



**MENDOTA
ROWING CLUB**

Launch Operation and Certification Manual

Version Date: April 25, 2021

Instructions for training and certification of new launch operators consists of:
<ul style="list-style-type: none"> • Training and certification shall include both knowledge verification and demonstration of hands-on skills in the boat.
<ul style="list-style-type: none"> • The instructor shall provide a copy of this document to the trainee.
<ul style="list-style-type: none"> • The instructor and trainee will read each item together, allowing the trainee to ask any questions, and the instructor will verify understanding.
<ul style="list-style-type: none"> • The training and verification will also include hands-on practice operating the launch boat(s).
<ul style="list-style-type: none"> • The instructor shall complete the MRC Launch Driver Certification Form at the end, certifying that the trainee has demonstrated both knowledge and hands-on skills to operate the boats. The completed form shall be retained in the MRC files.

Topic	Instruction
1. Purpose	1.1. All operators of the MRC launch boats must be trained on safe and proper operation of the launches to ensure the safety of life and preservation of property.
2. Emergency numbers	2.1. The trainee shall save the following emergency contact numbers in their mobile phone: <ul style="list-style-type: none"> 2.1.1. UW Lifesaving Station: 608-262-5865 2.1.2. Dane County Sheriff: 608-284-6800 2.1.3. General emergency: 911
3. Wisconsin Boating Laws (reference <i>Handbook of Wisconsin Boating Laws and Responsibilities</i> available at dnr.wi.gov)	3.1. The launches must be registered with the state, have a Wisconsin Certificate of Number, and expiration decals. The Certificate of Number (registration card) must be on-board and available for inspection by a law enforcement officer. The registration number and expiration decal must be displayed on the forward half of each side of the vessel. 3.2. A person at least 16 years old may operate a motorboat only if they have completed a DNR approved boating safety course. A person born before January 1, 1989 is exempt from the safety course requirement, but it is still recommended. Visit the DNR website at dnr.wi.gov and enter the keyword "boat safety" to find approved Boat Safety Education Courses. 3.3. All vessels must have at least one USCG-approved wearable personal flotation device or PFD (life jacket) for each person on board. The launch must also carry PFDs for each person in the shells including rowers and coxswains. 3.4. All vessels 16 feet or more in length (including MRC's launches) must have at least one USCG-approved throwable PFD (square cushion or ring) on board that is immediately accessible. 3.5. Navigation lights (red/green bow lights and white stern light) must be displayed between sunset and sunrise and during periods of restricted visibility (fog or dark). 3.6. Wisconsin law states that dangerous operating practices are illegal. These include:

	<p>3.6.1. Negligent or reckless operation that causes danger to the life, limb or property of a person. Examples include jumping wakes of other boats; operating within an area marked off as prohibited or for swimmers; weaving through traffic; creating a hazardous wave/wake for other vessels; chasing or disturbing wildlife, etc.</p> <p>3.6.2. Operating a boat with a person riding on the bow, deck or gunwale.</p> <p>3.6.3. Overloading a vessel. The launches have a plate indicating the maximum load and motor horsepower.</p> <p>3.6.4. Overpowering a vessel with an over-sized engine.</p> <p>3.6.5. Improper speed or distance including operating a vessel within 100 feet of shoreline, dock, raft, pier, swimmer, diver's flag, patrol boat displaying emergency lights or "no wake" zone, at speeds greater than "slow, no wake speed" (minimal speed needed to maintain steerage control).</p> <p>3.6.6. Operating a boat that is in unsafe condition or is leaking fuel or oil or has fuel or oil in the bilges.</p> <p>3.7. Wisconsin law prohibits anyone from operating a motorboat while under the influence of alcohol or drugs. Anyone who operates a vessel is deemed to have given consent to an alcohol or drug test. It is illegal to operate a motorboat with a blood alcohol concentration of 0.08%.</p> <p>3.8. It is illegal to obstruct navigation such as interfere with the safe navigation of other vessels; anchor an unoccupied vessel in a traveled traffic lane; moor a vessel to a buoy, etc.</p> <p>3.9. It is unlawful to operate a motorized vessel equipped with a battery unless the battery is secured against shifting.</p> <p>3.10. It is unlawful to place, leave, or discharge waste into Wisconsin waters.</p> <p>3.11. It is unlawful to spread aquatic invasive species.</p>
<p>4. Navigation Rules (reference <i>Handbook of Wisconsin Boating Laws and Responsibilities</i> available at dnr.wi.gov)</p>	<p>4.1. When operating a launch, you must not only protect yourself but also protect the rowing shells from other boats. The rowing shells can be difficult to see, especially for other boats that aren't aware that they are present. Stay close enough to the shells to protect them and position the launch between the shells and other boats when possible.</p> <p>4.2. Safe navigation is everyone's responsibility. However, many other boaters don't know the rules so you may have to yield even when you have right-of-way. When in doubt, yield to other boats by slowing or stopping, waiting to see the direction of the other boat, and veering away, towards starboard if possible so that both boats pass with the other boat on their port side.</p> <p>4.3. There are two terms used:</p> <p>4.3.1. Stand-on vessel: The vessel that should maintain course and speed. This vessel has right-of-way.</p> <p>4.3.2. Give-way vessel: The vessel that must slow, stop or change course. This vessel must yield.</p> <p>4.4. Non-powered (i.e. human-powered) vessels (shells, paddleboards, canoes, rowboats, etc.) are always stand-on vessels versus powerboats or sailboats who must give-way.</p>

	<p>4.5. Meeting head-on:</p> <p>4.5.1. Power vs. Power – neither vessel is stand-on. Both vessels should yield and veer/keep to the starboard.</p> <p>4.5.2. Power vs. Sail – the sailboat is the stand-on, the powerboat is the give-way.</p> <p>4.6. Crossing situations:</p> <p>4.6.1. Power vs. Power – if the other boat is on your starboard side you are the give-way vessel and must slow or stop for the other vessel to pass.</p> <p>4.6.2. Power vs. Sail – the powerboat is give-way, the sailboat is stand-on.</p> <p>4.7. Over-taking:</p> <p>4.7.1. Power vs. Power – the over-taking vessel is give-way, other stand-on.</p> <p>4.7.2. Power vs. Sail - the over-taking vessel is give-way, other stand-on.</p>
<p>5. Emergencies (reference <i>Handbook of Wisconsin Boating Laws and Responsibilities</i> available at dnr.wi.gov)</p>	<p>5.1. Preventing people from falling overboard:</p> <p>5.1.1. Sit down and ask riders to sit and don't move about the boat when underway.</p> <p>5.1.2. Don't sit on the gunwale, bow, or transom.</p> <p>5.2. If someone falls overboard:</p> <p>5.2.1. Reduce speed and toss the victim a throwable PFD.</p> <p>5.2.2. Turn your boat around and slowly pull alongside the victim, approaching the victim from the downwind or into the current, whichever is stronger.</p> <p>5.2.3. Turn off the engine. Assist the victim on board over the stern, keeping the weight in the boat balanced. Utilize a swimmer's ladder if available.</p> <p>5.3. If involved in a boating accident resulting in death, injury or damage exceeding \$2000 you must: immediately stop at the scene of the accident; assist anyone injured or in danger; provide in writing your name, address and vessel identification to anyone injured and to the owner of the damaged property; make a verbal report to a DNR warden or local law enforcement officer; submit a written report to the DNR within 10 days. Visit dnr.wi.gov and enter the keywords "boat crash" to obtain the Operator Boating Incident form.</p>
<p>6. Prep before launching</p>	<p>6.1. Log the boat out on the launch log.</p> <p>6.2. Extend and place scaffolds from shore to the lifts and ensure it is stable.</p> <p>6.3. Obtain a fuel tank from the fuel locker - check level and fill it if it is not full.</p> <p>6.4. Place the fuel tank in the bottom of the boat near the engine.</p> <p>6.5. Attach the fuel hose to the motor.</p> <p>6.6. Check that the fuel tank vent (small screw in the center of the cap) is open/loose to allow the tank to breathe. Otherwise, the tank will gradually collapse, and the engine will be starved of fuel unable to draw against a vacuum.</p> <p>6.7. Holding vertical, with the end towards the engine upward, pump the primer bulb until firm.</p> <p>6.8. Insert plug into transom and flip up to seal (or screw in from the backside of the transom on Nacho Madness). Make sure it is snug. If not, remove it, turn the handle to further expand the black rubber body, and reinstall. If the plug was never removed, and it rained, drain any accumulated water before reinstalling the plug.</p>

- 6.9. Inspect the engine and propeller for any damage or accumulated plant matter, fishing string, rope, etc. and remove it before proceeding.
- 6.10. Remove the hold-down straps and cable/lock and place in bottom of the bow of boat out of the way of feet.
- 6.11. Obtain and place in the boat:
 - 6.11.1. A large launch bag(s) of PFDs with sufficient PFDs for all rowers and coxswains
 - 6.11.2. A small yellow bag
 - 6.11.3. A wearable PFD for each person riding in the boat
 - 6.11.4. A throwable PFD cushion
 - 6.11.5. An oar to be used in case the engine fails or to push off
 - 6.11.6. A walkie-talkie – check that it is functional first
 - 6.11.7. A megaphone – check that it is functional first
- 6.12. Crank down the boat lift while keeping the bowline hooked over lift post.
- 6.13. *Nacho Madness* and *Belafonte* have a center console with steering wheel and ignition key. *Tilly* has a tiller operated motor.
- 6.14. Tilt the engine down with the electric tilt adjustment button and check that the steering is functioning smoothly. Turn the wheel or tiller to center the engine. The engine is water cooled and will over-heat if the engine is started without first being lowered into the water.
- 6.15. For *Nacho* and *Belafonte*, place the small key in the ignition and make sure the kill-switch clip and lanyard cable are present and that the clip is inserted over the switch and the switch is flipped up to Run position. Clip the other end of the lanyard to your clothing. This will kill the engine if you are thrown out of the boat or out of operating position.
- 6.16. Turn the key to start the engine.
- 6.17. If the engine does not start after a few attempts, it may be cold, try the following:
 - 6.17.1. On *Nacho Madness* and *Belafonte*, press the round throttle-only button at the base of the throttle/shift lever and move the throttle lever forward to supply more fuel. Try starting the engine again and when it starts adjust the throttle to a steady idle while the engine warms-up.
 - 6.17.2. On *Tilly*, turn the throttle. Try starting the engine again and when it starts adjust the throttle to a steady idle while the engine warms-up.
- 6.18. Once running, verify that cooling water is streaming out of the engine lower unit. If not, turn off the engine immediately to avoid over-heating, tilt the engine up and check the water intake areas for clogs from plant matter.
- 6.19. Turn on the boat lights and verify that both bow (green/red) and stern (white) lights are operating.
- 6.20. Visually survey the engine, hull, dock, water around the boat, and passengers one last time to verify that everything is in order.
- 6.21. Remove the bowline and safely reverse out of the lift.

7. Operating the boat	<p>7.1. Always be alert and constantly vigilant of what's around you 360 degrees - rocks, docks, shallow water, other boats, swimmers, paddleboards, wildlife, and of course MRC rowing shells.</p> <p>7.2. We share Lake Mendota with the University of Wisconsin's rowing teams and it's important for the safety of all rowers and equipment that everyone follows the traffic pattern. The traffic pattern for rowing shells requires that boats traveling clockwise take the outside (lake side) lane and boats traveling counterclockwise take the inside (shore side) lane. There is a marked 2k course in front of the UW Union where the lanes are separated by buoys. Elsewhere on the lake, a lane should be considered enough space for three 8+s to row side by side. It is important to follow the traffic pattern at all times and while it is permissible to row into the middle of the lake, you should be mindful when you approach shore again of boats that are in the traffic pattern and yield to them if necessary.</p> <p>7.3. Be aware of the wind direction and its potential to blow the boat into shore, the dock or onto a rowing shell.</p> <p>7.4. Do not operate the boat if you or your passenger are standing. Always sit when under way.</p> <p>7.5. If you find yourself in shallow water with rocks and there's a chance of damaging the prop quickly stop the engine, raise it to clear, and paddle to deeper water before continuing.</p> <p>7.6. When shifting from neutral, don't hesitate when shifting into gear as it causes the gears to grind. This will result in a short-lived transmission. Rather, shift firmly while maintaining counter-acting control to avoid rapid acceleration.</p> <p>7.7. Never shift directly from forward to reverse, or reverse to forward, without pausing at neutral between.</p> <p>7.8. Try to minimize shifting. This wears down the transmission.</p> <p>7.9. Always operate the boat in a controlled manner - accelerate and decelerate moderately; turn slowly to minimize surprises to other boats and to your passengers and other boats.</p> <p>7.10. If the boat or engine sounds wrong or performs in an unexpected manner, stop to investigate. There may be a foreign object (rope, fishing line, or plant matter) around the prop. Accumulated plant matter on the prop may cause the engine to lose power or vibrate. If so, shut off the engine, tilt the engine up to expose the prop, and remove foreign materials. You may be able to remove accumulated plant matter by stopping and reversing quickly to shed the material.</p> <p>7.11. If the boat or engine is damaged in anyway, call for help immediately. Don't operate the motor if it could be further damaged, unless human health and safety is at risk, which always takes priority.</p> <p>7.12. Periodically check for any water build-up in the boat. You can remove accumulated water from the hull by driving at a moderate to fast speed with the plug removed. Of course, replace the plug before decelerating or the boat will quickly take on water.</p> <p>7.13. Be careful when returning to the dock and the boat lift. Most accidents and equipment damage occur around docks.</p>
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	<p>7.14. Enter the boat lift centered at a slow controlled speed and quickly shift to neutral and shut down the engine as soon as you can. Shift to reverse and rev the engine to stop quickly to avoid a collision.</p> <p>7.15. Secure the bowline before leaving the boat. Ask for help from your passenger or others on the dock if available.</p>
<p>8. Operating the launch around the rowing shells</p>	<p>8.1. Keep the rowing shells organized within sight of the launch at all times, or, circle back frequently to check on all rowing shells. If the rowing shells will be spread-out, instruct groups of rowing shells to stay within clear sight of each other with a “buddy-system” to assist each other and to call-in any emergency situations to the launch. The use of walkie-talkies, carried in each rowing shell and launch, is therefore necessary for communication of any emergency situations and for relaying instructions.</p> <p>8.2. In general, the rowing shells should be between the launch and shore. In other words, position the launch off-shore from the rowing shells.</p> <p>8.3. Protect the rowing shells from other passing speed boats by positioning the launch between the rowing shells and other speed boats. Use hand signals or the megaphone to “warn-off” speed boats that are passing too closely or too quickly.</p> <p>8.4. Instruct the shells to stay as close to shore as practical considering the obstacles (e.g. docks) and directional guidelines (close to shore heading East, offset off-shore heading West). This is safer in the event of a flipped shell as the rowers may be able to walk or swim the shell back to shore if necessary.</p>
<p>9. Rower or swimmer emergency assistance</p>	<p>If a rowing shell tips over or becomes swamped and rowers are in the water, there are several options and the coach/launch must assist with prompt decision making and rescue assistance depending on the situation and the rower’s conditions and abilities:</p> <p>9.1. The coach/launch should default to the safest route – providing PFDs to all swimmers as quickly as possible - if there are any doubts about the rowers/swimmer’s condition or abilities. Swimmers will need assistance with putting the PDFs on and securing the straps.</p> <p>9.2. Approach the shell/swimmers from downwind (leeward) if possible so that the wind will blow them towards the launch.</p> <p>9.3. Keep the propeller positioned away from the rowers/swimmers.</p> <p>9.4. Turn off the engine as soon as you’re close enough to assist the rowers/swimmers. You want to be close enough that you can accurately throw a PDF to each of the rowers/swimmers. You may need to use the oar to keep the launch close or throw a rope to a rower/swimmer/shell to stay together.</p> <p>9.5. The rowers, if able, may attempt to right the shell and re-enter it – this is generally only practical/possible for singles and doubles. Once the rowers are back in the shell, they need to bail water out of the shell sufficiently with their hands or a pump.</p> <p>9.6. The launch bag includes a pump to assist with removing water from swamped shells that have been righted or have taken in a wave.</p> <p>9.7. The rowers/swimmers may be able to hold onto the shell and swim it or walk it back to shore. If high winds are making this impossible there may be cases where it is best to put on PDFs, abandon the shell, and swim to shore. The launch driver can closely follow the swimmers to shore and then return for the shell.</p>

	<p>9.8. A swimmer having difficulty and panicking should be provided a PDF ASAP and further assisted with handing them the end of an oar (hold your end tightly) or throwing them a rope to pull them to the launch.</p> <p>9.9. The rowers/swimmers may need to be pulled into the launch – this is not as easy as it sounds depending on the rower’s athletic abilities. Shut the engine off, bring the swimmer around to the stern along-side the engine, have the swimmer grasp the transom edge with both hands, deploy a swim ladder if equipped, or have the swimmer step on the engine rear-extending flat plate (trim tab or anti-cavitation plate) above the propeller with one foot while hoisting and pulling up and over the transom with the assistance of the launch driver pulling their PDF or waist band of their pants.</p> <p>9.10. An unconscious or exhausted swimmer may require lifeguard rescue swimming technique to get them to safety. Roll the person onto their back, position yourself under/behind them facing upwards and wrap your arm around their head with hand on their forehead or around their chest with their head on your shoulder, support/secure their head/chest upwards, and swim them to shore or the launch.</p>
<p>10. Returning the boat to the lift</p>	<p>10.1. Check for the label on the engine that indicates "this side up" and turn the wheel accordingly. This ensures the oil drains to the sump once the engine is raised.</p> <p>10.2. Raise the engine out of the water with the electric lift button.</p> <p>10.3. Inspect the engine and prop for any damage or accumulated plant matter, fishing string, rope, etc. and remove it before leaving.</p> <p>10.4. With the bowline in place, begin raising the boat by cranking the boat lift wheel. Check that the boat is centered on the lift. Continue cranking until the lift swings up fully and contacts the vertical metal post.</p> <p>10.5. Secure the two tie-down straps over the gunwales onto the lift.</p> <p>10.6. Lock the boat to the lift by looping the cable through the steering wheel (or metal ring) on one end and through the lift wheel on the other end and securing with the padlock.</p> <p>10.7. Remove and return all equipment to the boathouse and fuel tanks to the fuel locker.</p> <p>10.8. Refill the fuel tanks before storing.</p> <p>10.9. Lock the fuel locker and return the keys to the key rack.</p> <p>10.10. Log the boat in on the launch log.</p> <p>10.11. Report any issues with the boats, fuel, motors or lifts promptly.</p>

MRC Launch Driver Certification Form

Trainee:		Date:	
Instructor:		Manual Version Date:	April 25, 2021

The following categories of knowledge and skills were examined:

Category	Verified By Instructor (✓)
1. Purpose of training	
2. Emergency numbers – saved in phone	
3. Wisconsin Boating Laws	
4. Navigation Rules	
5. Emergencies	
6. Prep before launching	
7. Operating the boat	
8. Operating the launch around the rowing shells	
9. Rower or swimmer emergency assistance	
10. Returning the boat to the lift	

I hereby certify that the trainee has successfully demonstrated proficiency in knowledge and in operation of the Mendota Rowing Club launch boats.

Instructor: _____ Date: _____