	
EQUIPMENT: Fire apparatus, personal protective equipment, hearing protection, and eye protection (*for those not in enclosed cabs*)	
CONDITIONS: Given a simulated fire scenario, the candidate shall demonstrate the ability to:	

No.	TASK STEPS	TEST		RETEST 1		RETEST 2	
		P	F	P	F	P	F
	MOUNTING:						
1.	Properly don personal protective clothing	☐	☐	☐	☐	☐	☐
2.	State that the vehicle is not in motion	☐	☐	☐	☐	☐	☐
3.	Mount fire apparatus using handrails	☐	☐	☐	☐	☐	☐
4.	Close door, safety bar, gate to cab or compartment	☐	☐	☐	☐	☐	☐
5.	Sit and fasten seat belt	☐	☐	☐	☐	☐	☐
6.	Correctly use any other personal protective equipment furnished	☐	☐	☐	☐	☐	☐
	DISMOUNTING:						
7.	Wait for order(s) before leaving apparatus	☐	☐	☐	☐	☐	☐
8.	State that vehicle is completely stopped before leaving apparatus	☐	☐	☐	☐	☐	☐
9.	Look for hazards before stepping off vehicle	☐	☐	☐	☐	☐	☐
10.	Safely step from vehicle using handrails	☐	☐	☐	☐	☐	☐

Evaluator:		***Retest Evaluator 1:***	
		Retest Evaluator 2:	
Comments:			

_____ _____
Certifying Officer Name *Date*

_____
Certifying Officer Signature

Overall Skill Sheet Result:

Pass (P): ☐ **Fail (F):** ☐

NFPA 1002 - 2017 Ed. **PRACTICAL SKILL REQUIREMENTS** PO 3

Candidate:	**Date:**

STANDARD: NFPA 1002: 5.2.2	**SKILL AREA: Emergency Scene Operations**

TASK: Establish and operate in work areas at emergency scenes so that procedures are followed, protective equipment is worn, protected work areas are established, and the candidate performs assigned tasks only in established, protected work areas.

PERFORMANCE OUTCOME: The candidate shall be able to use personal protective equipment, deploy traffic and scene control devices, dismount apparatus, and safely operate in the protected work areas as appropriate.

EQUIPMENT: Fire apparatus, personal protective equipment, local SOP's/SOG's, and traffic control devices.

CONDITIONS: Given a scenario within an emergency scene or designated work zone, the candidate shall demonstrate the ability to:

No.	TASK STEPS	TEST		RETEST 1		RETEST 2	
		P	F	P	F	P	F
	Certifying Officer shall select one of the following scenarios for final certification examination:						
	a. ☐ Structure fire scene **b.** ☐ Roadway emergency scenes with traffic hazards **c.** ☐ Downed electrical lines **d.** ☐ Photovoltaic power systems **e.** ☐ Battery storage systems						
1.	Survey emergency scene for hazards according to department SOP's	☐	☐	☐	☐	☐	☐
2.	Identify potential for injury based on identified hazards	☐	☐	☐	☐	☐	☐
3.	Verbalize a plan for mitigation of hazards	☐	☐	☐	☐	☐	☐
4.	Properly dismounts apparatus with PPE correctly worn	☐	☐	☐	☐	☐	☐
5.	Using traffic cones, and verbalizing the placement of apparatus, establish a safe work area	☐	☐	☐	☐	☐	☐
6.	Verbalize how structure, roadway emergency scenes, traffic hazards, and downed power lines would be treated and isolated	☐	☐	☐	☐	☐	☐
7.	Verbalize dynamic nature of scene safety (*other potential hazards*)	☐	☐	☐	☐	☐	☐
8.	Describe measures to ensure continued scene safety	☐	☐	☐	☐	☐	☐

Evaluator:		***Retest Evaluator 1:***	
		Retest Evaluator 2:	

Comments:

_____ _____
Certifying Officer Name *Date*

_____
Certifying Officer Signature

Overall Skill Sheet Result:

Pass (P): ☐ **Fail (F):** ☐

NFPA 1002 - 2017 Ed. **PRACTICAL SKILL REQUIREMENTS** PO 4

Candidate:	**Date:**

STANDARD: NFPA 1002: 5.2.3	**GENERAL SKILL:** **Water Supply**

TASK: Connect a pumper apparatus to water supply as a member of a team, so that connections are tight and water flow is unobstructed.

PERFORMANCE OUTCOME: While operating as a member of a team, the candidate shall demonstrate the ability to hand lay a supply hose, connect and place hard suction hose for drafting operations, deploy portable water tanks and other necessary equipment, make hydrant-to-pumper hose connections for forward and reverse lays, connect supply hose to a hydrant, and fully open and close the hydrant.

EQUIPMENT: Full personal protective equipment, hydrant wrench, hard suction hose, strainer, utility rope, and appropriate supply line (min. 2 ½ hose line).

CONDITIONS: Given a static water source or fire hydrant, the candidate shall demonstrate the ability to:

No.	TASK STEPS	TEST		RETEST 1		RETEST 2	
		P	F	P	F	P	F
	Certifying Officer shall select one of the following tasks:						
	☐ **FIRE HYDRANT CONNECTION VIA FORWARD & REVERSE LAY:**						
1.	Connect supply hose to hydrant	☐	☐	☐	☐	☐	☐
2.	Connect supply hose to pumper intake	☐	☐	☐	☐	☐	☐
3.	Remove kinks from hose	☐	☐	☐	☐	☐	☐
4.	Fully open hydrant	☐	☐	☐	☐	☐	☐
5.	At end of operation, fully close the hydrant	☐	☐	☐	☐	☐	☐
6.	Place all equipment and hydrant in a ready condition	☐	☐	☐	☐	☐	☐
	☐ **STATIC WATER SOURCE:**						
1.	Deploy portable water tank	☐	☐	☐	☐	☐	☐
2.	Check gaskets on the hard suction hose for dirt, gravel or defects	☐	☐	☐	☐	☐	☐
3.	Connect strainer *or* foot *or* float to hose	☐	☐	☐	☐	☐	☐
4.	Fasten rope/strap to strainer to aid in handling the hose	☐	☐	☐	☐	☐	☐
5.	Connect hard suction hose to pumper	☐	☐	☐	☐	☐	☐
6.	Use rubber mallet to ensure air tight connections	☐	☐	☐	☐	☐	☐
7.	Lower hose and strainer into static water source	☐	☐	☐	☐	☐	☐

Candidate:	**Date:**

Evaluator:		***Retest Evaluator 1:***	
		Retest Evaluator 2:	
Comments:			

_____ _____
Certifying Officer Name *Date*

_____
Certifying Officer Signature

Overall Skill Sheet Result:

Pass (P): ☐ **Fail (F):** ☐

NFPA 1002 - 2017 Ed. **PRACTICAL SKILL REQUIREMENTS** PO 5

Candidate:	**Date:**

STANDARD: NFPA 1002: 5.2.4(1)	**SKILL AREA: Pump From Internal Tank**

TASK-5.2.4 (1): Produce effective hand or master streams, given an internal tank, so that the pump is engaged, all pressure control and vehicle safety devices are set, the rated flow of the nozzle is achieved and maintained, and the apparatus is continuously monitored for potential problems.

PERFORMANCE OUTCOME: The candidate shall demonstrate the ability to: position a fire department pumper; operate at a fire pumper using an internal water source; power transfer from vehicle engine to pump; operate pumper pressure control systems; operate the volume/pressure transfer valve (multistage pumps only); operate auxiliary cooling systems; assemble hose lines, nozzles, valves, and appliances; and produce an effective fire stream at the correct discharge pressure.

EQUIPMENT: Department policies and procedures (SOP/SOG), fire hose handline (min. 1 ½"), fire pumper apparatus, hose tools and appliances, and radio unit.

CONDITIONS: Given a fire apparatus and equipment, the candidate shall perform pump operations using an internal tank for supplying a pre-connected attack line, given one _____in. attack line, _____ft. in length with a _____ gpm fog nozzle, the candidate shall demonstrate the ability to:

No.	TASK STEPS	TEST		RETEST 1		RETEST 2	
		P	F	P	F	P	F
1.	Position the pumper as appropriate for objective	☐	☐	☐	☐	☐	☐
2.	Perform power transfer from vehicle operations to pump	☐	☐	☐	☐	☐	☐
3.	Engage the pump per manufacturer procedures	☐	☐	☐	☐	☐	☐
4.	Properly position wheel chocks	☐	☐	☐	☐	☐	☐
5.	Correctly deploy and assemble hose lines, nozzles, and appliances	☐	☐	☐	☐	☐	☐
6.	Open the water tank to pump valve fully (as applicable)	☐	☐	☐	☐	☐	☐
7.	Checks and verbalizes water level of internal tank	☐	☐	☐	☐	☐	☐
8.	Signal pumper operator to start drafting procedures	☐	☐	☐	☐	☐	☐
9.	Operate pumper pressure control systems	☐	☐	☐	☐	☐	☐
10.	Adjust the throttle to the correct discharge pressure within (+ or – 5 psi)	☐	☐	☐	☐	☐	☐
11.	Monitor system for overheating and operate auxiliary cooling systems. (if applicable)	☐	☐	☐	☐	☐	☐
12.	Monitor water level in the tank	☐	☐	☐	☐	☐	☐
13.	Correctly follow pump shut down procedures	☐	☐	☐	☐	☐	☐

Evaluator:		***Retest Evaluator 1:***	
		Retest Evaluator 2:	

Comments:

_____ _____
Certifying Officer Name *Date*

_____
Certifying Officer Signature

Overall Skill Sheet Result:

Pass (P): ☐ **Fail (F):** ☐

NFPA 1002 - 2017 Ed. **PRACTICAL SKILL REQUIREMENTS** PO 6

Candidate:	**Date:**

STANDARD: NFPA 1002: 5.2.4(2)	**SKILL AREA: Pump From Pressurized Water Source**

TASK-5.2.4 (2): Produce effective hand or master streams, given a pressurized water source, so that the pump is engaged, all pressure control and vehicle safety devices are set, the rated flow of the nozzle is achieved and maintained, and the apparatus is continuously monitored for potential problems.

PERFORMANCE OUTCOME: The candidate shall demonstrate the ability to: position a fire department pumper near a hydrant; operate at a fire pumper using a pressurized water source (hydrant/other pressurized source); power transfer from vehicle engine to pump; operate pumper pressure control systems; operate the volume/pressure transfer valve (multistage pumps only); operate auxiliary cooling systems; assemble hose lines, nozzles, valves, and appliances; and produce an effective fire stream at the correct discharge pressure.

EQUIPMENT: Department policies and procedures (SOP/SOG), fire hose handline (min. 1 ½"), fire pumper apparatus, hose tools and appliances, and radio unit.

CONDITIONS: Given a fire apparatus and equipment, the candidate shall perform pump operations using an internal tank for supplying a pre-connected attack line, given one _____in. attack line, _____ft. in length with a _____ gpm fog nozzle, the candidate shall demonstrate the ability to:

No.	TASK STEPS	TEST		RETEST 1		RETEST 2	
		P	F	P	F	P	F
1.	Position the pumper near a hydrant (or pressurized water source)	☐	☐	☐	☐	☐	☐
2.	Perform power transfer from vehicle operations to pump	☐	☐	☐	☐	☐	☐
3.	Engage the pump per manufacturer procedures	☐	☐	☐	☐	☐	☐
4.	Properly position wheel chocks	☐	☐	☐	☐	☐	☐
5.	Check pressurized source, correctly connect supply line, and verify static pressure of source	☐	☐	☐	☐	☐	☐
6.	Correctly deploy and assemble hoselines, nozzles, and appliances	☐	☐	☐	☐	☐	☐
7.	Open discharge valve(s) and operate pressure control systems	☐	☐	☐	☐	☐	☐
8.	Adjust the throttle to the correct discharge pressure within (+ or – 5 psi)	☐	☐	☐	☐	☐	☐
9.	Monitor system for overheating and operate auxiliary cooling systems. (if applicable)	☐	☐	☐	☐	☐	☐
10.	Identify possible problems that may occur if residual pressure drops below 20 psi and describe action to be taken	☐	☐	☐	☐	☐	☐
11.	Monitor water level in the tank and refill onboard tank	☐	☐	☐	☐	☐	☐
12.	Correctly follow pump shut down procedures	☐	☐	☐	☐	☐	☐

Evaluator:		***Retest Evaluator 1:***	
		Retest Evaluator 2:	

Comments:

_____
Certifying Officer Name

_____
Certifying Officer Signature

_____
Date

Overall Skill Sheet Result:

Pass (P): ☐ **Fail (F):** ☐

NFPA 1002 - 2017 Ed. **PRACTICAL SKILL REQUIREMENTS** PO 7

Candidate:	**Date:**
STANDARD: NFPA 1002: 5.2.4(3)	**SKILL AREA: Pump From Static Water Source**

TASK-5.2.4 (3): Produce effective hand or master streams, given a static water source, so that the pump is engaged, all pressure control and vehicle safety devices are set, the rated flow of the nozzle is achieved and maintained, and the apparatus is continuously monitored for potential problems.

PERFORMANCE OUTCOME: The candidate shall demonstrate the ability to: correctly position a fire department pumper; operate at a fire pumper using a static water source; power transfer from vehicle engine to pump; operate pumper pressure control systems; operate the volume/pressure transfer valve (multistage pumps only); operate auxiliary cooling systems; assemble hose lines, nozzles, valves, and appliances; and produce effective water flow at the correct discharge pressure.

EQUIPMENT: Department policies and procedures (SOP/SOG), fire hose handline (min. 1 ½"), fire pumper apparatus, hard suction hose with strainer, hose tools and appliances, and radio unit.

CONDITIONS: Given a static water source, a fire apparatus, and equipment, the candidate shall perform pump operations for supplying a hand line/supply line, given a _____inch hose _____ft. in length, the candidate shall demonstrate the ability to:

No.	TASK STEPS	TEST		RETEST 1		RETEST 2	
		P	F	P	F	P	F
1.	Position the pumper near a static water source (< 20ft lift)	☐	☐	☐	☐	☐	☐
2.	Perform power transfer from vehicle engine to pump	☐	☐	☐	☐	☐	☐
3.	Engage the pump per manufacturer procedures	☐	☐	☐	☐	☐	☐
4.	Properly position wheel chocks	☐	☐	☐	☐	☐	☐
5.	Correctly assemble and connect hard suction line and strainer	☐	☐	☐	☐	☐	☐
6.	Correctly deploy and assemble hoselines, nozzles, and appliances	☐	☐	☐	☐	☐	☐
7.	Maneuvers appliances and equipment into appropriate position	☐	☐	☐	☐	☐	☐
8.	Open appropriate valve(s) to supply water to pump	☐	☐	☐	☐	☐	☐
9.	Uses proper priming procedure when operating pump	☐	☐	☐	☐	☐	☐
10.	Open discharge valve and operate pressure control systems	☐	☐	☐	☐	☐	☐
11.	Adjust the throttle to the correct discharge pressure within (+ or – 5 psi)	☐	☐	☐	☐	☐	☐
12.	Monitor system for overheating and operate auxiliary cooling systems (if applicable)	☐	☐	☐	☐	☐	☐
13.	Monitor water level in the tank and refill onboard tank	☐	☐	☐	☐	☐	☐
14.	Correctly follow pump shut down procedures	☐	☐	☐	☐	☐	☐

Evaluator:		***Retest Evaluator 1:***	
		Retest Evaluator 2:	

Comments:

_____ _____
Certifying Officer Name *Date*

_____
Certifying Officer Signature

Overall Skill Sheet Result:

Pass (P): ☐ **Fail (F):** ☐

NFPA 1002 - 2017 Ed. **PRACTICAL SKILL REQUIREMENTS** PO 8

Candidate:	**Date:**

STANDARD: NFPA 1002: 5.2.4(4)	**SKILL AREA: Transfer Internal/External Water Source**

TASK-5.2.4 (4): Produce effective hand or master streams, given an internal and external water source, so that the pump is engaged, all pressure control and vehicle safety devices are set, the rated flow of the nozzle is achieved and maintained, make the transition between internal and external water sources, and the apparatus is continuously monitored for potential problems.

PERFORMANCE OUTCOME: The candidate shall demonstrate the ability to: position a fire department pumper near a water source; operate at a fire pumper using an internal and external water source (static or pressurized source); power transfer from vehicle engine to pump; operate pumper pressure control systems; operate the volume/pressure transfer valve (multistage pumps only); operate auxiliary cooling systems; assemble hose lines, nozzles, valves, and appliances; and produce an effective fire stream at the correct discharge pressure.

EQUIPMENT: Department policies and procedures (SOP/SOG), fire hose handline with nozzle (min. 1 ½"), fire hose supply line (min. 2 ½"), fire pumper apparatus, hose tools and appliances, and radio unit.

CONDITIONS: Given an external water source, a fire apparatus, and equipment, the candidate shall perform pump operations for supplying a pre-connected attack line, given two _____in. attack lines, _____ft. in length with a _____ gpm fog nozzle, the candidate shall demonstrate the ability to:

No.	TASK STEPS	TEST		RETEST 1		RETEST 2	
		P	F	P	F	P	F
1.	Position the pumper near a hydrant (or pressurized water source)	☐	☐	☐	☐	☐	☐
2.	Perform power transfer from vehicle operations to pump	☐	☐	☐	☐	☐	☐
3.	Engage the pump per manufacturer procedures	☐	☐	☐	☐	☐	☐
4.	Properly position wheel chocks	☐	☐	☐	☐	☐	☐
5.	Check external source and correctly connect intake supply line and verify establishment of external water supply	☐	☐	☐	☐	☐	☐
6.	Correctly deploy and assemble hoselines, nozzles, and appliances	☐	☐	☐	☐	☐	☐
7.	Open discharge valve and operate pressure control systems	☐	☐	☐	☐	☐	☐
8.	Adjust the throttle to the correct discharge pressure within (+ or – 5 psi)	☐	☐	☐	☐	☐	☐
9.	Monitor system for overheating and operate auxiliary cooling systems. (if applicable)	☐	☐	☐	☐	☐	☐
10.	Transition between internal and external water sources	☐	☐	☐	☐	☐	☐
11.	Monitor water level in the tank and refill onboard tank	☐	☐	☐	☐	☐	☐
12.	Correctly follow pump shut down procedures	☐	☐	☐	☐	☐	☐

Evaluator:		***Retest Evaluator 1:***	
		Retest Evaluator 2:	

Comments:

_____ _____
Certifying Officer Name *Date*

_____
Certifying Officer Signature

Overall Skill Sheet Result:

Pass (P): ☐ **Fail (F):** ☐

NFPA 1002 - 2017 Ed. **PRACTICAL SKILL REQUIREMENTS** PO 9

Candidate:	**Date:**

STANDARD: NFPA 1002: 5.2.5	**SKILL AREA:** **Relay Pumping**

TASK: Pump a supply line of 65 mm (2 ½ in.) or larger, given a relay pumping evolution the length and size of the line and the desired flow and intake pressure, so that the correct pressure and flow are provided to the next pumper in the relay.

PERFORMANCE OUTCOME: The candidate shall demonstrate the ability to: position a fire department pumper to operate at a fire hydrant and at a static water source, power transfer from vehicle engine to pump, draft, operate pumper pressure control systems, operate the volume/pressure transfer valve (multistage pumps only), operate auxiliary cooling systems, make the transition between internal and external water sources, and assemble hose lines, nozzles, valves, and appliances.

EQUIPMENT: Department policies and procedures (SOP/SOG), fire hose supply line (min. 2 ½"), fire pumper apparatus, hose tools and appliances, and radio unit.

CONDITIONS: Given an external water source, a fire apparatus, and equipment, the candidate shall perform pump operations for a supply line, given one 2 ½ in. (or larger) hose line, _____ft. in length, the candidate shall demonstrate the ability to:

No.	TASK STEPS	TEST		RETEST 1		RETEST 2	
		P	F	P	F	P	F
1.	Position the pumper near a water source (pressurized or static)	☐	☐	☐	☐	☐	☐
2.	Perform power transfer from vehicle operations to pump	☐	☐	☐	☐	☐	☐
3.	Engage the pump per manufacturer procedures	☐	☐	☐	☐	☐	☐
4.	Properly position wheel chocks	☐	☐	☐	☐	☐	☐
5.	Check external source and correctly connect intake supply line and verify establishment of external water supply	☐	☐	☐	☐	☐	☐
6.	Correctly deploy and assemble appropriate size discharge supply hose for relay pumping needs	☐	☐	☐	☐	☐	☐
7.	Open discharge valve and operate pressure control systems	☐	☐	☐	☐	☐	☐
8.	Adjust the throttle to the correct discharge pressure within (+ or – 5 psi)	☐	☐	☐	☐	☐	☐
9.	Monitor system for overheating and operate auxiliary cooling systems. (if applicable)	☐	☐	☐	☐	☐	☐
10.	Transition between internal and external water sources	☐	☐	☐	☐	☐	☐
11.	Monitor water level in the tank and refill onboard tank	☐	☐	☐	☐	☐	☐
12.	Correctly follow pump shut down procedures	☐	☐	☐	☐	☐	☐

Evaluator:		***Retest Evaluator 1:***	
		Retest Evaluator 2:	

Comments:

_____ _____
Certifying Officer Name *Date*

_____
Certifying Officer Signature

Overall Skill Sheet Result:

Pass (P): ☐ **Fail (F):** ☐

NFPA 1002 - 2017 Ed. **PRACTICAL SKILL REQUIREMENTS** PO 10

Candidate:	**Date:**

STANDARD: NFPA 1002: 5.2.6	**SKILL AREA:** **Produce Foam Fire Stream**

TASK: Produce a foam fire stream, so that properly proportioned foam is provided.

PERFORMANCE OUTCOME: The candidate shall demonstrate the ability to operate foam proportioning equipment and connect foam stream equipment.

EQUIPMENT: Department policies and procedures (SOP/SOG), foam, foam educator (or pump foam proportioner), foam compatible nozzle, fire hose handline with nozzle (min. 1 ½"), fire hose supply line (min. 2 ½"), fire pumper apparatus, hose tools and appliances, and radio unit.

CONDITIONS: Given foam producing equipment, a fire apparatus, and equipment, the candidate shall perform pump operations for producing a foam fire stream, given one 1 ½ in. (or larger) hose line, _____ft. in length, the candidate shall demonstrate the ability to:

No.	TASK STEPS	TEST		RETEST 1		RETEST 2	
		P	F	P	F	P	F
1.	Position the pumper as appropriate for objective	☐	☐	☐	☐	☐	☐
2.	Perform power transfer from vehicle operations to pump	☐	☐	☐	☐	☐	☐
3.	Engage the pump per manufacturer procedures	☐	☐	☐	☐	☐	☐
4.	Properly position wheel chocks	☐	☐	☐	☐	☐	☐
5.	Correctly deploy and assemble hose lines, foam appliances, other appliances, and nozzle	☐	☐	☐	☐	☐	☐
6.	Prepare foam producing equipment as necessary	☐	☐	☐	☐	☐	☐
7.	Open discharge valve and operate pressure control systems	☐	☐	☐	☐	☐	☐
8.	Adjust the throttle to the correct discharge pressure within (+ or – 5 psi)	☐	☐	☐	☐	☐	☐
9.	Flow correct proportion of foam and water mixture	☐	☐	☐	☐	☐	☐
10.	Monitor system for overheating and operate auxiliary cooling systems. (if applicable)	☐	☐	☐	☐	☐	☐
11.	Monitor water and foam levels	☐	☐	☐	☐	☐	☐
12.	Correctly follow pump shut down procedures	☐	☐	☐	☐	☐	☐

Evaluator:		***Retest Evaluator 1:***	
		Retest Evaluator 2:	

Comments:

_____ _____
Certifying Officer Name *Date*

_____
Certifying Officer Signature

Overall Skill Sheet Result:

Pass (P): ☐ **Fail (F):** ☐

NFPA 1002 - 2017 Ed. **PRACTICAL SKILL REQUIREMENTS** PO 11

Candidate:	**Date:**

STANDARD: NFPA 1002: 5.2.7	**SKILL AREA:**	**Supply Water to Fire Sprinkler and Standpipe Systems**

TASK: Supply water to fire sprinkler and standpipe systems, so that water is supplied to the system at the correct volume and pressure.

PERFORMANCE OUTCOME: The candidate shall demonstrate the ability to: position a fire department pumper to operate at a fire hydrant and at a static water source, power transfer from vehicle engine to pump, draft, operate pumper pressure control systems, operate the volume/pressure transfer valve (multistage pumps only), operate auxiliary cooling systems, make the transition between internal and external water sources, and assemble hose lines, nozzles, valves, and appliances.

EQUIPMENT: Department policies and procedures (SOP/SOG), fire hose supply line (min. 2 ½"), fire pumper apparatus, hose tools and appliances, and radio unit.

CONDITIONS: Given specific system information, a fire apparatus, and equipment, the candidate shall perform pump operations for a supply line, given one 2 ½ in. (or larger) hose line, _____ft. in length, and a standpipe/sprinkler system with _____ ft elevation, the candidate shall demonstrate the ability to:

No.	TASK STEPS	TEST		RETEST 1		RETEST 2	
		P	F	P	F	P	F
	Certifying Officer shall select one of the following scenarios for final certification examination: ☐ Standpipe ☐ Sprinkler						
1.	Position the pumper near a water source (pressurized or static)	☐	☐	☐	☐	☐	☐
2.	Properly position wheel chocks	☐	☐	☐	☐	☐	☐
3.	Perform power transfer from vehicle operations to pump	☐	☐	☐	☐	☐	☐
4.	Engage the pump per manufacturer procedures	☐	☐	☐	☐	☐	☐
5.	Check external source and correctly connect intake supply line and verify establishment of external water supply	☐	☐	☐	☐	☐	☐
6.	Correctly deploy and assemble hoselines and appliances for sprinkler and/or standpipe operations	☐	☐	☐	☐	☐	☐
7.	Calculate the appropriate discharge pressure based on standpipe/sprinkler system	☐	☐	☐	☐	☐	☐
8.	Open discharge valve and operate pressure control systems	☐	☐	☐	☐	☐	☐
9.	Adjust the throttle to the correct discharge pressure within (+ or – 5 psi)	☐	☐	☐	☐	☐	☐
10.	Monitor system for overheating and operate auxiliary cooling systems. (if applicable)	☐	☐	☐	☐	☐	☐
11.	Monitor water level in the tank and refill onboard tank	☐	☐	☐	☐	☐	☐
12.	Correctly follow pump shut down procedures	☐	☐	☐	☐	☐	☐

Evaluator:		***Retest Evaluator 1:***	
		Retest Evaluator 2:	

Comments:

_____ _____
Certifying Officer Name *Date*

_____
Certifying Officer Signature

Overall Skill Sheet Result:

Pass (P): ☐ Fail (F): ☐

		FIRE APPARATUS PUMPER OPERATOR REQUIRED EQUIPMENT/MATERIAL	Related Skill Sheet(s)
☐	**1**	Applicable forms/reports	All
☐	**2**	Appropriate personnel protective equipment	All
☐	**3**	Foam (or simulated product)	10
☐	**4**	Foam educator (or pump foam proportioner)	10
☐	**5**	Foam compatible nozzle	10
☐	**6**	Fire hose handline with nozzle (minimum 150' 1 ½ handline)	4 - 11
☐	**7**	Fire hose supply line (minimum 2 ½")	4 - 11
☐	**8**	Hard suction hose with strainer	7, 9
☐	**9**	Hose tools and appliances	2-11
☐	**10**	Maintenance log book/record	1
☐	**11**	NFPA 1002: *Standard for Fire Apparatus Driver/Operator Professional Qualifications*	All
☐	**12**	NFPA 1500:*Standards on Occupational Safety and Health Program*	All
☐	**13**	Notebook/Clipboard	1
☐	**14**	Radio unit	All
☐	**15**	Standard Operating Procedures (SOP)/Standard Operating Guidelines (SOG)	All

		FIRE APPARATUS PUMPER OPERATOR REQUIRED FACILITY/APPARATUS CHECKLIST	Related Skill Sheet(s)
☐	**1**	Relay/pump operations area (minimum 100' X 50')	2 - 11
☐	**2**	Fire pumper apparatus: • equipped with appropriate safety restraints (seatbelts) • water tank • pumping system • foam systems (or external components)	All
☐	**3**	Maintenance area/fire station bay	1
☐	**4**	Pressurized water source (hydrant)	4, 6, 8, 9, 11
☐	**5**	Standpipe/sprinkler system (or prop)	11
☐	**6**	Static water source	7, 8