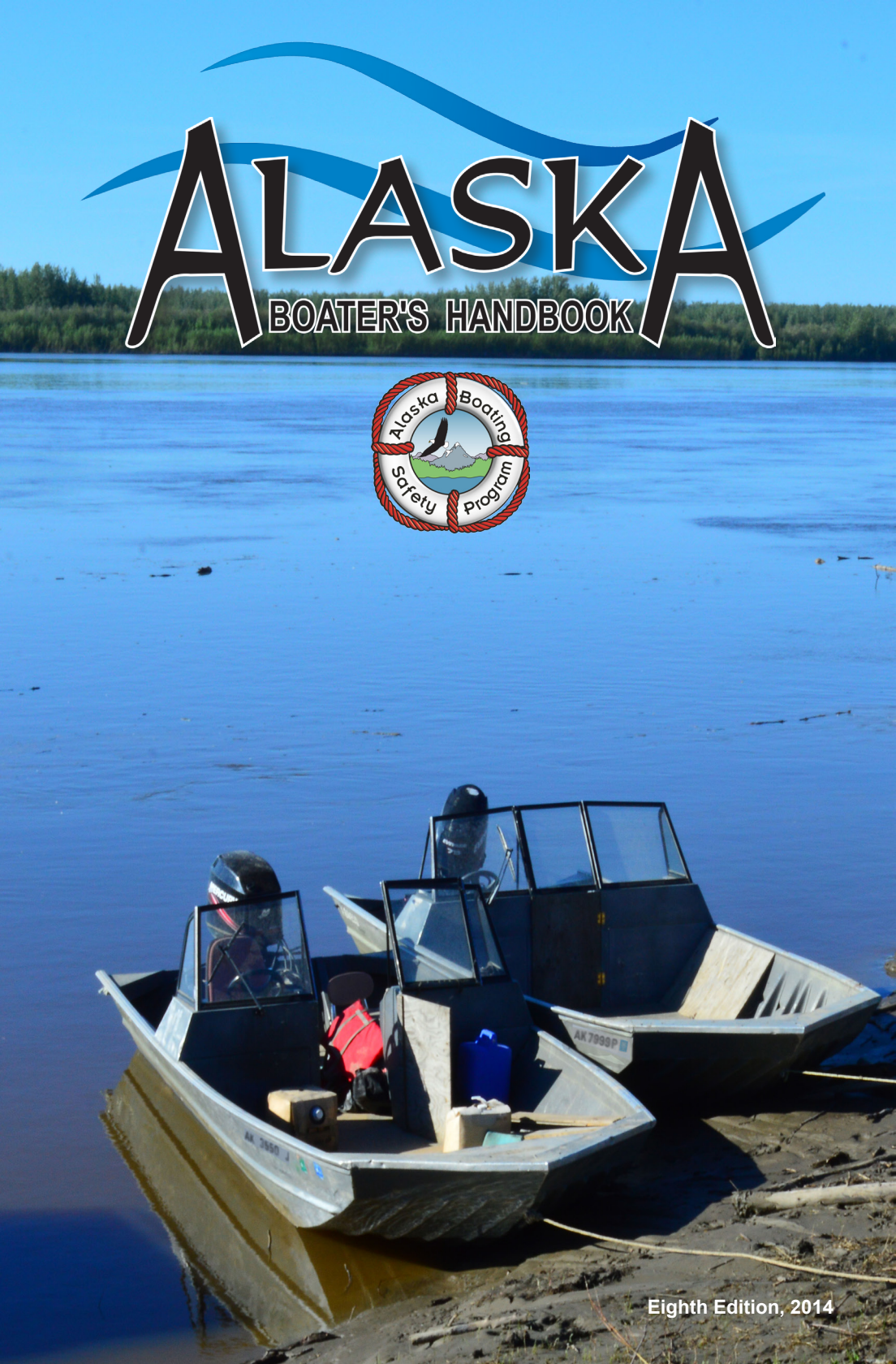
ALASKA
BOATER'S HANDBOOK

Alaska Boating Safety Program



Eighth Edition, 2014

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Front cover photo:

The Innoko River Shageluk, Alaska

Although this media is not a NASBLA-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 2014 edition of the *Alaska Boater's Handbook*.

A guide to safe and enjoyable boating in Alaska

Kids Don't Float Peer Educators in Shageluk, Alaska

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

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Dear Alaskan Boater,

Alaska offers a wide array of boating activities on its vast system of waterways. The types of water and vessels used are as varied as the people who use them. For many, Alaska is a boater's paradise, but the users of its waterways know that circumstances can change quickly and accidents can and do happen. 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, so that everyone can have a safe and memorable adventure.

Longtime Alaskans as well as the newest visitor can benefit from the information found in the pages of this handbook. Education, preparation and preparedness can help reduce fatalities when boating in our great state. Please familiarize yourself with the information the handbook provides and consider taking a boating safety course to stay up to date on legal requirements, new innovations such as inflatable life jackets and the latest information on topics such as cold water immersion.

In addition to this handbook, the Alaska Office of Boating Safety provides other resources for boaters that can be obtained by calling (907) 269-8706 or visiting the website 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.

Many great adventures await the well prepared and adventurous boater. From all of us at the Division of Parks and Outdoor Recreation, we wish you a safe and memorable adventure. For the sake of you and your loved ones, please follow safe boating practices when on the water including filing a float plan, avoiding alcohol and most importantly always wear a life jacket.

Sincerely,

Ben Ellis
Director, Divison of Parks and Outdoor Recreation

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PREPARATION

INTRODUCTION

From powerboating and kayaking our coastal waters to air boating, jet boating, rafting, drift boating and canoeing our Interior rivers and lakes, Alaska's boating opportunities are unsurpassed. However, Alaska also has one of the highest boating fatality rates in the nation. The statistics relating to boating fatalities in Alaska:

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

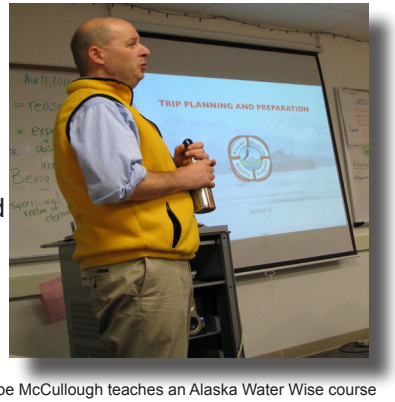
Because nearly all boating-related mishaps involve operator controllable risk factors, most are both predictable and preventable. All boating entails some risk and safe and enjoyable boating depends on effective risk management. The best skippers and paddlers know they must be able to anticipate, recognize 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 four cornerstones of safe, enjoyable boating: proper attitude, knowledge, skill and unimpaired judgment.

Attitude

Safe, enjoyable boating begins with the proper attitude. According to BoatUS, most accidents occur in good weather. Alaska's waterways are a dynamic, ever-changing environment. Complacency, over-confidence, carelessness or "amusement park" mentalities are serious liabilities on a boat. Never underestimate the power of Alaska's cold water. When boating in Alaska, avoid a "day trip" attitude.

Knowledge

Nationwide, eight out of 10 boating fatalities involve boat operators who had not taken a single boating course. 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.



Joe McCullough teaches an Alaska Water Wise course

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

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

The Alaska Boating Safety Program 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. For more information, please contact the Alaska Office of Boating Safety at (907) 269-8704 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 the Alaska Marine Safety Education Association 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. Courses that incorporate hands-on instruction are recommended.

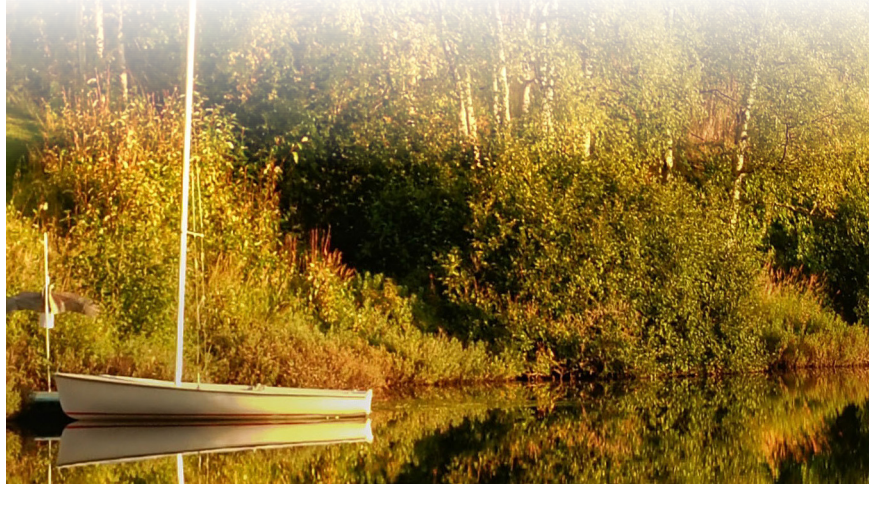
- American Canoe Association: www.americancanoe.org
- American Whitewater: www.americanwhitewater.org
- Knik Canoers and Kayakers: www.kck.org
- Fairbanks Paddlers: www.fairbankspaddlers.org
- Alaska Sea Kayak Symposium: www.aksks.org

Skill

All boaters should have the skill to operate their boat 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 mechanical breakdown can suddenly occur, requiring 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.

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.



EQUIPMENT REQUIREMENTS

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 through the United States Coast Guard's website at: www.uscgboating.org

State Requirements

In Alaska, 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.

Personal Flotation Devices (PFDs)

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

PFDs 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. If an object is more dense than the water it displaces, it has negative buoyancy and sinks. If it is less dense, it has positive buoyancy and floats. A U.S. Coast Guard approved PFD provides at least 15.5 lbs of supplemental buoyancy to overcome any negative buoyancy, allowing a person to float with little or no effort.

PFDs historically were thought of simply as a substitute for swimming ability. However, with increased understanding of the effects of cold water immersion, many Alaskan boaters are now realizing the importance of

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
Personal Flotation Devices (PFD)	One USCG-approved Type I, II, III or V PFD for each person on board. Must be in serviceable condition. Persons under 13 must wear a PFD when in an open boat, on the deck of a boat or when waterskiing.			
Throwable Devices (Type IV)	Recommended but not mandatory.	Except for canoes and kayaks, one USCG-approved Type IV (seat cushion or throw ring) device must be carried.		
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 must carry on board a whistle or horn.
Visual Distress Signals	USCG-approved night signals required between sunset and sunrise.	USCG-approved visual distress signals for both day and night time use must be carried. Exception: boats and open sailboats not equipped with mechanical propulsion and under 26 feet in length are not 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 USCG-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 USCG-approved fire extinguishers.	At least three B-I or one B-I and one B-II USCG-approved fire extinguishers.
Navigation Lights	Display required between sunset and sunrise and during periods of restricted visibility. International configuration required (varies with length and mode of operation). See the International Navigation Rules.			
Backfire Flame Arrestors	One USCG-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	Undocumented boats equipped with mechanical propulsion (gas, diesel or steam engines, and electric motors) and any undocumented vessel used in sport fishing charter activities must be registered with the Division of Motor Vehicles. Certificate of Number must be carried onboard. Registration numbers and validation decals must be properly displayed on hull of boat. REV 11.5.12			

always wearing a life jacket when in an open boat or on deck.

Life jackets aid breath control by increasing the distance between breathing passages and the water. They also assist with self-rescue or when rescuing someone else, and keep a person floating even if disabled or unconscious.

There are important legal requirements concerning PFDs:

- A U.S. Coast Guard-approved life jacket must be carried on board for each person on the boat.
- Persons under 13-years-old must wear a life jacket when in an open boat, on an open deck or when being towed on water skis or other devices.
- PFDs 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.
- PFDs must be used in accordance with the manufacturer's label and owner's manual. Some life jackets must be worn to count as U.S. Coast Guard approved.

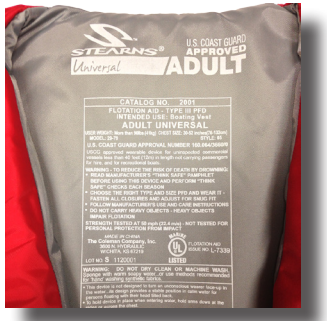
This life jacket is too big!

- All PFDs must be in serviceable condition, meaning they must be free of defects such as missing or waterlogged flotation material, or broken zippers, buckles or straps. Special attention should be given to inflatable devices, which should be carefully maintained per manufacturer recommendations.
- All life jackets must be readily accessible for use during an emergency. Of course, the best way to meet this requirement is to WEAR IT!

Life Jacket Selection

Life jacket designs have come a long way over the years and now come in a wide variety of styles and colors. No one life jacket is perfectly suited for all persons in all situations. For example, some are designed for off shore use, and others for near shore 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 flotation coats and coveralls, and full body immersion suits, help slow heat loss when in the water.

Carefully 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.



Read the label

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

Immersion suits (survival suits) completely cover the wearer, significantly slowing heat loss in the water. These devices have saved many lives and it is a good idea to carry them onboard.

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

Types of Personal Flotation Devices

USCG Type	Minimum Buoyancy (adult sizes)	Recommended Uses	Turns Unconscious Wearer Face Up?	Other Comments
I	22 lbs.	off shore PFD designed for rough, remote or open water	most	offers most buoyancy; high visibility colors
II	15.5 lbs.	near shore PFD designed for calm, inland water	some	less cost and less buoyancy than Type I
III	15.5 lbs.	designed for a wide variety of uses	inflatable designs turn most persons; inherently buoyant (foam) designs do not	comfortable, many styles (fishing, paddling, water skiing); use according to label
IV	16.5-20 lbs.	designed for throwing to a person in calm water	not applicable	boat cushions, life rings; not considered by law to be a wearable PFD
V	varies	wearable special use devices designed for specific purposes or conditions, such as flotation suits or deck coats	varies	in-water performance of a Type I, II or III (see label); some models must be worn to meet requirements

Type I

Type II

Type III

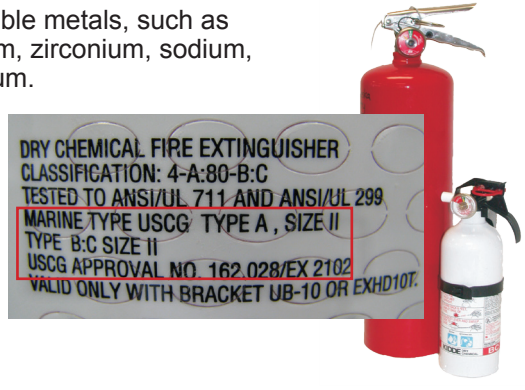
Inflatable: read label for type and use

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

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 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**—involve energized electrical equipment.
- **Class D**—combustible metals, such as magnesium, titanium, zirconium, sodium, lithium and potassium.



Extinguishers must bear 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.

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 and approved 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.

- Other boats must carry U.S. Coast Guard approved day and night signals at all times.
- Carry extra visual and sound signaling devices in clothing or PFD 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 U.S. Coast Guard approved pyrotechnic devices are marked with an expiration date. If expired flares are carried as spares, put them in a separate container and clearly mark them 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 that reason, many experienced boaters carry, in addition to the requirements, other signaling devices including expired pyrotechnics, survival mirrors, floating signaling streamers, distress flags and signal kites, whether or not they are U.S. Coast Guard approved.

Examples of U.S. Coast Guard approved visual distress signals are:

- Electric, automatic SOS distress light (night signal)
- Three orange smoke canisters (day signal)

Distress flag

Signal flares

- Three hand-held flares (day and night signal)
- Three red meteor aerial flares (day and night signal)
- Three parachute flares (day and night signal)
- Orange flag with distress symbol (day signal)

Sound Signals

The 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 PFD is a great way to meet this requirement.

Various types of sound signals

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

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.

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.

Exceptions: A vessel which 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 such a system is safe without a flame arrestor.

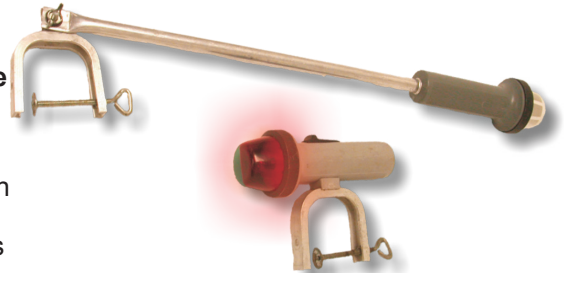
Navigation Lights and Shapes

The 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 and are black in color). It is the responsibility of the boat operator 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 following page.



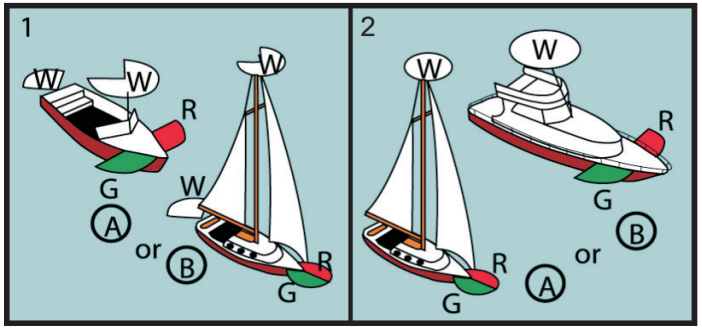
Powerboats must exhibit navigation lights as shown in Figure 1, except that boats less than 12 meters (39 feet, four inches) may show the lights shown in Figures 1 or 2. A power-driven boat of less than seven meters (23 feet) in length whose maximum speed does not exceed seven knots may instead exhibit 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.

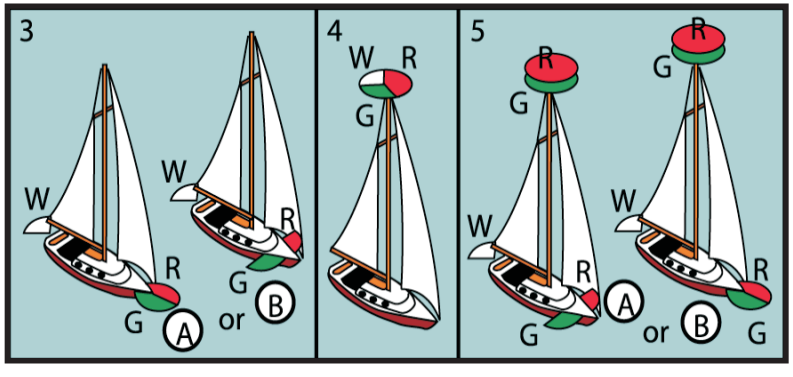
Sailboats under sail alone must exhibit navigation lights, as shown in Figures 3 or 4, and may also display the lights shown in Figure 5. A sailboat of less than seven meters (23 feet) in length must either exhibit navigation lights as shown in Figures 3 or 4 or carry an electric torch or white light,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

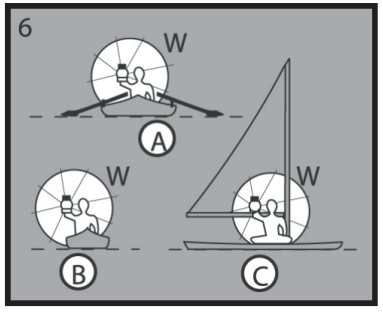
Boats under oars must either exhibit navigation lights as shown in Figures 3 or 4 or carry an electric torch or white light, which must be exhibited in sufficient time to prevent a collision (Figure 6).

Anchor lights must be displayed on power-driven vessels and sailboats. An anchor light is an all 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, lighting and shape requirements, can be found in the complete Navigation Rules, which may be obtained from:

Superintendent of Documents
U.S. Government Printing Office
P.O. Box 371954
Pittsburgh, PA 15250 -7594
(202) 512-1800

REGISTRATION 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 undocumented 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.

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

- Boats with current registration from another state (though not to exceed 90 consecutive days)
- Government boats. NOTE: Government recreational boats are <u>not</u> exempt under <u>federal</u> law

- Ship lifeboats that are used solely for lifesaving purposes
- Boats documented by the U.S. or a foreign government
- Boats not equipped with mechanical propulsion <u>unless</u> used for sport fish guiding

When a boat is registered, the owner is issued a Certificate of Number for that boat. The Certificate of Number must always be kept on the boat when the boat is in use.

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

How to Register

The 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 not yet been assigned a Certificate of Number in Alaska and is applying for a new Certificate of Number must also provide one of the following ownership documents with their application:

- Manufacturer's Statement of Origin (new boats only)
- Carpenter's Certificate
- Bill-of-Sale from a dealer or the previous owner
- Title or 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 on the internet through the Alaska Boating Safety Program's Web page at www.alaskaboatingsafety.org or the DMV Web page 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 Certificate of Number, transfer of ownership or renewal: $24
- Duplicate Certificate of Number or replacement decal: $5

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

- Original Certificate of Number, transfer of ownership, or renewal: $10
- Duplicate Certificate of Number or replacement decal: $5

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 Certificate of Number
- Transfer of all or part of the owner's interest in the boat
- Destruction or abandonment of the boat

The boat owner is also required to surrender the 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 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 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.

OTHER BOATING LAWS

Prohibited Operation

A person may not operate a boat on water of the state 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. (AS 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 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 that the person would otherwise incur and does not authorize or permit recovery in excess of injury or damage actually incurred. (AS 05.25.040)

Alcohol and Boating

Alcohol use is involved, on average, in at least 28 percent of Alaska's boating fatalities. Alaska's laws that define driving while intoxicated, and the penalites for conviction, also apply to boat operators. The Alaska Office of Boating Safety strongly encourages boaters and passengers to refrain from consuming alcohol 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
- **Slows 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 the effects are multiplied

- **Increases heat loss**
- **Is just as dangerous for passengers**—Having a designated driver is certainly a good idea on the water, but don't let the passengers be "designated drowners"

Littering and Pollution Laws

It is unlawful to litter in either 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. 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. (AS 05.25.030)

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

Under federal law, if a person disappears or dies, or there are any injuries from the accident requiring more than first aid, the report must be filed within 48 hours. Other accidents must be reported within 10 days.

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 from http://dnr.alaska.gov/parks/boating/pdf/accident.pdf

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 oftentimes overlap. State peace officers, including the 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. While safe boaters will find these officers both helpful and professional, violators can expect to be cited.

PRE-DEPARTURE CHECKLIST

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 before each season or periodically, others should be checked before each trip.

Personal Flotation Devices (PFDs)

- U.S. Coast Guard approved PFD for each person, properly sized and in serviceable condition. 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, with 1/4" (minimum) diameter floating line, marked with boat registration number or vessel name.
- Survival (immersion) suits carefully inspected. Zippers waxed and suits unzipped for quick donning.

Signals/Communication

- Horn or whistle, operational, capable of a four second blast and audible for a 1/2 mile. If using a hand-held air horn, bring a spare can of air.
- Visual distress signals packed in an easily accessible container and clearly marked. Pyrotechnic devices, such as flares, should be current.
- Emergency locator beacon, working, charged battery, readily accessible (a must-have for off-shore and remote-area boaters.
- VHF marine radio(s) are working properly.
- Cellular phone, fully charged, and spare battery stored in a waterproof bag.

Alaskan boaters should also 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, emergency locator beacon

Fire Extinguishers

- With gauge, corrosion free, clear nozzles and fully charged.
- Securely mounted in a readily accessible location, but not where fire is likely to occur.
- 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 out, 1/3 back and 1/3 spare.
- Tank valves in proper position. Portable fuel tanks placed in open, well-ventilated areas. Portable tank vents closed for storage and transport, opened for use, and caps vapor tight and leak proof. Fuel lines and all fuel fittings carefully inspected for leaks, kinks, cracks or clogs. Fuel filters checked for water/dirt contamination.
- Engine oil checked and/or proper fuel/oil mixture checked.
- Tanks larger than seven gallons are properly grounded and vented.

Hull

- Drain plug(s) are installed.
- Hull bottom and drive train 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.
- 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 checked and working properly.
- Generator, stove and engine exhaust ports clear and unobstructed.

- Capacity plate and hull identification number (HIN) visible and legible.
- Small rope ladder, step or other reboarding device attached to the boat, deployable in the event of a capsizing or fall overboard.

Bilge/Engine Compartments

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

Main and Auxiliary Engines

- Propellers and lower units inspected.
- Belts, hoses and fittings checked.
- Backfire flame arrestor tight, clean and in good condition (inboard gas engines).
- Seawater strainers clean, in good condition.
- Check all fluid levels.
- Water pump operational when engine running, tell-tale water stream observed (outboard).

Wrangell, Alaska

- Engine(s) secured on transom, clamps and/or bolts tightened and secure.
- Inspect exhaust hoses and each of the metallic exhaust components for cracks, leaking, rusting or other deterioration. Replace if necessary.
- Test run all engines for five minutes. Monitor gauges, test forward and reverse gears, steering and emergency cut-off switches and check fuel and cooling systems for leaks.

Electrical/Electronics

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

Ground Tackle and Dock Lines

- Main and lightweight “lunch hook” anchors, each with shackles, chain and line. At least one anchor system attached to the boat and at the ready.
- Anchors selected for the size of the boat, bottom type and depth, and weather/water conditions.
- Sea anchor, with 200 feet of line.

- Dock lines and spares inspected for chafing and wear, stowed and secured.
- Two or more docking fenders.

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

Personal survival kit:

- Shelter aids (such as an emergency blanket or large garbage bag)
- Communication and signaling devices (see box on page 22)
- Personal health needs
- Fire starter (waterproof matches, lighter, starter material)

Contents will depend on each individual and items should be multi-purpose and regularly inspected.

- 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 or current certificate of documentation.
- 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

ALASKA FLOAT PLAN

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

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

Vessel type:	Hull type:	Communication/Signals:	Survival Equipment:
☐ Kayak	☐ Canvas / skin	☐ Installed Marine VHF	☐ Personal survival kits
☐ Canoe	☐ Plastic	☐ Handheld Marine VHF	☐ Tender/Raft/Dinghy
☐ River raft	☐ Fiberglass	☐ Single Side Band	☐ Water
☐ Row boat	☐ Wood	☐ EPIRB	☐ Spare Food
☐ Personal Water Craft	☐ Aluminum	☐ Flares	☐ Spare clothing
☐ Center console / skiff	☐ Inflatable	☐ Mirror	☐ Shelter (tent, tarp)
☐ Runabout / bow rider	☐ Rigid hull inflatable	☐ Cell # _____	☐ Matches/Lighter
☐ Cabin Cruiser / overnighter	☐ Other_____	☐ Other Signals _____	☐ Other_____
☐ Sailboat			

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

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.

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 passenger's 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, planned destination and route, expected return 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.

Passenger Briefing

All passengers should know the rules while on board 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 PFDs, rescue devices, survival kits, first aid kits and survival suits and life rafts.
- How to use radios, battery switches, fuel valves, fire extinguishers, signaling devices and EPIRB(s).

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 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 at 1-800-472-0391.

If boating in 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 fill 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.

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 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.

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

Also consider the following:

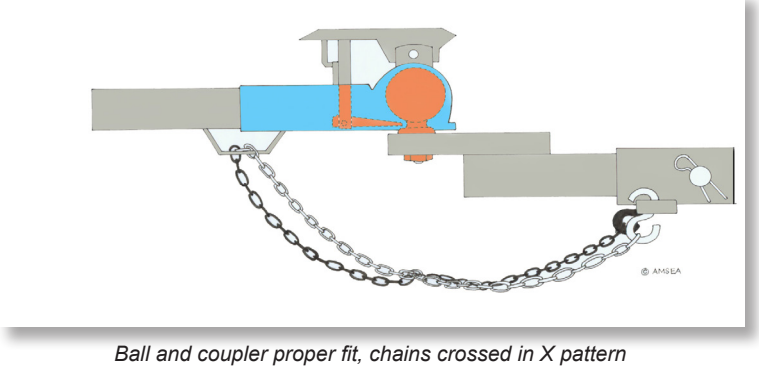
- Always use great care when loading and handing gear to a person already in the boat.
- Carefully secure heavy items from shifting.
- Properly position items and passengers evenly, and then adjust as necessary for safety and optimal boat performance.
- Proper trim (lateral, fore and aft) aids in boat 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 winch ratchet stop engaged.
11) Keep wheel chocks easily accessible.

At the ramp:

1) All passengers should exit the vehicle.
2) Vehicle doors unlocked, driver's window down.
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 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, away from the launch area, to the dock or shore.
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 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.

THEFT PREVENTION

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

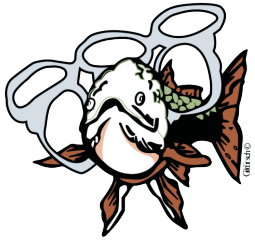
- Take keys and valuables out and lock the boat and all hatches and storage compartments.
- Lock portable outboard motors to the boat.

- 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 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 in a location where others cannot easily see them. If a powerboat, make sure the engine is disabled.
- Secure trailers by using a hitch lock (even when on the tow vehicle), by immobilizing the trailer with a wheel lock, removing a trailer wheel and/or blocking up the frame, or place a vehicle or other large object in front of it.

Fisherman's Memorial Cordova, Alaska

UNDERWAY

ENVIRONMENTAL ETHICS



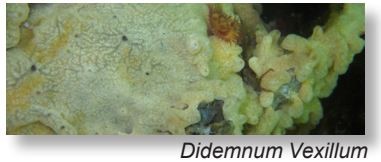
- Federal law prohibits the discharge of plastic trash into U.S. navigable waters. Polystyrene cups, plastic bags, bait packages and monofilament line can kill or injure birds, fish and marine mammals. Reduce the amount of packaging and plastic taken aboard. Keep a sturdy garbage container on board and use it. Retrieve any trash that falls overboard.
- No human generated waste, no matter how small, should be thrown overboard. Use rest rooms 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. navigable waters. Never discharge fuel, oil, chemicals or contaminated bilge water into the water. Don't use soap or detergent to get rid of oil that has spilled into the water. 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 approaching too close to bird rookeries. This may be evident by changes in the bird's behavior.

- Alaska has many special protected areas. Whenever boating in a new area, first contact local resource management agencies or landowners to obtain guidelines.
- Keep the 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.
- Don't keep more fish than can be used within the next three to six months.
- Consider using sinkers made of materials other than lead. Small lead sinkers are ingested by shore birds and sea birds, killing them.

Aquatic Invasive Species

Aquatic invasive species (AIS) are non-indigenous 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

Elodea

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

U.S. AIDS TO NAVIGATION SYSTEM

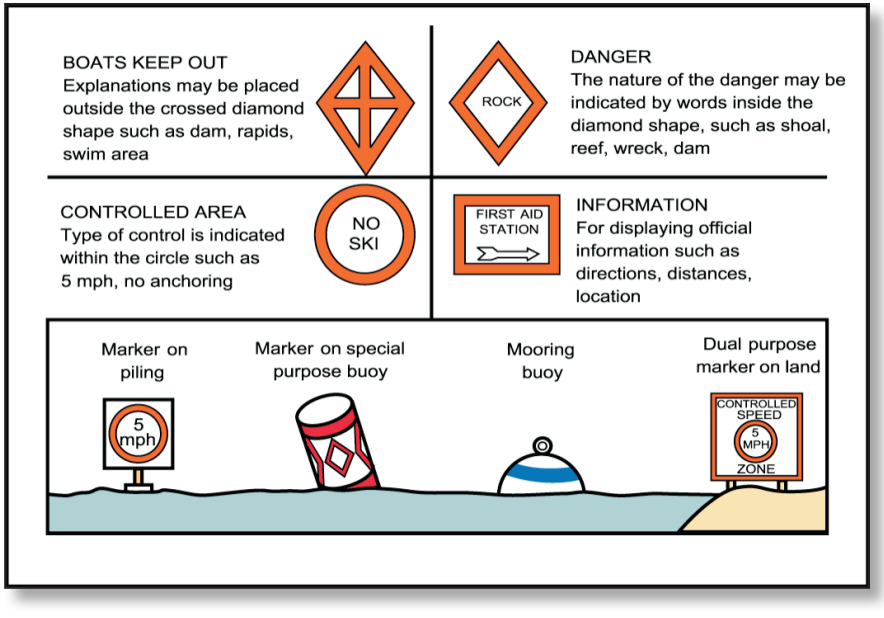
The U.S. Aids to Navigation System (ATONS) is a system of signs, buoys, day beacons and other structures that incorporate specific shapes, colors, numbers and lights in order to assist mariners with safe navigation.

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.

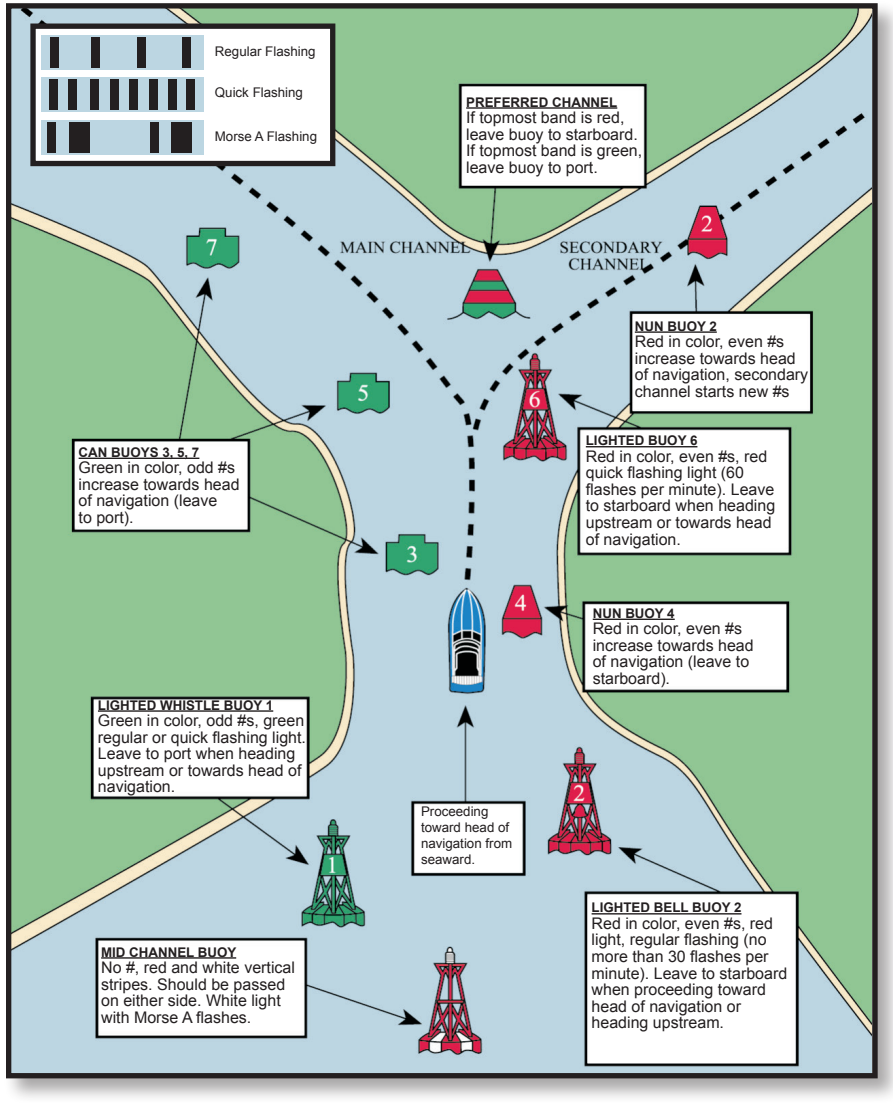
Other than a mooring buoy, it is a criminal offense to moor to, damage or interfere with aids to navigation. If you should collide with or damage an aid to navigation, report it immediately to the U.S. Coast Guard or a local law enforcement officer.

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 (as defined or designated under federal law 33 CFR 2.05-25).

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 also must 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 from:

Superintendent of Documents
U.S. Government Printing Office
P.O. Box 371954
Pittsburgh, PA 15250-7954
(202) 512-1800

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 any 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.

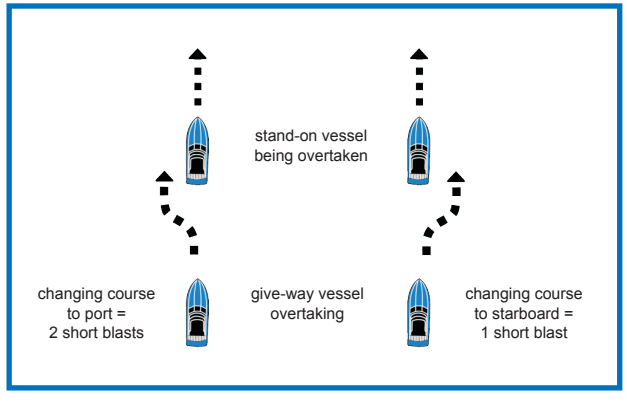
Narrow Channels (Rule 9)

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.

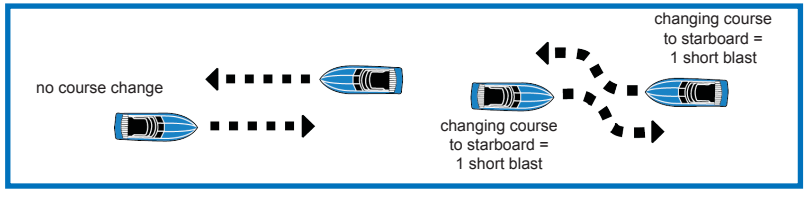
The following illustrates the proper maneuver and includes the appropriate (Rule 34) sound signals.



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.

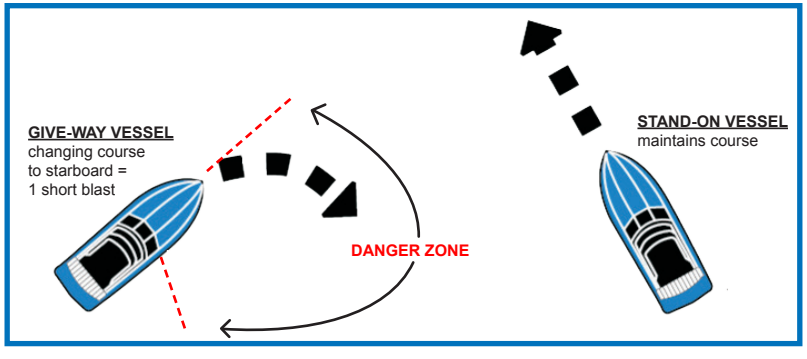


Crossing Situation (Rule 15)

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.

COMMUNICATIONS

Marine VHF Radios

Experienced boaters always carry an effective means of communication, and for many, a marine VHF radio is the best choice. Primarily used to access weather reports and to communicate with other boaters (and even airplanes), they can also be a very effective distress signal.

On small boats without electrical systems, hand-held models are a popular choice. On boats with 12-volt electrical systems, hand-held radios can also serve as a backup in case of a main power failure. A boat's electrical system is often "shorted out" when taking on water. Boaters should be proficient with their radio equipment and practice emergency communications so that procedures become second nature. Marine VHF radio operators must follow the rules of the Federal Communications Commission (FCC), which can be found on the FCC website: http://wireless.fcc.gov/rules.html

Telephones

Cellular and satellite telephones can be a great tool for boaters, but they do have limitations, including:

- Coverage is variable with cellular phones.
- Communications cannot be monitored by other boaters.

Telephones are an excellent supplement to, but not a replacement for, a marine radio. If a telephone is carried as the primary means of communication, take the following precautions before leaving the dock:

- Make sure the battery is fully charged (and consider bringing a fully charged spare).
- Keep the telephone and a list of emergency phone numbers inside a waterproof bag or case that floats, if it is not a waterproof unit.

HOMELAND SECURITY

Since the events of September 11, 2001, boaters have a new and 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 or port security. Do not approach or challenge suspects.

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.

POWERBOATING TIPS

General

- When underway, keep the engine cut-off cable attached to you. This is especially important for solo operators. Wireless cut-off devices are now available and highly recommended. 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 cruising speed. It is easier on the engine, greatly improves fuel economy and reaction time increases.
- Maintain a clear, unobstructed forward view at all times. Constantly scan the water back and forth for hazards. Avoid tunnel vision.
- 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.

Deshka Landing

- 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.

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.

- Don PFDs if not already on.
- Place passengers and loads low and along the centerline. Secure all items to prevent shifting.
- 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

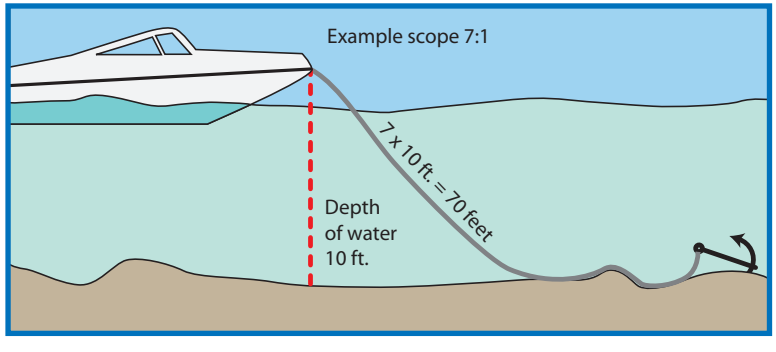
To anchor a boat, first select the appropriate type and size of anchor and the appropriate diameter and length of rode (anchor line and chain). Consider the size of the boat, the bottom type, the water conditions and the depth of the water (**measured from the bow to the bottom**). The length of the rode should be five to 10 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!

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 of a small powerboat. 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 to anchoring 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 special 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.

- 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 then scout new areas. Learn from the locals.
- River hazards include sweepers (overhanging trees), log jams, gravel bars, submerged objects, animals, wind, sunlight 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, basic troubleshooting and repairs.
- It is best to stay in the deeper water that is found closer to the outside bank, while still keeping as far to the right as possible, to allow 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.
- Carry communication devices that are suitable for the area. For example, cell phones are appropriate in some areas, but in remote areas, a VHF radio for contacting pilots may be a better choice.
- 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 very 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 Watercraft (PWC)

If new to operating a personal watercraft (PWC), take both basic boating safety and PWC-specific courses and develop skills under the instruction of an experienced operator. Also read the owner's manual carefully—it provides important information specific to the model such as load capacity and fuel systems.

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

- A PWC handles differently than boats with propellers. The jet drive and short overall length make the PWC extremely responsive to even a small movement of the handlebars. PWCs are steered by directing the water jet while powering forward. On many models, when the operator releases the throttle the ability to steer is eliminated. Inexperienced operators attempting to avoid a collision by powering down can find themselves steering directly toward the very thing they are trying to avoid!
- The wrist lanyard, which is connected to the ignition, will shut off the engine if the rider falls off the boat, preventing the boat from continuing on an out-of-control journey. The cut-off switch should be checked for function, and the wrist lanyard should ALWAYS be worn when underway. Remove the lanyard when the PWC is unattended.
- Most PWC fatalities are a result of collision. It is common for operators to develop tunnel vision. Constantly scan the water all around and check behind you before turning.

Guidelines for PWC Operation:

- 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.
- When righting an overturned PWC, rotate it according to the decal on the transom.
- NEVER loan a PWC to an inexperienced person. Many PWC accidents involve operators who did not own the boat.

- Wear the right gear. Start with synthetic long underwear, a dry suit or a two to three millimeter wet suit, neoprene boots, neoprene or water-ski gloves, safety helmet, goggles and a snug fitting United States Coast Guard-approved PFD. Inflatable PFDs are not appropriate for PWCs.
- 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 speed limit signs.
- Do not use alcohol before or during operation.
- Avoid wake jumping.
- Avoid operating in the same area for extended periods.
- PWC operation may be restricted or prohibited on some waterways. Check with local land managers.
- Carry and use navigation lights if operating between sunset and sunrise or in conditions of limited visibility.

PADDLE SPORTS

Paddle sports are one of the fastest growing recreational activities in the United States, as this trend grows, so do the number of accidents. In Alaska, paddling fatalities account for 25percent to 60 percent 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 PFD and almost a third 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 PFD is a sign of inexperience, regardless of swimming ability. Choose a style that has high visibility and a snug fit, without impeding mobility.

- 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 rough water.
- Standing up or moving about in a canoe or kayak greatly increases the chance of capsize. Maintain three points of contact at all times.
- Load the boat properly. Keep the 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 your 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.

If paddling in remote areas, consider wearing a waterproof beltpack while on the water. Fill this pack with the survival essentials. See the text boxes on pages 22 and 26 for more information on what to include. In the event of capsizing and losing the boat, you'll be glad to have it!

- 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.

Safe Paddler's Checklist

Be prepared, even on day trips.

- VHF radio, EPIRB, PLB, satellite phone, cellphone (whatever works in the area that you are paddling)
- Spare paddle
- Repair kits for boat
- Maps, compass, GPS, nautical charts
- Whistle, light and other signaling devices
- River knife on person
- Rescue devices: throw bag, paddle float, slings, ropes
- Bilge pump, bailing bucket, sponge
- Sunscreen, proper footwear, eye protection
- 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

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.
- 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.

Swift Water Paddling

Paddling in swift water requires a set of skills entirely different than that of flat or calm water paddling. The paddler needs to be very 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 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 signaling device.
- 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.

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 dry land and on the water instruction (in protected areas) are highly recommended.

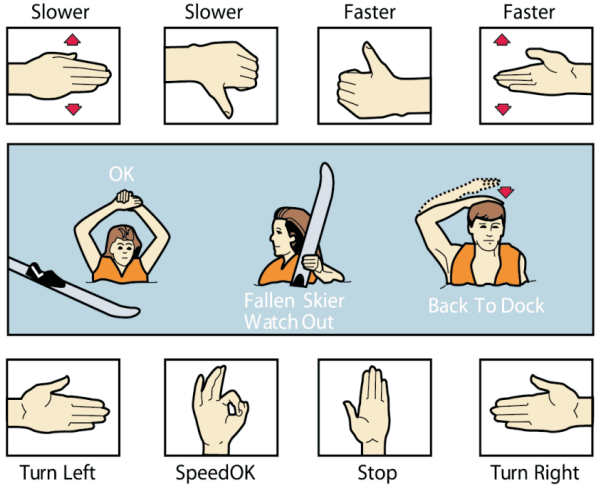
- Obtain and maintain essential skills in reboarding a capsized boat in open water, such as the paddle float self rescue and the two boat “T” rescue technique.
- Avoid powerboat traffic lanes. Strive for high visibility when around powerboats. Especially under conditions of limited visibility, rough 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.

OTHER WATER ACTIVITIES

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 PFD that is approved by the U.S. Coast Guard for the activity. Inflatable PFDs are not appropriate for water skiing.

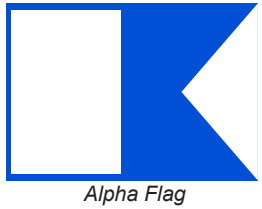


Boat operator and skier should agree on recognized hand signals prior to departure.

Diving

Diving has become a very 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.

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 and on a sunny day. Most were not wearing a PFD and died by drowning.

- 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.
- Consider yourself a boater and take a boating course.
- Avoid alcohol when boating. Sensible sportsmen already know alcohol 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 PFD 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 68 degrees Fahrenheit, cold water is virtually all water in Alaska.

The Effects of Cold Water Immersion

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

1. COLD SHOCK RESPONSE
    - Within the first three minutes.
    - Involuntary gasping and hyperventilation, panic and vertigo, can result in water inhalation.
    - Effect passes after a few minutes.
    - Higher risk of drowning if not wearing a life jacket.

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

2. COLD INCAPACITATION
    - Within 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.

Without a life jacket, it becomes difficult to keep the head above the surface of the water which could result in drowning.

3. IMMERSION HYPOTHERMIA
    - After at least 30 minutes of immersion.
    - 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, and body position in the water.
    - As body core temperature falls, hypothermia symptoms will range from mild to severe. Humans will eventually lapse into unconsciousness. If not removed from the water, death is caused by drowning or cardiac arrest.
    - Higher risk of drowning if not wearing a life jacket.

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.

Falls 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 for it. Don't.

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 boat deck. Trying to put your PFD on in cold water is extremely difficult (if not impossible) and costs precious time and energy.

- Carry some communication and signaling devices ON YOUR PERSON. A personal locator beacon, a small hand held VHF radio, EPIRB, a cell phone in a waterproof bag, 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 reboarding ladder, rope ladder, foot sling or a swim platform.
- Carry immersion (survival) suits. Make sure they are well maintained and readily accessible.
- Practice re-boarding your boat, donning survival suits, signaling, transmitting MAYDAYs, recovering a person overboard, and other cold-water survival techniques described in this section. Drills are fun and build skill and confidence.

Surviving Cold Water Immersion, the 1-10-1 Principle

REMEMBERING THIS MAY SAVE YOUR LIFE:

1-10-1

1 minute- get breathing under control
10 minutes (or more)- for meaningful activity
1 hour (or more)- before loss of useful consciousness

Surviving cold water immersion depends on adequate flotation to prevent drowning, and timely self-rescue or rescue by others. Wearing a life jacket, the ability 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.

1-10-1 is an easy way to remember what to do in the event of a sudden cold water immersion. Note: the information below does not apply to all persons in all cases.

1 Minute

The initial reaction/cold shock response phase usually passes within one to three minutes. Focus on getting breathing under control until the gasp reflex subsides. Understanding that this stage will soon pass may help prevent panic.

10 Minutes

Once breathing is under control, most people have at least 10 minutes (or more) to take the actions necessary for self rescue or obtaining rescue. Assess the situation and make a plan. Prioritze and perform the most important functions first.

Don't waste time and energy removing shoes or clothing. Even small amounts of air trapped in clothing will provide some buoyancy and thermal protection.

- If not already worn, attempt to don life jackets or immersion suits, and then assist others in doing so.

- Account for any other members of the party. Check around and under the boat.

- Activate emergency locator beacon, transmit a MAYDAY on Marine VHF radio channel 16, or call 911 or *CG (*24) on a cellular phone.

- If rescuers are near, deploy visual and sound distress signals.

- Water transfers heat much faster than air of the same temperature. Get all persons as much out of the water as is possible, as soon as possible. In some cases, if the boat is not overturned, use the boat's re-boarding devices and appropriate 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. In other cases, it may be better to swim to safety.

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 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.

Situational factors should often be considered when making the swim/don't swim decision:

- Whether or not a PFD is worn. Swimmers without life jackets are at a much higher risk of drowning.

- Whether or not the boat is still afloat and can be used to get out of the water.
- Whether or not a place of safety is more than 800 yards away or 45 minutes swimming time based on fitness level, swimming ability and wearing a life jacket.
- If the event was witnessed or others are aware of the emergency via an emergency locator beacon, radio or other communication device.
- Would be leaving a place of relative safety to swim.
- Whether in calm or moving water (e.g. a river).
- Physical ability and condition of the party members.

Swimming in open water (lakes or ocean):

Use a modified backstroke, using forearms and lower legs. Keep upper arms and elbows close to the sides of chest, upper legs close together and knees slightly bent. Move slowly and conserve energy.

Huddle

If there is more than one person and they are in the huddle position, one person may be able to propel the entire group, taking turns.

Use floating objects to help pull body out of water or assist with swimming.

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 being pulled under or 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. 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 (such as the head, neck, armpits, groin and the sides of the torso) as much as possible.

If in open water, the “Heat Escape Lessening Position” (H.E.L.P.) may be useful, but is only possible if wearing a PFD. Grasp the shoulders of your PFD by crossing your arms 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 possibly slowing 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.

Be prepared to activate visual and sound distress signals when potential rescuers are in range.

Person Overboard Response

1. Everyone don life jackets (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 a life jacket, Type IV life ring or seat cushion or any other floating object toward the victim. Any additional objects in the water with the person will also make them easier to see.

Designate a lookout

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 with an oar, paddle, or other item and pull them to the boat. Or, use a Type IV throw ring or cushion with a line attached and pull the person to the boat.

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

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:

Gentle handling - 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.

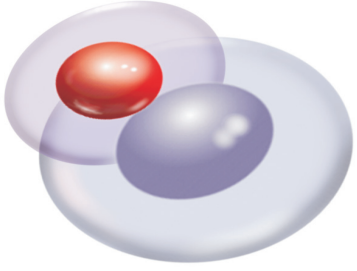
Preventing further heat loss - remove wet clothing, dry victims off and put them in dry clothes and a sleeping bag or blankets and vapor barrier. Shivering is good.

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

Cold Water Near-Drowning

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 binds to red blood cells displacing oxygen

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.

Boaters should be aware of improperly vented or malfunctioning cabin 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 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.

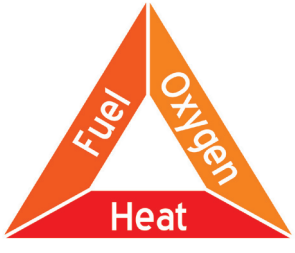
Because CO is difficult to detect by sight or smell and poisoning can happen so quickly, there is often little warning. CO poisoning is difficult to diagnose because of a wide range of vague symptoms.

- 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 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:
   - PULL the pin.
   - AIM the extinguisher nozzle at the source (at base of flames).
   - SQUEEZE the handle.
   - SWEEP back and forth.
5. Don't try to save some of the charge for a re-flash; instead, carry a spare extinguisher. Remember, a B-I extinguisher empties in less than 10 seconds.
6. Transmit a MAYDAY if necessary.

7. As a last resort, abandon ship. Stay together and use cold water survival techniques.

TAKING ON WATER

1. Direct passengers to don PFDs 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.

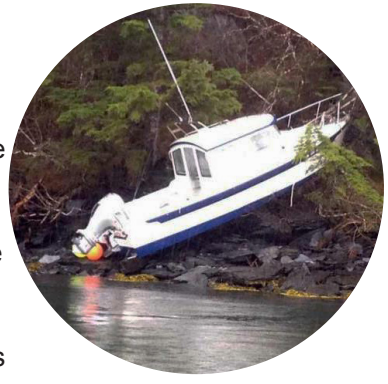
RUNNING AGROUND

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 a plunge 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 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.
- 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 safety shut-off cable 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.

SHORE SURVIVAL

Our boats provide us with access to beautiful and remote areas of the state. However, bad weather, mechanical breakdown, running out of fuel, running aground or poorly tied mooring lines can all result in an unexpected stay on shore. Research has shown that under these circumstances, the proper attitude has a profound influence on the

outcome. Your primary goal is to be found as quickly as possible in the best condition possible.

In these cases, follow the SEVEN STEPS TO SURVIVAL. In order of priority, they are:

1. **Recognition**—Recognize that an emergency exists and unless survival tactics are employed, bodily harm or death could occur.
2. **Inventory**—Take stock of your physical and emotional condition, the environment, available equipment and the factors working for and against you. All boaters should carry survival items (see text boxes on pages 22 and 26).
3. **Shelter**—Humans need shelter to survive. The goal in shelter building is to prevent heat loss, so make them small and tight. Remember that clothing is the first shelter layer, so keep clothing as dry as possible.
4. **Signals**—Flares, three fires, signal mirrors, log or rock SOS formations, bright flags, etc. You must BE SEEN to BE RESCUED!
5. **Water**—A person can live only a few days without water. Collect clean water, such as rain, in a piece of plastic or other material.
6. **Food**—A person can survive without food for quite a while, but our physical state affects our mental state, and food helps keep both energy levels and attitudes up. However, don't eat unless you have water and you know the food is safe for consumption.
7. **Play**—Stay busy by doing any activity that builds and maintains a positive attitude. However, don't use unnecessary energy.

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 (pronounced pon-pon).

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

Transmitting a MAYDAY:

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.
- 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, at no charge, from www.boatus.com/mmsi/

The U.S. Coast Guard’s Rescue 21 Digital Selective Calling Emergency Contact System is not yet operational in Alaska, however, those in the immediate area with DSC can receive the distress signal for relay purposes. For more information on when Rescue 21 will be operational, contact the U.S. Coast Guard.

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 which 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, but automatically activate when out of the bracket and in contact with water.
- 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 two years) 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.

CONTACTS

Boating Education

- Alaska Boating Safety Program (907) 269-8706 www.alaskaboatingsafety.org
- Alaska Water Wise Courses (907) 269-8704 www.alaskaboatingsafety.org
- Alaska Marine Safety Education Association (907) 747-3287 www.amsea.org
- USCG Auxiliary Courses, www.cgaux.org
- USCG Recreational Boating Safety, www.uscgboating.org
- National Association of State Boating Law Administrators, www.nasbla.org
- BoatUS Foundation, www.boatus.com
- Knik Canoers and Kayakers, www.kck.org
- Fairbanks Paddlers, www.fairbankspaddlers.org
- American Canoe Association, www.americancanoe.org

Accident Reporting

Mail to:
Alaska Office of Boating Safety
550 West 7th Avenue, 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 1-800-472-0391
- Cook Inlet Keepers (for a bilge pillow), www.inletkeeper.org

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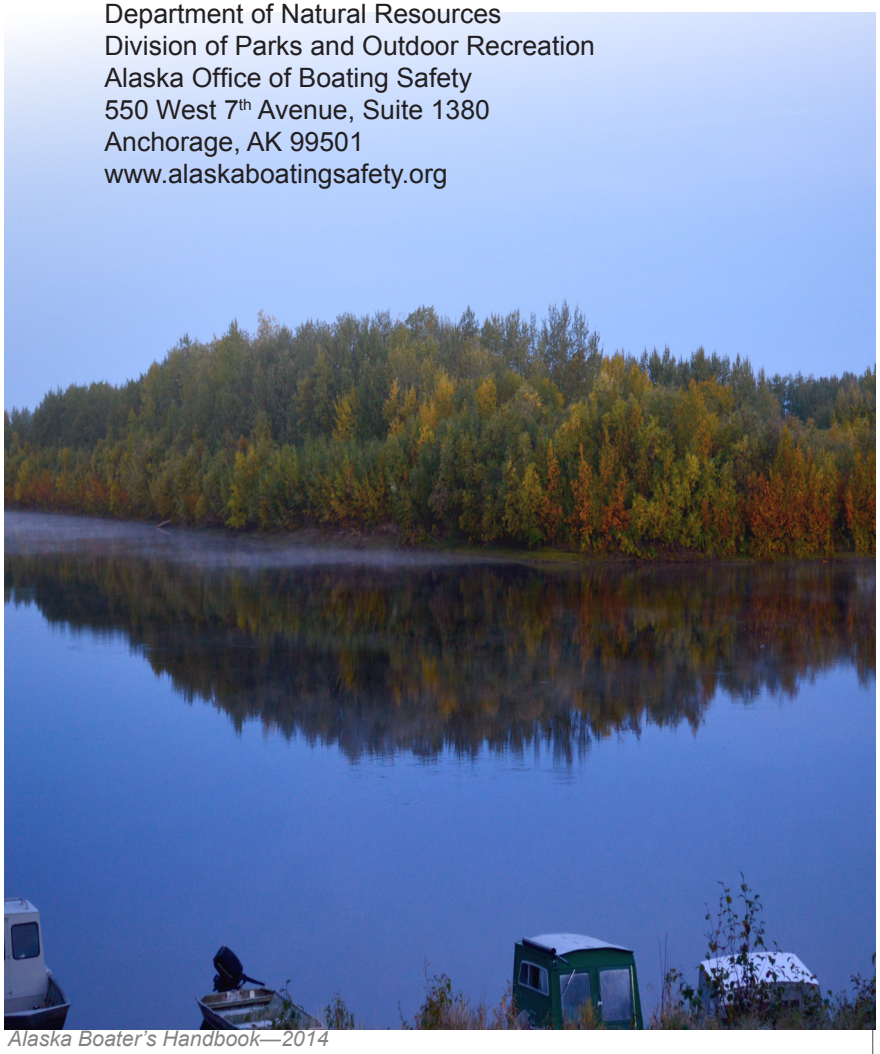
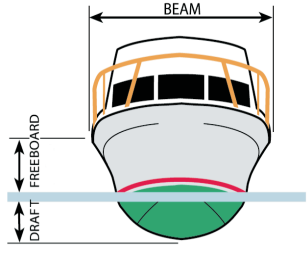
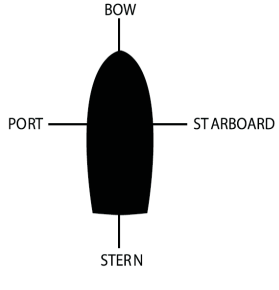
www.alaskaboatingsafety.org



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.





Notes

Notes

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

Help ensure safe and enjoyable boating:

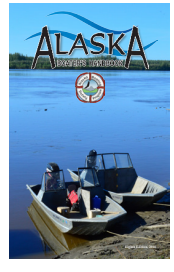
Always wear a life jacket.

VHF Marine Radio

Emergency Locator Beacon

Carry communication and signaling devices <u>on your person.</u>

File a float plan at pledgetolive.org



Read the Alaska Boater's Handbook and take a class.

For information on classes, presentations and educational resources visit alaskaboatingsafety.org

Alaska Boating Safety Program

Alaska Boating
Safety Program