PRE-DEPARTURE CHECKLIST

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

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

✓ Emergency communication and distress signaling devices carried ON person

✓ Float plan prepared and transmitted to responsible party

✓ Passengers and load distributed properly, items secured from shifting

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

✓ Engine cut-off device worn by the operator

✓ Throwable flotation device attached to floating line

✓ Weather, forecast update and local observations

✓ Fire extinguisher(s) fully charged and mounted securely

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

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

✓ Boat registration current, properly displayed and certificate onboard

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

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

✓ Scuppers clear, bilge clean

✓ Battery fully charged, secured, terminals covered

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

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

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

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

✓ Food, water, shelter, and spare clothing

✓ First aid kit

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

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

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

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

✓ Emergency locator beacons, radios and other electronics functional

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

PRE-DEPARTURE CHECK

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

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

GETTING READY:

Prepare your own personal survival kit

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

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

Personal Flotation Devices (PFDs)

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

Signals/Communication

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

Mirror

Whistle

Pyrotechnic flares

Fire Extinguishers

Make sure all fire extinguishers onboard are:

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

Fuel and Oil

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

Hull

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

Bilge/Engine Compartments

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

Wrangell, Alaska

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

Main and Auxiliary Engines

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

Electrical/Electronics

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

Ground Tackle and Dock Lines

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

Other Items

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

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

Documents and Placards

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

Reference Materials

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

PREVENTIVE MAINTENANCE

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

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

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

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

WEATHER AND TIDES

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

For detailed weather information, try the following sources:

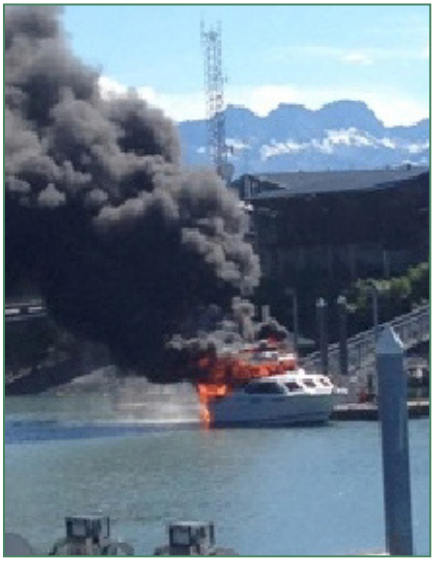
- National Weather Service VHF/FM frequencies of 162.400, 162.425, 162.475 and 162.550 MHz in areas where available
- National Weather Service's website: www.arh.noaa.gov
- Alaska Weather Information Hotline
  - In Anchorage, call: 266-5145
  - In Fairbanks, call: 458-3745
  - In Juneau, call: 790-6850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

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

FUELING

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

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



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

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

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

FLOAT PLAN

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

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

BOAT CAPACITY, LOADING AND STABILITY

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

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

ALASKA FLOAT PLAN

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

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

Vessel type:	**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

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

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

Also consider the following:

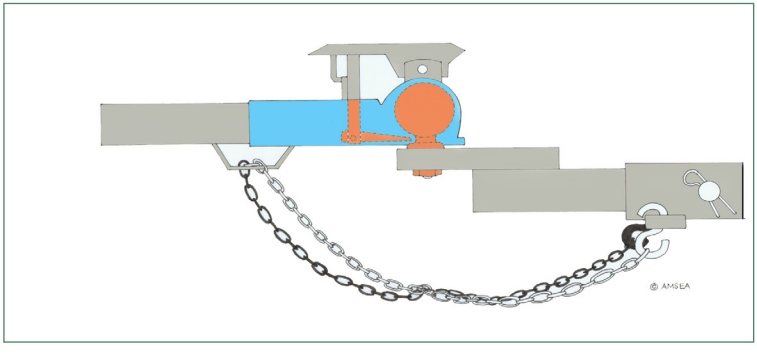
- Always use great care when loading and handing gear to a person already in the boat.
- Carefully secure heavy items from shifting.
- Properly position items and passengers evenly, and then adjust as necessary for safety and optimal boat performance.
- Proper trim (lateral, fore and aft) aids in boat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

BOAT TRAILERING

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

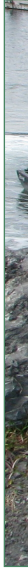
- Alaska law requires boat trailers to be registered.

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



Ball and coupler proper fit, chains crossed in X pattern

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



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

Tire failures top the list of boat trailer breakdowns.

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

Launching

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

At ramp staging area:

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

the boat to the trailer.

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

At the ramp:

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

Retrieving

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

Passenger Briefing

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

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

THEFT PREVENTION

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

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