# Science & Technology Vehicle/Boat POLICY AND PROCEDURES MANUAL

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Vehicle Use Form

Field Trip Waiver

Vessel Checkout / Float Plan

TPWD Boating Accident Report (Texas Water Safety Act)

Field Trip Itinerary

TAMU System Motor Vehicle Accident Report Form

Incident Report Form

# Vehicle Use Policy

The College of Science and Technology at Texas A&M University - Corpus Christi maintains vehicles/boats for field-based purposes within its departments. These vehicles are available to support field trip and research activities conducted by college faculty, students, researchers and their graduate students. The boats are available for both course instruction and related field activities as well as for research related endeavors. All vehicle/boat requests must have the signature of a responsible faculty member, researcher(s), or the appropriate department head(s), if necessary. General maintenance and full coverage insurance is paid by the College. Operators are responsible for daily rental fees, fuel, additional required insurance if applicable, and any damages to the vehicle/boat (NOTE: The operator and their department or research laboratory may be held responsible for an at-fault damage deductible.)

# Vehicle Request Policy

- Requests for vehicles will be administered on a 'first come, first served' basis.
- Vehicle/boat requests must be submitted by the TAMUCC faculty member, responsible Teaching Assistant, Research Assistant, or doctoral candidate.
- Requests should be submitted to the Department's Field Operations Coordinator (FOC) at least 3 days prior to the proposed trip.
  - NOTE: Although exceptions to this policy will possibly occur time to time, remember, vehicle/boat preparation necessitates as much lead-time as possible.
- Research requestors must have an existing account for daily fees, fuel charges, additional
  insurance, damage to the vehicle/boat, and all related incidental expenses. The FOC will post an
  unofficial itemized billing to all operators within five business days of vehicle/boat's return. NOTE:
  Field trip accounts will be IDT invoiced for all related fees and expenses.
- Vehicle/boat users must be checked out and approved by the FOC. The Field Operations
   Committee may approve users in the absence of the FOC. Refer to related policy for operator
   requirements and qualifications.
- Vessel float plans must be filed with the FOC prior to departure and posted in accordance with university/departmental policy. It is imperative the float plan be complete and include contact telephone numbers.
- Field Trip Waiver forms are required of the operator and all accompanying personnel. This form will be maintained by the FOC.
- Arrangements for vehicle/boat delivery and the fuel card, if necessary, must be coordinated with the FOC.
- Vehicles needed to tow boats or for field trip will be submitted in the same manner.
- Trips external to the United States (e.g. Mexico) and offshore overnight trips are not permitted, unless appropriate authority has authorized such a trip and necessary additional insurance coverage is secured.

#### **Cancellations**

The FOC must be notified of intent to cancel a reservation as soon as possible to free the vehicles for other users.

#### **Fees and Charges**

Fees and charges related to vehicle and boat use are intended to encourage their use and cover marginal costs related to boat operation and maintenance. The fee schedule is based on ½ day/full day use and charged accordingly. Contact the FOC for current S&T rates.

Vehicle users will bear full costs of fuel charges. All vehicle/boats will be picked-up with a full tank of gas. The FOC will fill the vehicle/boat upon its return unless other arrangements are made. The FOC will charge the account provided on the request form for the fuel used. FOC will post an unofficial itemized billing to all operators within five business days of vehicle/boat's return.

## **Vehicle/Boat Operator Requirements and Qualifications**

- Operator must be an employee of the University.
- Authorized students can drive University vehicles but it must be in performance of University duties. Students must meet the same requirements and qualifications as employees.
- Operator must possess a valid U. S. driver's license, and the license number must be listed on the vehicle/boat request form.
- Operators are required to pass a Driving Record Check. Employees anticipating driving a
  University vehicle must obtain a form from the FOC and fill out. The Comptroller's Office will then
  request the Employee's Texas Driving Record from Texas Department of Public Safety.
- Vehicles may not be taken across the border without authorization, liability insurance, and Mexico Tourist Insurance.
- Boat operators must have taken and passed the U. S. Coast Guard Auxiliary Boating Safety course, the Texas Parks and Wildlife Department's Boaters Education course or an equivalent course. The operator must provide documentation/certification related to their boating safety course.
- Operator must be checked out by the FOC or the field operations committee as to an adequate understanding of marine safety, navigation and etiquette
- Operator must be checked out while skippering a boat by the FOC or a field operations committee member as their ability to launch, dock and trailer a boat and demonstrate a thorough knowledge of general boating skills.
- Operator, crew and all passengers must file properly executed assumption of risk forms prior to castoff.
- Operator is responsible for executing and filing a complete and proper float plan.
- Operator will complete the trip inspection and checkout form with the FOC before departure. The FOC will retain the trip inspection and checkout form.
- Operator will complete the pre-departure checklist form prior to castoff.

#### Operator will fill out the boat log on completion of each research trip.

NOTE: It is critical to the ongoing availability of the boat itself that the boat log is filled out completely as possible. Please note any issues or concerns regarding the boat regardless of its seeming insignificance.

- Voyager gas cards are for gasoline and oil purchase only. An itemized receipt for expenses on the Voyager gas cards is required. Ensure the vendor accepts Voyager cards prior to fueling. Operator should enter the fuel purchase information in the boat log and note name and related research account on fuel receipt.
- Vehicle/boat return arrangements should be made with the FOC prior to trip departure. Late trip
  returns will be processed according to operator FOC arrangements.

- The interior and exterior of the vehicle/boat must be cleaned prior to its return to storage. Outboards should be flushed with freshwater by hydrophones, i.e. 'ear muffs' or 'rabbit ears,' on return. The vehicle/boat can be cleaned at the wash rack inside the gated motor pool compound. If the operator and crew fail to clean the vehicle/boat thoroughly, as determined by the FOC, the related account will be charged for cleaning (\$25/hour). The FOC will post an unofficial itemized billing to all operators within five business days of vehicle/boat's return.
- Operator and FOC will ensure the following forms have been completed and properly executed to the best of their abilities; all forms are available electronically on the College website.

Vehicle Use Form

Field Trip Waiver form

Vessel Checkout / Float Plan form (boats)

Pre-departure Checklist form (vehicles)

Field trip itinerary form

## **Operator Responsibilities and Conduct**

#### Responsibilities

The operator is responsible for taking charge of and ensuring the safety of their passengers and/or crew while on a trip. This means reviewing emergency equipment and procedures as well as weather forecasts prior to departure. The FOC will be the final authority on whether a trip may safely proceed or will need to be rescheduled.

The operator should never leave the dock without first checking the local weather forecast. TV, radio, the internet and weather channels on VHF radio are excellent sources of current weather conditions. Weather can change rapidly in the Gulf of Mexico region and operators and crew should continually keep a "weather eye" out in order to foresee impending change. See Appendix 2 for internet sites related to weather and tides.

The operator is also responsible for informing crew and passengers of the rules of safe boating and ensuring at least one other person aboard is capable of operating the boat in the event of an emergency. **See Appendix 1 for emergency contact telephone numbers.** 

#### Conduct

- Transport is restricted to A&M personnel, i.e. faculty, research, administration and students. Persons
  external to TAMUCC must be approved by the FOC or the Field Operations Committee through the
  vehicle request procedure.
- Vehicles must be kept in a condition that presents a favorable image to the public.
- Vehicles are to be used for official business only.
- Vehicles are to be returned free of trash, paper, cups, debris, etc.
- Smoking is **not** permitted in vehicles.
- Operators will not drive vehicles if impaired by medication (prescription or non-prescription) or alcohol.
- Operators will not drive recklessly or take the vehicle off standard roadways (for those vehicles not equipped to be driven off-road).
- All personal items should be removed before returning vehicle.
- Vehicles will not be loaded in excess of normal standard setting capacity for the vehicle.
- Luggage carriers, bike racks, etc. will not be attached to vehicles without permission of FOC.
- Report any vandalism/damage or other mechanical malfunction during trip or upon return of vehicle.
- Do not place feet or muddy objects on dash, doors, seats or interior of vehicle.
- Do not leave items that in heat could explode or melt and cause excessive cleaning fees.
- Do not use vehicle to tow or push another unless equipped with towing package.
- Log mileage daily on the appropriate forms.

- Return vehicle with the credit cards and packet of information, as well as all gas receipts.
- Secure vehicle when not in use.
- Obey all traffic safety laws and observe all boating rules, regulations and courtesies.

#### Security

- The security of vehicles and their contents is the responsibility of the operator. Ensure all doors and windows are properly secured and locked and that outboard ignition keys are removed. The boat must be secure when left unattended for any reason.
- If the tow vehicle becomes disabled on the road and boats must be left unattended, take all precautions to prevent theft or vandalism. Boats should be towed to a facility where they can be secured as necessary. The boat IS NOT to be left on a highway or abandoned in any area where vandalism might occur.
- If the boat is trailered, the trailer must be secured with the trailer lock or secured to the towing vehicle.
- The FOC should be the first call for assistance, then the Operations Supervisor.

#### **ACCIDENTS**

Immediately report any accidents or damage you incur while operating a vehicle on University business. Each vehicle contains an emergency packet in the glove compartment. Included in the packet are emergency phone numbers for Departmental employees, Texas Liability Insurance Card, a local wrecker service 24 hour number, and a Texas A&M University System Accident Report.

Use the appropriate checklist below, if you are involved in an accident:

#### While Driving University Owned Vehicle On Campus

to for repair of the University vehicle.

at 979-458-6235.

Pro	cec	lure Checklist:
		Call University Police at Ext. 4444 immediately after an accident occurs to respond to the accident site.
		Police will gather information and complete a Police Incident Report. If possible, ask them to take pictures of the damage.
		University driver is responsible for gathering information from all parties to accident for completing System Motor Vehicle Accident Report form (i.e. insurance, phone numbers, license number, etc.). Supply the other driver with University insurance information. Card is located in vehicle glove compartment. The accident report is in the same place as the insurance card and has to be completed fully by the University Employee.
		Ensure report of the accident is forwarded to the Comptroller's Office as soon as possible.
		Employee should report accident to his supervisor and request that First Report of Injury form be filled out (if necessary) and sent to Human Resources.
		Employee should contact Human Resources at 825-2627 if he/she sustained injuries for further information.
		Comptroller's Office personnel will report the accident to Risk Management and contact University Police for their report and fax both accident reports to Risk Management Office (Fax number 979-458-6247) in College Station.
		Responsible department personnel will take a picture of the damaged vehicle and send it to the Comptroller's office for the file, if the University Police were unable to do so.
		The Department assigned the vehicle will determine the steps to get the University vehicle repaired if the accident report from University Police states the University vehicle was at fault. Department that owns the vehicle will be charged for cost of repair.
		If the report states the other driver is at fault, Risk Management will contact Coleman Company

Insurance and coordinate the steps with Physical Plant or the department the vehicle is assigned

All contacts with Coleman Company Insurance must go through Risk Management Office, Debbie Smith, Insurance Specialist at 979-458-6229 or Kathy Miller, Audit and Central Support Manager

# While Driving University Owned Vehicle Off Campus

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Proced	dure checklist:
	Call Police (City of Accident) immediately after an accident occurs to respond to the accident site.
	The Police will gather information and complete a Police Report.
	University driver is responsible for gathering information from all parties to accident for completing System Motor Vehicle Accident Report form (i.e. insurance, phone numbers, license number etc.). Supply the other driver with University insurance information. Card is located in vehicle glove compartment. The accident report is in the same place as the insurance card and has to be completed fully by the University Employee.
	Call Comptroller's Office at Ext. 361-825-2409 while out of town during normal working hours, or the University Police Department at 361-825-4444 after hours to report the accident. Obtain accident report from the Police Department (City of Accident) where the accident occurred and fax both the completed System Motor Vehicle Accident Report and the Police Report to Ext. 5925 as soon as you get back to campus.
	Employee should report accident to his supervisor and request that First Report of Injury form be filled out (if necessary) and send to Human Resources
	Employee should contact Human Resources at 825-2627 if he/she sustained injuries for further information.
	Comptroller's Office personnel will report the accident to Risk Management and fax both accident reports to Risk Management Office (Fax number 979-458-6247) in College Station as soon as possible.
	The Department assigned the vehicle will determine the steps to get the University vehicle repaired if the Police report states the University vehicle was at fault. Department that owns the vehicle will be charged for cost of repair.
	If the report states the other driver is at fault, Risk Management will contact Coleman Company Insurance and coordinate the steps with Physical Plant or the department the vehicle is assigned to for repair of the University vehicle.
	All contacts with Coleman Insurance Company must go through Risk Management Office, Debbie Smith, Insurance Specialist at 979-458-6229 or Kathy Miller, Audit and Central Support Manager at 979-458-6235.
While	Driving University Leased Vehicle On Campus
Proced	dure checklist:
	Call University Police at Ext. 4444 immediately after an accident occurs to respond to the accident site.
	Police will gather information and complete a Police Incident Report. If possible, ask them to take pictures of the damage.
	University driver is responsible for gathering information from all parties to accident for completing System Motor Vehicle Accident Report form (i.e. insurance, phone numbers, license number etc.). Supply the other driver with University insurance information. Card is located in vehicle glove compartment. The accident report is in the same place as the insurance card and has to be completed fully by the University Employee.

Call Comptroller's Office at Ext. 2409 to report the accident and fax the completed report to Ext. 5925 as soon as possible.
Employee should report accident to his supervisor and request that First Report of Injury form be filled out and send to Human Resources.
Employee should contact Human Resources at 825-2627 if he/she sustained injuries for further information.
Comptroller's Office personnel will report the accident to Risk Management and contact University Police for their report and fax both accident reports Risk Management Office (Fax number 979-458-6247) in College Station as soon as possible.
Responsible department will take a picture of the damaged vehicle for the file if University Police were unable to do so.
Risk Management will contact Coleman Company Insurance and handle the claim from College Station. The Department will pay insurance deductible.
All contacts with Coleman Insurance Company must go through Risk Management Office, Debbie Smith, Insurance Specialist at 979-458-6229 or Kathy Miller, Audit and Central Support Manager at 979-458-6235.

#### While Driving University Leased Vehicle Off Campus

#### Procedure checklist:

- 1. Call Police (City of Accident) immediately after an accident occurs to respond to the accident site.
- 2. Police will gather information and complete a Police Report.
- 3. University driver is responsible for gathering information from all parties to accident for completing System Motor Vehicle Accident Report form (i.e. insurance, phone numbers, license number etc.). Supply the other driver with University insurance information. Card is located in vehicle glove compartment. The accident report is in the same place as the insurance card and has to be completed fully by the University Employee.
- 4. Call Comptroller's Office at Ext. 361-825-2409 while out of town during normal working hours, or the University Police Department at 361-825-4444 after hours to report the accident. Obtain accident report from the Police Department where the accident occurred and fax both the completed System Motor Vehicle Accident Report and the Police Report to Ext 5925 as soon as you get back to campus.
- 5. Employee should report accident to his supervisor and request that First Report of Injury form be filled out and send to Human Resources.

- 6. Employee should contact Human Resources at 825-2627 if he/she sustained injuries for further information.
- 7. Comptroller's Office personnel will report the accident to Risk Management and fax both accident reports to Debbie Smith at Risk Management Office (Fax number 979-458-6247) in College Station.
- 8. Risk Management will contact Coleman Company Insurance and handle the claim from College Station. The Department will pay insurance deductible. All contacts with Coleman Company Insurance must go through Risk Management Office, Debbie Smith, Insurance Specialist at 979-458-6229 or Kathy Miller, Audit and Central Support Manager at 979-458-6235.

#### **Boating Accident Policy**

- Ensure passengers and crew are safe and unhurt.
- Contact United States Coast Guard, local county sheriff office and/or appropriate emergency dispatch as necessary. (See Appendix 1)
- Do not place yourself or your passengers in danger. Take necessary precautions to avoid further complications.
- Notify local county sheriff office or police so that an official report can document the accident.
- Notify FOC and/or S&T Operations Supervisor as soon as possible after the accident.
- Get names and addresses of all witnesses.
- Give your name, address and place of employment (Texas A&M Corpus Christi) to the Coast Guard or appropriate law enforcement officer.
- While at the scene of the accident secure all information needed to complete the Motor Vehicle
   Accident Report. The Coast Guard or law enforcement will assist in providing the necessary
   information. Submit the completed form directly to the Environmental Health and Safety Office
   within 24 hours of the accident.
- It is the responsibility of the using department/lab to obtain a copy of any and all police reports for all off campus accidents. Reports are to be submitted to Environmental Health and Safety immediately upon receipt. Copies are to be submitted to the S&T Operations Supervisor as well.
- **DO NOT** make any statement, oral or written, as to fault or liability. Any admission may impair the insurer's ability to defend a case of questionable legal liability. Fault or liability will be decided by appropriate legal authority. While your signature is required if a citation is issued to you, your signature does not constitute an admission of guilt.
- Arrange for a marine tow as necessary and ensure the boat is secure.
- Report the accident to the FOC and your lab.

Any accident involving death, disappearance or personal injury, or damage greater than \$500 must be reported to TPWD. Refer to TPWD Boating Accident Report at Appendix 4 – Forms.

#### Insurance

- The College carries full coverage insurance for the vehicle/boat. The operator/captain and the department or research laboratory may be held responsible for an at-fault damage deductible.
- Normal wear-and-tear is expected and the operator will not be responsible; however, the
  operator is expected to exercise extraordinary care and due diligence to maintain the vehicle/boat
  for fellow faculty and research personnel. Determination of normal wear-and-tear is at the
  discretion of the FOC.
- Accidents resulting in bodily injury: Regardless of whether or not university personnel are liable for the accident, injury to University employees may be covered under the Texas A&M University System Worker's Compensation Insurance Program. Claims for Worker's Compensation should be initiated by filing a First Report of Injury through the Human Resources Department immediately after the injury. In the event of critical injury or death, Environmental Health and Safety will be notified immediately by telephone, (361) 825-5555. A written report will follow immediately.

NOTE: Per discussion with insurance carrier, boat personnel might 'waive' certain injury coverage if they fail to wear a life jacket. Boat personnel are required to wear life jacket at all times while aboard department boats and accept responsibilities related to life jacket use.

U. S. Coast Guard – Marine Emergency (361) 937-1898

Nueces County Sheriff Office - (361) 887-2222

Field Operations Coordinator - Frank McDaniel (361) 825-2887; cell (361) 438-8128

Operations Supervisor - Steve Dial (361) 825-2471

### **Texas Water Safety Laws**

- Accident reporting: Any accident involving death, disappearance or personal injury, or damage greater than \$500 must be reported. A "boating accident" includes, but is not limited to, capsizing, collision, foundering, flooding, fire, explosion and the disappearance of a boat other than by theft. Accidents should be reported immediately to the local county sheriff office and the United States Coast Guard. In addition, Texas Water Safety laws require filing report form of accident to the nearest office of the Texas Parks and Wildlife Department, 4200 Smith School Road, Austin, Texas 78744. An accident/incident form must also be completed.
- **Boating while intoxicated:** Boating while intoxicated is a criminal offense punishable by fines up to \$2,000, confinement of up to 180 days or both for first offenders. The second offense carries a fine not to exceed \$4,000, confinement not to exceed one year or both. The third offense carries a fine not to exceed \$10,000, imprisonment for not more than 10 years or less than 2 years.

#### It shall be unlawful for any person to:

- Operate any motorboat or vessel at a rate of speed greater than is reasonable and prudent or greater than will permit him to bring such boat to a stop within the assured clear distance ahead.
- Operate any motorboat so as to cause a hazardous wake or wash.
- Operate any motorboat in a circular course around another boat whose occupant is fishing or around any person swimming.
- Moor or attach any boat to any buoy, beacon, light marker, stake, flag or other aid to safe operation
  placed on the public waters of this State by proper authorities, or to move, remove, displace, tamper
  with, damage or destroy the same.
- Anchor any boat in the traveled portion of any river or channel so as to prevent, impede, or interfere
  with safe passage of any other boat.
- Operate a boat within an area designated as bathing, fishing, swimming, or otherwise restricted areas
- Operate a boat within an area designated as a "no wake" area except at headway speed without creating a swell or wake.
- Operate a motorboat within 50 feet of a Diver Down Flag or operate a boat within 150 feet of a Diver Down Flag except at Headway/Steerage Speed.
- Fail to comply with the U.S. Coast Guard Inland Rules of the Road.

## **Basic Boating Procedures**

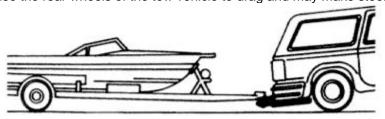
#### **Trailering**

- Rollers and bolsters must be kept in good condition to prevent scratching and gouging of the hull.
- Tie-downs and lower unit supports must be adjusted properly to prevent the boat from bouncing on the trailer. The bow eye on the boat should be secured with either a rope, chain or turnbuckle in addition to the winch cable. Additional straps may be required across the beam of the boat.

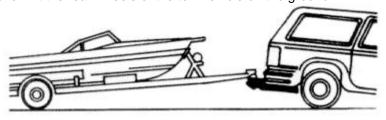
The capacity of the trailer should be greater than the combined weight of the boat, motor, and equipment. The tow vehicle must be capable of handling the weight of the trailer, boat, equipment, as well as the weight of the passengers and equipment which will be carried inside.

#### Before you go out on the highway, check:

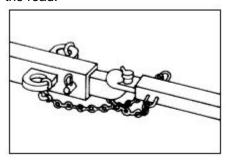
- The tow ball and coupler are the same size and bolts with washers are tightly secured. (The vibration of road travel can loosen them.)
- The coupler is completely over the ball and the latching mechanism is locked.
- The trailer is loaded evenly from front to rear as well as side to side. Too much weight on the hitch will cause the rear wheels of the tow vehicle to drag and may make steering more difficult.

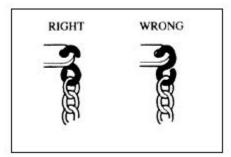


Too much weight on the rear of the trailer will cause the trailer to "fishtail" and may reduce traction or even lift the rear wheels of the tow vehicle off the ground.



 The safety chains are attached crisscrossing under the coupler to the frame of the tow vehicle. If the ball were to break, the trailer would follow in a straight line and prevent the coupler from dragging on the road.





- The lights on the trailer function properly.
- Check the brakes. On a level parking area roll forward and apply the brakes several times at increasing speeds to determine a safe stopping distance.
- The side view mirrors are large enough to provide an unobstructed rear view on both sides of the vehicle.
- Check tires (including spare) and wheel bearings. Improper inflation may cause difficulty in steering. When trailer wheels are immersed in water (especially salt water), the bearings should be inspected and greased after each use.
- Make certain water from rain or cleaning has been removed from the boat. Water weighs
  approximately eight pounds per gallon and can add weight that will shift with the movement of the
  trailer.

#### **Launching and Pre-Launching Preparations**

- Prepare the boat for launching away from the ramp for the courtesy of others and to prevent rushing.
- NOTE: The drain plugs should be left inside the boat near the plug holes. Always insert plugs prior to launching.
- Check the boat to ensure no damage was caused by the trip. If damage occurs it must be reported to the FOC.
- Inspect the launch ramp for hazards such as a steep drop off, slippery area and sharp objects.
- Raise the outboards to proper height and remove supports for launching so outboards will not hit bottom.
- Remove tie-downs and make sure the winch is properly attached to the bow eye and locked in position.
- NOTE: Do not remove winch from bow eye until boat has been backed into the water.
- Attach a line to the bow and the stern of the boat so the boat cannot drift away after launching and it can be easily maneuvered to docking area.
- When everything has been double checked, proceed slowly to the ramp remembering that the boat is
  just resting on the trailer and attached only at the bow. The ideal situation is to have one person in the
  boat and one observer at the water's edge to help guide the driver of the tow vehicle.

- Keep the rear wheels of the tow vehicle out of the water.
- Set the parking brake.
- Ensure someone else on shore is holding the lines attached to the boat.
- Lower the motor and prepare to start the engine (after running blowers and checking for fuel leaks).
- Start the outboards and make sure water is passing through the engine cooling system.
- Release the winch and disconnect the winch line from the bow when the boat operator is ready.
- At this point, the boat should be able to be launched with a light shove or by backing off the trailer under power.

#### Retrieval

- The steps for removing the boat from the water are basically the reverse of those taken to launch it. However, keep in mind certain conditions may exist during retrieval that did not exist during launching, e.g. changes in wind direction and/or velocity; changes in current and/or tide; increase in boating traffic; changes in visibility.
- Unload the boat at dock or mooring if possible.
- Back trailer into water until the fender/tire wells of the trailer are just submerged. This represents a rule-of-thumb and will require some adjustment based on slope of boat ramp and wind conditions.
- Maneuver the boat carefully to the submerged trailer and raise the lower unit of each outboard.
- Winch the boat onto the trailer and secure it with both winch and safety chain. Turn off motor and raise.
- Drive the trailer with boat aboard carefully out of the ramp to the parking area for cleanup, reloading, and an equipment safety check. Do a "walk around" to be sure boat is properly secured for towing.
- Practice will make launch and retrieval a simple procedure. The best advice is to retrieve the boat cautiously with safety as operator's main concern.

#### Loading

- Keep the load low and evenly distributed.
- Do not exceed the "U.S. Coast Guard Maximum Capacities" label.

#### **Anchoring**

To anchor, bring the bow into the wind or current and put the engine in neutral. When the vessel comes to a stop, lower, do not throw, the anchor over the bow. The anchor line should be 5 to 7 times the depth of water.



Do not anchor by the stern!!

Anchoring a small boat by the stern has caused many to capsize and sink. The transom is usually squared off and has less freeboard than the bow. In a current, the stern can be pulled under by the force of the water. The boat is also vulnerable to swamping by wave action. The weight of a motor, fuel tank, or

other gear in the stern increases the risk.

#### **Fueling**

- Fill portable tanks off the vessel.
- Close all hatches and other openings before fueling.
- Extinguish smoking materials.
- Turn off engine(s), all electrical equipment, radios, stoves and other appliances.
- Wipe up any spilled fuel immediately.
- Open all hatches to air out the vessel.
- NEVER start the engine until all traces of fuel vapors are eliminated. Your nose is the best known vapor detector.

#### **Fuel Management**

 Practice the "One-Third Rule" by using one-third of the fuel going out, one-third to get back and onethird in reserve.

#### **Emergency Repairs**

- If the boat becomes inoperative, arrange for a marine tow as necessary and secure the boat in the boat barn or trailer the boat as necessary. Contact the FOC to request assistance.
- If the boat becomes inoperative beyond 100 miles from TAMUCC, please follow the following procedures:
  - obtain an estimate of the repair cost;
  - if the estimate does not exceed \$100:
    - have the necessary repairs made and obtain copies of all invoices, noting the boat and operator name and signature;
    - make repair payment by departmental credit card, personal credit card or cash. The FOC will review receipt of paid invoices to ensure reimbursement is appropriate.
- If the estimate exceeds \$100, permission must be obtained from the FOC before repairs are authorized;

Boat operator is responsible for ensuring costs are reasonable for repairs performed and the University's interests are protected.

#### Weather

#### Prior to departure

Obtain the latest available weather forecast for the boating area. If warnings are in effect, don't
venture out on the water unless confident your boat can be navigated safely under forecast conditions
of wind and sea. The FOC will be the final authority on whether a trip may safely proceed or will need
to be rescheduled.

#### While Afloat

- Keep an eye out for the approach of dark, threatening clouds which may foretell a squall or thunderstorm.
- Check radio weather broadcasts periodically for latest forecasts and warnings.
- Heavy static on your AM radio may be an indication of nearby thunderstorm activity.
- Lightning can strike up to 6 miles from its point of origin. If you see lightning or hear thunder, get off the water immediately.
- If a thunderstorm catches you afloat DO NOT ATTEMPT TO "RIDE IT OUT" ON THE WATER!
  - Put on a Personal Flotation Device (if not already wearing one).
  - o Keep away from metal objects that are not grounded to the boat's protection system.
  - Return to port immediately if possible. If not, head for nearest shelter (land, dock, floating cabin, etc.) and exit boat.

# **Homeland Security**

The United States Coast Guard is the federal government's principal maritime law-enforcement agency. Since the terrorist attacks on September 11, 2001, the Coast Guard has significantly increased homeland-security operations to protect US ports and waterways from maritime terrorist threats. Our campus location on Corpus Christi Bay and its proximity to Naval Air Station – Corpus Christi as well as the Port of Corpus Christi and the numerous chemical and petrochemical operations within the bay complex create a substantial exposure to university personnel, students and physical plant from maritime terrorist threats. Detection, assessment, and emergency management are fundamental components of both environmental and homeland security.

- The operator must be able to certify the identity of any personnel accompanying his cruise.
   Operator must be wary of suspicious behavior of his personnel and other boats. Suspicious behavior should be reported to the Coast Guard or County Sheriff Department.
- The operator must maintain a distance of 300 yards from US Naval and Coast Guard boats and stations, and cruise boats and operations. In addition, the operator should contact local Coast Guard authorities to verify restrictions and restriction zones that might affect their study area.

# **U. S. Coast Guard Minimum Required Equipment**

USCG	MINIMUM REQUIRE	MENTS FO	R RECREATIO	NAL BOATS			
EQUIPMENT	CLASS A Less than 16ft/4.9m	CLASS 1 16 to less than 26 ft/7.9m	CLASS 2 26 to less than 40 ft/12.2m	CLASS 3 40 to not more than 65 ft/19.8m			
Personal Flotation Devices (PFDs)	One approved Type I, II, III or V(must be worn) PFD for each person on board or being towed on water skis, tubes, etc.	One approved Type I, II or III PFD for each person on board or being towed on water skis, etc.; and one throwable Type IV device. ( A type V PFD may be used in lieu of any wearable PFD, if approved for the activity in which it is being used. A TYPE V HYBRID MUST be worn to be legal.)					
Sound Producing Devices	Every boat less than 39.4 ft (12 meters carry an efficient sound producing devi		Every boat 39.4 ft (12 meters) or larger in length must carry a whistle and a bell. The whistle must be audible for 1/2 nautical mile. The mouth of the bell must be at least 7.87 inches (200mm) in diameter.				
Visual Distress Signals (Coastal Waters, the Great Lakes & US owned boats on the high seas)  Required to carry approved visual distress signals for both daytime use.  Must carry approved visual distress signals for both daytime use.				both daytime and night-time			
Fire Extinguisher (Must be Coast Guard approved)	One B-I type approved hand portable f (Not required on outboard motorboats length if the construction of the motorb does not permit the entrapment of expl gases or vapors and if fuel tanks are no installed.)	less than 26 ft in oat is such that it osive or flammable	Two B-I type <b>OR</b> one B-II type approved portable fire extinguishers.	Three B-I type <b>OR</b> one B-I type <b>PLUS</b> one B-II type approved portable fire extinguishers.			
If a fixed fire	e extinguishing system is installed in	machinery spaces	it will replace one B-I port	able fire extinguisher.			
Ventilation (Boats built on or after 8/1/80)	At least two ventilation ducts capable of efficiently ventilating every closed compartment that contains a gasoline engine and/or tank, except those having permanently installed tanks which vent outside of the boat and which contain no unprotected electrical devices. Engine compartments containing a gasoline engine with a cranking motor are additionally required to contain power operated exhaust blowers which can be controlled from the instrument panel.						
Ventilation (Boats built before 8/1/80)	At least two ventilation ducts fitted with cowls (or their equivalent) for the purpose of efficiently and properly ventilating the bilges of every closed engine and fuel tank compartment using gasoline as fuel or other fuels having a flashpoint of 110 degrees or less. Applies to boats constructed or decked over after April 25, 1940.						
Back-fire Flame Arrestor	One approved device on each carburetor of all gasoline engines installed after April 25, 1940, except outboard motors.						

## Safety and Survival Tips for small Boats and Water Activities

Many students do not think of themselves as boaters, but use small semi-v hull vessels, flatbottom jon boats or canoes to pursue their sports. These boats tend to be unstable and easily capsized. Capsizings, sinkings, and falls overboard from small boats account for 70% of boating fatalities and these facts mean you must have a greater awareness of the boat's limitations and the skill and knowledge to overcome them. Standing in a small boat raises the center of gravity, often to the point of capsizing. Standing for any reason or even changing position in a small boat can be dangerous, as is sitting on the gunwales or seat backs or on a pedestal seat while underway. A wave or sudden turn may cause an occupant to fall overboard or the boat to capsize due to the raised center of gravity.

#### **Staying Afloat**

It is common belief that someone dressed in heavy clothing or waders will sink immediately if they fall overboard. This is not true. Air trapped in clothing provides considerable flotation, and bending the knees will trap air in waders, providing additional flotation. To stay afloat, remain calm, do not thrash about or try to remove clothing or footwear. This leads to exhaustion and increases the loss of air that keeps you afloat. Keep your knees bent, float on your back and paddle slowly to safety.

#### **Cold Water Survival**

Sudden immersion in cold water can induce rapid, uncontrolled breathing, cardiac arrest, and other life threatening situations which can result in drowning. Wearing a PFD will help reduce this condition. If you must enter the water, button up your clothing, wear a PFD, cover your head if possible and enter the water slowly.

Hypothermia is the loss of body heat and immersion in cold water accelerates the loss of heat. If your boat capsizes it will likely float on or just below the surface. Outboard powered vessels built after 1978 are designed to support you even if full of water or capsized. To reduce the effects of hypothermia get in or on the boat. Try to get as much of your body out of the water as possible. If you can't get in the boat a PFD will enable you to keep your head out of the water. This is very important because about 50% of body heat loss is from the head.

It may be possible to revive a drowning victim who has been under water for considerable time and shows no signs of life. Numerous documented cases exist where victims have been resuscitated with no apparent harmful effects after long immersions. Start CPR immediately and get the victim to a hospital as quickly as possible.

#### **Basic Boat Maintenance**

All boats should be maintained in good working order. Essential to boating safety and productive instruction and/or research is the fact that the boat is maintained and all its parts and systems are able to perform as they were designed. Negligence in this area will eventually lead to an unsafe or disastrous experience.

Operators should report any and all concerns regarding the condition of any boat, outboards and onboard systems to the FOC immediately upon return.

#### **Engine**

The outboard components and fluids should be inspected and checked each and every time boats depart from the field staging facility. Periodic outboard and boat maintenance will include, but not necessarily be restricted to the following:

- Change oil in accordance with manufacturer's recommendations or, at least, twice a year.
- Check and replace worn or deteriorating belts or hoses.
- Check for oil and water leaks prior to each departure.
- Flush outboards with freshwater following operation in marine and estuarine waters.
- Check impellers and pumps in anticipation of system failure.
- Inspect outboards and boat for signs of corrosion and act to inhibit corrosion.
- Check and service transmissions and lower units according to manufacturer's recommendations.
- Change fluids on a recommended schedule or, at least, once each season.
- Maintain shafts and props in clean and good working order.

#### **Inspection and Maintenance**

#### Before each use

- Visually inspect fuel system for deterioration and leaks.
- Check outboards for tightness on transom.
- Check steering system for binding or loose components.
- Visually check steering link rod fasteners for proper tightness.
- Check propeller blades for damage.

After each use - Flush outboard cooling systems.

- Wash off salt deposits and flush exhaust outlets of propellers and gear cases.

#### **Systems**

Continual maintenance of each system on the boat is of critical importance. Maintenance will be performed as scheduled by the manufacturer's recommendation for the following systems:

- fuel system
- winch
- generators
- electrical including GPS, depth finder and related gear
- batteries

NOTE: Operators should report any and all concerns regarding the boat, outboards and onboard systems conditions to the FOC as soon as possible.

# **Engine Requirements**

#### Fuel

Use a major brand of automotive unleaded gasoline with a minimum posted octane of 87. Mid-grade automotive gasolines containing fuel injector cleaner are preferred. Avoid using gasolines containing alcohol.

#### Oil

Use an NMMA/BIA certified TC-W3 2-Cycle outboard oil.

# **Appendix 1 – Emergency Contacts**

- U. S. Coast Guard Galveston, TX (800) 874-2145
- U. S. Coast Guard Corpus Christi, TX (800) 434-9486
- U. S. Coast Guard Mobile, AL (334) 441-5720
- U. S. Coast Guard New Orleans, LA (504) 589-6225
- U. S. Coast Guard Maritime Search and Rescue Emergencies (757) 398-6231

Galveston County Sheriff's Department - Marine Division (409) 766-2331

Galveston County Sheriff's Emergency Dispatch (409) 766-2322

Aransas County Sheriff's Department (361) 729-2222

Brazoria County Sheriff's Department (979) 265-9310

Matagorda County Sheriff's Department (979)245-5526

Nueces County Sheriff's Department (361) 887-2222

Texas Parks and Wildlife Department (TPWD) Boat Education and Information (800) 792-1112

TPWD Galveston Regional Office – Dickinson (281) 534-0101

# **Appendix 2 – Weather and Tidal Information**

ImpactWeather - http://www.impactweather.com/cgi-bin/tide\_show.cgi?location=Galveston

Center for Operational Oceanic Products and Services - www.co-ops.noa.gov/tides/gulfGAL.html

Center for Operational Oceanic Products and Services (PORTS) - www.opsd.nos.noaa.gov/ports\_screens/hgscreen.html

Tides.INFO - www.tides.info/

Weather Research Center - www.wxresearch.com/tide.htm

Saltwatertides.com - www.saltwatertides.com/dynamic.dir/texassites.html

U. S. Coast Guard Navigation Center - http://www.navcen.uscg.gov/lnm/d8gm/

National Weather Service Forecast Office Houston / Galveston http://www.srh.noaa.gov/hgx/

# Appendix 3 - Forms

Vehicle Use form
Field Trip Waiver form
Vessel Checkout / Float Plan
Incident Report form
TPWD Boating Accident Report (Texas Water Safety Act)
Field Trip Itinerary

TAMU System Motor Vehicle Accident Report Form