This National Boating Education Standard, as overseen by the National Boating Education Standards Panel (ESP), is the product of voluntary consensus of representatives of federal and state government, industry, nonprofit organizations, and public sectors. It is intended as a guide to aid the boating community in the design and implementation of boating courses and boater education.

ESP will review this standard at least every five years, at which time it may be reaffirmed, revised, or withdrawn. ESP welcomes written comments on the Standard during open public comment periods via http://esp.nasbla.org/esp/. Requests for interpretation may be submitted at any time via esp@nasbla.org.
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NOTE: Membership on a panel or committee shall not in and of itself constitute an endorsement of the National Association of State Boating Law Administrators (NASBLA) or any document developed by the panel or committee on which the member serves.

This draft was developed under procedures of essential requirements for the American National Standards Institute. The Panel that approved the draft was balanced based on interest categories to ensure that individuals representing those with material interests in the standard had an opportunity to participate.

This draft, which is the result of extended and careful consideration of available knowledge and experience on the subject, is intended to provide minimum performance requirements.

National Boating Education Standards Panel meetings are open to the public. All contact regarding standards activity, interpretations, or meeting attendance should be directed to NASBLA ESP Staff at esp@nasbla.org.

REQUEST FOR INTERPRETATIONS
Upon written request, the Education Standards Panel will render an interpretation of any requirement of the standard. The request for interpretation should be clear and unambiguous. Requests should be presented to the ESP in a manner in which they may be answered in a ‘yes’ or ‘no’ fashion.

The Panel reserves the right to reconsider any interpretation when or if additional information which might affect it becomes available to the ESP. Persons aggrieved by an interpretation may appeal to the Panel for reinterpretation.

REQUEST FOR APPEALS
Any directly and materially affected interest who believe they have been or will be adversely affected by a Standard, or by the lack thereof, shall have the right to appeal substantive or procedural actions or inactions of the National Boating Education Standards Panel per Part XII of the Panel Rules (latest version) posted at www.nasbla.org under Education>Education Standards Panel. As stated in the Rules, prior to the filing of a formal appeal, communication of the alleged actions or inactions, with mutual effort to informally resolve the dissatisfaction, shall be attempted and documented.

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ANSI/NASBLA 103.1-2018
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ANSI/NASBLA 103.1-2018
Title: ANSI/NASBLA 103.1-2018: Supplement - Basic Boating Knowledge – Water-Jet Propelled Boats

A. Scope: This supplement applies to basic boating knowledge education and proficiency assessment in the United States, U.S. Territories, and the District of Columbia.

B. Purpose: This document provides optional, supplementary content for ANSI/NASBLA 103-2016: Basic Boating Knowledge – Power to address basic recreational Water-Jet Propelled knowledge with a primary focus on safety and mitigation of risks associated with recreational boating. It contains basic knowledge elements that a beginner (entry-level) operator should have in order to safely operate a water-jet propelled watercraft.

C. Description: This supplement focuses on operational characteristics of two principle water-jet propelled vessels currently available to the recreational boating public; Personal Watercraft (PWC) and Jet Boats. Water Jet-Pack types of vessels such as Jet-Lev, Fly-Boards and Hover Boards are not addressed in this education standard.

1.0 Water-Jet Propelled Propulsion

1.1 Propulsion

The course shall explain how a water-jet propelled propulsion system works.

1.2 Water-Jet Propelled Considerations

1.2.1 The course shall describe how to determine acceptable loading, passenger and operator placement based on:

- capacity and related information;
  - Standup model (one-passenger)
  - Sport model (up to two-passengers)
  - Runabout model (up to three-passengers)
  - Sport-utility model (up to four-passengers)
- passenger placement and special considerations such as occupant balance points; and
- legal requirements for observer and seating placement.

1.2.2. The course shall explain start-up, shut down, operating controls, and characteristics including but not limited to:

- Single throttle control;
- Dual throttle control;
- Tiller control;
- Trim control;
- Off-throttle steering;
  - Determine if feature is on model
  - Confusion of off-throttle steering
- Engine interruption cut-off lanyard;
- Twin Engines;
- Hull Design;
- Four stroke engine;
- Two stroke engine;
- Electric motor; and
- Tachometer.

2.0 Boating Equipment – Specialized

The course shall explain the appropriate U.S. Coast Guard approved life jacket wear, and protective clothing (gloves, eye protection, foot protection, wetsuit, drysuit, and helmet).

3.0 Trip Planning and Preparation

3.1 Preventative Maintenance

The course shall communicate the need for regular maintenance on the following:

- Jet pump (impeller, reverse bucket, bowl and stator vanes, shift linkage)
- Drive Train (linkage)
- Engine (hydro-lock concerns and exhaust system)
- Hull
- Fueling and fuel management (ethanol fuel, portable fuel tank)
- Clearing intake grate blockages
- Fuel/water separators - cold weather
- Battery – cold weather
- Digitized ignition keys including other remote vessel starting/stopping/operational devices and use of aftermarket equipment
4.0 Safe Boat Operation

4.1 Hazards of Jet Intake and Wash

The course shall describe the hazards of jet intake and wash relative to:
- safety risks to a person behind a jet intake and exit (e.g. focused stream of water to any swimmer or object); and
- zone of awareness.

4.2 Operator Responsibilities

The course shall describe boat operator’s ultimate responsibility for situational awareness.

4.3 Docking, Mooring and Beaching

The course shall describe common practices for docking, mooring and beaching a jet propelled boat.

4.4 Anchoring

The course shall describe the importance of anchoring nearshore and types of anchors.

5.0 Emergency Preparedness

5.1 Capsizing Awareness and Issues

5.1.1 The course shall describe how to prevent capsizing including these factors:
- Stern wake;
- Environmental conditions (water state and wind); and
- Turning.

5.1.2 The course shall describe the process for righting a capsized personal watercraft.

5.2 Carbon Monoxide Risk

The course shall describe how to be aware of symptoms and treatment.

5.3 Aquatic Invasive Species

The course shall describe how to prevent and respond to:
- Intake inspection and clearing;
- Bilge and engine compartment inspection; and
- Water cooling system flush.
6.0 Water-Jet Propelled Watercraft Operational Characteristics

The course shall explain:

- Slow (idle speed) operation and maneuvering;
- Braking;
- Reverse;
- Neutral;
- Constant motion when engine is running (transmission in neutral);
- Stopping the boat’s motion;
- Operation in shallow water;
  - Maintain manufacturer’s recommended minimum water depth
- Boarding and disembarking boat safely;
- Use of retractable rear step and stowage;
- High speed operational control issues;
- Dangers of operating beyond skill and ability of operator;
- Weight capacity passenger overloading; and
- Understanding weather conditions and changing water effects for safe operations while underway.