



PENNSYLVANIA STATE FIRE ACADEMY

SURFACE WATER OPERATIONS SKILL STATIONS

****Attention:** All certification candidates are required to have an established and up to date user portal account in the PA State Fire Academy's Acadis Learning Management System prior to participating in **ANY** certification testing opportunity. Please log in to your Acadis portal account and update all personal information before submitting your certification application. (Access can be gained through the OSFC website – [Training and Certification Portal](#)).

Skill Stations

NFPA 1006 Surface Water Rescue Operations – Chapter 17 (2021 Edition)

Station A	Site Survey, PPE, & Search Parameters	17.2.1, 17.2.2, 17.2.3, 17.2.12	Mandatory Station
Station B	Survival Swimming, Communications, & Emergency Procedures	17.2.1, 17.2.2, 17.2.10, 17.2.12	Mandatory Station
Station C	Helicopter Ground Support	17.2.8	Mandatory Station
Station D	Shore-based Rescue	17.2.3, 17.2.4, 17.2.5, 17.2.6, 17.2.10, 17.2.12	Mandatory Station
Station E	Watercraft-based Rescue Action Plan	17.2.1, 17.2.7, 17.2.9,	Mandatory Station
Station F	Watercraft-based Rescue	17.2.9	Mandatory Station
Station G	Rope System Operation	17.2.1, 17.2.2, 17.2.11	Mandatory Station
Station H	Termination	17.2.13	Mandatory Station

PPE Requirements:

- Personal Flotation Device (PFD)
- Water Rescue Helmet
- Water Rescue Gloves
- Dry suit w/ appropriate layering
- Water-appropriate boots/shoes
- Two (2) Locking Carabiners
- One (1) Whistle
- One (1) Knife
- One (1) light source

Note: If testing both Surface and Swift Water, the following Surface Water Operations stations will satisfy the listed Swift Water Operations requirements, but the converse is **NOT** applicable:

- Surface Water Operations Station A – “Site Survey and Search Parameters” will satisfy the requirements of Swift Water Operations Station A – “Scene Assessment, Search Parameters and Support Operations”
- Surface Water Operations Station G – “Rope Systems Operation” will satisfy the requirements of Swift Water Operations Station B – “Rope Systems”
- Surface Water Operations Station D – “Shore-based Rescue” will satisfy the requirements of Swift Water Operations Station C – “Non-Entry Rescue”
- Surface Water Operations Station H – “Termination” will satisfy the requirements of Swift Water Operations Station D – “Termination”



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STATION A – Site Survey, PPE & Search Parameters		Reference NFPA 1006 (2021 Edition), Chapter 17 Mandatory Station: JPRs 17.2.1, 17.2.2, 17.2.3, 17.2.12	
Test Site	Test Date	Candidate #	Check the Test Type ____ Initial ____ Retest

Directions: Given a location, personal protective equipment, historical data, flood insurance rate maps, and meteorological projections, the candidate shall develop a site survey for an existing surface water hazard so that risks to life safety are anticipated, appropriate PPE is selected, risk-benefit analysis is conducted, water conditions are projected, hazards are identified, probable victim locations and entrapments are determined, and routes of access and egress are identified. The candidate will then define search parameters and conduct a discipline-specific search of the surveyed location.

Performance Outcome: Pass / Fail is determined by **All** tasks being performed correctly.

No.	Tasks	Yes	No
1	Selects, describes, dons, and doffs appropriate personal protective equipment: ___ Personal Flotation Device (PFD) ___ Two (2) Locking Carabiners ___ Water Rescue Helmet ___ One (1) Whistle ___ Water Rescue Gloves ___ One (1) Knife ___ Dry suit w/ appropriate layering ___ One (1) light source ___ Water-appropriate boots/shoes		
2	Evaluates site conditions, identifies hazards, and impact of anticipated weather		
3	Utilizes reference materials, tactical worksheets, and maps		
4	Identifies the rescue sequence (Self, Shore-based, Boat, Direct Contact, Helicopter)		
5	Designates hot, warm, and cold zones		
6	Identifies probable victim locations and methods of entrapment		
7	Completes a risk-benefit analysis		
8	Communicates search parameters and personal protective requirements to search team		
9	Identifies and implements passive and active search techniques		
10	Act as a spotter/safety during search operations		
11	All tasks were completed in a safe manner		
Please indicate skill outcome		PASS	FAIL

Evaluator Comments: _____

Evaluator Signature: _____ **Evaluator #** _____



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STATION B – Survival Swimming, Communications, & Emergency Procedures (POOL)		Reference NFPA 1006 (2021 Edition), Chapter 17 Mandatory Station: JPRs 17.2.1, 17.2.2, 17.2.10, 17.2.12	
Test Site	Test Date	Candidate #	Check the Test Type ____ Initial ____ Retest

Directions: Given water rescue PPE, swim aids, safety equipment, and a body of water representative of surface water conditions, candidates will don PPE and swim aids, demonstrate fundamental survival swimming techniques and methods of communicating an emergency through audible and visual signals. Finally, candidates will demonstrate emergency escape procedures from their personal flotation device and doff their remaining PPE.

Performance Outcome: Pass / Fail is determined by **All** tasks being performed correctly.

No.	Tasks	Yes	No
1	Size-up of the water environment for access/egress locations, hazards, and conditions		
2	Demonstrates proficiency in communicating an emergency through audible and visible signals: ____ Hand & whistle signals for Help ____ OK ____ Stop ____ Wrap it up ____ Tension ____ Slack ____ Release/cut the line ____ Victim recovered		
3	Performs water entry in the pool, demonstrating a shallow water entry and standard/stride water entry		
4	Complete a 100-yard aided swim using a forward stroke (crawl, breast, side) in under 8 minutes		
5	Remain afloat for 10 minutes through floating, drown proofing, bobbing or treading water		
6	Demonstrates methods for body heat conservation (HELP & Huddle)		
7	Demonstrates proficiency in emergency escape procedures (rescue swimmer PFD blowout or complete PFD removal)		
8	Demonstrates the ability to engage a strainer in the surface water environment		
9	All tasks were completed in a safe manner		
Please indicate skill outcome		PASS	FAIL

Evaluator Comments: _____

Evaluator Signature: _____ **Evaluator #** _____



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STATION C – Helicopter Ground Support		Reference NFPA 1006 (2021 Edition), Chapter 17 Mandatory Station: JPR 17.2.8	
Test Site	Test Date	Candidate #	Check the Test Type ____ Initial ____ Retest

Directions: Using a pre-determined site, applicable resources, and personal protective equipment, establish a landing zone for a helicopter in accordance with local, jurisdictional, or flight service protocols. Communicate with the aircraft effectively and efficiently. The task must be completed without compromising the safety of the aircrew or ground personnel. Do you have any questions?

Performance Outcome: Pass / Fail is determined by **All** tasks being performed correctly.

No.	Tasks	Yes	No
1	Conducts a size up to include the need for helicopter support and hazards to aircraft operations		
2	Selects and dons appropriate personal protective equipment		
3	Select appropriate landing zone location and size for expected aircraft (200x200 minimum)		
4	Establishes and maintains scene control and safety		
5	Identifies visible hazards to aircraft operations		
6	Identifies required fire protection needs		
7	Mark the corners of the landing zone appropriately for conditions		
8	Windward side of the landing zone marked appropriately		
9	Establishes communication with and conveys hazards and conditions to aircraft		
10	Define procedures to rig aircraft for anticipated rescue procedures		
11	Define procedures for crash survival		
12	Assist aircrews in rescuing the victim from the water		
13	All tasks were completed in a safe manner		
Please indicate skill outcome		PASS	FAIL

Evaluator Comments: _____

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STATION D – Shore-based Rescue		Reference NFPA 1006 (2021 Edition), Chapter 17 Mandatory Station: JPRs 17.2.3, 17.2.4, 17.2.5, 17.2.6, 17.2.10, 17.2.12	
Test Site	Test Date	Candidate #	Check the Test Type ____ Initial ____ Retest

Directions: Given a surface water rescue scenario, personal protective equipment, and a water rescue tool kit, the candidate will develop an action plan for the shore-based rescue of a water-bound victim(s). The candidate will then deploy a water rescue reach device, bagged rope, and coiled rope to a water-bound victim so that the deployed equipment reaches the victim, the equipment does not slip through the rescuer's hands, the victim is moved to the rescuer's shoreline, the victim is not pulled beneath the surface of the water by the rescue efforts, the rescuer is not pulled into the water by the victim, and neither the rescuer nor the victim is tied to or entangled in the device. Candidates will then demonstrate moving water crossings both as an individual and a team. Lastly, the candidates will construct and operate a double-line floating tether.

Performance Outcome: Pass / Fail is determined by **All** tasks being performed correctly.

No.	Tasks	Yes	No
1	Size-up of the water environment for access/egress locations, hazards, and conditions		
2	Conduct a risk-benefit analysis		
3	Select and don appropriate personal protective equipment		
4	Apply safety, communications, and operational protocols		
5	Ensures upstream and downstream backup/spotter is in place		
6	Deploy a water rescue reach device to a water-bound victim		
7	Deploy a water rescue throw bag at a minimum distance of 40 ft. to a water-bound victim (underhand, overhand, or side-arm) (must be a rope 50'-75')		
8	Deploy a quick throw to a water-bound victim using a coiled water rescue rope. (coil, butterfly)		
9	Perform a single water crossing to a designated point		
10	Perform a multi-person water crossing as a member of a team to a designated point and successfully rescue a designated victim		
11	Demonstrate defensive swim posture for traveling downstream and setting ferry angles to travel as directed by the evaluator (self-rescue)		
12	Construct and operates a double-line floating tether system		
13	All tasks were completed in a safe manner		
Please indicate skill outcome		PASS	FAIL

Evaluator Comments: _____

Evaluator Signature: _____ **Evaluator #** _____



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STATION E – Watercraft-based Rescue Action Plan		Reference NFPA 1006 (2021 Edition), Chapter 17 Mandatory Station: JPRs 17.2.1, 17.2.7, 17.2.9	
Test Site	Test Date	Candidate #	Check the Test Type _____ Initial _____ Retest

Evaluator Note: This station should be conducted concurrently with Station F & G. A powered or unpowered watercraft can be used. See the evaluator handbook for additional information.

Directions: Given a rescue scenario, personal protective equipment, victim recovery aids, properly equipped watercraft, and qualified operator(s), the candidate will develop and implement an action plan for the use of watercraft to support the rescue of single or multiple water-bound victims so that watercraft pre-deployment checks are completed, watercraft launch and recovery is achieved, rescuers are deployed and recovered, both onboard and rescue operations conform with watercraft operational protocols and capabilities, communications are clear and concise, and the candidate is familiar with watercraft nomenclature, operation protocols, design limitations, and launch/recovery site issues.

Performance Outcome: Pass / Fail is determined by **All** tasks being performed correctly.

No.	Tasks	Yes	No
1	Size-up of the water environment for access/egress locations, hazards, and conditions		
2	Conduct a risk-benefit analysis for conducting a watercraft-based rescue		
3	Select and don appropriate personal protective equipment		
4	Identifies components of the watercraft provided: ___ Port ___ Starboard ___ Bow ___ Keel ___ Stern ___ Transom (if present) ___ Gunwale		
5	Conducts pre-deployment launch inspection of the watercraft provided: ___ Emergency signaling device present ___ Bowline secured/under control ___ Appropriate PPE ___ Drain plug in (if equipped) ___ Paddles present ___ Rescue equipment present ___ Watercraft inflated to manufacturer's recommended pressure ___ Motor properly installed and fuel supply secured (if equipped) ___ Properly and independently raises and lowers motor ___ Indicates the proper position of motor lock during movement		
6	Identifies watercraft's design capabilities, limitations and manufacturer's capacity plate (if equipped)		
7	Embarks and disembarks the watercraft safely		
8	Communicates effectively to the watercraft crew		
9	All tasks were completed in a safe manner		
Please indicate skill outcome		PASS	FAIL

Evaluator Comments: _____

Evaluator Signature: _____ **Evaluator #** _____



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STATION F – Watercraft-based Rescue		Reference NFPA 1006 (2021 Edition), Chapter 17 Mandatory Station: JPR 17.2.9	
Test Site	Test Date	Candidate #	Check the Test Type ____ Initial ____ Retest

Evaluator Note: This station should be conducted concurrently with Station E & G. A powered or unpowered watercraft can be used. See the evaluator handbook for additional information.

Directions: Given a rescue scenario, personal protective equipment, victim recovery aids, properly equipped watercraft, and qualified operator(s), the candidate, while working as a member of a team, will implement the procedures for the recovery of an incapacitated and a responsive victim into the watercraft so that the control and stability of the watercraft is maintained, risks to the victim and rescuers are minimized, and the victim is removed from the hazard.

Performance Outcome: Pass / Fail is determined by **All** tasks being performed correctly.

No.	Tasks	Yes	No
1	Ensures that the watercraft is not broached during rescue procedures		
2	Maintains control of the watercraft		
3	Minimizes the risks to the victims and rescuers		
4	Demonstrates proper approach and positioning to the victim		
5	Removes the victim from the water utilizing a parbuckling maneuver		
6	Removes the victim from the water utilizing a direct pull maneuver		
7	Assists victim from the water using the stir-up method		
8	Completes the removal of the victim from the water in an efficient and expedient manner		
9	All tasks were completed in a safe manner		
Please indicate skill outcome		PASS	FAIL

Evaluator Comments: _____

Evaluator Signature: _____ **Evaluator #** _____



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STATION G – Rope System Operation		Reference NFPA 1006 (2021 Edition), Chapter 17 Mandatory Station: JPRs 17.2.1, 17.2.2, 17.2.11	
Test Site	Test Date	Candidate #	Check the Test Type _____Initial _____Retest

Directions: Given rescue personnel, a rope rescue equipment cache, a load to be moved, and personal protective equipment, the candidate will identify and demonstrate procedures for the construction and operation of a rope system so that movement is controlled, the load is held in place when needed, and operating methods do not stress the system.

Performance Outcome: Pass / Fail is determined by **All** tasks being performed correctly.

No.	Tasks	Yes	No
1	Size-up of the water environment for access/egress locations, hazards, and conditions		
2	Determines incident need for rope system		
3	Select and don appropriate personal protective equipment		
4	Select an appropriate site with good visibility, with safe areas that the boat can be brought into, avoiding areas with strainers and potential entrapments		
5	Ensures upstream and downstream backup/spotters are in place before system operation		
6	Assign teams as warranted (far-shore and near-shore teams)		
7	Select anchors adequate for the expected loads		
8	Extend lines across the water to the other team while keeping the lines out of the water as best as possible		
9	Implement and establish communication methods		
10	Tensioned main line properly (No more than 4 personnel used on tensioning system)		
11	Attach the boat to the line properly without creating another hazard		
12	Complete a system safety check prior to loading		
13	Critical angles addressed if presented		
14	Prevent entanglements by keeping control lines separate		
15	Movement of the boat controlled		
16	Recover is victim successfully and brought to the designated point		
17	Completes all tasks in a safe manner		
Please indicate skill outcome		PASS	FAIL

Evaluator Comments: _____

Evaluator Signature: _____

Evaluator # _____



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STATION H – Termination		Reference NFPA 1006 (2021 Edition), Chapter 17	
		Mandatory Station: JPR 17.2.13	
Test Site	Test Date	Candidate #	Check the Test Type
			____ Initial ____ Retest

Directions: Given personal protective equipment, isolation barriers, and a tool kit, the candidate will terminate the incident so that rescuers and bystanders are accounted for and protected, the responsible party is provided appropriate documentation on potential or existing hazards and damages, documentation of the incident is completed, debriefing and post-incident analysis and critique are considered, and command is terminated.

Performance Outcome: Pass / Fail is determined by **All** tasks being performed correctly.

No.	Tasks	Yes	No
1	Ensures accountability of all personnel and bystanders		
2	Identifies procedures for on-scene gross decontamination		
3	Identifies procedures for cleaning and maintenance of personal protective equipment		
4	Transfers scene control to a responsible party by conducting a hand-off briefing		
5	Completes post-incident report		
6	Documents modifications, damages, equipment use, and injuries incurred during the incident		
7	Evaluates the need for critical incident stress management		
8	Schedules a post-incident analysis and critique		
9	Terminates command		
10	All tasks were completed in a safe manner		
		PASS	FAIL

Evaluator Comments: _____

Evaluator Signature: _____

Evaluator # _____