ALASKA
BOATER'S HANDBOOK



Ninth Edition, 2019









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Front cover photo:

Jason Johnson and his son, Jason, Jr., and Ethan Paul (middle) enjoy an outing on the Black River near Chalkyitsik.
Photo courtesy Kelli Toth

Although this media is not a National Association of State Boating Law Administrators-approved boating course, it is recognized by NASBLA to benefit boating safety.

The Alaska Boating Safety Program cooperates with the U.S. Coast Guard, U.S. Coast Guard Auxiliary, and other partners to produce educational programs and publications that promote safe and enjoyable boating, including this 2019 edition of the *Alaska Boater's Handbook*.



A guide to safe and enjoyable boating in Alaska



Aleut Community of St. Paul Island Ecosystem Conservation Office BSPISE summer program, Kids Don't Float education.

A special thank you to the photo contributors for this publication:

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Dear Alaskan Boaters,

The opportunities to enjoy Alaska's waterways are as broad as the Great Land itself. From pleasure sailing in the inlets of the Southeast to subsistence whaling in the arctic waters of the Northwest, boating is diverse. But the message is the same – always wear your life jacket, always carry emergency communication and always be familiar with self-rescue techniques.

The Alaska Boater's Handbook is intended to inform boaters of points to consider before departure, what to do when underway and how to handle emergencies on the water to ensure an experience that is both memorable and safe. Both longtime Alaskans and the newest visitors will benefit because education, preparation and preparedness are key to reducing boating fatalities. So please familiarize yourself with the information in the handbook. For even better protection against risk, consider taking a boating safety course that will bring you up to date on legal requirements, innovations such as inflatable life jackets and the latest information on cold-water immersion and other relevant topics.

In addition to the handbook, the Alaska Office of Boating Safety provides other resources for boaters. To learn more about those, call (907) 269-8704 or visit www.alaskaboatingsafety.org. You can also search for the Alaska Boating Safety Program on Facebook and "like" to receive information about our latest activities and programs.

Great adventure awaits the well-prepared and adventurous boater. From all of us at the Division of Parks and Outdoor Recreation, we wish you bon voyage. But for your own sake and the sake of your loved ones, please follow safe boating practices when on the water. File that float plan, avoid alcohol and most importantly, always wear a life jacket.

Sincerely,

Ricky Gease

Ricky Gease
Director, Division of Parks and Outdoor Recreation

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PREPARATION

INTRODUCTION

Alaska has a wide variety of boating opportunities, and the types of boats and activities are just as diverse. Alaska also has one of the highest non-commercial boating fatality rates in the nation. The statistics relating to boating fatalities in Alaska are:

- **5 out of 6 involve capsizing, swamping, ejection, or a fall overboard, resulting in a cold water immersion-related drowning**
- **9 out of 10 involve boats under 26 feet in length**
- **3 out of 4 involve powerboats**
- **9 out of 10 are adult males**
- **More Alaskans die in recreational boating incidents than die commercial fishing**

Because nearly all boating-related incidents involve operator controllable risk factors, most are both predictable and preventable. All boating entails some risk, and safe and enjoyable boating depends on effective risk management. The best skippers and paddlers know they must be able to anticipate, recognize and assess risks, avoid or control what they can, and minimize the effects of those they can't. The ability to do this hinges on the ability to master these four tenets: knowledge, skill, proper attitude, and unimpaired judgment.



Knowledge

The Alaska Office of Boating Safety highly recommends that all boaters take boating courses relevant to their type of boating and then continue to refresh and build on their knowledge over time.

Powerboaters should look for courses approved by the National Association of State Boating Law Administrators (NASBLA). Completing a NASBLA-approved boating safety course fulfills the mandatory boating education requirements of many states and may qualify boaters for discounts on their boat insurance. For more information on NASBLA, visit www.nasbla.org



Joe McCullough teaches an Alaska Water Wise course.

The U.S. Coast Guard Auxiliary, a civilian component of the U.S. Coast Guard, conducts NASBLA-approved boating classes in Alaska.

The Alaska Office of Boating Safety offers the NASBLA-approved **Alaska Water Wise** course and trains, certifies, and supports a statewide network of registered boating safety instructors who teach a variety of boating education programs in their communities. There are several classes available through the Alaska Office of Boating Safety at (907) 269-6041 or www.alaskaboatingsafety.org.

Marine safety instructor training and educational courses are also available through the Alaska Marine Safety Education Association (AMSEA). For more information, contact AMSEA at (907) 747-3287 or www.amsea.org.

Paddlers should look for courses specific to their sports, such as those sponsored by the American Canoe Association and American Whitewater. There are also several Alaska paddling organizations that can offer more information:

- Knik Canoers and Kayakers: www.kck.org
- Fairbanks Paddlers: www.fairbankspaddlers.org
- Alaska Sea Kayak Symposium: www.alaskaseakayaking.org

For online courses approved in Alaska, visit our website at www.alaskaboatingsafety.org.

Skills

All boaters should have the skills to operate their boats under a variety of conditions and deal with a variety of problems. Beginning boaters may have enough skill to operate a boat under ideal conditions, but events such as deteriorating weather or a mechanical breakdown can suddenly require a much higher level of skill than the boater possesses. Skills are developed with instruction, practice, and experience. It is important for boaters to recognize their skill level and avoid operating in conditions that could potentially exceed their abilities.

THE KEY TO SAFE BOATING

The four cornerstones of the prepared boater are:

- knowledge
- skill
- good judgment
- proper attitude

Attitude

Safe, enjoyable boating begins with the proper attitude. Alaska's waterways are a dynamic, ever-changing environment. Complacency, over-confidence, or carelessness are serious liabilities on a boat in Alaska. Avoid a "day trip" attitude, always have a contingency plan and prepare accordingly.

Judgment

Sound judgment, unimpaired by alcohol, drugs or fatigue, is a boater's most important tool. Boaters often have a choice of whether or not to put themselves and their passengers in a situation that could be beyond their skill or the capability of their boat or equipment. Be flexible in decision making; lives may depend on it.



REQUIRED EQUIPMENT

The federal and state laws requiring basic equipment on vessels are designed to save lives and reduce the need for rescue. Equipment required for a specific boat depends on many factors, including the size of the boat, source of propulsion, construction, and where and how the boat is used. The Alaska Requirements Summary (Page 5) incorporates the items required under state and federal law. Please note these requirements are the minimum — every boater should carry additional equipment appropriate for the boat and the operating conditions.

Federal Requirements

Federal requirements apply on all U.S. navigable waters. In Alaska, this includes all saltwater, rivers that empty into saltwater, and inland waterways designated as U.S. navigable waters under federal law. The requirements for non-commercial boats are found in the brochure "Federal Requirements and Safety Tips for Recreational Boats," or on the U.S. Coast Guard's website, www.uscgboating.org.

State Requirements

In Alaska, the state requirements are similar to the federal requirements and apply to all boats (except ship lifeboats, seaplanes, inspected passenger vessels, and water toys) on all waters of the state, including inland waters and saltwater within the territorial limits of the state. This section provides an overview of state requirements as of this printing.

Life Jackets

A personal flotation device (PFD) is either wearable (life jackets) or throwable (life rings, cushions), and designed to keep a person afloat in water.

Life jackets keep persons afloat by providing supplemental buoyancy. Buoyancy is the upward force exerted on anything in the water that is less dense than the water it displaces. A U.S. Coast Guard-approved life jacket provides at least 15.5 lbs. of supplemental buoyancy, allowing a person to float with little or no effort.

Life jackets were historically thought of simply as a substitute for swimming ability or boating experience. However, with increased understanding of the effects of cold water immersion, many Alaskan boaters are now realizing the importance of always wearing a life jacket when in an open boat or on deck.

ALASKA REQUIREMENTS SUMMARY

Requirements	Boats Under 16 Feet	Boats 16 feet to less than 26 feet	Boats 26 feet to less than 40 feet	Boats 40 feet to less than 65 feet
Life Jackets	One U.S. Coast Guard-approved life jacket for each person on board. Must be in serviceable condition, approved for the activity, and worn in accordance with the label and owner's manual. Persons under 13 must wear a life jacket when in an open boat, on the deck of a boat, or when being towed (i.e. tubing, waterskiing)			
Throwable Devices	Recommended but not mandatory.	Except for canoes and kayaks, one U.S. Coast Guard-approved throwable device. (i.e. seat cushion or throw ring)		
Sound Producing Devices	Boats less than 39.4 feet (12 meters) in length must be able to make an efficient sound signal (such as that made with a whistle or horn) to signal intentions and to signal position in periods of reduced visibility.			Boats 39.4 feet (12 meters) or more in length, a whistle or horn.
Visual Distress Signals	Night signals meeting federal requirements (33 CFR 175.110) between sunset and sunrise	Signals meeting federal requirements (33 CFR 175.110) for both day and night-time use. Exception: boats and open sailboats not equipped with mechanical propulsion and under 26 feet in length are <u>not</u> required to carry day signals. *Note: Pyrotechnic devices, if used to meet this requirement, must be current, serviceable and readily accessible. At the minimum, a total of three day/night combination devices or three day and three night devices must be carried.*		
Fire Extinguishers	At least one U.S. Coast Guard-approved B-I required for boats with inboard engines, living spaces, permanent fuel tanks or enclosed storage areas or hull voids not sealed or filled with flotation material		At least two B-I or one B-II U.S. Coast Guard-approved fire extinguishers	At least three B-I or one B-I and one B-II U.S. Coast Guard-approved fire extinguishers
Navigation Lights	Display required between sunset and sunrise and when visibility is restricted. International configuration required (varies with length and mode of operation). See the International Navigation Rules.			
Backfire Flame Arrestors	One U.S. Coast Guard-approved backfire control device on each carburetor of all inboard gasoline engines.			
Ventilation	Boats with permanently installed engines, closed compartments or permanent fuel tanks must have efficient natural or mechanical ventilation.			
Registration	A boat placed on state waters that is equipped with mechanical propulsion (gas, diesel or steam engines, and electric motors) and any vessel used in sport fishing charter activities must be registered and numbered with the Division of Motor Vehicles (AS 05.25.53. Certificate of Number must be carried onboard. Registration numbers and validation decals must be properly displayed on hull of boat. REV 3.11.19			

AlaskaBoatingSafety.org

Life jackets aid breathing by increasing the distance between airways and the water. They also assist with rescues and self-rescues, keep a person floating even if disabled or unconscious and offer protection in the event of an ejection. Some designs even offer insulation from cold water.

There are important legal requirements concerning life jackets:

- A U.S. Coast Guard-approved life jacket must be carried on board for each person on the boat and be "readily accessible" — the easiest way to ensure this is to wear it.
- Persons under 13 years old must wear a life jacket when on an open boat, on an open deck, or when being towed on water skis or other devices.
- Life jackets must be of the proper size and fit for the intended wearer. Adult sizes do not satisfy the legal requirements for children, or vice versa.
- Life jackets must be used in accordance with the manufacturer's label and owner's manual. Some life jackets must be worn to satisfy carriage requirements.
- Life jackets must be in serviceable condition, meaning they must be free of defects, such as missing or waterlogged flotation material, broken zippers, buckles, or straps. Special attention should be given to inflatable devices, which should be carefully maintained per manufacturer recommendations.



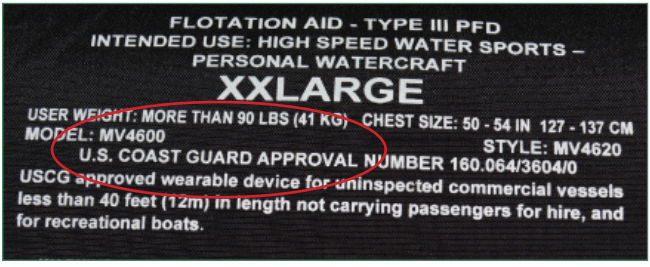
This life jacket is too big!



Proper life jacket fit impacts performance.

Life Jacket Selection

There is a wide variety of styles and colors of life jackets. No one life jacket is perfectly suited for all persons in all situations. For example, body shape is a consideration; some life jackets are equipped with several adjustment points enabling a custom fit. Some are designed for

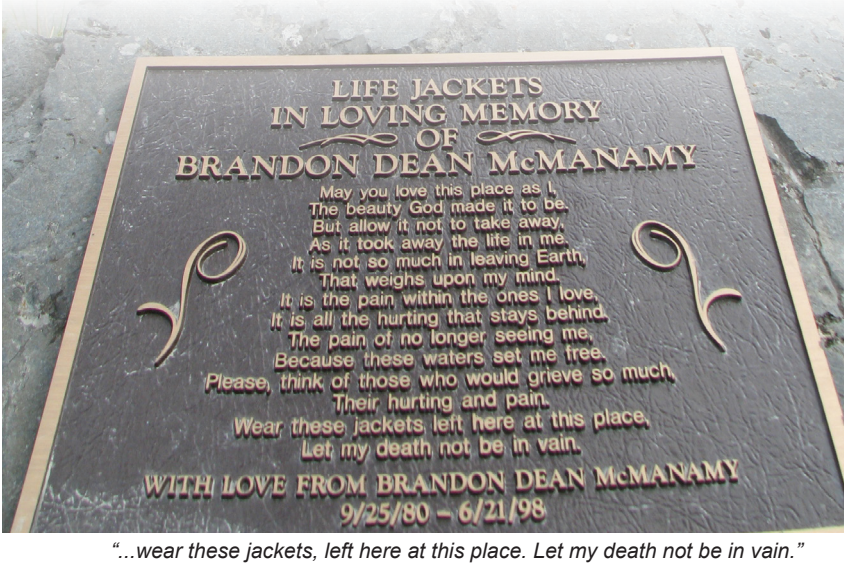


Read the label to ensure a proper fit.

offshore use, and others for nearshore and calm water. Some have bright colors, such as fluorescent green or orange, greatly increasing the visibility of a person in the water and improving the chances of a successful rescue or recovery. Some, such as float coats and full body work suits, help slow heat loss when in the water.

You must wear the life jacket in accordance with the label. Check for age restrictions and "approved only when worn" directions. Read the manufacturer's label to determine if the life jacket is U.S. Coast Guard-approved for the intended use. Some devices are not approved for recreational boats. In these cases, a U.S. Coast Guard-approved device for each person must also be carried on the boat in order to meet federal and state requirements.

Finally, all life jackets perform differently in the water, and identical life jackets perform differently on various people. Everyone should test their life jackets in water (such as a lake or a pool) before taking them out



"...wear these jackets, left here at this place. Let my death not be in vain."

boating. Become familiar with equipment before an emergency arises. Not all life jackets are created equally. Choose the life jacket to fit your specific needs. Consider:

Swimming ability and confidence in water: Inflatable life jackets and some styles may not have the buoyancy a nearshore or offshore life jacket provides. If swimming ability and confidence are low, choose a life jacket with a higher number of newtons (or pounds of buoyancy).

Proximity to shore and self rescue: If nearshore and possessing strong swimming ability and confidence in water, an inflatable or lower number of newtons may be appropriate. If boating offshore, the preferred life jacket is an offshore PFD because they are most likely to turn an unconscious wearer face up in the water.

Type of body of water: If boating in whitewater where water is heavily aerated, a higher number of newtons or pounds of buoyancy is a better choice.

Custom fit (number of adjustment points): The more custom fit the life jacket, the better the performance in the water. Choose a life jacket with multiple adjustment points. A snug and comfortable fit is the best option.



Offshore



Nearshore



Whitewater



Nearshore



Float Coat



Inflatable

Cold water boating: If boating in cold water during cold weather months, a float coat can offer additional protection and reduce body heat loss.



Immersion suits (survival suits) completely cover the wearer, slowing heat loss in the water. Although most recreational boating deaths are an immediate onset emergency, it is a good idea to carry them onboard. Try them on first to ensure proper fit. Immersion suits are not a substitute for a life jacket, but it is a good idea to have them on board in the event of a delayed onset emergency. Practice getting an immersion suit on within one minute.

Life Jacket Loaner Boards



"The best type of life jacket is the one you WEAR!"

There are more than 700 life jacket loaner boards located throughout Alaska. This grass-roots program makes life jackets easily accessible primarily at boat launch ramps or popular boating areas. Anyone can borrow a life jacket, and often there are a variety of sizes available. Thirty-four lives have been saved thanks in part to borrowing a *Kids Don't Float* life jacket. Call the Alaska Office of Boating Safety at 907-269-6042 for more information on how to establish a life jacket loaner board in your area. Anyone can donate a gently used U.S. Coast Guard-approved life jacket to a life jacket loaner board.

Sound Signals

International Navigation Rules 32-37 (Part D) address the signals used when maneuvering, warning other boaters, and attracting attention. According to both federal and state law:

- Vessels less than 39 feet, four inches (12 meters) are not specifically required to carry a sound-producing device, such as a whistle or horn, but must have some means of making an "efficient sound signal." Fastening a whistle to each life jacket is a great way to meet this requirement.

- Vessels over 39 feet, four inches (12 meters) are required to carry a whistle or horn.



Various types of sound signals

Visual Distress Signals

Problems can occur for many reasons when boating, and even well-prepared boaters sometimes need help. In these situations, boaters must be able to alert others. Signals can help, but only if they are the right type for the conditions and are used properly.

- Visual distress signals are classified by the U.S. Coast Guard as day signals, night signals, or combination day and night signals.
- Boats under 16 feet in length, manually propelled boats, and open sailboats under 26 feet without engines are not required to carry day signals. However, those boats must carry night signals when operating between sunset and sunrise, and in situations where there is diminished visibility, such as fog or smoke.



Flares are a type of visual distress signal.

- Carry extra visual and sound signaling devices in clothing or life jacket pockets; in the event of getting separated from your boat, you will be glad you have these devices with you!
- Pyrotechnic devices should be packaged in a watertight container with the expiration date clearly marked on the outside.

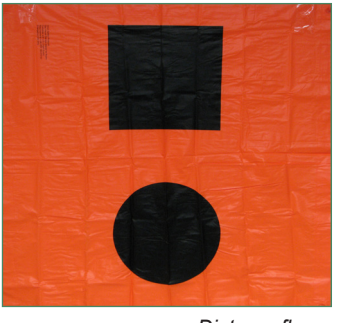
If pyrotechnic devices (such as smoke signals and flares) are used to meet legal requirements, at least three must be carried. All devices are marked with an expiration date. If expired flares are carried as spares, put them in a separate container and clearly mark them “expired” and consider using them first. If the expired devices work, then the newer devices are still available as a backup.

Keep in mind that three flares don’t last long in an emergency. For this reason, many experienced boaters carry other signaling devices in addition to the requirements — for example, expired pyrotechnics. Other examples of devices to carry on your person include signal mirrors, white

LED lights, glow sticks on a string and distress flags.

Examples of visual distress signals that meet Coast Guard requirements include:

- Electric, automatic SOS distress light (night signal)
- Three orange smoke canisters (day signal)
- Orange flag with distress symbol (day signal)
- Three hand-held flares (day and night signal)
- Three red meteor aerial flares (day and night signal)
- Three parachute flares (day and night signal)



Distress flag



Signal flares

Fire Extinguishers

Fire extinguishers are required on all powerboats with enclosed engine compartments, permanently installed fuel tanks or enclosed areas that could trap fumes. Extinguishers are classified by the type of fire (A, B, C, or D) they are designed for and by size (I, II).

- **Class A**—ordinary combustible materials, such as wood, cloth, paper, rubber, and many plastics.
- **Class B**—flammable liquids, combustible liquids, petroleum, greases, tars, oils, oil-based paints, solvents, lacquers, alcohols, and flammable gases.
- **Class C**—involves energized electrical equipment.
- **Class D**—combustible metals, such as magnesium, titanium, zirconium, sodium, lithium, and potassium.

Extinguishers must have a label from the testing laboratory and have a U.S. Coast Guard approval number or specify “Marine Type USCG.”

Marine extinguishers are typically B-I or B-II.

The size and number of extinguishers that are required to be carried on a powerboat vary with the length of the boat. (See Alaska Requirements Summary, Page 5). Everyone on the boat should be familiar with the location and correct use of fire extinguishers. Fire drills are highly recommended.



Some additional points:

- Do not test a fire extinguisher (this breaks the seal and causes leakage). See label for additional information.
- Place extinguishers in readily-accessible locations, but NOT where a fire would be most likely to break out. For example, an extinguisher mounted inside a closed engine compartment may be impossible to reach in the event of a fire.
- Inspecting fire extinguishers should be a regular part of the pre-departure checklist. Dry chemical extinguishers should be inspected monthly and shaken to redistribute the agent.

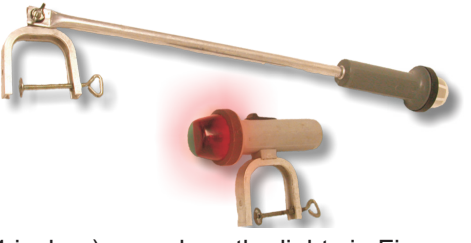
Navigation Lights and Shapes

International Navigation Rules 20-31 (Part C) address navigation lights and shapes (shapes are the daytime equivalent of navigation lights and may be balls, cones, cylinders or diamonds that are black in color). It is the boat operator's responsibility to learn and use these lights and shapes.

Boats on the waters of the state must display navigation lights **between sunset and sunrise and during periods of restricted visibility**.

The following summarizes the lighting requirements for non-commercial boats under 20 meters (65 feet, seven inches):

NOTE: Navigation light illustrations (Figures 1-6) can be found on the facing page.



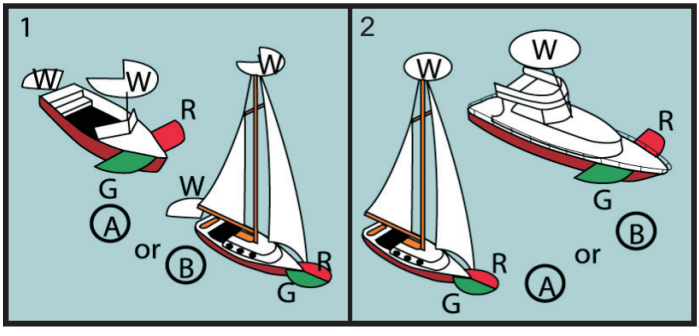
Powerboats must exhibit navigation lights as shown in Figure 1, except that boats less than 12 meters (39 feet, 4 inches) may show the lights in Figures 1 or 2. A power-driven boat of less than seven meters (23 feet) in length whose maximum speed does not exceed seven knots may instead exhibit an all-round white light and, if practicable, side lights. A sailboat operating under both machinery and sail power is considered a power-driven boat.

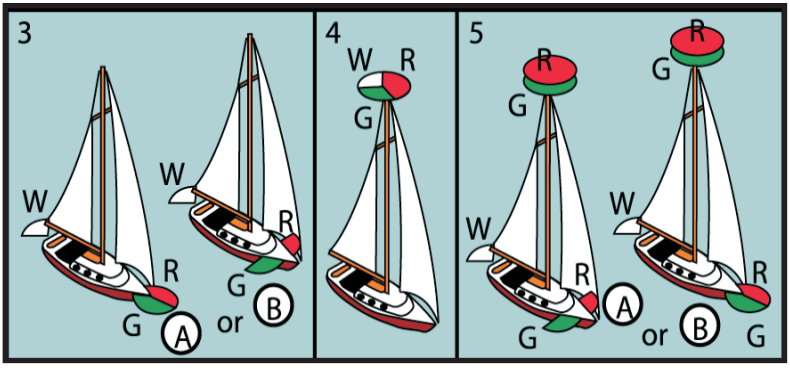
Sailboats under sail alone must exhibit navigation lights as shown in Figures 3 or 4, and may also display the lights shown in Figure 5. A sailboat of less than seven meters (23 feet) in length must either exhibit navigation lights as shown in Figures 3 or 4 or carry an electric torch or white light, which must be exhibited in sufficient time to prevent a collision (Figure 6).

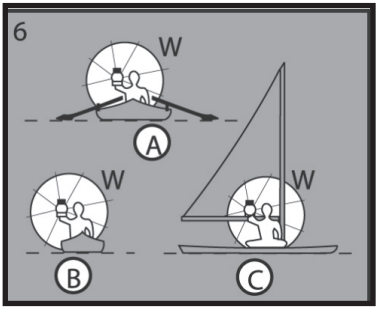
Boats under oars must either exhibit navigation lights as shown in Figures 3 or 4, or carry an electric torch or white light, which must be exhibited in sufficient time to prevent a collision (Figure 6).

Anchor lights must be displayed on power-driven vessels and sailboats. An anchor light is a round white light visible for two miles and exhibited forward where it can best be seen. Vessels less than seven meters (23 feet) are not required to display anchor lights unless anchored in or near a narrow channel, fairway, anchorage, or where other vessels normally navigate. Anchor lights are not required on vessels less than 20 meters anchored in a special anchorage designated by the Secretary of Transportation.

Navigation Light Illustrations (Figures 1-6)







COLOR CODE

W = White

R = Red

G = Green

Additional information, including all recognized signals and lighting, and shape requirements, can be found in the complete Navigation Rules, at:

https://www.navcen.uscg.gov/?pageName=navRuleChanges

PRE-DEPARTURE CHECKLIST

Power boaters can avoid inconvenience and potential danger by taking a few minutes before departure to check the following:

✓ Life jackets worn by each person (proper size, fit, and fastened)

✓ Emergency communication and distress signaling devices carried ON person

✓ Float plan prepared and transmitted to responsible party

✓ Passengers and load distributed properly, items secured from shifting

✓ Passenger briefing — how to start, stop and steer boat, clothing check, location and use of communications and emergency equipment

✓ Engine cut-off device worn by the operator

✓ Throwable flotation device attached to floating line

✓ Weather, forecast update and local observations

✓ Fire extinguisher(s) fully charged and mounted securely

✓ Ability to make an efficient sound signal (horn or whistle)

✓ U.S. Coast Guard-approved visual distress signals (check expiration dates)

✓ Boat registration current, properly displayed and certificate onboard

✓ Drain plugs installed, thru hull fittings leak-free, sea cocks closed

✓ Hoses/clamps, drive units/props, fuel lines/filters, blowers/backfire flame arrestors (inboards) inspected

✓ Scuppers clear, bilge clean

✓ Battery fully charged, secured, terminals covered

✓ Back-up manual bailing device(s) accessible and functional

✓ Back-up propulsion source (spare engine, sail, paddles or oars)

✓ Tools/parts e.g. spare batteries, fuses, spark plugs, belts, prop and nut

✓ Anchors (2), each with chain and line, one attached to the boat

✓ Food, water, shelter, and spare clothing

✓ First aid kit

✓ Reboarding devices (foot sling, swim step, ladder)

✓ Navigation tools (e.g., GPS, chart plotter, depth sounder, compass, charts, tide book)

✓ Fuel & oil sufficient for trip — 1/3 out, 1/3 return, 1/3 spare

✓ Test engines, engine cut-off device, steering, gear shift and lights

✓ Emergency locator beacons, radios and other electronics functional



Backfire Flame Arrestors

Backfire flame arrestors are screen-like devices installed on inboard gas-engine carburetors. They help prevent flames produced by engine backfire from causing a fire and/or explosion. These devices must be kept clean and periodically inspected for damage. They are required on all motorboats with inboard gas engines manufactured after April 25, 1940.

There are two exceptions to this requirement: a vessel that has an attachment to the carburetor or has the engine located so that flames caused by engine backfire will be dispersed outside the vessel so neither the vessel nor the persons on board are endangered; or a vessel whose air and fuel intake system bears a U.S. Coast Guard-approval label stating that it is safe without a flame arrestor.

Ventilation

An enclosed space containing explosive vapors is a bomb waiting to go off. Any boat equipped with a gasoline engine installed inside an enclosed engine or fuel tank space (not open to the atmosphere) must have an efficient ventilation system to disperse explosive vapors.

Natural ventilation consists of at least two ventilation ducts fitted with cowls or the equivalent. At least one exhaust duct extending to the lower portion of the bilge, where fumes are most likely to accumulate, and at least one intake (supply) duct extending to a point midway to the bilge (or at least below the level of the carburetor air intake) are required.

Boats built after July 31,1980, are required to have powered ventilation (exhaust blower) for engine compartments that are not open to the atmosphere. Such boats are also required to display a warning label.

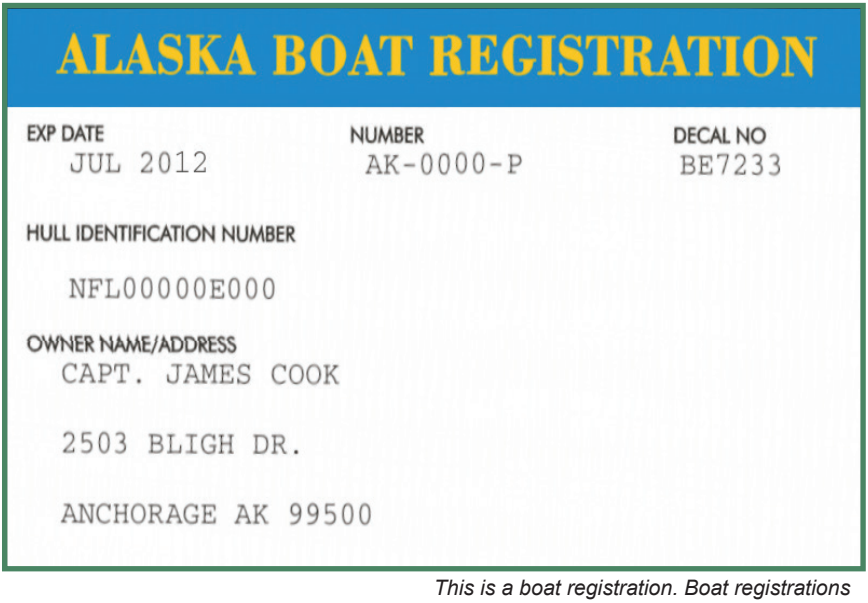
Butane and propane are even more dangerous than gasoline, so be diligent about checking inside the cabin and galley. Be sure the fuel tank enclosure is properly vented.

Before starting the engine, operate the blower for at least four minutes and check the engine compartment for gasoline vapors. Remember, your “nose knows!” If you smell vapors, do not start the engine.

REGISTRATION AND TITLING REQUIREMENTS

In the event of a boating emergency or boat theft, boat registration provides critical information such as a detailed boat description, owner contact information and hull identification number, and can substantially reduce the time and cost involved with responding to these cases.

All 50 states and six U.S. territories and commonwealths register boats. Under federal law, all boats equipped with machinery propulsion must be registered by the state in which principal use occurs. Once issued, this registration cannot be reassigned or transferred to another boat. Registration in Alaska is valid for a three-year period.


ALASKA BOAT REGISTRATION

EXP DATE
JUL 2012

NUMBER
AK-0000-P

DECAL NO
BE7233

HULL IDENTIFICATION NUMBER
NFL00000E000

OWNER NAME/ADDRESS
CAPT. JAMES COOK
2503 BLIGH DR.
ANCHORAGE AK 99500

This is a boat registration. Boat registrations include a Certificate of Number. This number is required by Alaska law.

In Alaska, exceptions to the state's registration requirement apply to:

- Any documented or undocumented boat with a current registration from another state (though not to exceed 90 consecutive days)
- Government boats (NOTE: Government recreational boats are not exempt under federal law)
- Ship lifeboats used solely for lifesaving purposes

- Boats documented by a foreign government, but not those documented within the U.S. territories or other states
- Boats not equipped with mechanical propulsion, such as canoes or kayaks, unless used for sport fish guiding

While non-motorized boats, such as canoes and kayaks, are not required to be registered in Alaska, having a registration can help aid in recovery efforts in the event of loss or theft.

A boat's registration (also referred to as the Certificate of Number) must always be kept on the boat when in use. An example of a boat registration is shown in the illustration on Page 18.

NOTE: The Alaska Department of Fish and Game vessel license for boats engaged in commercial fishing is not a boat registration.

How to Register

The boat owner must complete a state application for boat registration and present the application together with the appropriate fees to the Alaska Division of Motor Vehicles (DMV). An owner of a boat that has never had an Alaska registration must also provide one of the following documents to prove ownership:

— Manufacturer's Statement of Origin (new boats only)

— Carpenter's Certificate

— Bill-of-Sale from a dealer or the previous owner

— Title or Registration (Certificate of Number) from another state

— Affidavit of Ownership

Registration forms are available at any Alaska DMV office. Forms and additional information are also available online through the Alaska Office of Boating Safety's website at www.alaskaboatingsafety.org or the DMV website at www.state.ak.us/dmv/reg/boat.htm.

Registration Fees

Boats equipped with mechanical propulsion, including non-powered boats with auxiliary machinery propulsion (for three years):

Original registration/Certificate of Number, transfer of ownership, or renewal: $24

Duplicate registration/Certificate of Number or replacement decal: $5

Boats NOT equipped with mechanical propulsion (for three years):

Original registration/Certificate of Number, transfer of ownership, or renewal: $10

Duplicate registration/Certificate of Number or replacement decal: $5

Titling



In Alaska, motorized boats over 24 feet must also be titled.

Under Alaska Statute (AS 05.25.055), motorized boats over 24 feet must also be titled, to help keep track of ownership and discourage owners of derelict vessels from abandoning their ships in Alaska waterways. This statute applies to undocumented as well as documented vessels. If you sell your boat, you must transfer title to the new owner in order to be free of liability in the event of emergency, desertion or other misuse of the boat. If you are a documented boat owner from another state or country, you must have proof of title from your home state/country for presentation to authorities, if asked.

How to Title

The boat owner must complete a state application for boat title and present the application together with the appropriate fees to the Alaska Division of Motor Vehicles (DMV). An owner of a boat that has never had an Alaska title must also provide one of the following documents to prove ownership:

— Registration/Certificate of Number

— Proof of ownership, such as manufacturer's Statement of Origin (new boats only)

— Carpenter's Certificate

— Bill-of-Sale from a dealer or the previous owner or title or registration from another state

Titling forms are available at any Alaska DMV office. Forms and additional information are also available on the internet through the

Alaska Office of Boating Safety's website at www.alaskaboatingsafety.org or the DMV website at www.state.ak.us/dmv/reg/boat.htm.

Titling Fees

Boats over 24 feet must be titled in Alaska:

- Boat Title: $20
- Duplicate Boat Title: $20

Notification Requirements

The boat owner is required to notify the DMV in writing within 15 days of:

- Any change in address
- Theft (or recovery) of a registered boat
- Loss or destruction of a valid registration/Certificate of Number
- Transfer of all or part of the owner's interest in the boat
- Destruction or abandonment of the boat
- New boat owners of undocumented vessels must apply for a certificate of title within 30 days of purchase.

The boat owner is also required to surrender the registration/Certificate of Number to the DMV within 15 days if the Certificate of Number becomes invalid due to any of the following:

- U.S. Coast Guard documents the boat
- Owner transfers all of their ownership of the boat
- Boat is destroyed or abandoned
- Fees are not paid
- Application contains a fraudulent statement
- Boat is no longer principally used in Alaska
- Owner involuntarily loses their interest in the boat by legal process

Display of Number

If a boat is required to be registered, then the "AK" number assigned to the boat by the registration/Certificate of Number must be painted on or otherwise permanently attached to each side of the forward half of the boat. Boats not required to be registered are also not required to

display the number, but doing so speeds identification in the event of an emergency or theft.

- Numbers must be plain, vertical block letters not less than three inches in height. Numbers must contrast with the color of the background and be distinctly visible and legible. They must read left to right and have either a space or hyphen that is the width of a letter or number (except the width of an I or a 1) between each group of letters and numbers (Example: AK 5678 AA or AK–5678–AA).



- A backing plate made of plastic or other suitable material may be used as a surface to place the number if the boat is an inflatable or if the boat is so configured that the number would not easily be seen if it was affixed to the hull or superstructure.
- Boat dealers may use a removable backing plate to display the number, but only if the boat is actually being tested or demonstrated.
- Only the registration number officially assigned to a boat may be displayed.

Display of Validation Decals

All boats required to be registered must display the validation decals issued with the registration/ Certificate of Number. The decals must be visible when the boat is in operation and displayed within six inches of the registration number on each side of the boat. Only a current decal may be displayed. Expired decals must be covered or removed.



Decals may be applied to a backing plate if the plate is attached to the boat in the proper location and it is impractical to attach the decal directly to the boat.

Hull Identification Number (HIN)

A hull identification number (HIN) is a unique serial number that identifies a specific boat, much like the vehicle identification number of an automobile.

State law requires a permanent HIN on every boat registered in Alaska. Manufacturers are required under federal law to put a HIN on the boat during construction. However, some boats, such as those manufactured before 1972 and homemade boats, don't have one assigned, so the owner must obtain a HIN from the DMV. HINs shall be permanently inscribed into the hull in accordance with 02 AAC 70.080. It is unlawful for a person to remove, alter, deface, destroy, or otherwise make a HIN illegible.

RECOMMENDED EQUIPMENT

Already reviewed are the **required** items for operating a vessel in Alaska. But there are additional items to consider that will help to ensure safe and enjoyable boating.

Anchor

Boats in Alaska are not required to have anchors onboard; however, it is highly advisable. An anchor is a safety item that could save the day. If you run out of fuel or your boat motor dies, an anchor can hold you steady while help is on the way.



Anchor with appropriately equipped rode (chain and anchor line)

Select the appropriate type and size of anchor for your boat and its usage. Also make sure you have the appropriate diameter and length of rode (anchor line and chain). Consider the size of the boat, the environment at the bottom of the water, the water conditions and the depth of the water (from the bow to the bottom). The length of the rode should be seven times longer than the depth of the water, depending on the weather conditions, the current, and the size of the boat. Wind, tides, current and other boats in the vicinity are some factors to consider when anchoring. See "Underway" for anchoring procedures.

Engine Cut-off Device

Most personal watercrafts and powerboats come with a manufacturer-equipped emergency engine cut-off device. This is a safety item that is



Always use an engine cut-off device to ensure your boat will stop running in the event that you go overboard or are disabled.

specifically designed to shut off the engine if the operator is separated from the helm. This critical piece of equipment can prevent overboard passengers from being struck by a spinning prop from an out-of-control boat that has lost its operator. This is also known as the “Circle of Death.”

Remember to always secure the cut-off device to your person before operating your vessel. There are two types of cut-off devices -- those that are manually attached to the motor via a lanyard, or electronic wireless devices, which detect when the operator is a certain distance from the helm or captain’s seat. If your boat does not come equipped with an engine cut-off device, consider installing one.

Reboarding Device

If you fall out of your boat, the surest way to safety is to get back in! A reboarding device, such as a built-in transom ladder, handhold, foothold or rope ladder, will help make it easier. Make sure any non-attached item, like a rope ladder, is easily accessible and can be attached quickly for fast retrieval from the water. A simple loop of line between cleats could make reboarding easy.

Emergency Communication Devices

Believe it or not, radios and other forms of electronic communication are not required on Alaska waters. Still, it is a key ingredient to having a safe boating outing — so much so that it warrants its own section.

EMERGENCY COMMUNICATION DEVICES

It is one thing to be out on the water enjoying yourself and have everything go as planned. In this scenario, the sun is shining, the water is calm and the boat responds to your every maneuver. But anyone who spends time in Alaska knows this is not always how the day turns out. Fast-approaching storms, powerful tides, mechanical breakdowns and – more often than not – human error can turn a tranquil day into an unexpected tragedy. Pushing a button on a device does not necessarily guarantee a timely rescue, but it is one more critical piece of safety equipment that highly enhances the chance of success if you do.

Of the recreational boating fatalities to date in Alaska, five of six followed a capsizing, swamping, ejection or fall overboard. Nine of 10 fatalities were adult male victims who were not wearing a life jacket or who were never found. Life-threatening situations arise in the blink of an eye, and regardless of swimming ability, boating experience, physical or mental strength, death can occur – and can occur quickly.

For this reason, it is imperative to have some way to call for help in the event of an emergency. Whether you are paddling a kayak, steering a skiff or standing on a paddleboard, having some sort of emergency communications device can quite literally save your life.

The challenge is choosing the right device for your activity and area. What might work for one person in one



Dashboard-mounted VHF radio

GET HELP WHEN YOU NEED IT

To stay as safe as possible on the water, consider carrying a combination of the following emergency communication and distress signaling devices. Some are required and others are recommended, but having several communications options as backup is just smart boating.

Emergency Locator Beacons

- EPIRB
- PLB
- Satellite Tracking Devices

Radios

- VHF Radios
- HF Radios

Phones

- Satellite phones
- Cellphones


Handheld VHF radio

Distress Signaling Devices

- Visual distress signals
- Sound signals

location may be ineffective for someone else in a different location or scenario. The size of your boat, your destination, your proximity to other people and especially the broadcast reach of the device all comes into play when choosing the right model. Research the options carefully, compare prices and resist the urge to make an uninformed purchase. Advice is helpful, but also consider the source. The tools your uncle needs while commercial fishing in the Bering Sea, such as a personal locator beacon, may be way more than you need for your weekend kayaking trip to Halibut Cove. Likewise, a cellphone you may carry when paddleboarding on Campbell Lake may not be helpful to a stranded boater in the middle of Prince William Sound.

The options below offer insights to familiarize you with what might work best for your particular needs. Above all, carry some sort of combination of the tools listed below. Having a tool to initiate a rescue, and a device to help pinpoint your location, is the ideal combination. In other words, have a backup to your backup, on your person.

Immediate Help: Distress Signaling Devices

If you fall overboard, experience boat trouble or have any other sort of emergency, it is critical to perform functions to attract attention and receive help within the first ten minutes — especially if you are in the water. Even the most prepared boaters can find themselves in this situation, so know what to do, just in case. Visual distress and sound signals are part of the required equipment to have onboard in Alaska (See pages 9-11). But they are reiterated here, because this equipment, combined with the following options for emergency communication, will ensure a better chance of rescue if calling for help.

Distress signaling devices include visual distress signals, such as flares or mirrors; and sound signaling devices, such as a whistle or horn.

Emergency Locator Beacons

There are different types of devices within the emergency locator beacon family. Some are larger and geared toward large commercial vessels and some are smaller and can be carried on one's person.



EPIRB

Emergency Position-Indicating Radio Beacons, or EPIRBs can activate automatically or manually, either while still

mounted or when submerged in water. EPIRBs are linked to what is called the COSPAS SARSAT, a collaborative satellite system among the United States, Canada, France, and the Soviet Union to detect and aid in rescue.

- GPS? They can come with and without Global Positioning Systems
- Registration required? Yes, to particular boat, not a person
- Two-way communication? No
- Homing signal? Yes
- Cost? Starting at about $500 without GPS; the higher-priced units include GPS and are more reliable during search-and-rescue attempts
- Range: Interface with COSPAS SARSAT; range is practically limitless for reporting, and narrowing, a search
- Power mode? Battery; requires maintenance about every five years
- Ideal for: Boats, as they are larger and must be registered to a single vessel
- Pro: Some units will activate automatically in the case of a catastrophic emergency
- Con: Expensive, limited to one boat per unit.

PLB



Personal Locator Beacons, or PLBs, are smaller and more affordable than their larger counterpart above. Like EPIRBs, they utilize the COSPAS SARSAT system.

- GPS? On some but not all
- Registration required? Yes, to the individual
- Two-way communication? No
- Homing signal? Yes, 121.0MHz
- Cost? Prices as low as $300
- Range: They interface with COSPAS SARSAT. Range is practically limitless for reporting, and narrowing, a search.
- Power mode? Battery operated; batteries last up to five years.

- Ideal for: All recreational activities, as they are smaller, and can be kept on one's person at all times.
- Pro: Affordable, easy to carry and emit a homing signal on 121.0MHz radio frequency.
- Con: Must be activated and operated manually, which is not always an option.

Satellite Tracking Devices

Satellite tracking devices are one of the most recent products on the market. Rather than communicate with the COSPAS SARSAT system used by EPIRBs and PLBs, satellite tracking devices, such as the Spot or inReach, relay your position to a privately controlled satellite network, which will then relay your information to search-and-rescue personnel. There are different manufacturers of satellite emergency notification devices, also called SEND for short.



Satellite Emergency Notification Devices (SEND)

- GPS? Yes
- Registration required? Yes
- Two-way communication? Yes
- Homing signal? No
- Cost? Prices as low as $250; however they require a monthly service plan with fees ranging from about $12 to $35 per month
- Range: They interface on private satellite systems and relay information to local search-and-rescue, primarily the Alaska State Troopers.
- Power mode? Battery operated, rechargeable
- Ideal for: Boaters or other recreational activity. They are versatile, and can be used on land as well as water, so are good for those with varying outdoor interests.
- Pro: Two-way text communication available; different brands, prices vary. The products' websites track location.
- Con: Limited range, depending on which unit you choose, and they must be activated manually, which is not always an option. Some satellite networks are equitorial in nature only, limited by the tilt of the earth in northern regions such as Alaska.

Radios



Buying a radio does not automatically mean you will get the help you need in the event of an emergency. First, you must ensure that your dashboard-mounted radio is hard-wired to the boat's GPS, unless the radio comes GPS-equipped. Second, the radio must be registered and you must receive your unique Marine Mobile Service Identity, or MMSI, number (go to www.boatus.com/mmsi or www.usps.org/php/mmsi_new/index.php). Third, the MMSI number must be manually entered into your radio, per manual instructions. Finally, test the radio's operation and MMSI number delivery by making a routine test call to another equally equipped radio. If your radio has the "test" mode feature, you can call the U.S. Coast Guard Recue 21 system using the 003669999 MMSI and get an automatic acknowledgment.

Dashboard Mount or VHF handheld radios



There are two types of very high frequnecy (VHF) radios that can be used – those equipped with digital selective calling (DSC) and those without. Those with DSC can transmit much further than those without.

- GPS? Most radios today have GPS built in, but if they don't, they should be hard-wired to the GPS system. Some handheld radio varieties also have GPS capabilities.
- Registration required? No, but recommended. You will get a Maritime Mobile Service Identity (MMSI), which will help identify your location in an emergency.
- Two-way communication? Yes, and there is a broad reach among other boaters in the vicinity who could offer assistance.
- Homing signal? Some, but not all
- Cost? Relatively affordable, from $75 on up
- Range: Limited due to the curvature of the earth, mountains

and weather. Larger antennae can help but also be impractical. Most have a range between a three- and 12-mile radius, line-of-sight.

- Power mode: Dashboard-mounted radios are connected to the boat's electrical system, so have backup communications onboard, or carry a handheld, in case of engine/power failure.
- Ideal for: Boaters in an area with other boat traffic, within line-of-sight and who will hear your radio.
- Pro: Affordable and easy to install and use, and carry on your person.
- Con: Limited range and if the boat's electrical system fails, so does the radio. Handheld radios are only helpful if charged, on your person and waterproof.

KEEP IT WITH YOU

Alaskan boaters should ALWAYS carry communication and signaling devices ON THEIR PERSON, such as:

Communication: handheld waterproof VHF radio, cellphone in waterproof case, waterproof satellite phone

Signaling: whistle, signal mirror, small aerial flares, white LED light glowstick on a string, emergency locator beacon

A combination of both alert and locate devices ensures that search-and-rescue personnel can home in on the "final mile."

HF RADIOS

There are two types of high-frequency (HF) radios – HAM radios and Marine Single Sideband (SSB) radios. Both can be equipped with Digital Selective Calling (DSC). Because of the nature of DSC (a microburst digital transmission and not a voice transmission), DSC transmissions tend to transmit farther than a voice transmission. DSC distress transmissions can be automatically relayed from ship station to ship station until acknowledged as a distress. HAM radios are a specialty radio option not applicable to most recreational boaters.

- GPS? Most radios today have GPS built in, but if they don't, they should be hard-wired into your vessel to supply it.
- Registration required? Yes, Marine SSB radio systems require two FCC licenses — a Ship Station License and a Commercial Operators License. With a Ship Station License you will receive a 9-digit Maritime Mobile Service Identity (MMSI), which will help in the event of an emergency.
- Two-way communication? Yes, and broadcast
- Cost? SSB radios run $1,000 and higher and should be

installed by an FCC-licensed electronics technician.

- Range: Range is farther than that of VHF radios – hundreds of miles and even across oceans;
- Power mode: These radios require extensive battery life so have backup in case the boat's battery dies.
- Ideal for: Boaters who will routinely be out of cellphone and VHF range.
- Pro: They have a broad range that goes farther than just about any product out there.
- Con: Expensive to install and susceptible to poor weather or atmospheric conditions.

Phones

Two types – Satellite (SAT) phones and cellphone. Unlike cellphones, SAT phones use orbiting satellites for connections.

SATELLITE



- GPS? Yes
- Registration required? No
- Two-way communication? Yes, one-on-one communication with search-and-rescue personnel is possible, as is direct communication with others, such as family, to alert them to the situation at hand.
- Cost? SAT phones are costly, starting at about $1,000 if not on sale. Monthly calling plans are required as well, starting at about $35 per month for minimum usage, and with a per-minute charge.
- Range: SAT phones communicate with the closest satellite and must have line of site to reach it. In deep canyons and dense tree growth with a thick canopy, this can be tricky. However, most SAT phones can find at least one signal.
- Power mode: SAT phones require batteries for usage and can last about 30 hours, but vary. See your owner's manual for details.
- Ideal for: Boaters who will routinely be out of cell phone and

DEVICE ADVICE: *Choose the right communications for your boating needs*

Consider real-life issues:

- How long does the battery last? Is it rechargeable?
- Does it fit in your pocket or on your life jacket and if so how likely are you to always have it on you?
- Is it waterproof? Does it need a case? Is it on a lanyard so it can be kept close?
- Does it float? Does it need to float to work properly?
- How much does it cost? Are there added monthly service plan costs?
- Is it manually or automatically activated?
- Does it offer broad reach for nearby Good Samaritans, or one-on-one communication?
- What is the coverage? Anywhere, or limited by distance or geography?

Understand how satellite communications work:

- Before buying any satellite communications device, make sure its satellite coverage area is dependable and includes your intended destinations.
- Understand how your device communicates with rescue personnel, and its limitations.
- How long will it transmit an emergency signal? In what temperatures?
- Familiarize yourself with the device and its features well before heading out.

Register your device:

- Register devices so your vessel information is always available. Many DSC VHF radios in use are not connected to GPS, do not have an MMSI number assigned and have not been properly registered. This greatly diminishes its reach and hinders SAR professionals' ability to find you quickly in an emergency.
- EPIRBs and PLBs are required to be registered at www.beaconregistration.noaa.gov. You will receive a 15-character Unique Identifying Number (UIN). When activated, your device transmits the UIN to COSPAS-SARSAT satellites.

Prepare for potential problems:

- Before leaving shore, make sure everyone knows how to operate the emergency communications and distress signaling devices.
- Always carry some sort of backup communications, just in case.
- Make sure all devices are operational, batteries charged and properly secured in watertight (if applicable) cases/housing, on your person.
- If using a cellphone or satellite phone, pre-program the numbers of local emergency services (such as the U.S. Coast Guard) beforehand, just in case.

VHF radio range.

- Pro: They are rugged, waterproof and easy to use
- Con: Battery usage can dwindle if in areas where a direct satellite connection cannot be made. Rollover minutes can be use-it, or lose-it.

CELL



- GPS? Yes
- Registration required? No
- Two-way communication? Yes, one-on-one communication with SAR personnel is possible, as is direct communication with others, such as family, to alert them to the situation at hand.
- Cost? Investment in the phone is initially as low as a few hundred dollars, but a monthly cell phone plan must be subscribed to, and those costs vary, depending upon the cellphone provider.
- Range: Cellphone range varies from location to location, and depending upon the provider's network. Therefore cellphones are considered more of a backup, or "bonus" backup, than something that can be depended upon in the event of a boating emergency. Service can be spotty and not dependable.
- Power mode: Cellphones are electrically charged to stay at full power, but the batteries do eventually wear out. Also cold weather and cold-water immersion quickly drains the battery life.
- Ideal for: Users who will be in cellular range, know their service provider's coverage area and are familiar with their surroundings, and who have alternate forms of backup.
- Pro: Everyone knows how to dial 911. As a backup, a simple cellphone can often save the day. Dial *CG (*24) on an Alaska provider phone (any number with the 907 area code) to reach the U.S. Coast Guard Command Center.
- Con: Cellphones are extremely vulnerable to water damage and cannot send out automatic calls for help. The operator must manually make a call, and that is not often possible in

emergencies. Cellphones also do not have the broadcast reach of a radio, and cold water and weather can drain batteries fast.

Specialty communications

AIS MOB Devices, or Automatic Identification System Man Overboard Devices, are best used in areas of commercial boating traffic. When a MOB device is deployed, the person is depicted as a man overboard on computer screens in the wheelhouses of commercial vessels. The AIS is a lot like a PLB, but it is more suited to boating when others are relatively close by. These devices should be worn on your person. Most deploy automatically; some are equipped with digital selective calling (DSC) for better coverage area. The prices range from $250 to $750, depending on the model.

AIS A and B transceivers are becoming more popular among recreational boaters as well as large vessel operators. Not only do these transceivers help a vessel's navigation, but they also let other vessels with AIS A or B transceivers know where they are — and, consequently the U.S. Coast Guard, which monitors AIS vessel traffic in Alaska. Prices range from $500 for the B transceivers, to $1,500-plus for the A transceivers. For more information on A and B transceivers, please visit www.navcen.uscg.gov/?pageName=aismain.

OTHER BOATING LAWS

Prohibited Operation

A person may not operate a boat on state waters for a recreational purpose or another purpose, or tow water skis, a surfboard, or a similar device, in a reckless or negligent manner so as to endanger the life or property of another person; or that is not equipped as required under state law. (Alaska Statute 05.25.060)

Owner's Civil Liability

Except as provided under AS 09.65.112 and AS 09.65.290, the owner of a boat is liable for injury or damage caused by the negligent operation of the owner's boat, whether the negligence consists of a violation of a state statute or the failure to exercise ordinary care in the operation of the boat as the rules of the common law require. The owner is not liable, however, unless the boat is used with the owner's express or implied consent. It is presumed that the boat is being operated with the knowledge and consent of the owner if, at the time of the injury or damage, it is under

BE RESCUE READY: *A checklist for success*

Besides having the proper emergency communications devices on hand, here are some other ways to become "Rescue Ready," either through self rescue or by seeking help from a nearby Good Samaritan or search-and-rescue crew.



- Wear a life jacket when on an open boat or on deck.
- Carry emergency communication and distress signaling devices on your person.
- Operators attach the engine cut-off device when underway.
- Equip the boat with at least one means of reboarding.
- Complete a pre-departure checklist.
- File a float plan.
- Brief all passengers on the location and operation of emergency communication devices, and how to stop, start and steer the boat.
- Check and monitor the weather often.
- Never boat under the influence of alcohol or drugs. Thirty percent of fatalities involve boating under the influence — leave it at the beach.

the control of the owner's spouse, father, mother, brother, sister, son, daughter or other member of the owner's immediate family. This statute does not relieve any other person from a liability the person would otherwise incur and does not authorize or permit recovery in excess of injury or damage actually incurred. (AS 05.25.040)

Impaired Boating

Boating under the influence includes consuming alcohol, illicit or prescription drugs. Alcohol use is involved, on average, in at least 28 percent of Alaska's boating fatalities. Alaska's laws that define driving under the influence and the penalties for conviction, also apply to boat operators. The Alaska Office of Boating Safety strongly encourages boaters and passengers to refrain from consuming alcohol or drugs when boating. Alcohol use:

- **Decreases balance**. Most alcohol-related boating deaths involve a fall overboard.

- **Affects vision**. Alcohol can seriously affect peripheral vision, night vision, and ability to focus.
- **Affects judgment**. Operators under the influence are more likely to take risks they normally wouldn't take, and are more likely to make the wrong decisions in a life-threatening situation.
- **Impairs reaction time**. In an emergency, sharp reflexes and quick, appropriate action can save the day. Even without alcohol, a boater's reaction time is affected by exposure to constant motion, sun, wind, and noise. Add alcohol and/or drugs, and the effects are multiplied.

Littering and Pollution Laws

It is unlawful to litter in either state or federal waters.



It is unlawful to litter in state or federal waters.

It is a violation of federal law to discharge raw sewage within three miles of the shoreline. Federal law requires an operable U.S. Coast Guard certified Marine Sanitation Device (MSD) be installed on boats with toilets when on U.S. navigable waters. MSDs must be locked when boating within the three mile proximity to the coastline.

The Federal Water Pollution Control Act prohibits the discharge of oil or hazardous or toxic substances in U.S. navigable waters. Under both Alaska and federal law, any release of oil into the water must be reported as soon as the person has knowledge of the discharge. Spills may be reported by contacting the nearest Department of Environmental Conservation Area Response Team and the U.S. Coast Guard.

Federal law also requires that boats 26 feet and longer on U.S. navigable waters post an oil pollution placard in the machinery space or bilge area, and a garbage placard be posted in a visible location.

Boating Accidents

The operator of a boat involved in a collision, accident, or casualty shall render assistance as is practicable and necessary to save other persons from danger or to minimize the danger to other persons to the extent that the operator can do so without serious danger to the operator's boat, crew, and passengers.(AS 05.25.030)

The operator must also give his or her name, address, and identification number of the boat in writing to each person injured in the collision, accident, or casualty and to the owner of property damaged in the collision, accident, or casualty.

Accident Reporting

For the purpose of gathering boating accident statistics, the boat operator or owner is required by law (AS 05.25.030) to file a written report if a boating accident occurs and results in:

- Loss of life.
- Disappearance.
- Injury requiring medical treatment beyond first aid.
- Property damage over $500.

Please submit the accident report to the Alaska Office of Boating Safety by mail, fax, or email.

Alaska Office of Boating Safety: 550 W. Seventh Ave., Suite 1380, Anchorage, AK 99501

FAX: (907) 269-8907

Email: officeofboatingsafety@alaska.gov

Accident report forms can be obtained from the back of this book, the Alaska Department of Public Safety and the U.S. Coast Guard, or may be downloaded online at www.alaskaboatingsafety.org.

MARINE LAW ENFORCEMENT

Boating regulations can be local, state, or federal and boaters are encouraged to check with area managers for the rules that apply. Jurisdictions can often overlap. State peace officers, including Alaska State Troopers and State Park Rangers, enforce state boating laws. U.S. Coast Guard boarding officers enforce federal boating laws.

Whenever approached by an officer, boaters must stop, or slow to a speed sufficient for safe steerage only, and permit the officer to come alongside to check for registration and safety equipment.

PRE-DEPARTURE CHECK

Along with skillful boat handling, thorough preparation is what distinguishes the better skippers from other boaters. This is especially true in Alaska. Boaters are often a long way from help and must be as self-sufficient as possible. Develop a pre-departure checklist that is specific to the boat and the way it is used.

The following is an example of a pre-departure checklist for a powerboat that incorporates both federal and Alaska requirements and some additional equipment and procedures. Keep in mind that while some of these items might only need to be checked periodically or before each season, others should be checked before each trip. An abbreviated, one-page example of this checklist can be found on page 16. Take a photo of it and keep it with you at all times for your pre-departure preparation. Other pre-departure checklists can be found at www.pledgetolive.org.

GETTING READY:

Prepare your own personal survival kit

- ❑ Communication and signaling devices (see box on Page 30)
- ❑ Shelter aids (such as an emergency blanket or large garbage bag)
- ❑ Personal health needs
- ❑ Fire starter (waterproof matches, lighter, starter material)

Contents will depend on each individual. Items should be multipurpose and regularly inspected.

Personal Flotation Devices (PFDs)

- U.S. Coast Guard-approved wearable life jacket for each person: properly sized, in serviceable condition, and worn and properly fastened when in an open boat or on an open deck.
- U.S. Coast Guard approved Type IV throwable PFD (seat cushion or throw ring): readily accessible, equipped with 1/4” (minimum) diameter floating line, and marked with boat registration number or vessel name.
- Survival (immersion) suits: carefully inspected, zippers waxed, and suits unzipped for putting on quickly.

Signals/Communication

- Sound signals: operational, capable of a four second blast, and audible for a ½ mile. If using a hand-held air horn, bring a spare can of air.
- Visual distress signals easily accessible and clearly marked. Pyrotechnic devices, such as flares, should be current.
- Emergency locator beacon: working, battery charged, and readily accessible (a must-have for off-shore and remote areas).
- VHF marine radio(s): working properly, spare batteries for hand-helds.
- Cellular phone: fully charged and in a waterproof bag or case.



Mirror

Whistle



Pyrotechnic flares

Fire Extinguishers

Make sure all fire extinguishers onboard are:

- Fully charged, with gauge, corrosion free, and clear nozzles.
- Securely mounted in a readily accessible location, but not where fire is likely to occur.
- Updated with current inspection tags (if required).

Fuel and Oil

- Calculate fuel needs based on the boat's fuel consumption and the trip plan. Follow the rule of thirds: 1/3 tank for the trip out, 1/3 for the trip back, and 1/3 to spare.
- Tank valves are in proper position.
- Portable fuel tanks are placed in open, well-ventilated areas.
- Vents are closed for storage and transport, opened for use, and caps are vapor tight and leak proof.
- Fuel lines and all fuel fittings are carefully inspected for leaks, kinks, cracks, or clogs.
- Fuel filters are checked for water/dirt contamination.
- Engine oil is checked and/or proper fuel/oil mixture is checked.
- Tanks larger than seven gallons are properly grounded and vented.

Hull

- Drain plug(s) are installed.
- Hull bottom and drive train are inspected for damage before launch. Ensure the hull bottom is clean.
- Registration numbers/validation decals or documented vessel name/port is properly displayed and legible.
- General inspection/walk around is complete.
- Galley and heating systems are secure, tanks properly installed, fuel lines secure, and connectors secure. No flammable material is stored near stoves and heaters.
- Marine sanitation devices are checked and working properly.
- Generator, stove, and engine exhaust ports are clear and unobstructed.
- Capacity plate and hull identification number (HIN) are visible and legible.
- A small rope ladder, step, or other reboarding device is attached to the boat and deployable in the event of capsizing or a fall overboard.

Bilge/Engine Compartments

- Ventilation ducts are clear and functional. Connections are secure for all closed compartments with potential for explosive vapors and potential ignition sources.
- Bilge area is clean and reasonably dry; this helps reduce the risk of a fire.
- Oil or waste is cleaned up to prevent an illegal discharge. Dispose of waste properly.
- Bilge pumps start, run, and shut off properly.
- “Sniff test” completed around the engine and bilge areas for fuel leaks or vapors before ventilating. If a fuel scent is detected, stop and search for the source.
- Engine compartment is ventilated for four minutes. Before starting engines, do the sniff test again. If an odor is



Wrangell, Alaska

detected after ventilating, stop and search for source before starting engine.

Main and Auxiliary Engines

- Propellers and drive units are inspected.
- Belts, hoses, and fittings are checked.
- Backfire flame arrestor is tight, clean, and in good condition (inboard gas engines).
- Seawater strainers are clean and in good condition.
- All fluid levels are checked.
- Water pump is operational when engine is running and the tell-tale water stream is observed (outboard).
- Engine(s) are secured on transom and clamps and/or bolts are tightened and secure (outboard).
- Exhaust hoses are inspected and each of the metallic exhaust components checked for cracks, leaking, rusting, or other deterioration. Replace if necessary.
- Test run all engines. Monitor gauges, test forward and reverse gears, steering, and emergency cut-off switches. Check fuel and cooling systems for leaks.

Electrical/Electronics

- Spark plugs have a bright and visible spark and show no fouling or corrosion. Wires and plugs are in good condition and firmly seated.
- Battery switches are operational.
- Volt meters are working. Confirm proper charging voltage.
- Batteries are fully charged with proper electrolyte level.
- Battery terminal connections are secure and corrosion free. Batteries encased in plastic boxes with terminals are covered and secured with a strap.
- Jumper cables are in good condition.
- Hand-held electronic devices (cellphone, marine radio, flashlight, emergency locator beacon, etc.) are tested and have spare batteries.
- Installed devices (depth finder, radio, GPS, bilge pump, horn, navigation lights, radar, gauges) are tested.

Ground Tackle and Dock Lines

- Main and lightweight “lunch hook” anchors are present, each with shackles, chain, and line. At least one anchor system is attached to the boat and at the ready.
- Anchors are selected for the size of the boat, bottom type, depth, and weather/water conditions.
- Sea anchor with 200 feet of line is onboard.
- Dock lines and spares are inspected for chafing and wear, stowed, and secured.
- Two or more docking fenders are readily accessible with line attached.

Other Items

- Manual bailing device (even if the boat has an electric bilge pump)
- Knife
- Sunglasses or goggles
- Hearing protection
- Foot pump and fabric repair materials (inflatables)
- First aid kit
- Watch or small clock
- Binoculars
- Means of manual propulsion (oars, paddles)
- Compass with headings list
- Radar reflector
- Depth soundings marked on oar, sounding pole or a line
- Plenty of water and food, tarp or tent, fire-making materials, and spare clothing in a waterproof bag (AKA: abandon boat bag).
- Survival raft, small inflatable, boat or dinghy
- Brimmed hat and sunscreen
- Warm hat and gloves
- Portable AM/FM radio
- Fuel additive for water contamination

- Push pole (river boats)
- Tools—anchor shackle key or rigging knife, fuel cap key, fuel and oil filter wrenches, assorted adjustable wrenches, screw drivers, open-end wrench set, pliers (slip joint, needle nose, locking), wire cutters, spark plug wrench, electrical repair kit, socket set and prop nut wrench.
- Spare parts—right size propeller, prop nut and thrust washer, propeller shear pin and/or cotter pin, spark plugs, various sized hose clamps, starter rope, fuses, fuel filter cartridge, belts, drain plugs, light bulbs, ignition and lock keys, water pump kit, starter solenoid, duct tape, bailing wire, hull repair materials. Consult a marine dealer or mechanic to determine what other spare parts are recommended for your specific boat.

Documents and Placards

- Boat registration/Certificate of Number or current certificate of documentation; proof of title on qualifying vessels
- Federally required certificate of compliance label (boats under 20 feet with inboard engines, manufactured after October 31, 1972) and pollution and garbage placards (boats over 26 feet)
- Other licenses and permits (moorage, fishing licenses, etc.)

Reference Materials

- Navigation Rules
- Owner's manuals
- Charts
- Maps
- Tide book
- Waterway guides
- Vessel log book
- Equipment repair manuals
- Alaska Boater's Handbook or supplement

PREVENTIVE MAINTENANCE

Mechanical breakdown is the most common powerboating problem. Insufficient or contaminated fuel, a poorly maintained electrical/ignition

system, fouled spark plugs, a damaged propeller, or a bad water pump are just a few of the culprits. To help prevent these problems, keep the boat clean, organized, and well maintained. Follow the maintenance recommendations in the owner's manual. Keep the boat, engine, and trailer maintenance records up to date and organized.

Fuel contamination due to condensation is an ever-present problem in Alaska, especially in coastal areas. Installing a water separator/fuel filter between the fuel tank and engine will go a long way in preventing fuel contamination and engine damage.

The leading causes of fires aboard vessels include wiring problems, engine and transmission overheating, and fuel leaks. Consider these potential problem areas when inspecting and maintaining a boat.

WEATHER AND TIDES



Alaska's weather can be harsh and turn an enjoyable boating experience into a life-threatening situation very quickly. Always check the local weather forecast and current weather and water conditions before leaving the house and before getting on the water. NEVER try to outrun a bad weather forecast. It is always better, however inconvenient and disappointing, to wait until conditions improve. Be alert to weather changes, especially the build up of dark, heavy clouds, which indicates wet weather ahead.

For detailed weather information, try the following sources:

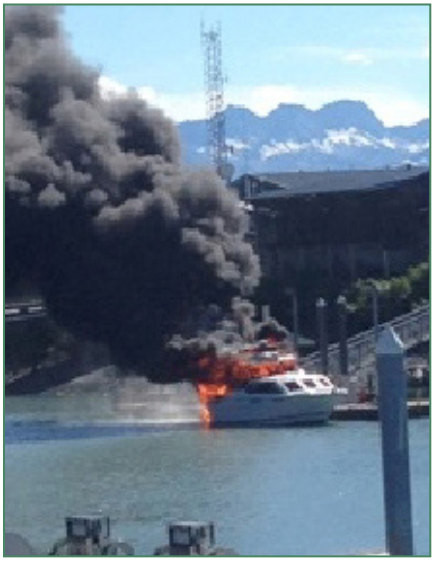
- National Weather Service VHF/FM frequencies of 162.400, 162.425, 162.475 and 162.550 MHz in areas where available
- National Weather Service's website: www.arh.noaa.gov
- Alaska Weather Information Hotline
  - In Anchorage, call: 266-5145
  - In Fairbanks, call: 458-3745
  - In Juneau, call: 790-6850
  - Anywhere else in Alaska: 1-800-472-0391
  - Outside of Alaska: 1-907-266-5145

If boating on saltwater, always carry and use a tide book. Tidal currents can be very strong in some areas of Alaska and can cause dangerous rip currents (also known as an undertow) or standing waves, especially when the current is in opposition to the wind. In those areas, it is usually better to wait for the "slack," which occurs when the tide is changing directions. Remember that current and wind can greatly affect fuel consumption.

FUELING

Most boat fires, explosions, and fuel spills happen during or just after fueling. To help prevent this:

- Fuel before dark.
- Secure and cover batteries to prevent terminals from shorting and sparking fuel vapors.
- Do not smoke or strike matches.
- Shut off motors.
- Turn off all battery switches and electrical equipment.
- Close all cabin windows and doors.
- Make sure all tank vents are unobstructed.
- Ensure the boat's stability. Ask passengers to step on shore when fueling.
- Take portable tanks out of the boat to fill them.
- Know how much the fuel tanks can hold and don't overfill them. Avoid "topping off" tanks.



- Keep the fuel nozzle in contact with the tank while filling, to prevent static discharge.
- Fuel slowly.
- Don't rely on automatic nozzle shutoffs.
- Catch drips and wipe up any spilled gasoline with

oil absorbent pads. Discard on shore in a safe and environmentally responsible manner.

- Before starting the engine, ventilate engine compartment for at least four minutes, and sniff around to make sure there is no odor of gasoline anywhere in the boat.
- Keep bilges clean to avoid the risk of a fire.

FLOAT PLAN

Like the flight plans filed by pilots, boaters use float plans to provide critical information to those who will try to assist them in case of trouble. A sample plan is provided on the facing page. Some factors to consider when filing a plan:

1. **Assess the risk BEFORE you go.** Consider the condition of the boat and equipment and gather information about local boating hazards and the weather. Consult charts, local boaters, and tide tables and check both the weather forecast and existing conditions one last time. The operator's skill and ability should always be considered in relation to the prevailing conditions.
2. **Based on your risk assessment, make a GO/NO GO decision.** It is always better to be on shore wishing you were on the water than to be on the water wishing you were on shore. Consider the passengers' comfort levels as well as your own.
3. **Prepare the float plan.** If it's a "go," provide trip information to someone who can be relied upon. The plan should include a description of the boat and equipment, boat registration, the names of everyone on the boat, the planned destination and route, expected return time, and when and who to call for help. If the float plan can't be left with someone, place it in a window of your vehicle so others can read it. Notify the same person(s) if plans change and immediately upon return.

BOAT CAPACITY, LOADING AND STABILITY

Attention to capacity and proper loading is critical to safe boat operation. Overloading or imbalanced and shifting loads can seriously affect boat stability, which is dangerous even on calm water.

To help prevent overloading, a U.S. Coast Guard boat capacity plate is required to be installed by the manufacturer. The plate lists the maximum number of persons, total weight of passengers, and the maximum total weight of the passengers, gear, and motor. If the boat is designed to

ALASKA FLOAT PLAN

I. If Overdue, Contact: _____
Phone: _____
On (date)**:** _____

II. Vessel Information: **Vessel Name:** _____
Boat Registration (or USCG documentation) Number: _____

Vessel type:
- ☐ Kayak
- ☐ Canoe
- ☐ River raft
- ☐ Row boat
- ☐ Personal Water Craft
- ☐ Center console / skiff
- ☐ Runabout / bow rider
- ☐ Cabin Cruiser / overnighter
- ☐ Sailboat

Hull type:
- ☐ Canvas / skin
- ☐ Plastic
- ☐ Fiberglass
- ☐ Wood
- ☐ Aluminum
- ☐ Inflatable
- ☐ Rigid hull inflatable
- ☐ Other_____

Communication/Signals:
- ☐ Installed Marine VHF
- ☐ Handheld Marine VHF
- ☐ Single Side Band
- ☐ EPIRB
- ☐ Flares
- ☐ Mirror
- ☐ Cell # _____
- ☐ Other Signals _____

Survival Equipment:
- ☐ Personal survival kits
- ☐ Tender/Raft/Dinghy
- ☐ Water
- ☐ Spare Food
- ☐ Spare clothing
- ☐ Shelter (tent, tarp)
- ☐ Matches/Lighter
- ☐ Other_____

Length:_____ Engine(s) make _____ hp _____ Hull color: _____ Cabin/top color: _____

III. Vehicle Information:
License #: _____Make: _____Model: _____Year: _____Color: _____

Location vehicle is parked: _____

IV. Boat Trailer Information:
License #: _____Make: _____Model: _____Year: _____Color: _____

Location trailer is parked: _____

V. All Persons Onboard (POB):

Names / ages:	Phone:	Can Operate Boat? (Y/N)
- Skipper		yes

VI. Trip Plan:

Depart From:	Departure Date/Time:	To:	Arrive Date/Time:

Revised 01/2010

be equipped with an outboard engine, the plate will also display the maximum horsepower. Never exceed a boat's recommended capacity. If a capacity plate is not installed, use the formula below to estimate the number of persons the boat will safely carry in calm conditions. This formula only applies to powerboats less than 20 feet. The result gives the number of persons (150 lb/person average) that can be put aboard in calm weather conditions.

$$\frac{\text{Boat Length (ft) x Boat Width (ft)}}{15} = \text{Number of People}$$

Also consider the following:

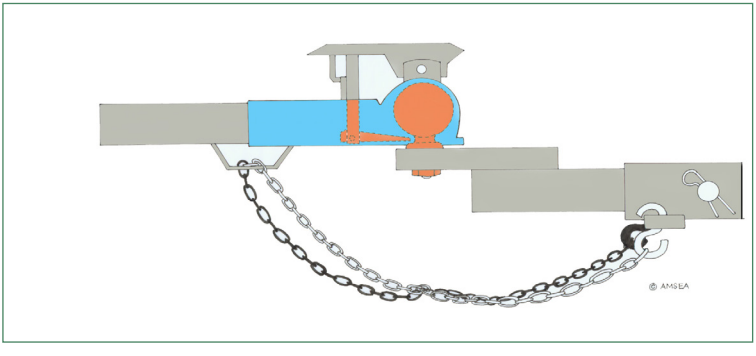
- Always use great care when loading and handing gear to a person already in the boat.
- Carefully secure heavy items from shifting.
- Properly position items and passengers evenly, and then adjust as necessary for safety and optimal boat performance.
- Proper trim (lateral, fore and aft) aids in boat handling, especially in smaller boats or when approaching the capacity limits.
- Instruct passengers in small boats to remain seated unless otherwise instructed.
- Don't stand while operating unless the boat is rigged for it and equipped with an emergency cut off cable.
- Keep shoulders inside gunwales.
- When retrieving an object outside the boat, either pull it toward the boat with a paddle or maneuver the boat alongside the object, then reach straight down for it without shifting weight or leaning over the side.

BOAT TRAILERING

Trailers are not often on the minds of boaters when preparing for a trip, except when something goes wrong. With a little planning and attention, trailer problems can be prevented. According to BoatUS, the top five reasons for trailer breakdowns are flat tires, bearing problems, axle problems, suspension problems, and tongue problems.

- Alaska law requires boat trailers to be registered.

- Boat trailers are subject to the lighting requirements of Title 13 of the Alaska Administrative Code.
- The driver of the towing vehicle must be able to safely stop in a reasonable distance. Check the function of the brakes on flat ground. Allow more time and distance for braking while towing. Booster brakes are best with heavy boats.
- Carefully follow the trailer manufacturer's recommendations for maintenance. Inspect and lubricate all moving parts frequently, especially wheel bearings.
- Does the tow vehicle have adequate power? Is the transmission capable of towing? Are adequate cooling systems installed?



Ball and coupler proper fit, chains crossed in X pattern

- Make sure the trailer isn't overloaded. Check these capacities before hauling:
  - Gross vehicle weight rating
  - Gross vehicle axle weight rating
  - Trailer tongue weight
  - Trailer capacity
- Adequate tie-downs are necessary at both bow and stern. The bow should be secured with the winch cable, winch post safety chain, and the boat's bow line. The stern should be secured with transom tie-downs.
- Hitches should be welded or bolted to the frame of the towing vehicle. Bumper hitches are not recommended.
- The tow ball and ball coupler must be the same size. Secure the ball coupler with a pin or lock after it has been placed onto the ball and closed.



- Two safety chains, crossed under the coupler, help prevent the trailer tongue from dropping to the ground in the event the coupling device fails. The chains must have a tensile strength at least equal to the weight of the trailer and be long enough to permit the turning of the vehicle. To prevent the chain hooks from bouncing out, it's usually best to face the open end of the hooks toward the boat, rather than toward the vehicle.
- Before departure, check overhead, side and engine drive unit clearances.
- Place all overhead antennas in the down position.
- Check and tighten all adjustable trailer components and bolt-on parts.
- Secure all loose items in the boat and tie boat covers down securely.
- Check wheel bolts for proper torque, test brakes, tighten winch cable and transom straps, check that ball and hitch are tight and locked, test lights, and check electrical connections.

Tire failures top the list of boat trailer breakdowns.

- Check all tires and spares (trailer and tow vehicle) for wear and proper inflation while cold.
- Carry a wheel jack, some flares and reflectors, a spare tire and wheel (with proper inflation), proper size jack and lug nut wrench, a set of wheel bearings, a seal and cup set, and some wheel bearing grease when on the road.
- Stop periodically during each trip to check wheel hubs/ bearings for overheating.

Launching

Be courteous. Avoid blocking ramps and docks when others are waiting to use the facility. Practice backing a trailer until proficient - the less time spent on the ramp, the better.

At ramp staging area:

1) Check for any engine or hull damage sustained during the drive.
2) Remove any covers, raise antennas.
3) Load and secure any gear going into the boat.
4) Check that drain plug(s) are in place and secure.
5) Check blower, lights, bilge pump, and electronics.
6) Remove any transom and side tie-down straps that are securing



the boat to the trailer.

7) Tilt engines/outdrives up, disengage travel bracket or transom saver(s).
8) Check that the ball hitch and safety chains are secure.
9) Unplug trailer lights.
10) Check that winch line and bow safety chain are secure and the winch ratchet stop engaged.
11) Keep wheel chocks easily accessible.

At the ramp:

1) All passengers should exit the vehicle.
2) Unlock vehicle doors and roll down driver's window.
3) Unfasten seat belt.
4) Scan the ramp for hazards or obstructions before backing.
5) While backing down the ramp, one person acts as lookout and is ready with wheel chocks.
6) Back down ramp until the boat floats or can be pushed off trailer. Don't immerse rear wheels of vehicle unless absolutely necessary.
7) Put vehicle in first gear (or park), shut off vehicle, put on parking brake and place chocks behind tires.
8) Hand the bow line to an assistant, and remove the bow safety chain and winch line hook.
9) Use the bow line to guide boat off trailer and secure it to the dock or shore, away from the launch area.
10) Promptly move vehicle and trailer away from the ramp area.

Retrieving

1) Raise outdrive/outboard motor.
2) Be cautious while winching the boat onto the trailer. Make sure the winch ratchet click-stop is properly engaged to prevent the handle from spinning in reverse. Watch for signs of a worn or damaged winch cable.
3) Once the boat is on the trailer, move the boat and trailer well away from the launch ramp.
4) Rinse trailer with fresh water following saltwater immersion.
5) Remove drain plugs and make sure the boat is de-watered before getting on the road.
6) Secure all tie-downs and straps.

Passenger Briefing

All passengers should know the rules while onboard and the basic functions of the boat in case something were to happen to the operator. Passengers should be aware of:



- The float plan and the alternate plan in case of problems or delays.
- How to start, shift gears, steer, and stop the boat.
- Stability rules - remain seated and refrain from sudden movement or reaching overboard for objects.
- The location of life jackets, rescue communication and signaling devices, survival kits, first aid kits, survival suits, and life rafts.
- How to use distress signals,such as waving arms, using whistles, mirrors, flares and white lights, and what each signal is for.
- How to use radios, battery switches, fuel valves, fire extinguishers, and emergency locator beacon(s).

THEFT PREVENTION

Nationwide, boat theft has become big business. To help prevent theft, consider the following:

- Take keys and valuables out and lock the boat and all hatches and storage compartments.
- Lock portable outboard motors to the boat.
- Engrave or permanently mark property with a driver's license number (include "AK" before the number and "DL" after the number) or boat registration number.
- Record property on an inventory list (include brand names and model numbers) and store in a safe place.
- Photograph or videotape the boat's exterior, interior, and property. Prepare notes to accompany photos.
- Install an audible alarm.
- Make sure the registration certificate and title is current and on the boat and keep a copy in a safe place at home.
- Secure small boats by chaining and locking them to a secure object or storing them in a locked garage, shed, or a location where others cannot easily see them. Make sure powerboat engines are disabled.
- Secure trailers by using a hitch lock (even when on the tow vehicle), immobilizing the trailer with a wheel lock, removing a trailer wheel and/or blocking up the frame, or placing a vehicle or other large object in front of it.



UNDERWAY

ENVIRONMENTAL ETHICS



- Federal law prohibits the discharge of plastic trash into U.S. navigable waters. Polystyrene cups, plastic bags, bait packages and monofilament line can kill or injure birds, fish and marine mammals. Reduce the amount of packaging and plastic taken aboard. Keep a sturdy garbage container on board and use it. Retrieve any trash that falls overboard.
- No human-generated waste, no matter how small, should be thrown overboard. Use restrooms on shore before departure and carry a portable toilet. Federal law requires that all boats with installed toilets also have a U.S. Coast Guard-approved Marine Sanitation Device (MSD).
- The Federal Water Pollution Act prohibits the discharge of oil or oily waste into U.S. waters. Never discharge fuel, oil, chemicals or contaminated bilge water into the water. Don't use soap or detergent to get rid of spilled oil. This practice doesn't dissolve the oil; it just breaks it down into smaller particles and forces it deeper into the water column where it can kill zooplankton and larval forms of fish, crab and shellfish.
- Encounters with marine mammals are always an exciting experience. However, federal law protects many marine mammal species. Boaters should stay at least 300 feet away from marine mammals, or more if animals appear to change their behavior. Time spent viewing particular animals should be kept to less than 30 minutes. Never try to pursue animals, restrict their path, or encircle them. Always leave them a clear escape route. If a marine mammal approaches, put the engine in neutral and let the animal pass. If an animal displays erratic behavior or appears disturbed, cautiously leave the area. Never handle young animals or feed animals.
- Many of our shoreline areas are very sensitive habitats. Please practice "leave no trace" techniques when on land.
- Avoid getting too close to bird rookeries. If you are too close, birds' behavior will be disrupted, causing unnecessary stress.

- Alaska has many special protected areas. Whenever boating in a new area, first contact local resource management agencies or landowners to obtain guidelines.
- Keep your boat bottom clean and the engine tuned for optimal performance and reduced emissions.
- Do heavy boat cleaning and maintenance away from the water. Routinely scrub decks with fresh water and a brush to reduce the need for heavy cleaners.
- Recycle used zincs.
- Don't idle engine(s) unnecessarily.

Aquatic Invasive Species

To report an invasive species, please call 1-877-INVASIV.

Aquatic invasive species (AIS) are nonindigenous species that invade local water bodies and can threaten native species, ecological stability, traditional human activities, our economy, and even human health. According to the Alaska Department of Fish and Game, Alaska is vulnerable to invasive species introduction through many pathways, including contaminated boats and fishing gear brought to our waterways. We can help prevent the spread of AIS by following these simple steps:

- Thoroughly clean and dry boats and equipment before transporting to other water bodies. Remove any visible mud, plants, fish or animals from the hull, trailer or other parts of your gear.
- Completely de-water boats and equipment, including any areas where water can be held, before transporting. Dump bait buckets, coolers, etc. on land.
- State regulations prohibit releasing plants, fish, or animals into a body of water unless they came out of that body of water.



Didemnum Vexillum is a saltwater sea squirt that can destroy native vegetation and even shellfish populations.



Elodea is the first invasive aquatic plant known in Alaska. It can impact freshwater resources and fish habitat.

U.S. AIDS TO NAVIGATION SYSTEM

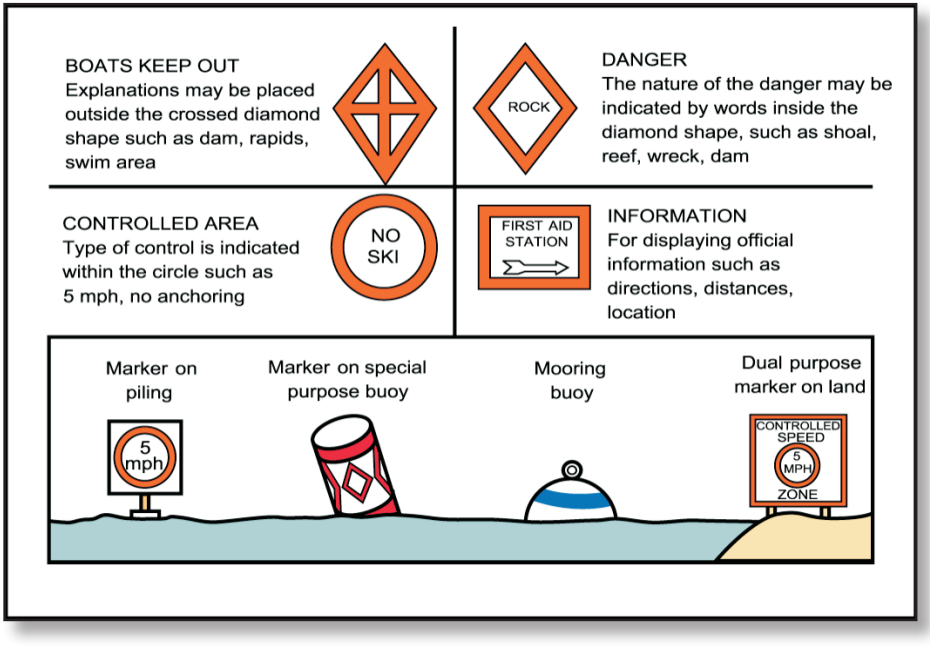
The U.S. Aids to Navigation System (ATONS) is a system of signs, buoys, day beacons, and other structures that incorporate specific shapes, colors, numbers, and lights to assist mariners with safe navigation.

Some types mark areas with restrictions, such as speed limits or no-wake zones; waters closed to boats, such as swim beaches; or waters with obstructions or other dangers. Others are placed to help boaters locate their position or safely navigate channels.

Although technically not an aid to navigation, mooring buoys are assigned a distinctive marking scheme under the aids to navigation system in order to promote easy identification and to avoid confusing them with other aids to navigation.

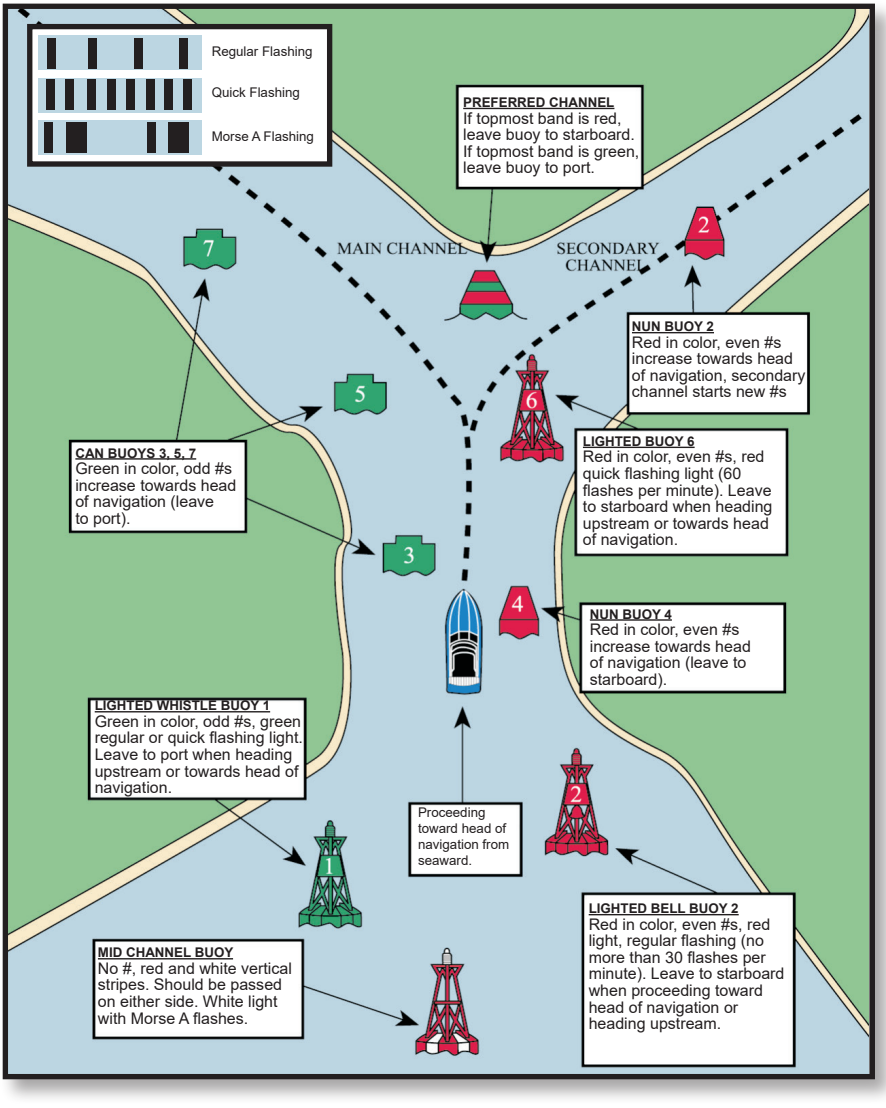
Other than a mooring buoy, it is a criminal offense to moor to, damage or interfere with aids to navigation. If you collide with or damage an aid to navigation, report it immediately to the U.S. Coast Guard or a local law enforcement officer.

Information and Regulatory Markers and Mooring Buoys



Lateral Aids (Channel Markers)

Channel markers assist vessels in navigating safe courses. Because they are numbered and depicted on nautical charts, they can also help boaters determine position. An easy way to remember how to steer the proper course, relative to channel markers, is the phrase “red, right returning.” Red channel markers should be on the boat’s right (starboard) side and green markers on the left (port) when proceeding north, upstream, or returning from open water to a harbor.

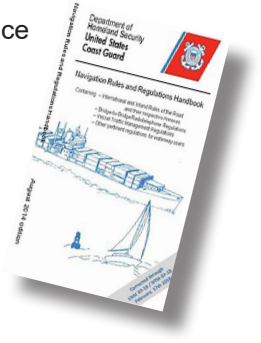


NAVIGATION RULES—STEERING AND SAILING

The International Regulations for Avoiding Collisions at Sea 1972 (72 COLREGS) are also known as the International Navigation Rules or simply "the Rules." Adopted under federal law, the Rules address navigation light requirements, sound signals, day shapes and emergency signals and contain the International Navigation Rules on Steering and Sailing (Rules 1-19, Part A) to help vessels stay clear of each other. In Alaska, the International Rules apply to all boats on all U.S. navigable waters where the U.S. Coast Guard has jurisdiction.

Please keep in mind that the Rules assign tasks but never confer entitlements. For example, although vessels in certain situations should "keep out of the way" of other vessels, the Rules never grant any vessel the "right of way." Also keep in mind that the ordinary practice of seamanship requires precaution and prudent action by all boaters, at all times, under all circumstances. Knowing the Rules is important, but boaters must also be constantly vigilant of the circumstances and be prepared to depart from the Rules, if necessary, to avoid a collision.

Boaters should obtain and become familiar with the complete Rules, available from a link on the Alaska Office of Boating Safety website www.alaskaboatingsafety.org or downloadable from the U.S. Coast Guard's site: www.navcen.uscg.gov/?pageName=navRuleChanges.



Following is a summary of some of the International Navigation Rules:

Responsibility (Rule 2)

- None of the Rules shall excuse anyone from the consequences of any neglect to comply with these Rules or of the neglect of any precaution required by the ordinary practice of seamen or by the special circumstances of the case.
- In using these Rules, be aware of all dangers of navigation and collision and any special circumstances, including the limits of the boats involved, which may require a departure from these Rules necessary to avoid immediate danger.

General Definitions [Selected] (Rule 3)

- **Vessel** — every description of watercraft, including non-displacement craft and seaplanes, used or capable of being used as a means of transportation on the water.

- **Power-driven vessel** — any vessel propelled by machinery.
- **Sailing vessel** — any vessel under sail except if under mechanical power.
- **Vessel engaged in fishing** — any vessel fishing with nets, lines, trawls or other fishing apparatus which restricts maneuverability, but does NOT include a vessel fishing with trolling lines or other fishing apparatus that does not restrict maneuverability.
- **Vessel not under command**—a vessel, which through some exceptional circumstance, is unable to maneuver as required by the Rules and is therefore unable to keep out of the way of another vessel.
- **Vessel restricted in ability to maneuver** — a vessel, which from the nature of its work is restricted in the ability to maneuver as required by the Rules and is therefore unable to keep out of the way of another vessel.
- **Vessel constrained by draft** — means a power-driven vessel that, because of its draft in relation to the available depth of the water, is severely restricted in the ability to deviate from its course.
- **Underway** — means a vessel is not at anchor, made fast to the shore or aground.
- **Length and breadth** — means a vessel's length overall and her greatest breadth (width).
- **Restricted visibility** — means any condition in which visibility is restricted by fog, mist, falling snow, heavy rain, sand or other similar causes.

Look-out (Rule 5)

Every vessel shall at all times maintain a proper look-out by sight and hearing as well as by all available means appropriate in the prevailing circumstances and conditions so as to make a full appraisal of the situation and the risk of collision.

Safe Speed (Rule 6)

Every vessel shall at all times proceed at a safe speed so that she can take proper and effective action to avoid collision and be stopped within a distance appropriate to the prevailing circumstances and conditions. In determining a safe speed the following factors shall be among those taken into account:

— The state of visibility.
— The traffic density, including concentrations of other vessels.
— The manageability of the vessel with special reference to stopping distance and turning ability in the prevailing conditions.
— At night, the presence of background light such as from shore lights or from back scatter from her own lights.
— The state of wind, sea and current, and the proximity of navigational hazards.
— The draft in relation to the available depth of water.

Risk of Collision (Rule 7)

Every vessel shall use all available means appropriate to the prevailing circumstances and conditions to determine if risk of collision exists. If there is any doubt such risk shall be deemed to exist.

Action to Avoid Collision (Rule 8)

(a) Any action shall be taken in accordance with the Rules of this Part and, if the circumstances of the case admit, be positive, made in ample time and with due regard to the observance of good seamanship.

(b) Any alteration of course and/or speed to avoid collision shall, if the circumstances of the case admit, be large enough to be readily apparent to another vessel observing visually or by radar; a succession of small alterations of course and/or speed should be avoided.

(c) If there is sufficient sea room, alteration of course alone may be the most effective action to avoid a close-quarters situation provided that it is made in good time, is substantial and does not result in another close-quarters situation.

(d) Action taken to avoid collision with another vessel shall be such as to result in passing at a safe distance. The effectiveness of the action shall be carefully checked until the other vessel is finally past and clear.

(e) If necessary to avoid collision or allow more time to assess the situation, a vessel may slacken her speed or take all way off by stopping or reversing her means of propulsion.

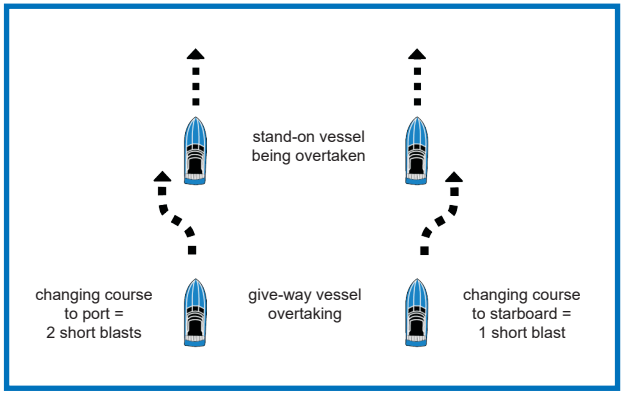
Narrow Channels (Rule 9)

When traveling along a narrow channel, keep as near to the outer limit of the channel or fairway, which lies to the boat's starboard side, as is safe and practical.

Overtaking (Rule 13)

The vessel overtaking any other shall keep out of the way of the vessel being overtaken. Be prepared to use a sound signal to indicate intentions.

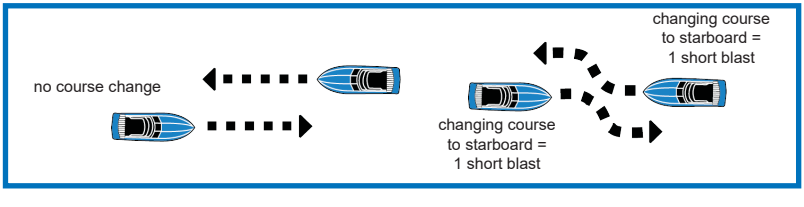
The following illustrates the proper maneuver and includes the appropriate (Rule 34) sound signals.



Head-On Situation (Rule 14)

Unless otherwise agreed, when two power-driven vessels are meeting on reciprocal or nearly reciprocal courses so as to involve risk of collision, each shall alter her course to starboard so that each shall pass on the port side of the other.

The following illustrates the proper maneuver and includes the appropriate (Rule 34) sound signal.

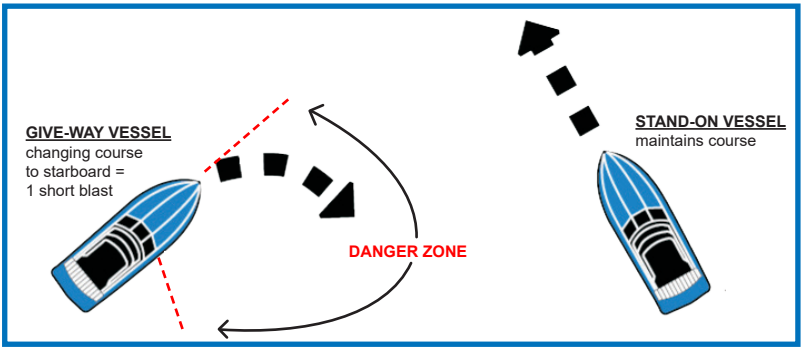


Crossing Situation (Rule 15)

When two power-driven vessels are crossing so as to involve risk of collision, the vessel which has the other on her own starboard side shall keep out of the way and shall, if the circumstances of the case admit, avoid crossing ahead of the other vessel.

A power-driven vessel crossing a river shall keep out of the way of a power-driven vessel ascending or descending the river.

The following illustrates the proper maneuver and includes the appropriate (Rule 34) sound signal.



Action by Give-Way Vessel (Rule 16)

Every vessel which is directed to keep out of the way of another vessel shall, so far as possible, take early and substantial action to keep well clear.

Action by Stand-On Vessel (Rule 17)

Where one of two vessels is to keep out of the way, the other shall keep her course and speed.

The latter vessel may, however, take action to avoid collision by her maneuver alone, as soon as it becomes apparent to her that the vessel required to keep out of the way is not taking appropriate action in compliance with these Rules.

When, from any cause, the vessel required to keep her course and speed finds herself so close that collision cannot be avoided by the action of the give-way vessel alone, she shall take such action as will best aid to avoid collision.

Responsibilities Between Vessels (Rule 18)

Except where Rules 9, 10 (compliance with official traffic separation schemes) and 13 otherwise require, the higher-listed vessels should give way to the lower-listed vessels:

(a) Power-driven vessel

(b) Sailing vessel

(c) Vessel engaged in fishing

(d) Vessel restricted in ability to maneuver

(e) Vessel not under command

Note: The determination that a vessel is "restricted in its ability to maneuver" is made by the vessel's master. If that determination is made, the vessel shall also display the lights and shapes prescribed in Rule 27 accordingly.

Conduct of Vessels in Restricted Visibility (Rule 19)

When vessels are not in sight of each other when operating in or near an area with restricted visibility, every vessel shall proceed at a safe speed adapted to the prevailing circumstances and conditions of restricted visibility. A power-driven vessel must have its engines ready for immediate maneuver.

Every vessel shall have due regard to the prevailing circumstances and conditions of restricted visibility when complying with Rules 4 through 10.

Except where it has been determined that a risk of collision does not exist, every vessel that hears, apparently forward of her beam, the fog signal of another vessel, shall reduce speed to the minimum at which course can still be kept. The vessel shall, if necessary, take all way off and, in any event navigate with extreme caution until danger of collision is over.

Rendering Assistance

Under federal law, the master or person in charge of a vessel is obligated to provide assistance that can be safely provided to any individual in danger at sea. The master or person in charge is subject to a fine and/or imprisonment for failure to do so.

HOMELAND SECURITY

Since the events of September 11, 2001, boaters have an important role in helping to keep our nation's waterways safe and secure.

Please follow these guidelines:

- Keep well clear of all military vessels, cruise-liners, tankers and other commercial ships.



- Slow to minimum speed when within 500 yards of any U.S. naval vessel and proceed as directed by the Commanding Officer of the naval or escort vessel.
- Do not approach within 100 yards of naval vessels. If you must enter this zone in order to ensure safe passage in accordance with the navigation rules, you MUST first contact the naval vessel or its escort on marine VHF channel 16 to seek direction.
- Violators of a Naval Vessel Protection Zone can face up to six years in prison and a $250,000 fine, not to mention a quick and severe response.
- Approaching certain other commercial vessels may also result in an immediate boarding.
- Observe and avoid all marked or designated security zones and other restricted areas.
- Avoid commercial port operation areas, especially those that involve military, cruise-line, or petroleum facilities.
- Do not stop or anchor beneath bridges.

Keep a look out for anything that appears to be out of the ordinary. Depending on the circumstances, suspicious activity may include:

- Persons renting or attempting to procure or borrow watercraft or offering cash on the spot for a vessel.
- Persons asking suspicious questions concerning the boat, such as how to start the engines or how much weight the boat can carry.
- Persons loitering around or photographing or creating diagrams of such things as the underside of bridges, established security zones, oil refineries or transfer facilities, military bases, military or government vessels, and the waterfront areas near those facilities or vessels.
- Vessels attempting to sell/deliver merchandise or drop off packages in waterfront areas.
- Persons who are throwing or retrieving unusual objects in or out of the water.

If encountering a situation that feels suspicious, report it immediately to local law enforcement, the U.S. Coast Guard, port security, or the National Response Center at 877-24 WATCH.



Do not approach or challenge suspects. Make some notes on the person's appearance, clothing, vehicle license plate, and type of boat.

By actively demonstrating a commitment to boating safety, we can help reduce the demand on limited law enforcement and rescue resources and show support for homeland security efforts.

For more information, visit America's Waterway Watch at http://americaswaterwaywatch.uscg.mil.

POWERBOATING

Any boat that is powered by a motor is considered a powerboat. Generally, a powerboat has a high power-to-weight ratio and a hull design that allows for easy planing, which allows for higher speed and improved handling. In Alaska, three out of four boating fatalities happens in a powerboat, and most of them occur in recreational boats, not commercial vessels. It is vitally important for powerboaters to educate themselves on safe operation and planning to avoid problems while out on the water. Here are some tips:

General

- When underway and operating a vessel, keep the engine cut-off device attached to you. This is especially important for solo operators. Wireless cut-off devices are now an option. If you somehow get tossed into the water, the boat will stop.
- Don't run at full throttle, but maintain enough speed to keep the hull "on step." This is called planing: It is easier on the engine, greatly improves fuel economy, and increases reaction time.
- Use a "Boater's Eye": Maintain a clear, unobstructed forward view at all times. Constantly scan the water back and forth for hazards. Avoid tunnel vision. Visually recognize and continually assess boat motion (momentum) or lack of motion.

The boat operator must be aware of boat speed, rate of turning, and progress toward or away from the objects nearby that are restricting operating room.

- When operating in an area where there are divers, be on the lookout for diving flags displayed on the boats. Boaters must stay at least 100 feet away from the flag unless they are operating in a no-wake zone. (See more on diving on Page 85)
- For waterskiing, boat operators should keep a minimum of a 200-foot wide “ski corridor” (100 feet on either side) to protect the skier from other boats and/or obstacles. A designated lookout or rear view mirror should also be used.
- Operate well within the limits of your skill and respect the capabilities of the boat.
- Develop proficiency with basic boater’s knots (bowline, figure eight, cleat hitch, anchor bend).
- Exercise caution when around commercial traffic. Give these vessels a wide berth. Don’t get caught between a tow boat and a barge. Slow down and keep a sharp eye for hazards in the water, because tow lines and fishing gear are not always clearly visible.
- Control boat wake when operating near moored boats or structures (docks, floating homes, and launch ramps).
- Be considerate around small or slow moving boats, swimmers, and water skiers. Maintain a distance of at least 100 feet from a boat towing a water skier.



Control boat wake when operating near moored boats or structures such as docks, floating homes and launch ramps.

Handling Rough Open Water



If rough weather is coming and can't be avoided, there are a number of things that can be done to prepare, including:

- Put on a life jacket if not already on.
- Place passengers and loads low and along the centerline. Secure all items to prevent shifting, and make sure passengers maintain three points of contact
- Consider pulling drain plugs to promote self-bailing. Prepare bailing devices.
- Consider donning immersion suits, at least to the waist.
- Establish radio contact with nearby boaters.
- Have a spare fuel filter and wrench handy, because rough conditions can stir up tank sediment.
- Brief passengers and assign tasks as necessary. Proceed to the nearest protected area.
- Avoid the middle of inlets, rounding a point of land, and the mouth of bays where wind, current, and seas collide.

When running into the waves:

- "Tack" back and forth at a 45-degree angle to the waves.
- Slow down to allow the bow to lift with oncoming waves instead of digging in.

When running in the same direction as the waves:

- Throttle and steering adjustments must be made constantly to avoid a "pitch pole" (stern over bow) down the wave face, a broach sideways, or taking a breaking wave over the stern.
- Avoid sudden stops or backing down into following seas.

In the event of an engine failure, use oars or a sea anchor (a plastic bucket with a hole in the bottom attached to the bow) to keep the bow into the waves.

Anchoring

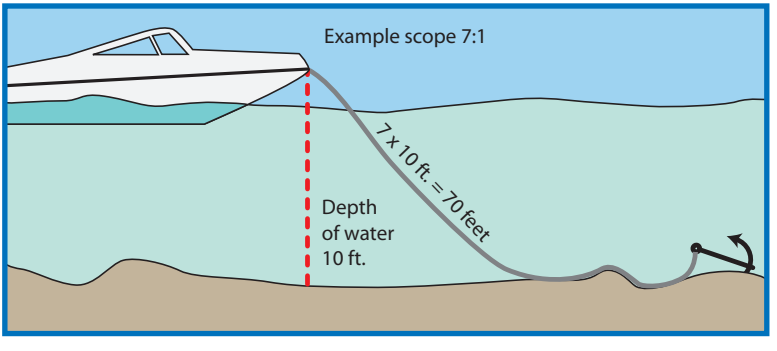
To anchor a boat, first select the appropriate type and size of anchor and the appropriate diameter and length of rode (anchor line and chain). Consider the size of the boat, the bottom type, the water conditions and the depth of the water (**measured from the bow to the bottom**). The length of the rode should be five to ten times longer than the depth of the water, depending on the weather conditions, the current, and the size of the boat. Don't forget to account for tidal fluctuation! See "Recommended Equipment" for information on anchor selection.

Prepare the anchor and rode in advance and firmly attach the anchor line to a secure point at the bow. Secure anchor and rode while underway to avoid accidental deployment.

- Bring the bow into the wind or current. When in areas with no current, put the engine in neutral and wait for the boat to stop moving forward.

RODE: line and chain attached to anchor

SCOPE: ratio of rode length to depth of the water



- Lower (do not throw) the anchor over the bow slowly.
- Back up slowly to straighten the anchor line and "set" the anchor.
- If an outboard or inboard with outdrive, raise the drive unit out of the water to prevent fouling the anchor line.
- Avoid anchoring from the stern. This squares the boat's flat transom directly into the wind, waves or current and can cause the boat to swamp, capsize or sink.
- Never leave an anchored boat unattended. Tides, current,

wind and wave conditions may change and can cause an anchor to foul or drag. Maintain an anchor watch.

- If the boat is small, consider taking it up onto shore (beyond the high water line) and securing it. Other options include using designated mooring buoys or setting up a “running line” (with a safety line) from the boat to the shore.
- Take communications and survival gear ashore in case you get separated from the boat.

River Boating

Whether by jetboat, airboat, inboard or outboard, powerboating on Alaska’s interior rivers is both an exhilarating recreational activity and an important means of access. River boating puts us in places that might otherwise be out of reach. However, the power of moving water is relentless and should never be underestimated.

Exercising good judgment and applying the right mix of skill, ability, and caution are never more important than when boating on rivers. Here are some important points to consider:

- Always wear a life jacket. Rivers contain many hazards and fast water — emergencies can develop quickly. River boats tend to be small and fast, capable of throwing passengers overboard without much warning. Currents and eddies can make self-rescue very difficult.



- Carry communication devices that are suitable for the area on your person. For example, cellphones are appropriate in some areas, but in remote areas, a VHF radio for contacting other boats may be a better choice.
- Reading the water is a much-needed skill while boating on rivers. This takes time and practice to develop.
- Match the boat design to the intended use. There are a lot of options out there—do your research, work with the boat dealer, and, if possible, test drive boats under similar conditions before purchase.
- Knowledge of the river is key. Always research and scout out new areas. Learn from the locals.
- Be aware of such river hazards as sweepers (overhanging trees), log jams, gravel bars, submerged objects, animals, wind, sun and other restricted visibility problems, and, of course, other boaters.
- If new to river boating, practice skills in safe areas first. River boaters should be skilled in turning with and against current, launching, landing and beaching, anchoring, and basic troubleshooting and repairs.
- It is best to stay in the deeper water found closer to the outside bank, while still keeping as far to the right as possible, allowing room for a boat coming from the other direction.
- Be particularly vigilant in narrow channels. Slow to the minimum speed needed when rounding tight river bends and blind corners. Consider using your sound-producing device to signal your presence.
- Learn the locations of popular bank fishing spots and be considerate of bank anglers in the water.
- Before launching, make sure to have an alternate propulsion source (oars, paddle, another engine) and anchor at the ready for immediate use. It is a good idea to warm up your engine before pushing away from the bank.
- When beaching, try to find places where the boat can be placed facing into the current. Otherwise, look for a slow channel or calm backwater pool. ALWAYS secure the boat to the shore.
- Follow the Navigation Rules and slow down when passing other boats on the river. When passing, make sure other boat operators see you and understand your intentions.

Personal Water Craft (PWC)



If new to operating a Personal Water Craft (PWC), take basic boating safety and PWC-specific courses and develop skills under the instruction of an experienced operator. Read the owner's manual carefully. It provides important information specific to the model, such as safety warnings and recommendations, load capacity and maintenance schedule.

PWCs are boats, and operators have the same responsibilities as other boaters. However, there are some important differences:

- PWCs handle differently than other boats. The water jet drive and shorter overall length make the PWC extremely responsive to even a small movement of the handlebars.
- PWCs are steered by directing the water jet steering nozzle while powering forward. Throttle must be applied for forward movement. When the operator releases the throttle, the ability to steer is eliminated, and the vessel will coast to a stop. However, on newer models, various off-throttle steerage features may exist. Please refer to your specific craft to know what your craft operational needs are.
- Start, ride and stop the water craft using the manufacturer's recommended water depth, and keep away from any underwater hazards or obstructions.
- Know your water craft minimum stopping distances, which may vary depending on the type of PWC and vehicle load and water conditions.
- There are both older, two-stroke and modern, four-stroke engine types, which require different maintenance and operational considerations, as well as hull types:
    1. Stand Up (1 person on board)
    2. Sport (1-2 person/s on board)
    3. Runabout (1-3 person/s on board)
- Weight load capacities range from one to three persons on board. Know your PWC and its requirements. (One style of craft held up to four persons, but these are no longer

produced). Simply put: Do not exceed the recommended weight load capacity.

- There are newer four-stroke sit-down models that may offer the following: off-throttle steering features, braking units, reverse and neutral. Some use a brake unit and some use natural water drag to effect a stop. It is important to understand the features of the various functions. Remember: Reverse features are not a brake!
- Attach the engine shut-off cord (lanyard) to the wrist of the operator, taking care that it does not wrap around the handlebars, thus impeding its ability to properly engage the engine shut-off in the event the operator falls off. The engine shut-off cord (lanyard) should be checked for damage before and after use. The wrist lanyard should always be worn when underway. A PWC has no directional control when stopped.
- Remove the lanyard from the boat when the PWC is unattended. On some PWC models there are a variety of different start controls such as, but not limited to: remote control fob keys, ignition keys and/or digitally coded engine shut-off cord keys for the ignition feature to be regulated or to start the craft.
- Most PWC fatalities are a result of collision. Constantly scan the water left and right and check both sides and behind you before turning. Throttle down before approaching your intended stopping area, while performing a safety scan.

Guidelines for PWC Operation:

- Know the boating laws and rules, and obey them.
- Read and follow the owner's manual of your model and year of PWC.
- Read all manufacturer warning labels. If any labels are missing contact your dealership and order replacements for your PWC.
- When transporting by a trailer, ensure that you are observing trailer laws and regulations. Make sure the trailer matches the craft's weight and hull design. Securely fasten the watercraft to prevent movement between the trailer and the craft.
- Carry on board all state and/or federally required equipment.
- If renting a PWC, research the boating rules that apply to the type of PWC you are renting before you depart.

- Ride within your limits and those of your passenger(s). Avoid aggressive maneuvers to reduce risk of loss of control, ejection or collision.
- When re-fueling, avoid possible explosion or fire due to flammable gas. Pull the lanyard key off the start button. Make sure you are in a well-ventilated area free from any source of flame or sparks (including pilot lights).
- Prior to starting the engine, ventilate the engine cover or open the seats to vent the engine compartment.
- Do not start the craft in enclosed areas. Exhaust gas contains carbon monoxide, a colorless, odorless poisonous gas. Inhaling carbon monoxide can cause serious brain injury or death. Operate in a well ventilated area.
- Conduct a pre-launch inspection of the craft interior and exterior to ensure all features are secure and functional. Use the proper safety protective equipment. Hint: Ensure your bilge plugs are in place! (drain plugs)
- Practice skills first in a safe area with an experienced operator.
- Be aware of your vessel operations and your fatigue limits.
- Check the water and weather conditions, and monitor the NOAA weather channel.
- Operate the PWC at safe speeds for the conditions.
- To help prevent passengers from falling overboard, avoid making quick turns and sudden accelerations. Advise passengers to hold on at all times. Look before making a turn.
- Operators must have the skill and ability to reboard the boat in deep water. Even the best method of deep water reboarding, from the rear of the boat, can be difficult in rough water and/or if the operator is tired.
- Stand-up type water craft have different operational needs. Refer to the owner's manual and abide by the manufacturer's recommendations.
- To avoid being stranded, refer to the manufacturer's recommendations on re-righting the particular model of PWC you are operating prior to driving. Know the proper righting procedure. Be sure to remove the lanyard key so the



engine is off. Water craft do not self-right. When righting a capsized water craft, reference the decal located astern on the watercraft. Failure to properly right a capsized PWC can possibly damage the engine from water in the exhaust system entering the engine.

- Never loan a PWC to an inexperienced person. Many PWC accidents involve operators who did not own the boat.
- Wear the appropriate personal protective gear. Wear a U.S. Coast Guard-approved life jacket that is properly sized and fitted tightly and designed for PWC use. Inflatable life jackets are not appropriate for PWCs.
- Refer to the manufacturer's recommendations and the current weather. In cool weather, use a dry suit with undergarments or a wet suit that matches the conditions you operate in. Wear foot protection and water gloves. Goggles/glasses are recommended, as is a whistle.
- A helmet protects your head but could contribute to neck injuries or loss of peripheral vision, depending upon what kind of helmet you wear. If you choose to do so consider the risks vs. the benefits.
- Slow to 10 mph when within 100 feet of another motorboat or a sailboat underway.



- Slow to no-wake speed when within 100 feet of anchored boats or paddle craft, or when within 200 feet of the shoreline, a swimmer, diver's flag, dock, or launch ramp.
- Obey regulatory markers such as "No Wake" zones and posted speed limit signs.
- Do not exceed the manufacturer's load capacity.
- Carry a waterproof radio and GPS with you at all times.
- File a float plan before launching with a trusted friend or family member
- Never ride after consuming drugs or alcohol, before or during operation.
- Do not operate in shallow water due to possible environmental impact and/or damage to the water jet pump, hull or water cooling system.
- Keep away from intake grate when the engine is on. Keep long hair or clothing, life jacket straps or lines clear; these can become entangled in moving parts, resulting in severe injury or drowning.
- Avoid boat wakes, waves or swell jumping and sharp turns. These maneuvers can increase the risk of injury, accidents or loss of your water craft.
- Avoid operating in the same area for extended periods.
- PWC operation may be restricted or prohibited on some waterways — check with local land managers.
- Do not board a PWC if the operator is applying throttle; shut the engine off or keep at idle.
- PWC manufacturers advise against operation after dark. Navigation lights are required between sunset and sunrise or in conditions of limited visibility.
- Stay current with any recall notices that may apply to your particular water craft.
- Severe internal injuries can occur if water is forced into body cavities as a result of falling into water or being near the jet thrust nozzle. Wear a long wetsuit bottom or clothing that provides adequate protection.

PWC SAFETY:
Avoid boat wakes, waves and swell jumping — as fun as it sounds, these maneuvers increase the risk of injury.



PADDLE SPORTS

Paddle sports are one of the fastest growing recreational activities in the United States, and as this trend grows, so does the number of accidents. In Alaska, paddling fatalities account for up to a quarter of all boating deaths each year. Nationally, statistics show that three out of four of the paddlers who died in boating accidents were not wearing a life jacket, and almost a third of those incidents were alcohol related.

Safe Paddling Tips

- All paddlers should know how to swim.
- Take hands-on training and read books and guides specific to the sport. Look for courses offered by instructors certified by the American Canoe Association and Alaska paddling organizations.
- A paddler without a life jacket is a sign of inexperience, regardless of swimming ability. Choose a style that has high visibility and a snug fit, without impeding mobility.
- Carry emergency communications and signaling devices on your person.
- Practice re-boarding in a safe environment, on your own, and with a buddy.
- Avoid paddling alone. In the event of a capsize, self-rescue can be very difficult.



- Like other sports, paddling requires the right gear. Purchase quality equipment.
- Be prepared to get wet and dress appropriately—consider wearing a dry suit, especially when paddling in rough water.
- Avoid standing up or moving about in a canoe or kayak as it greatly increases the chance of capsizing. If you must move, then maintain three points of contact at all times.
- Load the boat properly. Keep weight centered both from side to side and bow to stern. The lower and closer the load is to the boat's centerline, generally the more stable the boat will be, assuming there is adequate freeboard.
- When retrieving something from the water, reach with a paddle or guide the boat close to the object so you can grab the item from the water without leaning your shoulders over the gunwales.
- Plan ahead. Check weather and water conditions, and conduct thorough pre-departure checks before each trip. Avoid extreme conditions including weather, distance from shore, water conditions, and fast current beyond skill level.
- Always file a float plan and stick to it as much as possible.
- Trips should be planned in consideration of the least experienced group member. Make sure skill levels are adequate for the situation.

Canoeing

The majority of paddling fatalities are attributable to capsized canoes. Comply with the manufacturer's load recommendations. Canoes are generally not recommended for coastal waters unless they are decked, have extra flotation, and the paddler has extensive experience.

The American Canoe Association recommends that all paddlers be proficient in:

- Keeping a boat balanced under a variety of conditions and maneuvers.

SAFETY TIP: ***Help rescuers reach the final mile***

Always wear emergency communication and signaling devices **on your person**, so in the event of an emergency rescuers can home in on your exact location. Mirrors, whistles, and especially such items as personal locator beacons can give rescuers the information they need to spot you in the middle of nowhere.

- Proper boarding—entries and exits.
- Maintaining a straight course when going forward, backward and stopping.
- Turning a boat in any direction quickly and efficiently.
- Performing self-rescues and assists.

Coastal Kayaking



Alaska has some of the most amazing sea kayaking in the world. But before venturing out into the gorgeous waters around the state, begin with proper instruction and practice. Both dryland and on-the-water instruction (in protected areas) are highly recommended.

- Wear a life jacket.
- Carry emergency communication and signaling devices on your person.
- Obtain and maintain essential skills in reboarding a capsized boat in open water, such as the paddle float self rescue and the two boat “T” rescue technique.
- Avoid powerboat traffic lanes. Strive for high visibility when around powerboats. Especially under conditions of limited visibility, rough water, or strong backlighting from the sun, groups of boats are far more easily seen than single boats. Wave paddles if necessary to attract the attention of approaching boats.
- When on the beach, move the boat well above the high tide line and tie it securely. Many a paddler has returned to the shore only to watch their boat float away on a high tide.
- Check the weather forecast before every departure and never try to outrun a bad weather forecast. Get frequent weather updates via VHF radio.
- Keep a lookout for large boat wakes and wave rebound off the shoreline, rocks and coastal cliff faces.
- Stay close to the shore and avoid paddling in strong winds or heavy chop. Cross open water where the distance is the shortest. Perform “Pan Pan” communication via radio before crossing heavy traffic lanes.

Swift Water Paddling

Some examples of boats used in rivers, streams and other swift water include **white-water kayaks, rafts and packrafts**. Paddling in swift water requires a skillset entirely different than that of flat or calm water paddling. The paddler needs to be extremely familiar with each kind of paddle stroke and able to quickly respond to changing conditions with the correct stroke. It is highly recommended to take paddling courses, swift-water rescue training and practice with paddlers of higher abilities.



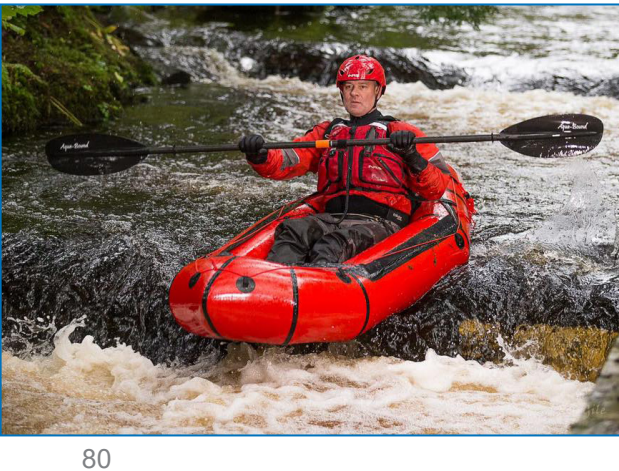
- Learn and practice the universal river signals. Make sure other party members know them as well.
- Match skill and experience to the difficulty of the river. Before a trip, carefully review maps and determine the current and anticipated water levels and any possible evacuation routes.
- Rivers contain many hazards including waterfalls, rocks, strainers and sweepers, hydraulics or “holes” and challenging rapids. If in doubt, walk around.
- Always scout down river from the shore. Rivers are constantly changing, so don’t rely on what it looked like last season.
- Learn and be proficient in first aid and basic swift water rescue techniques. Carry throw bags and other appropriate rescue gear.
- If the boat is not designed with closed decks and bulkheads to displace water, install devices such as float bags. This is especially important for open canoes.
- Be alert on rivers used by powerboaters. Listen carefully, keep to the right side (especially around river bends) and be prepared to handle boat wakes. Carry a sound-producing device, as required by state law.

- If in a group, assign the most experienced paddlers to the lead and sweep (last) boats. All other boaters should stay in between. If you lose sight of the boat behind you, pull over and wait.
- It is strongly advised to wear a dry suit while paddling swift water in Alaska.

Packrafting

The American Packrafting Association, like the Alaska Office of Boating Safety, reiterates this vitally important message: Gain knowledge, acquire the abilites and practice the skills for your particular boating activity. Packrafting is a subcategory of swift water paddling that is growing exponentially in popularity, especially in Alaska, where the remoteness of so many of its rivers and streams necessitates on-foot backcountry travel. A packraft is light, ideally less than five pounds, inflatable, yet still durable enough to do the job of a larger, heavier boat designed for the same purposes.

The APA's Safety Code is detailed (see https://packraft.org/education/safety/ for more) and encourages rafters to know self-rescue, never travel alone, be in control of their boats, understand and be



Paddler's Checklist

- ❑ **A properly fitted life jacket.**
- ❑ **Emergency communication and signaling devices on your person, such as whistle, light, mirror, PLB.**
- ❑ **Avoid a day-trip mentality**
- ❑ **VHF radio, EPIRB, PLB, satellite phone, cellphone (whatever works in the area that you are paddling)**
- ❑ **De-watering device such as bilge pump, bailing bucket, sponge**
- ❑ **Repair kits for boat**
- ❑ **Maps, compass, GPS, nautical charts**
- ❑ **River knife on person**
- ❑ **Rescue devices: throw bag, paddle float, slings, ropes**
- ❑ **Dry bag with appropriate and extra clothing, rain gear**
- ❑ **First aid kit, personal medications**
- ❑ **Emergency shelter and sleeping bag**
- ❑ **Water and food**
- ❑ **Fire starting material (or stove and fuel)**
- ❑ **Helmet, paddling jacket and pants or a dry suit, spray skirt, neoprene gloves**
- ❑ **Sunscreen, proper footwear, eye protection**

able to read water conditions and, above all, wear a U.S. Coast Guard-approved life jacket appropriate for the activity and carry your emergency communication and signaling devices on your person. A satellite texting device is a popular choice among packrafters, although there are many other options available as well. (See Emergency Communications Devices, Page 25)

Other things to consider:

- Review trip plans prior to departing, and retain the ability to abort a trip in case of poor conditions or unsafe water.
- Keep the least skilled person in mind when choosing route locations. Paddle from your "lowest common denominator."
- Packrafts in any moving water with waves should have a spraydeck or whitewater deck, or if the boat is open without one, the boater should wear a drysuit or wet suit. Cold-water immersion, and even hypothermia, even in Alaska's nonglacial waters, is a real danger.
- A drysuit is especially recommended when using self-bailing packrafts.
- Packrafts require special care to prevent punctures and other damage, so carry them inside your pack when traveling on foot, and even in a stuffsack within your pack to avoid abrasion holes caused by rubbing against other items within the pack.
- If using a packraft and carrying more than 30 pounds, consider using boats that incorporate gear storage inside the air tubes, to offer boat stability and

Paddling and the law

❑ **Canoes, kayaks, stand up paddleboards and packrafts are all considered vessels and subject to Alaska boating regulation.**

❑ **Nonmotorized paddle craft do not need to be registered or titled under Alaska Statute, but doing so can help in the event of theft or loss.**

❑ **Those under the age of 13 must wear a U.S. Coast Guard-approved life jacket suitable to the activity.**

❑ **Helmets are not required by Alaska law but are recommended for some forms of paddlesports, especially in rivers.**

❑ **It is unlawful to operate a boat while under the influence of drugs or alcohol.**

❑ **It is against federal law to operate your vessel too closely to federally protected mammal species.**

keep gear dry. This requires that the boater carefully pack the boat without any metal or sharp plastic objects making contact with the tubes.

- Equip packrafts with stern and bowlines that a swimmer can grab onto.
- Learn how to get back into a flipped packraft, especially a loaded one, while holding your paddle. Learn how to help others get into their boats.
- Know how to make a fire and keep fire-starter and lighter/matches dry and on your person at all times.

Stand Up Paddleboarding



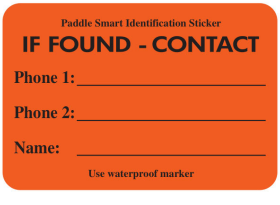
Although Stand Up Paddleboarding, or SUP, may look easy, life-threatening incidents can happen at any time and within moments. It is critical to learn how to avoid situations from happening, and how to respond to them if they do. SUP incidents and drowning deaths occur when paddlers are unexpectedly ejected from the board and are unable to successfully self-rescue, or rescue others. Such ejections become life threatening when paddlers are without a leash, life jacket, are paddling alone, or any combination of the above. Paddling in Alaska's cold water adds the additional threat of cold-water immersion.

Prior to paddling for the first time, beginner paddlers should learn how to hold the paddle, stroke, turn, and brace, how to read and respond to adverse weather conditions, particularly wind and tides, and how to prevent and respond to rescue situations. It is also critical to learn what apparel is appropriate for Alaska's air and water temperatures. These tips and techniques can be learned in basic SUP paddling classes on

flat water. Once paddlers have gained enough flatwater experience and confidence, they may consider trying ocean, down winding, whitewater, river, surfing, racing, fishing, or yoga, Pilates, or fitness paddling. There are specialized courses available in these disciplines to help you prepare. Only paddlers with a strong surfing background should try SUP surfing at Alaska shore breaks and bore tides. Without adequate surf knowledge and experience, paddlers can be a danger to themselves and others in the surf break lineup.

Other points to consider:

- SUPs are considered vessels and must carry required equipment, including a life jacket, sound-producing device and a light.
- Carry emergency communication and signaling devices on your person.
- Wear a life jacket, leash, and a whistle. Dogs on SUPs should have life jackets with handles.
- All SUP paddlers, including children, MUST be able to swim proficiently and be physically able to self-rescue.
- Children on SUPs should not be left unsupervised. SUPs are not a toy. SUPs are boats and can easily drift away.
- Understand that should a fall occur, the best flotation device beyond your life jacket is the paddleboard, and that every attempt should be made to self-rescue onto the paddleboard as quickly as possible. A leash will ensure that the board does not drift away rapidly.



Affix a Paddle Smart "If Found" sticker on your board to reconnect you to your boat and would-be rescuers.

- Choose appropriate paddling attire such as dry suits, wetsuits, or swimsuits and learn which leashes will work for which paddling (coiled or straight and ankle, calf, or waist attached).
- File a float plan and leave one with your vehicle or trusted person. Write your name, phone number, and an emergency contact name and phone number on the paddleboard itself. The same information should be located on your person. Should you be separated from your board, this information may prove life saving.

- Boards that are bare may help sell the freedom of stand up paddleboarding in advertisements, but bare boards in Alaska are dangerous. Stand up paddleboards should include webbing to hold emergency as well as comfort gear.
- Emergency gear includes a first aid kit, matches, space blankets, and a mirror. Comfort gear includes a water bottle, high-calorie snacks, sunglasses, and extra layers such as rain gear, hat, and gloves.
- Carry a tow line or throw bag especially when paddling with less experienced paddlers or children.
- Be aware of wind and tidal conditions and stay along the coast within swimming distance to the shore or just outside the surf break. If possible, always start upwind and end your paddle downwind. A wristwatch and/or GPS tracking device will help keep track of your progress, particularly in changing weather conditions.



Always wear a life jacket and attach an ankle leash when using a stand up paddleboard.

- If you plan on performing fitness activities (such as yoga or Pilates) on the paddleboard, use an anchor to stabilize the paddleboard, avoid falling, and prevent the board from drifting away should you fall. Make sure that the line on the anchor is long enough to secure the anchor.
- If you choose to wear a waist belt life jacket to allow for freedom in your movement (particularly during a fitness class), consider also carrying an extra life jacket secured to the paddleboard.
- All SUP instructors should have certified training, water sports insurance, and appropriate permits. Paddlers should verify an instructor's credentials before taking a class.

- Inflatable paddleboards should be fully inflated to the recommended PSI per the instruction manual.
- Lights should be mounted if paddling at night, and should be all-round white lights as required by law.
- Paddlers should understand that they are taking a risk when paddling alone and take every preventative measure to ensure their own safety.
- Consider washing your board after each use to minimize the chances of spreading aquatic invasive species.

OTHER WATER ACTIVITIES

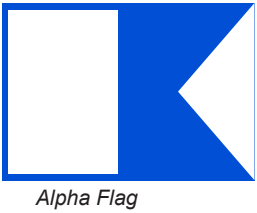
Recreational boaters must share waterways with various other craft and users. When underway, always maintain a proper lookout. Scan the water back and forth constantly for hazards such as logs, submerged and exposed rocks, shallow areas, kayaks, and other boats. This becomes especially important in situations with limited visibility such as when facing into the sun, when in fog, in conditions with rough water, when rounding points, or when navigating narrow winding passages. Boat operators should understand the unique characteristics of other watercraft operation and regulations in order to boat safely and legally.

Diving

Diving is a popular activity in Alaska. Boat operators need to be aware of divers in the water and be able to recognize diving flags.



Diver Down Flag



Alpha Flag

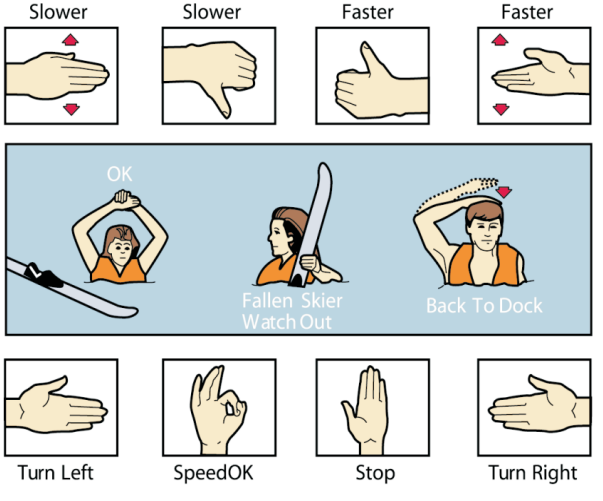
- Alaska law recognizes that a red flag with a white diagonal stripe (a “diver’s flag”) indicates a person is engaged in diving in the immediate area. Displaying the diver’s flag is not required by law and does not in itself restrict the use of the water.
- International Navigation Rules also require a blue and white “Alpha” flag be displayed on boats engaged in diving operations.

- When operating in an area where a diving flag is displayed, boaters must stay at least 100 feet away from the flag unless they are operating at no-wake speed.

Water Skiing

To make water skiing safer and more enjoyable, boat operators and skiers should observe the following:

- Operate only between sunrise and sunset.
- Boat operators must either have another person (12 years of age or older) onboard as a lookout or have a rear view mirror installed on the boat.
- The boat operator should keep a minimum of a 200-foot wide "ski corridor" (100 feet on either side) to protect the skier from other boats and/or obstacles.
- A boat operator may not tow a person on water skis, a surfboard, or a similar device, in a reckless or negligent manner so as to endanger the life or property of another person (AS 05.25.060 (1)).
- Skiers should wear a life jacket that is approved by the U.S.



Boat operator and skier should agree on recognized hand signals prior to departure.

Coast Guard for the activity. It is a legal requirement for those being towed under the age of 13 to wear a life jacket. Inflatable life jackets are not appropriate for water skiing.

HUNTING AND FISHING

Nationwide, hunters and anglers account for one in three boating fatalities. According to the National Rifle Association, many more hunters die from drowning than by gunshot. Records show the average sportsman who dies on the water is an adult male in a small open motorboat on relatively calm water on a sunny day. Most were not wearing a life jacket and died by drowning, not hypothermia.



- Unless a boat is designed for it, avoid hauling heavy fishing pots and nets over the stern.
- Avoid standing up or moving about when casting or shooting (especially in a canoe). Shoot or cast from a well balanced or seated position.
- When retrieving objects from the water (such as fish, decoys or dogs) either move the boat to the object or draw it toward the boat with a paddle and keep shoulders inside the gunwales.
- Consider yourself a boater, carry all required and recommended equipment, and take a boating course.
- Avoid boating under the influence. Sensible sportsmen already know alcohol, drugs and guns don't mix!
- File a float plan and stick to it.
- Many new styles of life jackets are available that are comfortable and don't restrict movement. Sportsmen should always wear a life jacket when in a boat and when hunting and fishing waterways on foot.

EMERGENCIES

SURVIVING COLD WATER

Cold water immersion plays a significant role in the majority of Alaska's boating fatalities. Generally accepted by researchers to be water temperatures below 70 degrees Fahrenheit, cold water is virtually all water in Alaska.

Causes of Cold Water Immersion

The following are the leading causes of cold water immersion:

Swamping and/or capsizing – due to overloading, poorly secured or shifting loads, improper boat handling in rough water, loss of power or steerage, anchoring from the stern, wrapping an anchor, mooring, or pot line around a drive unit, or taking a wave over the transom during a sudden stop.



Ejection – primarily caused by improper lookout, resulting in a collision with another boat, hitting a submerged object such as a log, or running aground while underway. The risk of ejection also exists when operating a boat in restricted visibility such as fog or in the dark, and during the fall with diminishing daylight.

Falling overboard – most commonly due to slipping, a loss of balance while standing or moving around the boat, striking another boat or object, sudden grounding, or when reaching for objects overboard.

Swimming to retrieve a drifting boat – a loose boat drifting away produces an almost irresistible impulse to intentionally leave a place of safety to swim after it. Don't.

Effects of Cold Water Immersion

Most of Alaska's boating fatalities involve cold water immersion that, according to research, kills in several ways:

1. INITIAL REACTION — COLD SHOCK RESPONSE

- Within the first 1-3 minutes
- Involuntary gasping and hyperventilation, panic and vertigo, can result in water inhalation

- Higher risk of drowning if not wearing a life jacket

2. SHORT TERM IMMERSION — COLD INCAPACITATION

- Within 10-30 minutes of immersion
- Localized cooling of extremities affects muscles and nerves, impairing their function
- Arms and legs become stiff and unresponsive. Activities such as swimming, re-boarding a boat, using a radio or distress signal, or holding on to a floating object becomes difficult or impossible.
- Higher risk of drowning (even good swimmers) if not wearing a life jacket

3. LONG TERM IMMERSION — IMMERSION HYPOTHERMIA

- After at least 30 minutes of immersion, depending on factors
- Gradual cooling of the body core will occur at a rate dependent upon factors including water temperature, clothing worn, body type, physical condition/physical activity.
- As body core temperature falls, hypothermia symptoms will range from mild to severe, eventually leading to unconsciousness.
- Higher risk of drowning if not wearing a life jacket.

Prepare for Cold Water Immersion

Most immersion events happen quickly and unexpectedly. So, while prevention is best, it is also important to be prepared. Taking these simple steps will help ensure the best possible outcome:

- Always wear a life jacket when in an open boat or on an open deck. Trying to put your life jacket on in cold water is extremely difficult (if not impossible) and costs precious time and energy.
- Carry emergency communication and distress signaling



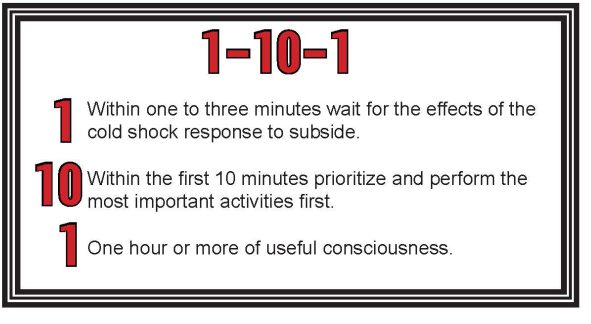
*Without a life jacket, it is very difficult to keep the airway clear during the **cold shock response** stage, which could result in drowning.*

devices ON YOUR PERSON. Such items as an emergency locator beacon, a small handheld VHF radio or cellphone, a whistle, and some visual distress signals may save the day. Today's devices are smaller, lighter, and easy to carry.

- Unless the boat is designed so that a person in the water can easily get back into the boat unassisted, equip the boat with a re-boarding device, such as a rope ladder, foot sling, or a swim platform.
- Carry survival suits. Make sure they are well maintained and readily accessible.
- Practice re-boarding your boat, donning immersion suits quickly, signaling, transmitting MAYDAYs, rescuing a person overboard, and other cold-water survival techniques described in this section. Drills are fun and build skill and confidence. In-water cold water survival classes are available at AlaskaBoatingSafety.org.

Surviving Cold Water Immersion

Surviving cold water immersion depends on adequate flotation to prevent drowning, and timely self-rescue or rescue by others. Wearing a life jacket, carrying a communication and distress signaling device, the ability and confidence to swim, a controlled entry into the water, surface conditions, length of time in the water, associated injuries or medical conditions, and alcohol use can all influence the outcome.



According to Canadian physiologist Gordon Giesbrecht, who studies the effects on humans of such extreme environments as cold water immersion, the phrase "1-10-1" is an easy way to remember what to do in the event of a sudden cold water immersion. Note: this information does not apply to all persons in all cases, but it does give a general idea of how long you have to rescue yourself, and reminds you not to panic: While time may be of the essence, you still can remain calm and take command of your rescue.

1 Minute

The initial reaction/cold shock response stage usually passes within the first few minutes. Wait for effects of cold shock to subside. According to Michael Tipton, another expert in the field of cold water immersion, resist the urge to fight the water; float first. A life jacket is designed to float a person in the water on their back at a 45 degree angle. Float first on your back and wait for gasping and hyperventilation to subside. Understanding that this stage will soon pass may help reduce panic.

10 Minutes

Once breathing is under control, most people have at least 10 minutes to take the actions necessary for self-rescue or for obtaining rescue before incapacitation occurs. Do not waste time and energy removing shoes or clothing. Even small amounts of air trapped in clothing will provide some buoyancy and thermal protection. Perform the most important functions first:

- If not already worn, attempt to don life jackets or survival suits, and then assist others in doing so.
- Account for any other members of the party. Check around and under the boat.
- Alert and Locate. If not already deployed (and depending on the circumstances), activate an emergency communication and/or distress signaling device such as an emergency locator beacon, transmit a MAYDAY on a VHF marine radio, or call 911 (or *24) on a phone. If in range of others, activate visual and sound distress signals.
- Get all persons as much out of the water as possible. Water transfers heat much faster than air of the same temperature. For example, if the boat is not overturned, use the boat's re-boarding devices and practiced techniques to get back in. If overturned, climb on top of the hull. If separated from the boat use any other available objects to get as much of your body out of the water as possible, even if it feels colder.
- Make a plan, and do not give up. A hopeful outlook is much more productive in an emergency situation.

The Swim/Don't Swim Decision

Staying with or near a floating boat may be the best choice, especially if the event was witnessed or emergency communication was successful. Even if capsized or swamped, a boat may offer supplemental flotation and is far easier for potential rescuers to spot than is a person in the

water. Swimming in cold water can reduce in-water survival time, and the average person will lose more heat faster by swimming than by remaining still. Distances can be deceiving when on the water, and safety can look closer than it really is. According to Professor Dr. Michel B. Ducharme, situational factors should be considered when making the swim/don't swim decision:

- Whether or not a life jacket or survival suit is worn
- Whether a place of safety is close (less than 800 yards away or 45 minutes swimming time based on fitness level and swimming ability, and wearing a life jacket)
- The likelihood of rescue by others; i.e., the event was witnessed or others are aware of, and are responding to the emergency
- The ability to get in or on top of the boat or other object to get some or all of your body out of the water
- Whether you would be abandoning a place of relative safety to try to swim



The "huddle" position helps preserve heat, keeps you together to better be spotted by rescuers, and can be a way to aid an injured person in the water.

- Whether calm or moving water (e.g. a river)
- Physical ability and medical condition of the party members.

Swimming in open water:

Use a "head out" breaststroke or modified backstroke, using just forearms and lower legs. Keep upper arms and elbows close to the sides of chest, upper legs close together and knees slightly bent. Move in an even and sustained pace and conserve energy.

If there is more than one person and they are in the "huddle" position (above), one person at a time may be able to propel the group, perhaps taking turns.

Use floating objects to pull body out of water

Swimming in rivers or other moving water:

- Point feet downstream, knees bent slightly and feet up to avoid foot entrapment.

- Maintain body at a 45-degree angle to the current, with head pointing to the bank of choice. The force of the current on the upstream side of your body will help to “ferry” you toward that bank.
- Use a modified backstroke. Use your feet, arms and legs to fend off rocks and other objects.
- If necessary be prepared to quickly flip onto your stomach and into a head-first position to scramble over “strainers” or other obstacles to keep from becoming pinned against them by the current.

1 Hour

Even in very cold water people may have 30 minutes or more before body core temperature begins to drop. If unable to self-rescue, the priority may now become slowing the rate of heat loss to extend useful consciousness and survival time. Keep movement to a minimum. Protect areas of high heat loss (e.g., head, neck, armpits, groin, sides of the torso) as much as possible.

If in open water, some life jacket designs will allow the person to use the “Heat Escape Lessening Position.” (H.E.L.P.) Test the life jacket first to make sure it does: Grasp the shoulders of your life jacket by crossing your arms, or place hands in arm pits and cross lower legs and raise your knees as close to your chest as possible while still maintaining position in the water.

Small groups can form a tight “Huddle” by intertwining arms so that bodies work together to possibly slow heat loss. Small children and injured or unconscious persons can be placed in the center of the huddle to be supported by the group. Persons in a group should tie themselves together to keep from becoming separated.

In any case, be prepared to activate visual and sound distress signals when potential rescuers are in range.



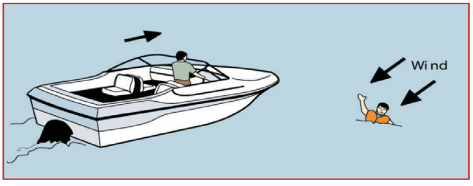
Designate a lookout while launching a rescue effort, so they can keep eyes on any victim falling overboard while the boat driver maneuvers closer.

Person Overboard Response

1. Everyone put on a life jacket (if they aren’t worn already).
2. Keep eyes on the victim at all times. If

possible, assign a person on the boat to serve as the lookout.

3. Throw supplemental flotation, ideally with attached floating line to the person immediately. (e.g. life ring, seat cushion, horse shoe buoy.)



Approach a victim in the water from downwind and/or down current.

4. Approach the person from downwind or downstream if possible. To avoid the risk of striking the victim with the boat, when close enough to reach for the person, use an oar, paddle, or other item to pull them to the boat. Or, use a throw ring or cushion with a line attached to pull the person to the boat.
5. Don't go into the water for the victim, except as a last resort.
6. Direct passengers as necessary to assist and/or to balance the boat, then assist the person in getting out of the water. If pulling a victim in over the stern, all engines should be stopped.
7. Treat the victim to your level of training.

Treating Immersion Hypothermia

The goals for treating immersion hypothermia patients are:



Approach victims in the water carefully so you don't accidently run over them. Use caution transferring them into the boat to avoid further injury or capsize.

Handling gently because cold heart muscle and vasculature of severely hypothermic patients are vulnerable to physical exertion, jarring, or moving from a horizontal to vertical position too quickly.

Providing basic life support as necessary.

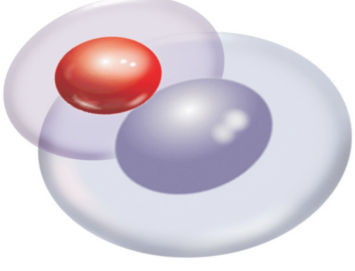
Preventing further heat loss by removing wet clothing, drying victims off and putting them in dry clothes and a sleeping bag or blankets and vapor barrier. Shivering is good.

Securing transport to medical care for moderately to severely hypothermic patients.

A person found unconscious in cold water, even if they appear dead, may still have a chance for survival. If the victim was known to be submerged for an hour or less (or if the time of submersion is unknown), providing basic life support to your level of training and obtaining medical help quickly could save a life. Emergency medical responders are taught "a cold water immersion victim isn't dead until they are warm and dead."

CARBON MONOXIDE POISONING

Carbon monoxide (CO) poisoning, the leading cause of accidental poisoning death in America, has been identified recently as a serious problem on our nation's waters. CO (known as "The Silent Killer") is an odorless, colorless, tasteless gas, formed by the incomplete combustion of hydrocarbon fuel, which can cause seizures, unconsciousness and death. CO binds to red blood cells 240 times more aggressively than oxygen, displacing oxygen and causing metabolic asphyxiation (suffocation). Depending on the concentration, CO poisoning can happen very quickly, sometimes with just a few breaths.



Carbon monoxide binds to red blood cells displacing oxygen

Boaters should be aware of improperly vented or malfunctioning cabin

DID YOU KNOW?

Carbon monoxide (CO) poisoning can happen very quickly, but on a boat can sometimes be mistaken for seasickness. If you begin to feel ill, consider your surroundings, and the possibility of exposure to too much CO, as a culprit.

heating systems, grills and propane appliances and exhaust gases produced by generators and engines. These all produce CO.

Exhaust fumes and CO can accumulate in areas such as enclosed cabin spaces and under swim platforms. Prevent CO poisoning aboard your vessel by taking these precautions:

- Use care in running the engine or boat's generator continuously when the boat is closed up in cold or bad weather, particularly when the boat is not in motion.
- Do not use small, portable gas generators on boats.
- Be alert to any indication that exhaust fumes are present and ventilate accordingly.
- CO detectors should be installed and maintained in enclosed areas.
- Everyone on board should keep well clear of engine and generator exhaust ports that are running.
- If there is a need to be around swim platforms or exhaust ports for any reason, first shut the engines down and then allow sufficient time for fumes to dissipate.
- Be mindful of the wind direction if idling the motor; even if you are in a boat with the three-sided canopy, don't assume enough fresh air is flowing to disperse the exhaust.
- Be sure to have your engine and generator exhaust systems regularly inspected by a professional. If you notice a change in the sound or appearance of the exhaust system, shut the unit down and have it inspected and repaired by a competent mechanic.

Because CO is difficult to detect by sight or smell and poisoning can happen so quickly, there is often little warning. CO poisoning is difficult to diagnose because it often is mistaken for seasickness, and also has a wide range of vague symptoms:

- Fatigue and headache are most common.
- Symptoms of dizziness, vomiting, muscular twitching, weakness and sleepiness.
- Gray or ashen appearance.

If someone feels dizzy or loses consciousness while onboard, consider the possibility of CO poisoning. If you suspect someone could be suffering from CO poisoning, remove them from the suspected source

and into fresh air immediately. Be prepared to provide basic life support to your level of training, and call for medical assistance.

FIRE

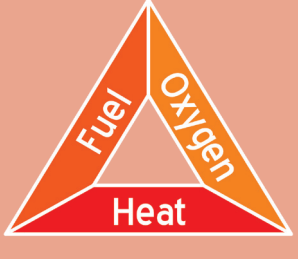
The key to putting out a fire on a powerboat is eliminating any of the fire's three ingredients: fuel, oxygen or heat. Often the easiest to remove is oxygen—by using a fire extinguisher. Fire extinguishers use agents that either cool or smother the fire, such as water, carbon dioxide, halon, dry chemical or dry powder.

If a fire breaks out:

1. Alert passengers. Direct them to put on lifejackets if not already on, gather survival gear and prepare to go into the water if necessary.
2. Keep the fire downwind; turn the boat so flames and smoke blow away from the craft, rather than over it.
3. Cut off oxygen to the area of the fire.
4. Use the P.A.S.S. system to extinguish the fire:
   - P: PULL the pin.
   - A: AIM the extinguisher nozzle at the source (at base of flames).
   - S: SQUEEZE the handle.
   - S: SWEEP back and forth.
5. Don't try to save some of the charge for a re-flash; a B-I extinguisher empties in less than 10 seconds; instead, carry a spare extinguisher.
6. Transmit a MAYDAY if necessary.
7. As a last resort, abandon ship. Stay together and use cold water survival techniques.

STOP THE FLAMES

Use the P.A.S.S. system to extinguish a fire:
• PULL the pin.
• AIM the extinguisher nozzle at the source (at base of flames).
• SQUEEZE the handle.
• SWEEP back and forth.



TAKING ON WATER

1. Direct passengers to put on their life jackets if not already wearing them, and gather survival gear.
2. Re-distribute weight to balance the boat.
3. Secure doors and hatches.
4. Pump and bail. Start bilge pumps and get manual dewatering

devices in use.

5. Locate leak source and take measures to stop or reduce leak. If unsuccessful and near shore, consider beaching the boat.
6. Shut off engines if the leak is from the cooling system.



7. If hull is breached, an inboard engine can act as a bilge pump. Shut off engine, close sea cock, disconnect cooling water intake hose, restart engine and use the water intake hose to pump out the boat.
8. Transmit MAYDAY if necessary.
9. As a last resort abandon ship, but stay with the boat if it is floating. Stay together and use cold water survival techniques. See Swim/ Don't Swim section, on Page 91, for more.

RUNNING AGROUND

Besides causing expensive damage to the boat and engine, striking underwater objects or the bottom can cause passengers to be suddenly thrown forward, often resulting in injury and/or ejection into the cold water. Running aground is usually caused by inattention. This can be avoided by taking these simple steps:



- Carefully study charts of the area before a trip to identify shallow areas, rocks and other hazards.
- Be aware of the tide cycle or changes in river volume.
- Always maintain a close watch while underway, constantly scanning the water.
- In shallow water, proceed SLOWLY and use charts, a depth finder and an observer.

If you do run aground, first ensure the safety of passengers. Next:

- Assess the situation.

- Check for hull damage.
- If the boat is not firmly grounded, consider lightening the load and, if safe, rocking the boat back and forth to free it. If the tide is coming in, and the hull is not damaged, it may be possible to wait a few minutes to regain flotation.
- Another method is to use an anchor or sea anchor to pull the boat into deeper water.
- If the boat can not be freed, stabilize it and secure fuel tanks and vents.
- Prepare signaling devices and consider calling for help.

MECHANICAL BREAKDOWN

Mechanical breakdown is the most common powerboating problem. If you encounter problems on the water, consult owner's manuals and try some of the following before calling for help:

Problem: Engine turns over but won't start

- Check if safety shut-off cable is disconnected.
- Check if fuel is getting to the engine (fuel line not primed, kinked, bad connection, tank vent closed).
- Check if engine is flooded.
- Check for spark.

Problem: Engine doesn't turn over or the solenoid clicks but starter does not engage

- Check that the gear shift is in the neutral position.
- Check that the battery switch is in the "on" position.
- Check that battery terminals, cables, and connections are clean and secure.
- Check ALL ignition system fuses, including under engine cowling (outboards).
- Check starter solenoid.
- Check connections at starter motor.

Problem: Engine runs poorly

- Check if fuel line priming bulb is full of fuel and firm
- Check if fuel tank vent is closed.

- Check fuel lines and connections for kinks, pinches, obstructions and poor connections, and check fuel filters for contamination (water or other agents).
- Check fuel and fluid levels.
- Check for overheating.

Problem: Engine stops suddenly

- Check if engine cut-off device became disconnected or the ignition key was turned off.
- Check fuel and oil levels.
- Check if fuel tank vent is closed.



- Check fuel line connections.
- Check for engine overheating.
- Check for propeller fouling.

Problem: Engine overheats

- Shut down immediately until problem solved.
- Check oil levels.
- Check water intakes and cooling system for fouling, obstructions or leaks.
- Check water pump operation.
- Check engine trim to make sure water intake is below the water line.

EMERGENCY COMMUNICATIONS

Emergency Radio Procedures

There are three types of emergency radio messages:

SECURITE — to notify others of bad weather or other hazards (pronounced say-cure-eh-tay).

PAN-PAN — to notify others of a very urgent situation regarding vessel or personal safety. In a Pan-Pan the situation is urgent, but for the time being does not pose an immediate danger to anyone's life or to the vessel itself (pronounced pon-pon).

MAYDAY — to notify others when experiencing an immediate threat to life or vessel.

WHAT IS THE PROBLEM?

Here are a few examples of calls that would fall under each of the emergency radio messages categories:

• SECURITE: A storm is coming in from the north and seas are picking up rapidly.

• PAN-PAN: A group of paddlers is crossing a heavy traffic zone.

• MAYDAY: Our boat is taking on water and we need immediate help.

EMERGENCY RADIO CALL PROCEDURES

1. MAKE SURE RADIO IS ON
2. SELECT CHANNEL 16
3. PRESS & HOLD TRANSMIT BUTTON
4. CLEARLY SAY: ***MAYDAY, MAYDAY, MAYDAY***
5. ALSO GIVE:
   - **VESSEL NAME & DESCRIPTION**
   - **POSITION/LOCATION**
   - **NATURE OF EMERGENCY**
   - **NUMBER OF PEOPLE ON BOARD**
6. RELEASE TRANSMIT BUTTON
7. WAIT 10 SECONDS — IF NO RESPONSE, REPEAT

16
VHF-FM

CONFIRM ALL PERSONS WEARING LIFE JACKETS!

www.alaskaboatingsafety.org

If you get a response, be prepared to give the following information:

Vessel description:

Length:_____ Propulsion type:_____

Color:_____ Registration #:_____

On-scene weather:

Wind speed:_____ Wind direction:_____

Sea height:_____ Swell direction:_____

Visibility:_____ Ceiling:_____

Emergency radio and survival equipment onboard:_____

Radio frequencies available:_____

Operator's name and phone:_____

Owner's name and phone:_____

Home port:_____

Digital Selective Calling

In addition to sending a distress call, or MAYDAY, boaters should also consider activating the red digital selective calling (DSC) emergency button on their MMSI-equipped and registered radio to “alert all stations.”

- A distinctive red “DISTRESS” button is located on the face of a DSC radio, and some handheld radios.
- Manufacturers are required to install DSC on any marine VHF radio model developed after June 1999 (except handheld models).
- DSC radios automatically send (once pushed) a DISTRESS alert to those in the immediate area who are also equipped with a DSC radio, without having to use the usual voice calling/distress channels.
- DSC radios automatically and silently maintain a listening watch on the appropriate DSC channel (VHF 70, or 2187.5 kHz).
- The benefits of DSC are greatly enhanced when the radio is connected to the boat’s global positioning system (GPS) unit.

To be able to use the DISTRESS alert function, boaters must first obtain a Maritime Mobile Service Identity (MMSI) number. This nine-digit number electronically identifies a specific boat and must be programmed into the radio. MMSI numbers may be obtained from www.boatus.com/mmsi/, 1-800-563-1536; SeaTow, 1-800-4SEATOW; U.S. Power Squadrons, www.usps.org; or Shine Micro, www.shinemicro.com.

The U.S. Coast Guard’s Rescue 21 Digital Selective Calling emergency contact system is operational in some parts of Alaska; in addition, those in the immediate area with DSC can receive the distress signal for relay purposes. For more information on where Rescue 21 is operational, contact the U.S. Coast Guard at (907) 428-4200.

Emergency Cellular Procedures

Where there is cellphone coverage, it is possible to call the U.S. Coast Guard directly by dialing *CG (*24). Alaska is the only state where *CG is still operational, however the call must be placed from an Alaska cellular phone provider.



1. First give your phone number in case you are disconnected.
2. Give your name and a boat description.
3. Give your position/location.
4. Explain the nature of your problem.
5. Give the number of people on board.
6. REPEAT your cellphone number before ending your call.
7. Keep as calm as possible and speak slowly and clearly so you can be understood.

Single Side Band (SSB)

The U.S. Coast Guard can be reached by HF/SSB radio on 4125 MHz.

Emergency Locator Beacons

Emergency locator beacons are highly effective tracking transmitters that aid in the detection and location of boats, aircraft, and people in distress. When activated, these radio beacons interface on the 406MHz frequency with COSPAS-SARSAT, an international satellite-based search and rescue alert detection and information distribution system.

There are two main types of beacons that are appropriate for boating in Alaska:

- Emergency Position Indicating Radio Beacons (EPIRBs) are installed on vessels. There are two categories: Category 1 beacons automatically deploy and activate when in contact with the water, but can also be manually deployed and activated or manually activated while in its bracket. Category 2 beacons manually deploy.
- Personal Locator Beacons (PLBs) work much the same way as EPIRBs, but are carried by a person and must be manually deployed and activated by the user. When selecting a PLB for boating, consider models that are waterproof, will float and are small enough that you will always carry it on your person when on the boat.

When selecting an emergency locator beacon, consider ease of activation under a variety of conditions and the length of time the unit will operate following activation.

It is important that the EPIRB or PLB be registered (and the information updated every year) so that rescuers can access the vessel's or PLB owner's emergency contact information. Registration is available online

at www.beaconregistration.noaa.gov.

Once communication has been established, be prepared to deploy signaling devices when search and rescue is nearby.

If You See a Flare:

To improve an emergency responder's ability to quickly locate a mariner in distress, a technique known as the "Fist Method" has been developed to assist in accurately determining the position of the flare in relation to yourself, the reporting source.

The Fist Method: To estimate the distance of a flare from your position, the responder needs to determine the height of the flare above the horizon. To do this, hold your arm straight out in front of you and make a closed fist. Hold the bottom of your fist on the horizon with the thumb side pointing up. Picture in your mind the flare that you saw, compare the height of the flare at its peak to your fist. Was it one knuckle or two from the horizon? Or more? By using this method, responders can estimate how far away the flare is from you.



CONTACTS

Boating Education

- Alaska Office of Boating Safety (907) 269-6041
  www.alaskaboatingsafety.org
- Alaska Water Wise courses (907) 269-8704
  www.alaskaboatingsafety.org
- Alaska Marine Safety Education Association (907) 747-3287
  www.amsea.org
- American Canoe Association, www.americancanoe.org
- BoatUS Foundation, www.boatus.com
- Fairbanks Paddlers, www.fairbankspaddlers.org
- Kids Don't Float Education Program, 907-269-8705
- Knik Canoers and Kayakers, www.kck.org
- National Association of State Boating Law Administrators, www.nasbla.org
- USCG Auxiliary courses, www.cgaux.org
- USCG Boating Safety Division, www.uscgboating.org

Accident Reporting

Mail to:
Alaska Office of Boating Safety
550 W. Seventh Ave., Suite 1380
Anchorage, AK 99501

Fax to:
(907) 269-8907

Email to:
officeofboatingsafety@alaska.gov

Reporting Oil Spills

Both state and federal agencies must be contacted in the event of an oil spill.

State:

Department of Environmental Conservation

- Southeast Area (907) 465-5340
- Northern Area (907) 451-2121
- Central Area (907) 269-3063

- 1-800-478-9300 (after normal business hours)

Federal:

- U.S. Coast Guard National Response Center 24-hour Hotline 1-800-424-8802

Ports and Harbors

- Anchorage (907) 343-6200
- Bristol Bay (907) 246-6168
- Cordova (907) 424-6400
- Dillingham (907) 842-1069 (seasonal number)
- Haines (907) 766-2448
- Homer (907) 235-3160
- Juneau (907) 586-5255
- Kenai (907) 283-7535
- Ketchikan (907) 228-5632
- Kodiak (907) 486-8080
- Petersburg (907) 772-4688
- Sand Point (907) 383-2331
- Seldovia (907) 234-7886
- Seward (907) 224-3138
- Sitka (907) 747-3439
- Skagway (907) 983-2628
- Valdez (907) 835-4981
- Whittier (907) 472-2330
- Wrangell (907) 874-3736

Other

- Alaska Weather Information Hotline
  -In Anchorage, call: 266-5145
  -In Fairbanks, call: 458-3745
  -In Juneau, call: 790-6850
  -Anywhere else in Alaska: 1-800-472-0391
  -Outside of Alaska: 1-907-266-5145
- Cook Inlet Keepers (for a bilge pillow), www.inletkeeper.org

ACKNOWLEDGEMENTS

Research, Writing and Editing

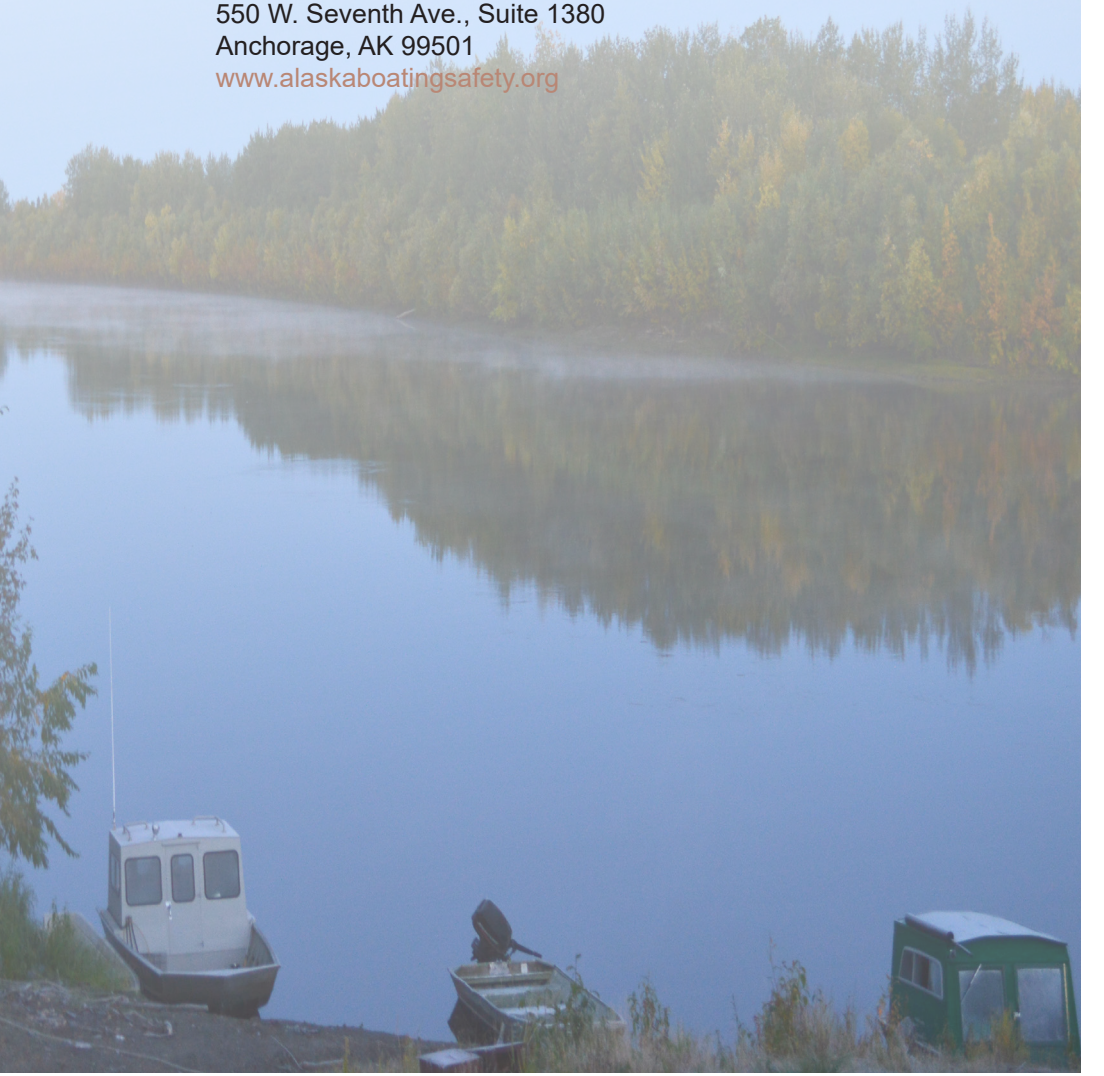
Jeff Johnson, Joe McCullough, Kelli Toth, Melissa DeVaughn — Alaska Office of Boating Safety

Layout and Design

Melissa DeVaughn, Alaska Office of Boating Safety
Meg Anderson, Alaska Division of Parks and Outdoor Education, Interpretation and Education

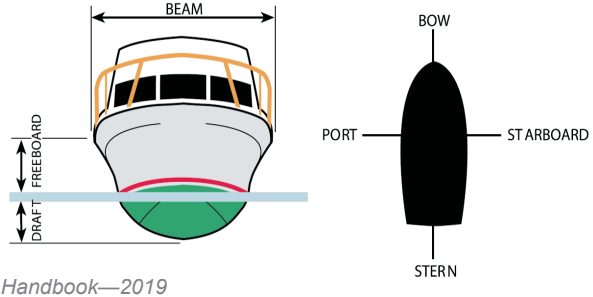
Publisher

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www.alaskaboatingsafety.org



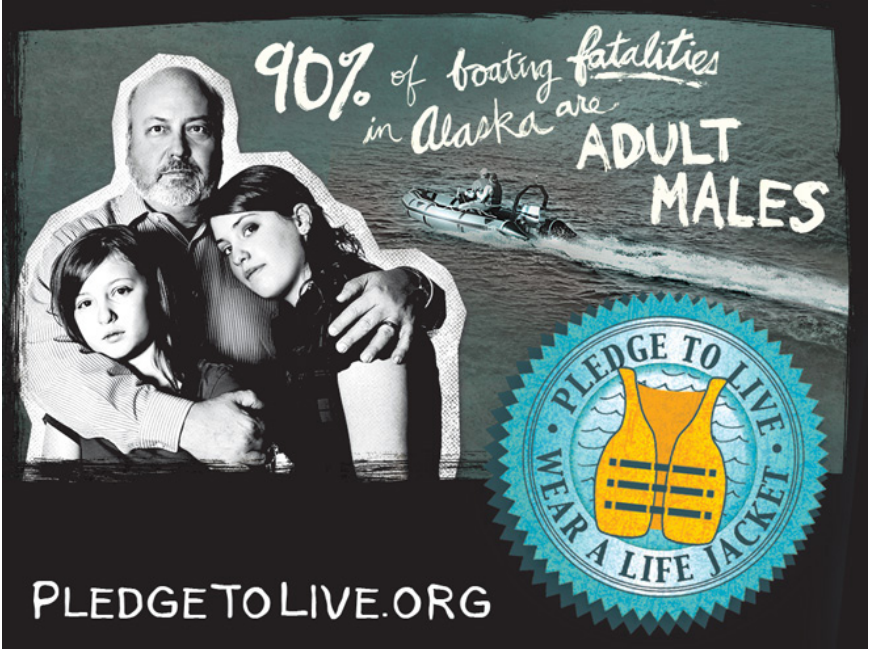
BOATING TERMS

- **Amidships**—Center of boat with reference to its length and/or sometimes its width.
- **Aft**—Toward the stern of a boat.
- **Beam**—The boat's maximum width.
- **Bilge**—Lower internal part of a boat's hull.
- **Boat**—Every description of watercraft used or capable of being used as a means of transportation on the water.
- **Bow**—Forward part of a boat.
- **Bulkhead**—A vertical partition separating compartments.
- **Draft**—The depth of water a boat draws.
- **Fathom**—Six feet.
- **Fore**—To or at the front of the boat.
- **Freeboard**—Height of boat from the waterline to the deck or gunwale.
- **Gunwale**—Top, outer edge of boat's hull.
- **Helm**—The wheel or tiller controlling the rudder.
- **Hull**—Body of a boat.
- **Motorboat**—Any boat propelled by machinery, including any sailboat under power.
- **Port**—Side of boat to the left when facing forward.
- **Starboard**—Side of boat to the right when facing forward.
- **Stern**—Back end of a boat.
- **Transom**—Flat planking across the stern of a boat.
- **Trim**—Fore and aft balance of a boat.
- **Underway**—Boat in motion. Technically, a boat is underway when not moored, at anchor or aground.



Boater's Toolbox:

Float plan
Marine weather
Tide tables
Life jacket selector tool
Pre-departure checklist



Notes



Notes


Make them promise
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Notes

Alaska's boating fatalities:

- Nine out of ten are adult males
- Nine out of ten occur from open boats under 26 feet
- Five of six are cold water related drownings following a sudden capsize, swamping, or fall overboard

I, _____pledge to always wear my life jacket because:

_____

_____

_____

_____



Visit PledgeToLive.org for a trip planner, E-float plan, weather, tides, and much more.

Notes



Notes



This publication is dedicated to Mr. Jeff Johnson, Alaska's first Boating Law Administrator, and state employee for more than 30 years.

RESCUE READY



Always wear a life jacket when in an open boat or on an open deck.



Carry emergency communication and distress signaling devices on your person.



Attach the engine cut-off device when underway.



Equip the boat with at least one means of reboarding.



File a float plan and find more information at PledgeToLive.com

For classes, presentations, and educational resources visit:
AlaskaBoatingSafety.org

Alaska Boating Safety Program

AK Boat