Skill 16-5
Evaluation Checklist

Objective 23: Test the operation of a water tower apparatus. *[NFPA® 1002, 4.2.2, 6.1.1]*

Student Name: _____ **Date:** _____

Directions

For this skills evaluation checklist, students will test the operation of a water tower apparatus. This skill requires a minimum of two firefighters: one to inspect and one to assist. Always follow manufacturer's recommendations and local standard operating procedures (SOPs) when performing all procedures.

Resources

- Appropriate PPE
- Fire service water tower apparatus
- Manufacturer's operator's manual

- Service records for apparatus being inspected/tested
- Appropriate documentation forms
- Writing utensil

Criteria & Evaluation Comments

Criteria (determined by the AHJ)

After the candidate has completed the skill sheet, write comments below.

Evaluator/Candidate Comments

Pass [ ]   Fail [ ]

Evaluator Signature   Date   Student Signature   Date

Skills Evaluation Checklist

Objective 23: Test the operation of a water tower apparatus. *[NFPA® 1002, 4.2.2, 6.1.1]*

Note: Ensure the apparatus is properly prepared and all personnel are clear before performing this skill.

	Task Steps	Yes	No
1.	Park the apparatus in a suitable location for operating the aerial device. a. Set the parking brake. b. Chock the apparatus wheels.		
2.	Transfer power from the drive train to the aerial device hydraulic system. a. Ensure that the transfer actually occurs when the controls are operated. b. Check to make sure the transfer indicator light illuminates after the shift is made.		
3.	Inspect the stabilizers. See Skill Sheet 18-1 for the exact procedures for stabilizing the apparatus. a. Deploy the apparatus stabilizers according to the manufacturer's instructions. b. Once deployed onto the ground pads, check the stabilizers for signs of damage or leaking hydraulic fluid. c. If there is a slide out step at any control station, confirm that the step is functional. **Note:** If the apparatus begins to lean toward one side after the stabilizers have been deployed for a while, this indicates a leak in the system and must be reported and repaired immediately.		
4.	Check that the stabilizers and ground pads are operating within manufacturer's parameters. **Note:** If the apparatus is equipped with an indicator light, make sure that it illuminates when the apparatus is safely stabilized to allow the aerial device to be lifted from the bed.		
5.	Move the hydraulic system selector valve control to the aerial device position.		
	CAUTION: It is not advisable for inexperienced operators to perform two functions at the same time. Functions should be performed in sequence of 1. Elevate 2. Rotate, and 3. Extend.		
6.	Elevate the water tower to full elevation. The aerial device should respond immediately and positively when the control levers (or joystick) is		

	operated.			
7.	Rotate the water tower a. Make sure that all turntable rotational equipment is in proper working condition. The aerial device should move smoothly in a complete circle. b. Listen for unusual sounds and watch for fluid leaks while the rotation is in process.			
8.	Extend the aerial device to its maximum extension. a. Look for signs of problems such as chattering or jerky motions of the aerial device or its workings. b. Check for unusual noises and squeaks and binding of components. c. Once the device is fully extended, inspect the waterway system, and extension system for signs of damage, defect, or leakage.			
9.	Manipulate any control pedestal controls that have not been used in the test thus far.			
10.	Test operation of auxiliary equipment. a. Test remote control nozzle (if so equipped). b. Test video camera (if so equipped). c. Test floodlights (if so equipped). d. Test other auxiliary equipment.			
11.	Test the emergency power unit (EPU). Ensure the pump function physically creates motion of a hydraulic component per manufacturer's recommendations. **Note:** The main hydraulic system should be disengaged when this operation is performed, and a control valve must be open before turning on the valve.			
12.	Stow the aerial device and stabilizers and ready the apparatus for road travel. Ensure that all equipment stows properly and all indicator devices go out when the appropriate systems are de-energized.			
13.	Document the inspection and any maintenance actions and report any deficiencies per local policy.			