# **ASSEMBLY AND OPERATION MANUAL**



Thank you for purchasing the Paradise sailboat! We at AquaCraft know how exciting a new R/C boat purchase can be and we know you're anxious to get started, but please take time to read the instructions carefully and completely before attempting to operate your model. This manual contains the instructions you need to safely build, operate, and maintain your R/C sailboat.

**Before Building:** 

If for any reason you think that this model is not for you, return it to your local dealer immediately. PLEASE NOTE: Your hobby dealer cannot accept a return on any model after the final assembly sequence has begun.

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# SAFETY PRECAUTIONS

- Because of the speed and mass of this boat, it is capable
  of inflicting property damage and severe personal injury
  if a collision occurs. Never run this boat in the presence
  of swimmers or where the possibility of collision with
  people or property exists.
- This boat is controlled by radio signals, which are subject to possible interference from other R/C transmitters, paging systems or other electrical noise. Before turning your radio on, make sure no one else in the area is operating a radio on the same frequency (channel).

If the buyer is not prepared to accept the liability associated with the use of this product, the buyer is advised to return this kit immediately in new and unused condition to the place of purchase.

# REPAIR SERVICE

Repair service is available anytime.

After the 90-day warranty, you can still have your Paradise sailboat repaired for a small charge by the experts at AquaCraft's authorized repair facility, **Hobby Services**, at the address listed on the front page of this manual.

To speed up the repair process, please follow the instructions below.

- 1. Under all circumstances return the **ENTIRE** system, boat and radio.
- 2. Make sure all batteries are removed from the boat and radio!

- 3. Send written instructions which include: a list of all items returned, a **THOROUGH** explanation of the problem, the service needed and your phone number during the day. If you expect the repair to be covered under warranty, be sure to include a proof-of-purchase date (your store receipt or purchase invoice).
- 4. Also be sure to send your full return address.

# **SPECIFICATION & DESCRIPTION CHANGES**

All pictures, descriptions, and specifications found in this instruction manual are subject to change without notice. AquaCraft maintains no responsibility for inadvertent errors in this manual.

# ITEMS REQUIRED FOR COMPLETION

☐ Twelve "AA" batteries (eight for the transmitter, four for the receiver battery box)

# **USEFUL TOOLBOX ITEMS**

As with any hobby, it is a good idea to assemble a useful collection of tools to bring along anytime you head out to the pond. Here are some items you may wish to keep handy.

_	PLUII.
	Phillips screwdriver (HCAR1024)
	Long nose pliers 6" (HCAR0625)
	Paper towels
	Water Displacing Spray Lubricant
	Electrical Tape

# **BASIC BOAT TERMINOLOGY**

**BOW:** The front of the boat.

**STERN:** The back of the boat.

**PORT:** This is the left side of the boat when aboard and facing the front (bow). An easy way to remember this is that port and left both contain four letters.

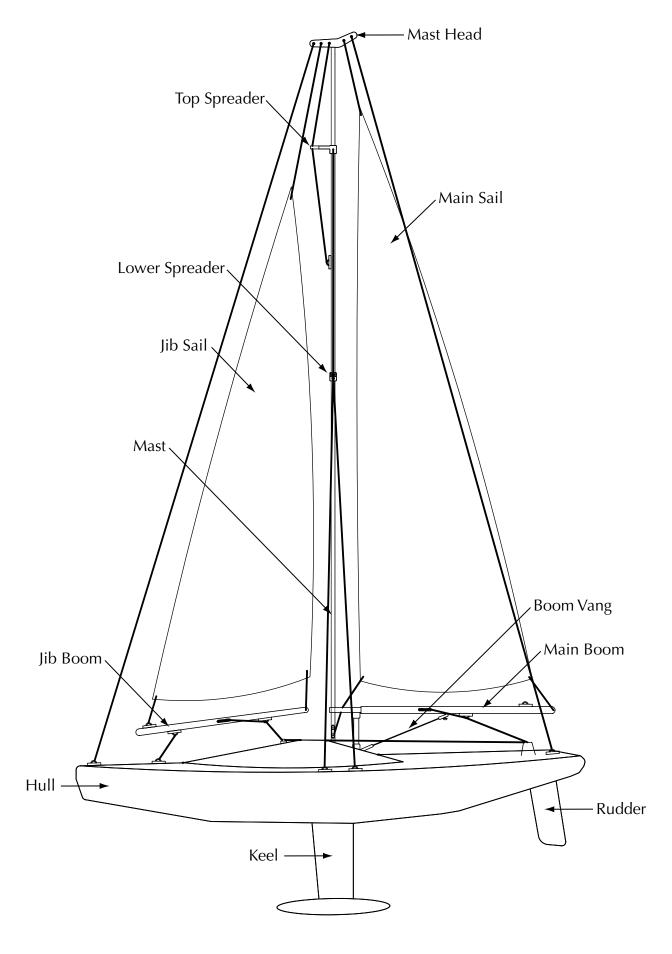
**STARBOARD:** This is the right side of the boat when aboard and facing the front (bow).

**HULL:** The body of the boat.

**DECK:** The top of the boat.

**KEEL:** A weighted blade that protrudes from the bottom of the hull as a means of providing lateral stability.

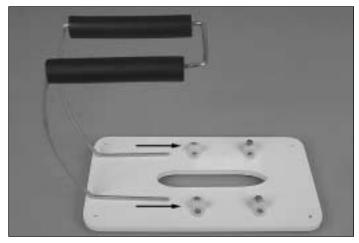
**RUDDER:** The hinged vertical plate mounted at the stern that controls steering.



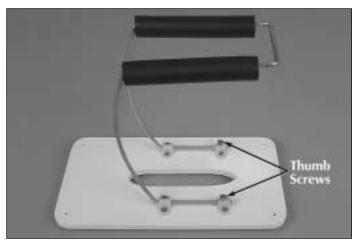
# FINAL ASSEMBLY

Carefully remove your Paradise sailboat and all remaining components from the box. **IMPORTANT:** Use additional care not to bend the mast while removing the mast and sail assembly from the box.

# ASSEMBLE THE STAND



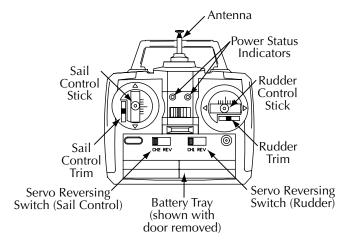
1. Insert the wire uprights into the base of the boat stand as shown (note direction).



 $\square$  2. Tighten the two (2) thumb screws firmly.

### TRANSMITTER ASSEMBLY

**Important Note:** The **transmitter is not water resistant** and should never come in contact with water.



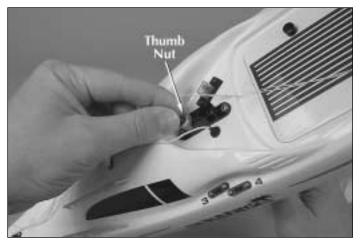
- ☐ 1. Remove the transmitter antenna from the parts bag and screw it into the top of the transmitter. To ensure that the antenna is attached, lightly pull on the base of the antenna. If it slides out, it is not installed properly.
- ☐ 2. Slide off the battery door on the face of the transmitter. Install 8 fresh "AA" batteries into the transmitter in the configuration molded into the battery compartment. Re-install the battery door onto the face of the transmitter.
- □ 3. Turn the transmitter on using the switch on the front. The green and red LED lights above the on/off switch should light up. If they do not light up, turn the transmitter off and check to make sure that the batteries are installed properly. If you see a flashing red LED, the batteries are low and need to be replaced.

# INSTALL THE KEEL

☐ 1. If you have not already done so, remove the Paradise hull from the plastic bag and open the bag containing the keel and rudder parts.



☐ 2. Remove the thumbnut from the keel shaft and insert it up through the bottom of the hull as shown. The keel has been shaped to fit only one way. Pay close attention here or the keel and hull may be badly damaged.



□ 3. Replace the thumbnut and tighten firmly.

INSTALL THE RECEIVER BATTERIES

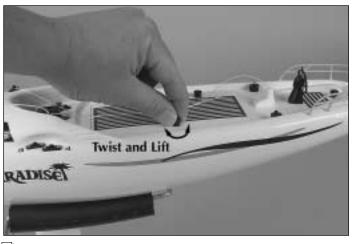
# Battery Box +AA BATTERY FILLYB VV+

☐ 2. Install 4 fresh "AA" batteries in the configuration molded into the battery holder. Leave the hatch open for now.

# INSTALL THE MAST AND SAILS

**Note:** The snap rings and eyelets have been numbered for identification only; the lines do not need to be attached in numerical sequence.

# TANAMATI ...

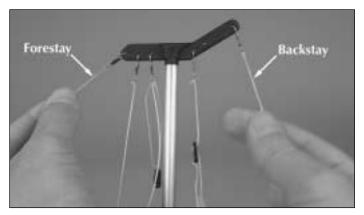


☐ 1. Place the Paradise sailboat on the stand. Twist the hatch lock knob and remove the forward hatch as shown.

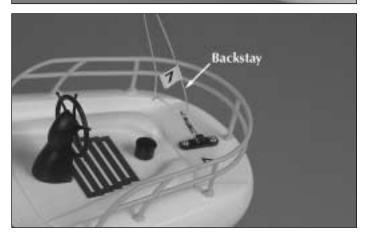




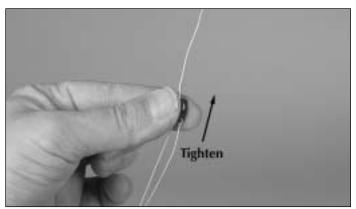
☐ 1. If you have not already done so, remove the mast and sail assembly from its packaging and remove the tape securing the rigging lines. Insert the bottom of the mast into the mast base.







☐ 2. Attach the forestay and backstay to their corresponding eyelets as shown. The numerical markings in the photos may not match those of your model.



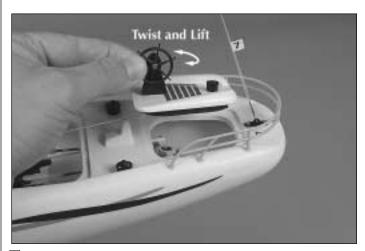
□ 3. Tighten the lines by adjusting the adjustment blocks (bowsies) as shown. It is important to make sure that the mast is as straight as possible.

☐ 4. Attach the remaining snap rings to their counterparts and tighten all of the lines. Once again, make sure that the mast stands as straight as possible.

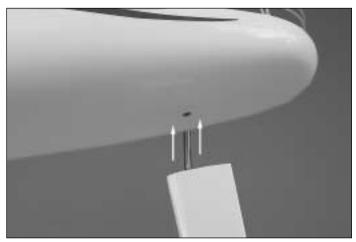
# CHECKING THE RADIO SYSTEM, RUDDER INSTALLATION, AND ATTACHING THE SAIL CONTROL LINES

☐ 1. Turn the power "ON" to the transmitter and sailboat (in that order).

☐ 2. Move the sail control stick (left stick) all the way down and center both the left and right trims.



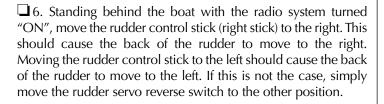
□ 3. Gently twist the helm pedestal and lift the rear hatch from the deck as shown. This will enable you to access the rudder pushrods and rudder control arm.



☐ 4. Insert the rudder shaft up through the small hole at stern. The rudder is shaped so that it will only fit one way.



☐ 5. Tighten the thumb screw on the rudder control arm firmly making sure that it contacts the flat spot on the rudder shaft. Replace the rear hatch.







☐ 7. Thread the jib and mainsail control lines through the eyelets as shown. Attach the end of the jib control line to the jib boom cleat by coiling the line around the cleat several times and tucking the end of the line through the coils as shown.



**NOTE:** Since it is necessary to adjust the sail control lines depending on wind conditions, they should not be permanently attached. A good starting point is to pull the left stick of the transmitter all the way down and attach the lines so that the booms have about 2" of play as shown. When the sail control stick (left stick) is moved up, you should be able to open the sails.



■ 8. Run the antenna up one of the mast guidelines and secure it with a small piece of electrical tape as shown.

- ☐ 9. Replace the forward hatch and twist the hatch lock knob to secure it.
- □ 10. Turn the power "OFF" to your boat and then your transmitter (in that order).

# SAILING THE PARADISE SAILBOAT

# **SAILING 101**

Unlike propeller driven boats that you basically point and accelerate, sailboats present an interesting challenge. Sailing requires constant reaction to water movements, any wind gusts, and any wind direction changes. These reactions then require adjustment of the rudder and sails in order to find the best possible course. In some cases transmitter adjustments are sufficient but at other times it will be necessary to make

physical adjustments of the sails via the rigging lines. There is no substitute for actual "on-the-water" experience and after your first couple of outings you may want to read through this manual again in order to help you to gain a better understanding of the "art" of sailing. While learning to sail, it is a good idea to pick up on as much sailing terminology as possible; this will make it easier to grasp some aspects.

# **READING THE WIND**

When you get to your favorite pond, take a few moments to observe wind direction, speed, and frequency of gusts and adjust your sailboat's rigging as necessary. What follows are guidelines for tuning your ship's sails and rigging, but with experience you will gain the ability to fine-tune your sails and rigging for optimal performance, regardless of conditions.

For light wind conditions (1-5 MPH): Use the adjustment blocks (bowsies) located between the tops of the sails and the masthead to tighten the sails so they will respond to the slightest push from the wind.

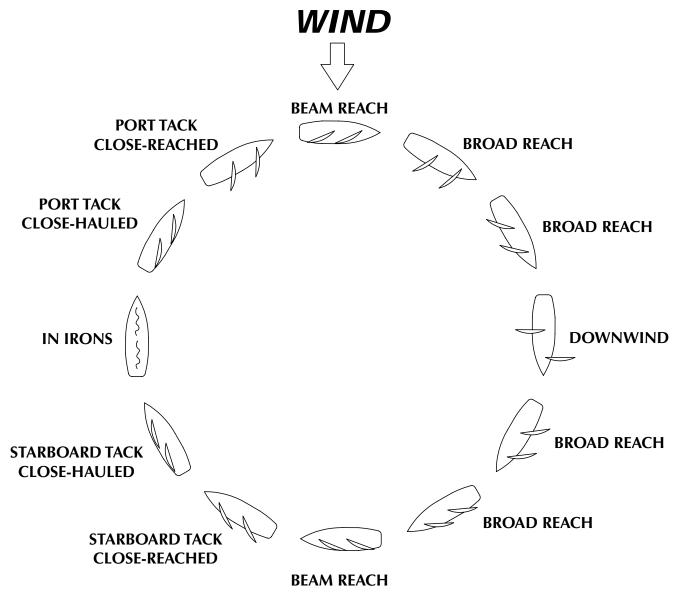
**For medium wind (6-10MPH):** Loosen the sails slightly in order to find the most efficient combination of sail shape and tension. As a *rough* guideline, you will want it somewhere inbetween the light and high wind set-up.

For high wind conditions (11-15 MPH): Loosen the jib and main sail further. They will be better able to handle the high winds and your hull will be less likely to lay over on its side.

# GETTING WHERE YOU NEED TO GO

Sailboats can easily sail *downwind* but sailing against the wind can be quite challenging. In fact, sailboats cannot sail directly into the wind and attempting to do so will leave you *in irons*. Sailboats can sail at up to a 45° angle against the wind, movements against the wind are known as *tacking*. Take a moment to study the diagram below as you read through these definitions.

**DOWNWIND:** Sailing with the wind coming from stern (a.k.a. *running* and *sailing free*).



**IN IRONS:** A sailboat is said to be "in irons" when the boat stalls with its bow pointed directly into the wind with its sails struggling to fill with air (luffing), keeping the boat from moving. If you find yourself in this position, simply move the rudder stick to either side and hold it until the sails catch some air. You will need to adjust the tension on the sails with the sail control stick to get the boat moving. Release the rudder when the ship reaches the desired heading.

**LUFFING:** When the sails are unable to fill with wind and begin flapping wildly (like a flag).

**TACKING:** Sailing towards the wind in a series of maneuvers diagonal to the wind source. There are basically two tacking directions. *Starboard tack* occurs when the wind comes from starboard and the sail boom hangs over the port side. *Port tack* is just the opposite, with the wind coming from port with the sail boom hanging over the starboard side.

There are varying degrees of *tack angle* and it is important to learn when each will be useful and how to get your sailboat into position, especially when racing. For instance, when trying to reach a specific position upwind, sailing *close hauled* may be the most direct route. Sailing *close reached* allows you to get upwind faster, but is not as direct. In any case, you basically want the sails to be full of air and just on the verge of luffing. Here are some terms that describe different sailing positions in relation to the wind:

**CLOSE-HAULED:** You can sail up to a 45° angle against the wind. Think of it as sailing "close" to the wind with the sails "hauled" in tight.

**CLOSE-REACH:** Nearly the same as close-hauled, but at less of an angle toward the wind. This allows the boat to reach greater speed.

**BEAM REACH:** Sailing with the boat at about a 90° angle to the wind.

**BROAD REACH:** Sailing with the wind coming diagonally from behind (a.k.a. *sailing large or quartering wind*).

# PLEASE READ BEFORE RUNNING THE PARADISE SAILBOAT:

- NEVER attempt to swim after a stalled or stuck boat! Wait
  patiently for the wind currents to return the boat to shore
  or use a tennis ball attached to the end of a fishing rod to
  retrieve it.
- Sailing the Paradise in winds over 15 MPH is not advised.
   If you wish to sail in conditions where wind speed is above 15 MPH, you may want to install a high-torque sail servo.
- It is dangerous to operate any R/C vehicle at any time that there is not sufficient light.
- R/C models produce vibrations which will cause screws, nuts, bolts, etc, on your model to become loose over

time. It is important to make sure that all hardware is secure before operating your model.

- **CAUTION:** Windy conditions cause rough water that will affect the performance of your sailboat and increase the chances of taking on water.
- Your Paradise sailboat may occasionally take on small amounts of water, especially when running in high winds, rough water, and when making tight turns. Keep a roll of paper towels handy and dry out the hull interior after every run. Check for leaks if you notice excessive amounts of water in the hull.
- After running, remove the hatch covers and allow the interior of the boat to dry out completely. If you neglect to do this, it may result in corrosion of the electronic components.
- **IMPORTANT:** If, for whatever reason, your boat takes on a large amount of water causing the electronics to get wet, you must do the following immediately: Remove the radio equipment from the boat. Allow the components to air dry completely before reassembling. Reinstall the components and check for proper operation before running the boat in water.
- Total run time of the Paradise sailboat is approximately 45-60 minutes (assuming you begin with new batteries in the receiver box). When you notice a decrease in power or sluggish response, it means the batteries are nearly drained and it's time to head for shore. As soon as the boat reaches shore, turn off the power to the boat and transmitter (in that order).

## **LAUNCH PROCEDURE:**

- 1. Turn the power "ON" to the transmitter and boat (in that order).
- 2. Gently place the boat in water that is at least 12" deep and free of obstacles (weeds, rocks, sticks, ducks, muskrats, etc.). The mast of the Paradise sailboat is NOT A HANDLE. **Do not hold the boat by the mast.**
- 3. Initially you will want to launch the boat downwind and note if the boat has a tendency to turn right or left. Adjust the steering trim lever on your transmitter until the boat runs in a straight line when the steering control stick is at neutral.
- 4. When finished running, be sure to turn the power "OFF" to your boat and transmitter (in that order).
- 5. When you are through sailing for the day, remove the keel and rudder and allow them to dry.

# THE WAITING GAME

If for whatever reason, you lose control of your Paradise sailboat, wind and water currents will slowly carry it toward shore. The bad news is that the boat could be carried to the opposite shore. Keep in mind things like wind direction and size of the pond or lake when surveying areas to run your sailboat. We recommend that you do not attempt to operate your sailboat on any "free flowing" bodies of water such as rivers or creeks.

If your boat gets stuck in weeds or runs aground, use a fishing rod with at least 12lb. line and a tennis ball tied to the end to retrieve it. Above all, NEVER attempt to swim after a stalled or stuck boat.

If you intend to run on salt water, be sure to do the following:

- Tape the hatches shut for added protection.
- Use petroleum jelly on the rudder and keel shafts.
- Rinse thoroughly with freshwater after every run.

# GOOD LUCK AND GREAT BOATING!

# ORDERING REPLACEMENT PARTS

To order replacement parts for the Paradise sailboat, use the order numbers in the **Replacement Parts List** that follows. Replacement parts are available only as listed and can be purchased from hobby shops or mail order/ Internet order firms. Hardware items (screws, nuts, bolts) are also available from these outlets. If you need assistance locating a dealer to purchase parts, visit **www.hobbico.com** and click on "Where to buy". If this kit is missing parts, contact **Hobbico Product Support**.

# REPLACEMENT PARTS LIST

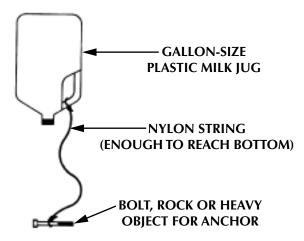
Order #	Item	Description
HCAB9100	Mast & Boom Set	Includes main mast
		and horizontal booms
HCAB9201	Sails	Includes jib and main
		sail (white, no graphics)
HCAB7005	Hatch Set	Includes the main & rear
		hatch with hardware
HCAB9150	Keel	Assembled keel with
		ballast and the nut to
		secure keel to the hull.
HCAB6308	Decal Set	Decal sheet with all six
		(6) trim schemes
HCAB8704	Rudder	Includes the rudder with
		rudder control arm.
HCAB7100	Sailboat Stand	Complete stand
		(unassembled)
HCAZ3022	Instruction Manual	Guide for operating the
		Paradise sailboat

# **RACING**

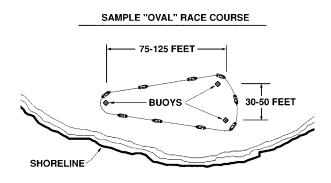
Although it is very enjoyable to go out and run the Paradise sailboat by yourself, we think the real fun and excitement is experienced when you get involved in RACING!

Racing does not have to be an organized and sanctioned competition to be fun. In fact, small informal races can be very exciting without the stress that comes with formal events.

Here are some suggestions for setting up a simple racecourse for boats:



 Make 2 to 4 simple and inexpensive "marker buoys" with empty milk jugs, string, and heavy objects for anchors, similar to the above sketch.



- For "oval racing" place the buoys similar to the above sketch. NOTE: The above patterns are not based on any sort of official standards; therefore, you may set up race courses any way you desire, using your imagination to make the races more interesting. Usually the smaller courses will provide more action and excitement.
- The length of the races can be determined by a set number of laps around the buoys (for example, the first boat to complete 5 laps is the winner); or by time (for example, whoever is leading at the end of two minutes is the winner).

# BRISTOL BAY



# CHECK OUT THESE OTHER SENSATIONAL AQUACRAFT BOATS!







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