



BOAT SAFETY AND RESCUE TRAINING COURSES



PADDLE BOAT

About Rescue 3 Europe

Rescue 3 Europe develops state of the art technical rescue courses, providing internationally recognised accreditation for organisations and individuals operating in high risk environments.

As an international accrediting body, Rescue 3 provide up to date best practice guidance that is constantly evolving in line with new research and testing. All changes and developments of Rescue 3 courses go through a process of peer review and oversight by a steering committee made up of industry experts from all over the world.

Rescue 3 training providers deliver courses worldwide, in multiple disciplines, including: rope, water, boat, ice and confined space rescue. Our large suite of courses have been adopted by mountain rescue teams, wind turbine operators, fire and rescue services, ambulance teams, utilities providers, and military personnel.

Within each discipline, Rescue 3 accredited courses cover every level of operations, whether this is at an awareness level, avoiding risks and applying simple safe systems of work; or at more advanced levels where practitioners must acquire high levels of personal skills and understanding to access and navigate difficult environments.

For over four decades Rescue 3 has provided the standard for technical rescue training, offering guidance and support for maintaining best practice.





The course learning outcomes are provided as pre- and post-course reference for people involved in the delivery of Rescue 3 courses (eg Rescue 3 training providers, instructors and students). They are not to be used for any other purpose without the express written permission of Rescue 3 Europe.

www.rescue3europe.com

info@rescue3europe.com

+44 (0) 1978 869069



PADDLE BOAT COURSES

Swiftwater Paddle Boat Handling (SPBH)	5
--	---



Swiftwater Paddle Boat Handling (SPBH)

Course overview and target audience

This course is designed for Rescue 3 Swiftwater Rescue Technicians (SRTs), who wish to improve and expand on their paddle boat handling ability. It follows on from the basic boat handling section in the SRT class and covers in more depth, swiftwater boat handling and rescue scenarios using the paddle boat as a rescue craft.

It is a supporting course to assist trained swiftwater rescuers, rather than a qualification to be used by professional river users. Shortly and sweetly, it's not a raft guide qualification.

The Swiftwater Paddle Boat Handling course is designed as a paddle boat handling course only, and does not cover use of powered craft. However, it may be used to support Rescue 3 powerboat courses.

Contact hours 12 hours (2 days)	Prerequisites Swiftwater and Flood Rescue Technician (SRT) Minimum age: 18.
Qualification valid for 3 years	Accredited by Rescue 3 Europe

Taught by

- Swiftwater Paddle Boat Handling Instructor (SPBHI)

Assessment

The assessed elements of this course are:

- Foundation knowledge
- Boat handling with paddles
- Team/personal recovery
- Casualty pick-up and recovery
- Flips and rights



Swiftwater Paddle Boat Handling (SPBH) skill sheet contents

Theory	
1. Rescue 3 philosophy	
2. Water rescue training standards	
3. Personal equipment	
4. Dynamic risk assessment and incident size-up	
5. Pre-planning	
6. Medical and decontamination considerations	
7. Route planning	
8. Communications	
9. Crew operational roles	
10. Multiple boat operations	
11. Swiftwater dynamics and hazards	
12. Boat and hull types	
13. Rescue boat equipment	
14. Pre- and post-trip checks	
15. Considerations for night/poor visibility	
Practical	
16. Launching and recovery	
17. Boat handling with paddles	
18. Securing	
19. Flips and rights	
20. Team/personal recovery	
21. Casualty pick-up and recovery	
22. Casualty management	
23. Boat-based conditional rescues	
24. Boat wraps	
25. Hydraulic and weir considerations	



Swiftwater Paddle Boat Handling (SPBH) learning outcomes and key teaching points

- Be able to accurately paddle a boat and read the water in complex consequential swiftwater.
- Be able to use an unpowered boat in order to access a variety of casualties, both static and mobile.
- Choose an appropriate method for stabilisation and transport, depending on casualty needs.

	Skill sheet element		Learning outcome	Key teaching points
1	Rescue 3 philosophy	1.1	Explain the order of priorities at a water rescue scene	Self > team > victim
		1.2	Recall the steps required in order to develop judgement	Training. Practice. Experience. Judgement
		1.3	Apply best practice guidelines to paddle boat operations, in order to produce safe working practice.	Best practice guidelines. Always have a backup plan
2	Water rescue training standards	2.1	Recognise the different levels of training with the Rescue 3 scheme, and identify the role of a boat at a rescue scene.	SPBH, SRT, RBO, FRBO and SFRBO courses. Greater capability for access and transportation
		2.2	State how the Rescue 3 scheme fits within national and international standards	Rescue 3 standards, eg NFPA, DEFRA
		2.3	Identify where paddle boats fit into rescue options	Deep water, platform for search, expansive flooding, swiftwater, transfers of welfare and people
3	Personal equipment	3.1	Identify PPE and equipment used for in-water operations by paddle boat handlers	PPE: Buoyancy aid, helmet, eye protection, throwbag, drysuit, boots, gloves, thermal layers. Boat kit: First aid, comms, pump, welfare, tech gear and lines, spare paddles. Task specific: Stretcher, ladder, additional long lines, O2, defib
		3.2	Select appropriate PPE for a paddle boat handler, dress and perform buddy checks	PPE list, buddy checks
4	Dynamic risk assessment and incident size-up	4.1	Perform a risk assessment of the following areas: rescue site, downstream and upstream	Depth and speed of water, debris, hazards
		4.2	Based on risk assessment of environment and casualty requirements, select an appropriate plan of action for the personnel present using a paddle boat	Is a boat or SRT solution needed?

SPBH



	Skill sheet element		Learning outcome	Key teaching points
5	Pre-planning	5.1	Identify sources of information useful for pre-planning paddle boat operations	River guides (online and books), tide tables (online and booklet), online river gauges
		5.2	Describe key information that should be included within a pre-plan specific to paddle boat operations	Slipway access/egress, alternative access/egress if no slipway. Access to water level information. Task specific kit list. Emergency RV
6	Medical and decontamination considerations	6.1	Identify priorities when dealing with casualties from both mid-water and a dry location	Temperature and major trauma. Hazards presented by the water
		6.2	Apply techniques which minimise exposure to the water and decontamination procedures	Remain in the boat to minimise exposure to HAZMAT. Gels, wipes and sprays post-exposure
7	Route planning	7.1	Apply scouting information to a successful paddle boat descent of rapids	Future water: how much can be seen? Where is the next eddy? Is there a drop/horizon line? Are there hazards in the current vector i.e. strainers?
		7.2	Orient map to ground and identify how water level changes will affect information represented on river map	Loss or gain of access with changes of water level
		7.3	Using an appropriate information source, identify tick features that will be seen en route	Passage plan. Return to last point if visibility or comms are lost
		7.4	Using a map/chart, confirm when at an objective	Three reasons that confirm your position
		7.5	Use stop/catch features when planning a route	Large features that identify the end of a search or working area
8	Communications	8.1	Be able to communicate boat-to-boat and boat-to-shore using hand and whistle signals	Hand signals: Ok, distress, point positive, medical, hold station. Whistle: attention, upstream, downstream, distress
		8.2	Apply simple commands in order to centralise command within the boat	Commands for changing trim, tying or untying the boat, exiting or entering the boat should all come from the helm
9	Crew operational roles	9.1	Explain the primary roles of paddle boat crew within a paddle rescue boat, and their duties	Helm: overall control, clear comms. Bowman: directions (points positive) and information for the helm. Rescuer: hands on casualty, enters the water if required. Who is paddling? Who is steering?
		9.2	Apply crew roles when performing a variety of tasks	Clear communication and allocation of roles
10	Multiple boat operations	10.1	Identify the roles and the benefits of working with multiple boats.	Different sized boats for different access and/or load carrying abilities. Downstream cover/containment
		10.2	Explain techniques for operation that would add resilience through multiple boat operations	Backup for damaged boats. Providing backup/downstream cover



	Skill sheet element		Learning outcome	Key teaching points
11	Swiftwater dynamics and hazards	11.1	Identify how river and swiftwater features affect a paddle boat crew	Speed, depth, obstacles and hazards
		11.2	Explain the effect of these on paddle rescue boats operating in swiftwater	Planning and communication. Responding to hazards. Appropriate PPE, training, medical and decontamination
12	Boat and hull types	12.1	Identify how different hull types and construction will affect performance and deployment of a paddle boat	How a keel will affect a paddle boat's performance. Skid or drift experienced in a flat bottomed boat. Size of sponsons/stability. Load carrying
13	Rescue boat equipment	13.1	Select and use appropriate equipment required for swiftwater paddle boat operations	Boat kit: First aid, comms, pump, welfare, tech gear and lines, spare paddles. Task specific: Stretcher, ladder, additional long lines, O2, defib
		13.2	Recall post-use care and inspection procedures for equipment	Wash down kit with clean water. Look for obvious signs of damage
14	Pre- and post-trip checks	14.1	Perform systematic checks of boat/hull, and auxiliary equipment	Obvious holes, wear or damage. Boat pressure. Handles in place. Safety line not too slack. Bow and stern lines properly attached
		14.2	Prep equipment in order to give a clean working space within the boat	All equipment secured into the boat
		14.3	Perform post-trip checks	Look for obvious signs of damage
15	Considerations for night/poor visibility operations	15.1	Identify problems associated with hazard recognition, group control and application of rescue techniques, and appropriate control measures	Depth perception. Comms. Line of sight. Awareness of speed over ground. Water depth. Debris
		15.2	Identify control measures that may be required when operation boats in swiftwater in darkness	Slower travelling speeds. Personal, scene and boat lighting. Buddy system and roll call
16	Launching and recovery	16.1	Identify considerations when launching and recovering via trailer	Terrain. Vehicle access, hand roll or rope lower
		16.2	Identify hand launch considerations, including manual handling	The benefits of specifically designed paddle boats over boats without engines
		16.3	Identify how changing conditions and deployment will affect launching/recovery site choice	Water levels. Time pressures. Light. Weather



	Skill sheet element		Learning outcome	Key teaching points
17	Boat handling with paddles	17.1	Identify application for paddle skills	Self rescue. Access in shallow or debris strewn water. Close quarters control in swiftwater and eddies
		17.2	Identify the importance of correct trim and power distribution	Maintaining an efficient hull shape and length. Paddling in time, with balanced power to maximise efficiency
		17.3	Be able to paddle forwards, backwards and turn	Time it takes to generate momentum. Awareness of boat spin
		17.4	Recognise the importance of applying angle before momentum	Planning for future water
		17.5	Apply simple command within the boat in order to achieve simple objectives	One person takes charge, specific paddle commands
		17.6	Predict, and make adjustments for, the affect of future water on the boat	Moving into and out of flow. Into and out of eddies. Crossing the current vector while maintaining an appropriate angle. Be proactive with the setting of angles and the adjustment of momentum
18	Securing	18.1	Identify why securing a rescue boat would be required	Casualty recovery. Downstream containment. Switch to SRT rescue
		18.2	Recognise types of tethers depending on area, boat size and design	Bow/stern lines. Long lines for changing water levels
		18.3	Perform bow and stern tethers, including checks to ensure tethers are holding	Releasable tie-offs for changing circumstances
19	Flips and rights	19.1	Identify steps to minimise the likelihood of a flip occurring	Angle of boat to flow. Trim. Boat position relative to obstacles
		19.2	Recall process for dealing with a flipped boat	Head count. Keep contact with boat. Re-flip, paddle upside down, or abandon boat
		19.3	Explain options for whether to re-flip and variables that would affect this choice	Water speed and depth, proximity to downstream hazards
		19.4	Perform a re-flip and clear up as a team	How many needed to re-flip boat? People in the water not in the fall-line of flipping boat
20	Team/personal recovery	20.1	Identify reasoning behind team/self-rescue ability	Recovery from rescue or malfunction. Reduces task loading on other crew members
		20.2	Perform team-based rescue (or self-rescue) over sponson whilst in deep water	Boat set up: handles, safety line, size of sponsons



	Skill sheet element		Learning outcome	Key teaching points
21	Casualty pick-up and recovery	21.1	Allocate roles for casualty pick-up and recovery	Considering active roles and positioning crew to trim the boat
		21.2	Perform pick up rescues approaching from both downstream and upstream of the casualty	Based on water speed, access and boat position, a paddle boat crew may approach a casualty from upstream or downstream; adjusting momentum and position with their paddles
		21.3	Recover casualties into boat using forwards- and backwards-facing techniques, and rolling	Method of recovery should be based in water speed, depth and hazards, and the nature of the casualty's injuries
22	Casualty management	22.1	Identify priorities for casualty care	Breathing, temperature and major trauma
		22.2	Describe how casualty care would impact on boat handling, length of transit and operation	Reduced capability due to added weight and awkward paddling positions
		22.3	Identify suitable placement of casualty once aboard and how medical stabilisation would influence this	Feet up or feet down. Temperature concerns: compression of packaging by wind
23	Boat-based conditional rescues	23.1	Identify how addition of conditional rescue tools will aid the crew's margin for error	Use of paddle or throwline to create space between boat and casualty
		23.2	Identify environmental and casualty variables that will influence the choice of rescue	Conscious/unconscious. In water hazards, Turbulent water
		23.3	Perform conditional rescues from a boat	Rope management
24	Boat wraps	24.1	Explain how risk assessment and boat control will minimise the likelihood of a wrap	Position relative to obstacles. Trim to protect upstream tube
		24.2	Identify how the movement of weight may help to unbalance a wrap	Movement to bow or stern. Bouncing
		24.3	Apply rope systems for evacuation, and unwrapping through peel and pull techniques	Direction of pull is critical
25	Hydraulic and weir considerations	25.1	Perform a dynamic risk assessment of a hydraulic and a weir, identifying key variables that will affect a swimmer, rescuer and boats	Angle of face. Length of towback. Open/closed feature
		25.2	Relate the hydraulic assessment to rescue options and solutions that include control measures for hazards	Risk may limit true rescue options. Throw, reach helo options



Swiftwater Paddle Boat Handling (SPBH) training site and equipment list

Training site

The training site should have a range of water environments.

For initial training, a flat or slow-moving water environment is required.

For the swiftwater elements, the training site should be swiftwater up to a grade 2 river or marine environment, with suitable hydrology features, for all aspects of swiftwater paddle boat handling and rescue training to be carried out safely and effectively. The maximum grade is 2+.

Team equipment

The training provider must provide the following for each working group:

- Suitably equipped paddle boat
- Appropriate vehicle, trailer or launching trolley if required
- First aid, crew welfare and emergency shelter kit
- Whiteboard and marker pens
- Radio/communication ability
- Appropriate ropes for tethered ropework
- Karabiners
- Pulleys
- Tape slings
- Map

Personal equipment

The students must bring (if not provided by the training provider)

- Drysuit or suitable waterproof protective clothing
- PFD
- Thermal undersuit
- Protective footwear
- Throwline and suitable quick release belt
- Helmet that meets BS EN 1385:2012 standard
- Gloves
- Eye protection
- Knife
- Waterproof notepad





Rescue 3 Europe Ltd
Llangollen
Denbighshire
Wales
United Kingdom

Tel: +44 (0) 1978 869 069
Email: info@rescue3europe.com
Website: www.rescue3europe.com

 [Facebook.com/Rescue3Europe](https://www.facebook.com/Rescue3Europe)

