

# OWNERS MANUAL





## THANKS FOR CHOOSING TIGÉ!

Congratulations on your purchase of a Tigé, the finest, most versatile watersport boat on the water today. Tigé quality, innovation, performance and versatility assures your overwhelming satisfaction the first day out and for many years to come.

Everything we do at Tigé is aimed at one objective: enhancing the on-water experience for driver, passenger and watersport enthusiast. We encourage you to thoroughly read this manual before using your boat and familiarize yourself with its operational and safety features.

We have made every effort to insure the accuracy of this manual, providing the most current information available. Since we are continuously refining features

and design, Tigé reserves the right to make changes at any time without notice in models and specifications. We also reserve the right to change parts, accessories or specifications at any time with no obligation to equip boats manufactured before the date of change with new equipment. If you have any questions after reviewing this manual, please contact your Tigé dealer.

Once again, thanks for choosing Tigé.

*Have fun!*





# SERIAL NUMBERS

These identification numbers associated with your boat are extremely important. Please record these numbers below. Also keep a copy of these numbers separately for future reference, insurance and boat registration.

## HULL IDENTIFICATION NUMBER:

Located at the top, right (starboard) corner of the transom.

\_\_\_\_\_

Ignition Key #: \_\_\_\_\_

Registration Number / State:

\_\_\_\_\_

Date of Purchase: \_\_\_\_\_

Dealership Name and Address:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Phone: \_\_\_\_\_

Salesperson: \_\_\_\_\_

**Note: Removing, altering, tampering or destroying identification numbers in part or completely will relieve Tigé Boats, Inc. from all obligations to make warranty replacement or repairs.**

## ENGINE:

Refer to Engine Owners Manual for specific location.

Serial Number: \_\_\_\_\_

Manufacturer \_\_\_\_\_

Model \_\_\_\_\_ Horsepower \_\_\_\_\_

## TRANSMISSION:

Refer to Engine Owners Manual for specific location.

Serial Number: \_\_\_\_\_

Model: \_\_\_\_\_

## TRAILER:

Serial Number: \_\_\_\_\_

Manufacturer: \_\_\_\_\_



## PLAY IT SAFE AND ENJOY!

Safety is a top priority in the design and construction of every Tigé boat. Before use, we strongly encourage owners to become familiar Tigé safety features, safe operation, maintenance procedures and overall safe boating practices. In addition to ensuring your safety and that of your passengers, proper maintenance and operation of your Tigé greatly enhance your enjoyment on the water.



## TIGÉ TIPS FOR A SAFE, FUN DAY ON THE WATER!

A day on the water may be relaxing for you, but cruising through chop, towing skiers and other normal boating activity puts significant stress on a boat. Although your Tigé is built tough to withstand the rigors of on-water activities, pylons, towers, accessories and other attachments must be checked and tightened **every time you go out** to avoid injury and ensure safe reliable performance. It is also very important to **regularly** check and maintain the various systems and equipment on your boat ***before*** you get underway.

To help you keep everything in good working order, refer to the *Preflight Checklist* on the following page each time you go boating. Make it a habit and you'll make the most out of your time on the water.

## SAFE OPERATION

Tigé Boats, Inc. and your Tigé dealer strongly recommend that you and all who will be operating your boat attend a Coast Guard or County Sheriff Department approved safe boating course.

Make it a habit to regularly follow these guidelines for safe operation:

- ✓ Use common sense at all times and when in doubt- **DON'T!**
- ✓ It is required by law that you have a Coast Guard Approved PFD-Personal Flotation Device on board and accessible for each person on the boat.
- ✓ Avoid personal injury-Shut off engine if people are:
  - Near Propeller
  - On boarding platform
  - Getting in or out of the boat
- ✓ The engine should never be running unless the driver is in the correct operating position, body facing forward with hands on the controls.
- ✓ Do not sit on seat backs, sides of boat, motor box or on the closed bow.
- ✓ Do not stand on the sides of the boat at any time.
- ✓ Do not overload the open bow area. Never seat more than three people in the open bow area. Maximum weight capacity for the open bow area is 250 lbs. (combined weight of persons and gear).
- ✓ Children under 11 years of age should not use the open bow area unless accompanied by an adult.
- ✓ Do not allow open bow passengers to obstruct the driver's vision.
- ✓ Occupants of the boat must be seated while the engine is running or while the boat is in motion.
- ✓ DO NOT make high speed (greater than 10 m.p.h.) maneuvers and quick turns seen in water ski shows. These types of maneuvers should be performed only by professionals under certain conditions.

## WATERSPORTS TOWING SAFETY

Boat operators, skiers and boarders must all be aware of current boating and watersports rules and pay constant attention safe operating procedures and skiing practices at all times. If skiing or boarding is a new sport for you we recommend that you seek certified training and join a local ski club or other watersports organization.

The following guidelines will help you stay safe, avoid accidents and have a fun time on the water.

- ✓ Skiers, boarders and other watersports enthusiasts must always wear an USCG approved personal flotation device. It's the law!
- ✓ Know the area you are skiing in. Do not ski in shallow water or too close to shorelines.
- ✓ Keep a safe distance (100') from all other objects (boats, rafts, piers, pilings, shoreline, etc.)
- ✓ Always have an experienced driver and observer on board while skiing.

- ✓ Never put any part of your body through the ski rope handle or wrap ski line around any part of your body.
- ✓ Never jump from a boat that is underway at any speed or get into or out of the water while the engine is running.
- ✓ Never operate a boat or watersport device while under the influence of alcohol or any other drug.
- ✓ Always turn off engine if swimmers or skiers are on or near the swim platform. A propeller accident or carbon monoxide poisoning can occur.
- ✓ Ski pylons and approved towers have been developed for normal watersports activities only. Any other use may cause overstressing resulting in cause personal injury or equipment damage.  
**Do not use a tower or extended pylon to pull a wakeboarder or any other watersport activity at speeds above 24 m.p.h.**



- ✓ Never ski at night or in marginal light.
- ✓ Never ski directly in front of other boats.
- ✓ Do not sit behind the tow pylon during watersports activities.
- ✓ The transom towing hook is designed for normal watersports activities only.
- ✓ Tigé Boats, Inc. and your dealer will not assume responsibility for damage or personal injury that may occur from the use of a boom or extended pylon on a Tigé boat.

## TRAILER SAFETY:

### BEFORE TRAILERING:

- ✓ Check trailer ball for tightness.
- ✓ Connect trailer hitch only to the ball size marked on coupling.
- ✓ Be certain hitch ball is fully engaged in coupler and locking lever is down. **Never place hands or other body parts between the coupling and any part of the tow vehicle.**
- ✓ Connect safety chains under coupling allowing only enough slack in chains for turns.
- ✓ Lock winch and attach safety straps and chains. **Never tow your boat/trailer unless the safety straps and chains are attached and the winch is in the locked position.**
- ✓ Check trailer wheels lug nuts before every outing. Tighten to 90-95 ft. lbs. of torque.
- ✓ Be sure all lights are working properly.
- ✓ Be sure “bearing buddies” are greased.



I have read and understand these Safety Guidelines  
and the Tigé warranty.

Owner: \_\_\_\_\_

Date: \_\_\_\_\_

*Happy Boating!*









## BASIC OPERATING GUIDELINES

Tigé Boats urges you to seek certified instruction from your local boating authority. We also encourage you to familiarize yourself with the controls, systems and features of your boat **BEFORE** the first day of operation. If there are any questions regarding operation, maintenance or features, contact your Tigé dealer.

### NEVER OVERLOAD YOUR BOAT

The certification plate on your boat lists the weight capacity, which includes all persons and gear. Distributing the load evenly will insure optimum boat performance and safety.

### BE PREPARED FOR EMERGENCIES!

Emergencies can occur. Know how to use and spot distress signals, administer first aid or general assistance.

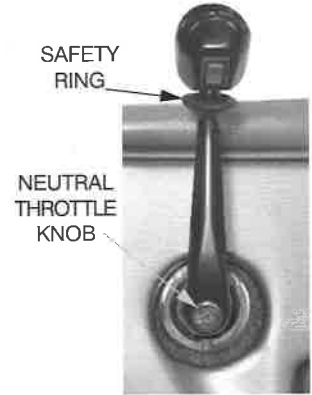
### PRACTICE GOOD BOATING MANNERS

While on the water as well as during loading, unloading and trailering, respect the rights of others. Keep a safe distance, be alert, be careful and, above all, ***DO NOT DRINK AND DRIVE!***

## CONTROLS

### SHIFT/THROTTLE CONTROL

This single-lever gear control operates both the gearshift and throttle. The control can only be moved from the neutral position by lifting the safety ring under the throttle handle. Moving the control forward from the neutral position will advance throttle in forward gear. Moving the control aft from the neutral position will advance throttle in reverse gear. To “rev” the engine without engaging the transmission, move the throttle to idle and pull out the neutral throttle knob located at the base of the throttle handle. To return to normal operation, push the knob back in while throttle is set at idle.



**NOTE: Engine will only start when throttle is in neutral. If engine does turn over and battery is charged, try moving the throttle handle and then return it to neutral. Try starting again.**

## GAUGES:

**ENGINE HOUR METER** keeps a running total of engine hours while operating. Depending on Tigé model, the hour meter readout may be a separate gauge or incorporated within the Tachometer unit. **The hour meter is engaged whenever the ignition switch is in the ON position, even if the engine is not running.** Be careful not to leave the ignition switch on while engine is not running. Accessory equipment (stereos, showers, etc.) should be installed to operate without the need for the key to be in the *ON* position.

**SPEEDOMETER** indicates forward speed of the boat in miles per hour (M.P.H.). On some models, dual speedometers are installed to have one as a backup in the event that one speedo temporarily fails during operation. Speedometers can be calibrated using the adjustment knob located on the dashboard.



**TACHOMETER** indicates engine speed in crankshaft revolutions per minute, or RPM.



**PILOT GAUGE**, available on some models, displays speed, time of day, water depth, water temperature and several engine functions. Refer to the Pilot Gauge instruction manual for details on operation.



**WARNING!**  
**DISCONNECT BATTERY BEFORE CHARGING.**  
**FAILURE TO COMPLY WILL RESULT IN ELECTRICAL MALFUNCTIONS.**

# CONTROLS

**FUEL GAUGE** indicates the approximate amount of fuel in the tank. These readings are only approximate and an adequate margin of comfort should always be allowed.

**ENGINE OIL PRESSURE GAUGE** indicates the pressure in PSI (lbs. per square inch) of the lubricating oil inside the engine. Normal pressure is between 10-30 PSI at idle and 30 to 60 PSI at running speed.



**VOLTMETER** indicates electrical system operating voltage D.C. Normal operating voltage is between 14.5 and 15.5 volts.

**ENGINE TEMPERATURE GAUGE** indicates the internal engine coolant temperature in degrees Fahrenheit. Normal operating temperature is between 165-195°. **If gauge indicates temperature above 195°, shut engine off immediately!**



**TAPS GAUGE** indicates the position of the TAPS plate (see *TAPS Operation.*)

**V-DRIVE LIGHT** indicates low fluid in the V-drive unit (V-drive Models only). It should illuminate at idle and at low operating speeds (below 1200 RPM). It should not illuminate at higher RPM.

## TAPS OPERATION

TAPS is a patented variable-hull system which dramatically enhances wake characteristics, ride and boat performance. With the push of a button, TAPS modifies the hull's running angle for optimum watersport wake enhancement, a smoother ride in rough water, better fuel economy and increased safety and comfort .

TAPS adjustments are made using the rocker switch located on the throttle handle. For safe operation, Tigé strongly recommends that the driver always keeps the left hand on the steering wheel and the right hand on the throttle. The location of the TAPS switch allows operation with the right thumb maintaining safe, hands-on control of the throttle.

TAPS switch adjustments can be made while idling or while underway. The position



U.S. Patent No. 5549071

of TAPS is indicated on the TAPS gauge located on the dashboard. Settings range from 1 (flat, bow-low running angle) to 7 (bow-high running angle). To move the bow to a higher running attitude, push the top of the TAPS rocker switch. The TAPS gauge will begin moving from right to left towards a higher number. To lower the bow, push the bottom of the TAPS rocker switch. The bow angle will lower and the TAPS gauge will move from left to right.

Although the effects of the various TAPS settings depend on Tigé model, passenger load, water conditions speed and other factors, the following guidelines are provided as a starting point as you learn to use TAPS to optimize your performance needs.





## WATERSPORTS SETTINGS:

TAPS has been designed for “shift-on-the-fly” adjustment of wake size and shape. Generally, the larger the wake desired, the higher the TAPS setting.

### Slalom

Because the best TAPS setting for slalom is the one which best suits the skier, we urge you to experiment and take full advantage of the system’s full variability. For kids skiing below 15 M.P.H. try a setting between 0 and 2. Skiers in the 15-32 M.P.H. range usually require a setting between 1 and 3. At or above 32 M.P.H., skiers will prefer a setting from 1 to 4.

Remember, the optimum TAPS setting will vary depending on passenger load, line length, water conditions, etc. A slight TAPS adjustment can make a big difference in wake size and shape, so don’t hesitate to use that switch.

### Boarding

Experienced riders will find the largest, pro-size wakes will be achieved with a TAPS setting at 7+. If you have a full passenger load or Skybox seating, use TAPS at a lower setting to dial in the optimum wake shape. For recreational or intermediate riders, Tigé recommends a maximum TAPS setting of 4.



TAPS settings and the effect on hull running attitude and wake characteristics.

## Other Watersports

TAPS also dramatically enhances wake characteristics for Air Chairs, barefooting, kneeboarding and towables. Experiment with different settings and have a great time!

### ★ Helpful Hint

For best ride and performance, use the extreme slalom setting (1) only when pulling up a skier or boarder or at towing speeds under 24 M.P.H.. At speeds greater than 24 M.P.H., adjust TAPS to a setting more conducive to the water conditions.

## Ride, Safety and Boat Performance

The variable-hull TAPS system also dramatically enhances boat performance, comfort and safety. To eliminate bow rise on take off, set TAPS at 1. As soon as the boat reaches planing speed adjust TAPS up to 3 or higher, depending on water conditions. If water is choppy (less than 6" waves), the optimum ride setting will be from 2 to 5, depending on Tigé model and

passenger load. In rougher water (12" waves and higher), trim TAPS to a setting of 5 to 7. Raising the bow in rougher water will provide a safer, drier ride while maximizing the hull's "entry vee" to reduce the effects of the chop. This higher running attitude will also provide bow passengers with a smoother, drier ride.

To maximize top speed in your Tigé, set TAPS between 5 and 7. When the boat reaches top speed, bring the TAPS setting down slightly to achieve the optimum running attitude. Top speed should be achieved at a TAPS setting of 5 – 6.





## FUELING

Tigé recommends the use of unleaded fuel to ensure the best performance and longevity of your engine. Fuel additives and treatments, other than conditioners for absorbing moisture and winter storage, are not recommended for use in Tigé Boats. Please refer to your engine owner's manual for complete details.

When possible, obtain fuel from a land-based fueling station. Marina gas sometimes contains water which can adversely affect engine performance.



### WARNING!



**Gasoline is extremely flammable and highly explosive under certain conditions.**

Always turn off the engine before fueling and NEVER allow smoking, open flames, or sparks within 100' of the area you are fueling in.









Be careful not to spill gasoline and always tighten the fuel cap completely after refueling.

**Before restarting the engine, OPERATE THE BLOWER FOR AT LEAST FOUR MINUTES!**

## LAUNCHING AND LOADING


### PREPARING TO LAUNCH

**Before** backing your boat down the ramp:

-  If your boat has a cover, remove it.
-  Stow any additional equipment if necessary.
-  **Make sure that the drain plugs are in place.**
-  Be certain engine is not winterized even if freeze plugs are in place.
-  Remove any additional trailer tie downs.
-  Disconnect trailer lights from the automobile.
-  Attach all docking lines and fenders if necessary.
-  Check battery for charge.

### LAUNCHING:

Although it is possible for one person to launch, it is best accomplished with two people.

-  Back the boat down the ramp until the trailer fenders are slightly above water level. (Note: All ramps have different slopes and conditions).





# OPERATING

## LAUNCHING (CONTINUED):

- Loosen and detach winch strap from the bow eye.
- Start the bilge blower and allow it to run for at least **FOUR minutes** before starting engine.
- Smell for gas fumes.
- Start the engine and, after warm up, back the boat slowly off the trailer in a straight line.

## LOADING:

Like launching, loading is best done with two people.

- Back trailer into the water until the tops of the fenders are slightly above water level. Set the parking brake securely.
- In the boat, approach the trailer in a straight line from a distance of 50' out. Guide the boat using short bursts of forward propeller to direct the boat between the trailering alignment posts and onto the bunks.
- Using a very light touch of the throttle, ease the boat forward until it rests on the bow stop.
- Attach and tighten bow winch strap to secure boat.

- Turn off engine.
- Pull the trailer and boat up the ramp and attach any additional tie downs, as well as connecting the trailer lights and unload any extra gear and equipment.
- Always check the hitch coupler for proper and complete closing. Once coupler is closed put a lock or safety pin in the coupler securing device to insure it stays closed.

**NOTE: Do not trailer the boat with the cover on, unless the cover is so designed. Wind whipping the boat cover will cause chafing of gel coat finish.**

- Always allow yourself a safe distance on all sides while trailering your boat. It will take you more room to stop, turn and accelerate. Always be aware of changing road and weather conditions.



## MAINTENANCE

Proper, regular maintenance is mandatory to ensure optimum performance and safe operation of your Tigé. Make certain all systems are serviced by your Tigé dealer or other qualified personnel according to the *Maintenance Schedule* (page 21). Also, be sure to use only marine-approved and designed replacement parts.

### ENGINE AND TRANSMISSION

Because Tigé equips its boats with a variety of engine and transmission options, please refer to the Engine and Transmission Owner's Manual for your particular boat. This manual will outline maintenance and specifications unique to your engine and transmission. Please read this manual thoroughly and if you have any further questions contact your dealer.

### CORROSION

Your boat has been designed for operation in fresh water. If you use your boat in brackish or salt water then it will need to be flushed thoroughly after each use.

### MARINE GROWTH

Tigé does not recommend storage of your boat in the water. However, if you chose to store your boat in the water, marine growth will be a problem. Please speak to your dealer or marina about antifouling paint to retard the growth of marine life and prevent gel coat damage. If antifouling paint is not applied it is very important to remove the boat from the water weekly by boat lift, trailer or other means to prevent osmosis or blistering.

### WINTERIZATION

In the storage season make sure your boat is properly WINTERIZED by an authorized Tigé dealer or qualified marina. After winterization, proper storage of your Tigé will insure a smooth transition back into the upcoming boating season. If you have any questions please contact your Tigé dealer.

## CLEANING

### FIBERGLASS

Use a mild detergent to clean fiberglass surfaces. Do not use harsh chemicals or solvents. Waxing of fiberglass surfaces at least twice a year is highly recommended.

### UPHOLSTERY

Upholstery should be washed regularly with a very mild detergent and warm water. Suntan lotions that have any dye or colors should not be used due to the possibility of staining the vinyl. Cushions should be kept from being soaked and always dried thoroughly. **Do not cover and store your boat unless upholstery and carpet has been thoroughly dried.**

### TEAK WOOD

Teak wood should be cleaned and oiled regularly to insure a good appearance and longevity of the wood. Teak wood cleaners and preservatives can be purchased through your Tigé dealer.

### STAINLESS STEEL AND CHROME

Occasional cleaning and polishing with a high-grade metal polish (for chrome and stainless steel) will maintain and extend the life and appearance of the finish. **NOTE: Routine cleaning of your Tigé, in and out of the boating season, will prolong the life of the finish, the upholstery and the brightwork.**





## TIGÉ MAINTENANCE SCHEDULE

	REGULAR	20hrs.	75 hrs.	150 hrs.
Smell bilge area for fuel vapors				
Check and tighten all steering system bolts and connections				
Check rudder, tiller arm bolt and safety set screw				
Lube rudder stuffing box				
Check bilge pump operation				
Check blower operation				
Adjust and tighten throttle linkage				
Inspect shaft log for excessive leaking				
Check that transmission output coupler is within .003 to propeller shaft coupler				
Check and tighten motor mounts				
Tighten pylon and/or tower mounting bolts				
Tighten all hardware and fasteners				
Lubricate cables				
Replace cables	If stiffness continues after lubricating			
Teak oil swim platform				
Wax boat				
Service engine and transmission (Refer to separate manuals)				

**If propeller strikes an object, inspect entire drive train system immediately!**



## TRAILER MAINTENANCE

### PAINTED SURFACES

Wash trailer regularly with mild detergent and rinse thoroughly. Wax painted surfaces approximately twice a year with a high-grade automotive wax.

### TIRES AND WHEELS

Tires and wheels on your trailer deserve the same attention as do the tires and wheels on your car. Check tires for proper inflation and wear before each use as well as inspecting rims for dents, cracks or abnormalities. Grease “bearing buddies” regularly.

### WIRING AND LIGHTS

Before each use check your directional brake and running lights on your trailer. Make sure wiring harness from trailer to vehicle is secure and free from worn spots.

### BOAT PLACEMENT

When the boat is loaded on the trailer it should be in the center and resting properly in the bunks and bow stop.

### GENERAL

It is the owner’s responsibility to check and tighten lug nuts, guide bars and other trailer hardware. Your trailer does require regular maintenance on the bearings, brakes and hydraulic system, hitch coupler, lights/wiring, and other components. Please refer to your owner’s manual for complete details.

### “BEARING BUDDY”-TYPE UNITS

Maintain adequate grease.



## UNITED STATES COAST GUARD REGULATIONS

The following United States Coast Guard Regulations have been included in this manual for the owner's convenience. Since regulations change periodically, we urge all boat operators to obtain and review a current copy of these and other applicable boating laws.

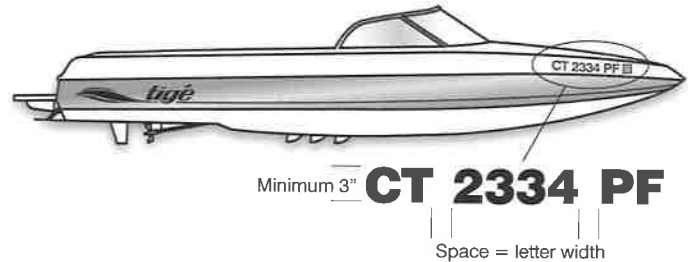
## REGISTRATION, NUMBERING AND DOCUMENTATION

All undocumented vessels equipped with propulsion machinery must be registered in the state of principal use. A certificate of number will be issued upon registering the vessel. These numbers must be displayed on your vessel. The owner/operator of a vessel must carry a valid certificate of number whenever the vessel is in use. When moved to a new state of principal use, the certificate is valid for 60 days. Check with your state boating authority for numbering requirements. Some states require all vessels to be numbered. The Coast Guard issues the certificate of number in Alaska; all others are issued by the state.

Some larger recreational vessels may be documented. The certificate of documentation **MUST** be on board at all times. A document serves as a certificate of nationality and an authorization for a specific trade. A vessel is not exempt from applicable State or Federal taxes, nor is its operator exempt from compliance with Federal or State equipment carriage requirements.

### DISPLAY OF NUMBERS

Numbers must be painted or permanently attached to each side of the forward half of the vessel. The validation




Lettering **NOT LESS THAN 3"** in height in plain characters, color contrasting with background.

stickers must be affixed within six inches of the registration number. With the exemption of the vessel fee decal, no other letters or numbers may be displayed nearby.

### NOTIFICATION OF CHANGES TO A NUMBERED VESSEL

The owner of a vessel must notify the agency which issued the certificate of number within 15 days if:

- The vessel is transferred, destroyed, abandoned, lost, stolen or recovered.
- The certificate of number is lost, destroyed or the owner's address changes.



If the certificate of number becomes invalid for any reason, it must be surrendered in the manner prescribed by the issuing authority within 15 days.

A documented vessel must have the name and hailing port plainly marked on the exterior part of the hull in clearly legible letters not less than 4 inches in height. In addition, the documented vessel must have the Official Number permanently affixed in block type, Arabic numerals not less than 3 inches on some clearly visible interior structural part of the boat.

## **LAW ENFORCEMENT**

A vessel underway, when hailed by a Coast Guard vessel is required to heave to or maneuver in such a manner that permits a boarding officer to come aboard.

Other federal, state and local law enforcement officials may board and examine your vessel whether it is numbered, unnumbered or documented. Coast Guard law enforcement personnel may also be found aboard other vessels.

The Coast Guard may impose a civil penalty up to \$1,000 for failure to comply with equipment requirements, report a boating accident or comply with other Federal regulations. Failure to comply with the Inland Navigation Rules Act of 1980 can result in a civic penalty up to \$5,000.

Improper use of a radiotelephone is a criminal offense. The use of obscene, indecent or profane language during radio communication is punishable by a \$10,000 fine, imprisonment for two years or both. Other penalties exist for misuse of a radio, such as improper use of Channel 16 VHF-FM.

Channel 16 is a calling and distress channel. It is not to be used for conversation or radio checks. Such traffic should be conducted on an authorized working channel.

### **BOATING WHILE INTOXICATED (BWI)**

Operating a vessel while intoxicated became a specific Federal offense effective January 13, 1988.

The final rule set standards for determining when an individual is intoxicated. If the blood alcohol content (BAC) is .10% (.08% in some States) or higher for operators of recreational vessels being used only for pleasure, violators are subject to a civil penalty not to exceed \$5,000, 1 year imprisonment or both.

### **NEGLIGENT OPERATION**

Law prohibits negligent or grossly negligent operation of a vessel, which endangers lives and/or property. The Coast Guard may impose a civil penalty for negligent operation. Grossly negligent operation is a criminal offense and an





# REGULATIONS

operator may be fined \$5,000, imprisoned for one year or both. Some examples of actions that may constitute negligent or grossly negligent operation are:

- Operating a boat in a swimming area.
- Operating a boat while under the influence of drugs or alcohol.
- Excessive speed in the vicinity of other boats or in dangerous waters.
- Hazardous water skiing practice.
- Bowriding, riding on a seatback, gunwale or transom.
- Unsafe, quick turns, especially at high speeds greater than 10 M.P.H.

## TERMINATION OF USE

A Coast Guard Boarding officer who observes a boat being operated in an *UNSAFE CONDITION*, specifically defined by law or regulation, and who determines that an *ESPECIALLY HAZARDOUS CONDITION* exists, may direct the operator to take immediate steps to correct the condition, including returning to port.

Termination for unsafe use may be imposed for:

- Insufficient number of CG approved personal flotation devices (PFDs).
- Insufficient fire extinguishers.
- Overloading beyond manufacturer's recommended safe loading capacity.
- Improper navigation light display.
- Ventilation requirements for tank and engine spaces not met.
- Fuel leakage.
- Fuel in bilge.
- Improper backfire flame control.
- Operating in regulated boating areas during predetermined adverse conditions. (Applies in 13<sup>th</sup> CG District only).
- Manifestly unsafe voyage.

An operator who refuses to terminate the unsafe use of a vessel can be cited for failure to comply with the directions of a Coast Guard boarding officer, as well as for the termination order. Violators may be fined not more than \$1,000, imprisoned not more than one year or both.



### **REPORTING BOATING ACCIDENTS**

All boating accidents (or accidents which meet the criteria below), must be reported by the operator or owner of the vessel to the proper marine law enforcement authority for the state in which the accident occurred.

### **FATAL ACCIDENTS**

Immediate notification is required for fatal accidents. If a person dies or disappears as a result of a recreational boating accident, the nearest state boating authority must be notified without delay. The following information must be provided.

- Date, time and exact location of the accident.
- Name of each person who died or disappeared.
- Number and name of the vessel.
- Name and address of the owner operator.

If a person dies, or there are injuries requiring more than first aid, you must file a formal report within 48 hours.

A formal report must be made within 10 days for accidents involving more than \$500.00 damage or complete loss of vessel.

If you need further information regarding accident reporting, please call the Boating Safety Hotline, at 1-800-368-5647.

### **RENDERING ASSISTANCE**

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.

## **EQUIPMENT REQUIREMENTS**

The Coast Guard sets a minimum safety standard for vessels and associated equipment to meet these standards. Some of the equipment must be Coast Guard Approved Equipment which has been determined to be in compliance with USCG specifications and regulations relating to performance, construction or materials.

### **PERSONAL FLOTATION DEVICES (PFDs)**

PFDs must be Coast Guard Approved, in good and serviceable condition and of appropriate size for the intended user. Wearable PFDs must be readily accessible, meaning you must be able to put them on in a reasonable amount of time in an emergency (vessel sinking, on fire etc.). They should not be stowed in plastic bags, in locked or closed compartments

or have other gear stowed on top of them. Throwable devices must be immediately available for use. Though not required, a PFD should be worn at all times when the vessel is underway. A wearable PFD may save your life, but only if you wear it.

- Boats less than 16 feet in length (including canoes and kayaks of any length) must be equipped with one Type I, II, III, IV or V PFD for each person aboard.
- Boats 16 feet and longer must be equipped with one Type I, II, III, or V PFD for each person aboard plus one Type IV.
- Type V PFDs have use restrictions marked on them, which must be observed.
- If a type V PFD is to be counted toward minimum carriage requirements, it must be worn.
- Federal law does not require PFDs on racing shells, rowing skulls and racing kayaks. State laws vary.
- CME boats less than 16 feet in length must be equipped with a minimum of 2 PFDs. Boats 16 feet and over must have a minimum of 2 wearable and throwable PFD.

Remember that PFDs will keep you from sinking but not necessarily from drowning. Extra time must be taken in

selecting a properly sized PFD to insure a safe fit. Testing your PFD in shallow water or guarded swimming pool is a good reassuring practice.

## TYPES OF PFDs

### **Type I PFD, or Off-Shore Life Jacket**

A Type I PFD provides the most buoyancy. It is effective for all waters especially open, rough, or remote waters where rescue may be delayed. It is designed to turn most unconscious wearers in the water face-up position. The Type I comes in two sizes. The adult size provides at least 22 pounds buoyancy, the child size, 11 pounds, minimum.

### **Type II PFD, Near-Shore Buoyant Vest**

A Type II is intended for calm, inland water or where there is a good chance of quick rescue. This type will turn some unconscious wearers to a face-up position in the water. The turning action is not as pronounced and it will not turn as many persons to a face-up position under same conditions as a Type I. And adult size device provides at least 11 pounds. Infant and small child sizes each provide at least 7 pounds buoyancy.

### **Type III PFD, or Flotation Aid**

A Type III is good for calm, inland water, or where there is a good chance of quick rescue. It is designed so wearers can



place themselves in a face-up position in the water. The wearer may have to tilt their head back to avoid turning face down in the water. The Type III PFD has the same minimum buoyancy as a Type II PFD. It comes in many styles, colors, and sizes and is generally the most comfortable type for continuous wear. Float coats, fishing vests, and vests designed with features suitable for various sports activities are examples of this type of PFD.

#### **Type IV PFD, or Throwable Device**

This is intended for calm, inland water with heavy boat traffic where help is always present. It is designed to be thrown to a person in the water and grasped and held by the user until rescued. It is not designed to be worn. Type IV devices include buoyant cushions, ring buoys, and horseshoe buoys.

#### **Type V PFD, or Special Use Device**

A Type V is intended for specific activities and may be carried instead of another PFD only if used according to the approval conditions on the label. Some Type V devices provide significant hypothermia protection. Varieties include deck suits, work vests, board sailing vests, and Hybrid PFDs.

#### **Type V Hybrid Inflatable PFD**

A Type V Hybrid Inflatable is the least bulky of all PFD types. It contains a small amount of inherent buoyancy, and an inflatable chamber. Its performance is equal to a Type I, II or III PFD (noted on the PFD label) when inflated. Hybrid PFDs must be worn when underway to be acceptable.

#### **WATER SKIING AND PFDs**

A water skier is considered on board the vessel and a PFD is required for the purpose of compliance with the PFD carriage requirements. It is advisable and recommended for a skier to wear a PFD designed to withstand the impact of hitting the water at high speed. Impact Class marking on the label refers to PFD strength, not personal protection. Some state laws require skiers to wear a PFD.

### **FIRE EXTINGUISHERS**

Coast Guard Approved fire extinguishers are required on certain boats. Extinguishers are required to be classified by a letter and number symbol. The letter indicates the type fire the unit is designed to extinguish (Type B, for example, is designed to extinguish flammable liquids such as gasoline, oil and grease fires). The number indicates the relative size of the

extinguisher (minimum extinguishing agent weight). Coast Guard approved extinguishers are hand-portable, either B-I or B-II classification and have a specific marine type mounting bracket. It is recommended the extinguishers be mounted in a readily accessible position.

Fire extinguishers are required if one or more of the following conditions exist:

- Inboard engines
- Closed compartments and compartments under the seat where portable fuel tanks may be stored.
- Double bottoms not sealed to the hull or which are not completely filled flotation materials.
- Closed living spaces.
- Closed stowage compartments in which combustible or flammable materials are stored.
- Permanently installed fuel tanks. Fuel tanks secured so they cannot be moved in case of fire or other emergency are considered permanently installed. There are no gallon capacity limits to determine if a fuel tank is portable. If the weight of a fuel tank is such that persons on board cannot move it, the Coast Guard considers it permanently installed.

Inspect extinguishers monthly to make sure that:

- Seals and tamper indicators are broken or missing.
- Pressure gauges or indicators read in the operable range. (Note: CO<sub>2</sub> extinguishers do not have gauges).
- There is no obvious physical damage, corrosion, leakage or clogged nozzles.

## VENTILATION

All vessels built after April 25, 1940 which use gasoline for electrical generation, mechanical power or propulsion are required to be equipped with a ventilation system.

A *natural ventilation* system consists of at least two ventilator ducts, fitted with cowls or their equivalent: a minimum of one exhaust duct installed so as to extend from the open atmosphere to the lower portion of the bilge *and* a minimum of one intake duct installed so as to extend to a point at least midway to the bilge or at least below the level of the carburetor air intake.

A *power ventilation* system consists of one or more exhaust blowers. Each intake duct for an exhaust blower should be in the lower one-third of the compartment and above the normal accumulation of bilge water.



Between April 25, 1940 and July 31, 1978, the regulations covering ventilation systems applied to the owner/operator. If your boat was built between April 25, 1940 and July 31, 1978, a natural ventilation system is required for all engine and fuel tank compartments and other spaces to which explosive or flammable gases and vapors for these compartments may flow, except compartments which are open to the atmosphere. There was no requirement for powered ventilation system. However, some boats were equipped with a blower.

The Coast Guard Ventilation Standard, a manufacturer requirement, applies to all boats built on or after August 1, 1980. Some builders began as early as August 1978. If your boat was built on or after August 1, 1978 it might have been equipped with either (1) a natural ventilation system, or (2) both a natural ventilation system and a powered ventilation system. If your boat bears a label containing the words, ***This boat complies with U.S. Coast Guard safety standards***, etc., you can assume that the design of your boat's ventilation system meets applicable regulations.

Boats built after August 1, 1980, which comply with the Coast Guard Ventilation Standard, must display at each ignition switch, a label that contains the following information:

**Warning! Gasoline vapors can explode.  
Before starting engine operate blower for at least  
4 minutes and check engine compartment bilge  
for gasoline vapors.**

All owners are responsible for keeping their boat's ventilation system in operating condition. This means making sure openings are free of obstructions, ducts are not blocked or torn, blowers are operating properly and worn-out components are replaced with equivalent marine type equipment.

#### **BACKFIRE FLAME CONTROL**

Gasoline engines installed after April 25, 1940, except outboard motors, must be equipped with an acceptable means of backfire flame control. The device must be suitably attached to the air intake with a flame tight connection and is required to be Coast Guard approved or comply with SAE J-1928 or UL 1111 standards and marked accordingly.

### **SOUND PRODUCING DEVICES**

The navigation rules require sound signals to be made under certain circumstances. Meeting, crossing and overtaking situations described in the Navigation Rules section are examples of when sound signals are required. Recreational vessels are required to sound fog signals during periods of reduced visibility. Therefore, you must have some means of making an efficient sound signal, although regulations do not specifically require vessels less than 12 meters to carry a whistle, horn or bell. Vessels 12 meters or more in length are required to carry on board power whistle or power horn and a bell.

## **POLLUTION REGULATIONS**

The Refuse Act of 1899 prohibits throwing, discharging or depositing any refuse matter of any kind (including trash, garbage, oil and other liquid pollutants) into the waters of the United States.

The Federal Water Pollution Control Act prohibits the discharge of oil or hazardous substances, which may be harmful into U.S. navigable waters. Vessels 26 feet in length and over must display a placard at least 5 by 8 inches, made of durable material, fixed in a conspicuous place in the

machinery spaces, or at the bilge pump control station, stating the following:

### **Discharge of Oil Prohibited**

The Federal Water Pollution Control Act prohibits discharge of oil or oily waste into or upon the navigable waters of the United States and contiguous zones. If such discharge causes a film or sheen upon, or discoloration of, the surface of the water, or causes a sludge or emulsion beneath the surface of the water, violators are subject to a penalty of \$5,000.

Regulations issued under the Federal Water Pollution Control Act require all vessels with propulsion machinery to have a capacity to retain oily mixtures on board. A fixed or portable means to discharge oily waste to a reception facility is required. A bucket or bailer is suitable as a portable means discharging oily waste on recreational vessels. No person may intentionally drain oil or oily waste from any source into the bilge of any vessel.

You must immediately notify the U.S. Coast Guard if your vessel discharges oil or hazardous substances in the water. Call toll-free 800-424-8802 (in Washington, D.C., (202) 267-2675). Report the following information: location, source, size, color, substances and time observed.

The Act to Prevent Pollution from Ships (MARPOL



ANNEX V) places limitations on the discharge of garbage from vessels. It is illegal to dump plastic trash anywhere in the ocean or navigable waters of the United States including the Great Lakes. The discharge of other types of garbage is permitted outside of specific distances offshore as determined by the nature of that garbage.

## ADDITIONAL RECOMMENDED EQUIPMENT

Besides meeting the legal requirements, prudent boaters carry additional safety equipment. The following additional items of equipment are suggested depending on the size, location and use of your boat.

You may want to carry: VHF radio, visual distress signals, spare anchor, heaving line, fenders, first aid kit, flashlight, mirror, searchlight, sunscreen lotion, tool kit, ring buoy, whistle or horn, anchor, fuel tanks spare fuel, boat hook, spare propeller, mooring line, food and water, binoculars, spare batteries, sunglasses, marine hardware, extra clothing, spare parts, alternate propulsion (paddles), denaturing device (pump or bailer).

## OPERATING PROCEDURES

### NAVIGATION RULES

The Navigation Rules establish action to be taken by vessels to avoid collision. The rules are divided into two parts, *Inland* and *International*. Inland Rules apply to vessels operating inside the line of demarcation while International apply outside. Demarcation lines are printed on most navigational charts and are published in the Navigation Rules.

The operator of a vessel 12 meters or greater is responsible for having on board and maintaining a copy of the navigation rules. The following diagrams describe the whistle signals and action to be taken by vessels in a crossing, meeting or overtaking situation while operating in inland waters. These are basic examples: for further information consult the *NAVIGATION RULES* International-Inland (commandant Instruction M16672.2 Series). Copies of the rules may be obtained from the Superintendent of documents, U.S. Government Printing Office, Washington DC 20402 tel.: (202) 783-3238.

### AIDS TO NAVIGATION

Aids to Navigation are placed along coasts and navigable waters as guides to mark safe water and to assist mariners in determining their position in relation to land and hidden dangers. Each aid to navigation is used to provide specific information.



Several aids to navigation are usually used together to form a local aid to navigation system that helps the mariner follow natural and improved channels. Such aids to navigation also provide a continuous system of charted marks for coastal piloting. Individual aids to navigation are used to mark landfall from seaward and to mark isolated dangers.

Lateral marks are buoys or beacons that indicate the port and starboard sides of a route to be followed. Virtually all U.S. lateral marks follow the traditional 3R rule of red, right, returning. This means, when returning from sea, keep red marks on the right-hand (starboard) side of the vessel.

## **VESSEL CONDITION**

The operator should assure that a vessel is in top operating condition and that there are no tripping hazards or sharp edges exposed. The vessels should be free of fire hazards and have clean bilges.

## **LOADING YOUR VESSEL**

Keep the load low and evenly distributed. Do not exceed the U.S. Coast Guard Maximum Capacities label. If there is no capacity label, use the following formula to determine

the maximum number of persons you can safely carry in calm weather:

$$\text{People} = \frac{(\text{length of Boat} \times \text{Width})}{15}$$

Length is determined by measuring in a straight line from the foremost part to the after most of the vessel, parallel to the centerline, exclusive of sheer. Bowsprits, rudders, outboard motors and similar fittings are not included in the measurement.

## **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 the water.

## **STERN ANCHORING**

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. Do not anchor by the stern!!!



## FUELING PRECAUTIONS

Fill portable tanks off the vessel. Close all hatches and other openings before fueling. Extinguish smoking materials. Turn off engine, all electrical equipment, radios, stoves and other appliances. Wipe out any spilled fuel immediately. Open all hatches to air out the vessel. Run the blower for at least four minutes, and then check the bilge for fuel vapors before starting the engine. 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 one-third in reserve.

### MARINE RATED PARTS

Do not use automotive parts to replace such items as starters, distributors, alternators, generators, carburetors, fuel pumps, etc. because they are not ignition protected and cause fire or explosion.

### FLOAT PLAN

Tell a friend or relative where you are going and when you plan to return. Make sure they have complete description of your vessel and other information that will make identification easier should the need arise.

### WEATHER

Check weather reports before leaving ashore and remain watchful for signs of bad weather. Listen to National Weather Service Radio.

### SMALL BOATS AND WATER ACTIVITIES

Capsizing, sinking and falls overboard from small boats account for 70% of boating fatalities and these facts mean you must have a greater awareness of the boats limitations and the skill and knowledge to overcome them. 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 a fall overboard or capsizing because of the raised gravity.

### STAYING AFLOAT

It is a common belief that someone dressed in heavy clothing or waders will sink immediately if they fall overboard. This is not true. Trapped air in clothing provides considerable flotation, and bending the knees will trap the air in waders, providing additional flotation. To stay afloat, remain calm, do not thrash about or try to remove clothing or foot ware. 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 water speeds the loss of heat. If your boat capsizes it will likely float on or just below the surface. 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 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.

## **BE SAFE ON THE WATER!**

**KNOW** the navigation rules, observe the courtesies of safe boating and **BEFORE** you go **KNOW**:

- Your boat
- The equipment on the boat
- The safety devices and to wear PFDs
- About Alcohol and other distress stressors
- First aid and emergency procedures
- The environment, area and weather

Boating safety is no accident. To build sound knowledge, proficiency and confidence -- the keys to safe boating -- take a boat course.

For more information on boating safety and boating courses, contact your State Boating Agency, Coast Guard or call the Boating Safety Hotline.

**For information on boating courses,  
call the *Coast Guard Course Line*  
1-800-336-4628**



NOTES:

*tigé* 

## Tigé Boats, Inc.

6803 Hwy. 277 North • Abilene, TX 79601  
915.676.7777 • [www.tige.com](http://www.tige.com)