

# Hand-on RC Refresher 2020

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## AYC Race Management

### Objective

The objective of Race Management is to run safe, fair and enjoyable Fleet races.

### Race Committee Updates for 2020

#### Team structure, size

Staying with the Two PRO's per team, Designated PRO in training and  
~12 - 13 members per team

#### Benefits:

Safety  
Mentoring / learning, especially for newer members  
Flexibility

#### Morning vs. Afternoon race teams

#### Team assignments and race days

Race Management Teams, Schedule, Procedures: <http://www.atlantayachtclub.org/RaceManagement/>

#### PRO certification

What is required to be certified  
SOARS  
What is the benefit of certification

### Planning for RC Duty

Check your assigned dates & update your calendar.

If you have a conflict, try to arrange a swap with another club member. Otherwise consult with the PROs on your team.

Plan to be at the club ready to prepare 1 to 1.5 hrs before the racing starts.

PRO is in charge and will make assignments to the RC roles.

Be prepared to leave the dock 30 min before the Warning signal is scheduled.

### Safety

#### Safety guidelines for use of club owned boats:

<http://www.atlantayachtclub.org/resources/Documents/AYC%20Documents/Boat%20Use%20Agreement/Safety%20Guidelines%20for%20use%20of%20Club%20Owned%20Boats%20Revision%201%20Oct%202018.pdf>

#### Safety Related Video links:

[2017 Hands-Only CPR Instructional Video](#)

[Using an AED](#)

[Help for active drowning victim](#)

[Using an Epi-pen](#)

#### Weather

Lots of weather apps available to monitor for thunderstorms, etc. What are the apps that folks use?

- Weather Underground Storm
- Weather Channel Storm Radar
- MyRadar

#### Life Jackets

Check for required life jackets and a throw able PFD with a line attached on Every RC boat

## Cold water Rescue.

Watch for hypothermia and get sailors out of the water without delay.

Always shut engine down when rescuing from a stern ladder. ALWAYS

## Safety Supplies

First aid kits, AED, epi pens, etc.

## Communications

Call 911 for emergencies. Notification will be sent to first responders including rangers on the lake.

Race committee on VHF radio channel 69.

VHF channel 16 - Distress and safety calls to Coast Guard and others. Ch. 16 is only to be used in an emergency as it should be monitored by the COE, Sheriff Dept, and other Emergency personnel. Channel 9 is an "initial contact" only channel and we will not normally use.

## Who can operate a boat in Georgia?

See <https://gadnrle.org/boat-operation>

Those less than 12 years of age

- May not operate any vessel over 16 feet in length.
- May legally operate a vessel under 16 feet in length which is either non-motorized or powered by a motor of 30 horsepower or less only if they are accompanied by a competent adult.

Those 12 through 15 years of age

- May legally operate any vessel less than 16 feet in length, including a PWC only if they:
  - Have passed a boat education course approved by the Department of Natural Resources, OR
  - Are accompanied by a competent adult
- May not legally operate any vessel over 16 feet in length.

Those 16 years of age or older

- May operate any boat on the waters of Georgia if they have proper identification onboard
- All operators born after January 1, 1998 must have passed a boater education course approved by the Department of Natural Resources and have card on board to operate any vessel.

**"Competent Adult"** means a person of age 18 or older who is not under the influence of alcohol or drugs and who is carrying proper identification.

**"Proper Identification"** means a drivers license (or legible copy) or any other government issued identification that contains a description of the person, a photograph, and birth date.

## NOR & SI

Fleet Races NOR & SI: <http://www.atlantayachtclub.org/Sailing-Info/>

## Scoring

No race conducted... still return score sheet

Sail number + sailor name on score sheet

Rally Days or other special events

## Club owned Motor Boats

Signal Barge

RC 1 is the skiff with the 75 hp Yamaha

RC 2 the skiff with the xxx

RC 3 the skiff with the Honda

RC 4 is the McKee Craft.

Jet boat

RIB

## Reference material

AYC Website

Home > Training Resource: <http://www.atlantayachtclub.org/Training-Resources>

US Sailing

RRS

Join the Race Committee Team: <https://pyc.org/wp-content/uploads/Join-the-Race-Committee-Team.pdf>

US Sailing education: <https://www.ussailing.org/education/>

Other online videos, links

Georgia Department of Natural Resources - <https://gadnrle.org/boating-rules-regulations>

US Boat

Free online boating courses: <https://elearning.boatus.org/>

Georgia Boating Safety Course: <https://elearning.boatus.org/catalog/course.asp?id=13&cid=1>

## Signal Boat Operations

### Equipment & Supplies

#### Stored on the boat

- At least 10 life jackets
- At least one throwable
- Danforth anchor + line to anchor the boat
- Air horns
- First aid kit
- Fire extinguisher
- Boat registration...?
- Flags
- Start flag /pole
- Laminated Documents:
  - Barge operations
  - Emergency Action Plan
  - NOR & SI

#### Stored in the shed / club house

- RC Closet*
  - Radios
  - Distance gauge
  - Ollie
  - Score sheets
  - Megaphone
  - Blower batteries

#### Bring your own

- Cell phone
- Appropriate clothing...layers, etc,
- Hats, sunglasses, sunscreen, water bottle, snacks
- RRS

### Departure

### Operations on the Water

#### Safety is job one

- Signal Boat is Headquarters for Safety. Keep a sharp lookout at all times.
- Keep a continuous count of boats sailing in each fleet
- Watch continuously for boats in trouble.

#### Communications

FCC Authorized Channels are 68, 69, 71, 72, 78, 9 and 16. Note Ch. 16 is only to be used in an emergency as it should be monitored by the COE, Sheriff Dept, and other Emergency personnel. Channel 9 is an "initial contact" only channel and we will not normally use.

#### *Radio Check*

- Use Channel 69
- Turn Radio ON and adjust volume and Squelch
- Set Radio to 1 watt or low power. If problem transmitting set to higher power

#### *Standard Protocol*

- Use terms "Signal", "Mark 1", "Mark 2", "Judge", and "Rescue Boat". Avoid use of personal names.
- When channel is quiet, hold radio ~2" in front of mouth and slightly to one side. Press the talk and pause before speaking.
- Proper calling procedure is to say [name of station being called,] [your vessel name] ie: "Signal, this is Mark 1"
- Over & Out – the most misused terms.
  - OVER - means I expect a reply.
  - OUT- means I am finished and do not expect a reply.

#### *No Contact or Lost Contact Procedure*

- Is Radio turned on, Volume turned up, and Squelch adjusted
- Is Radio on low power (1 watt)
- Is radio on Proper Channel (69)

## Anchoring

Based on the conditions position the signal boat directly to leeward of the direction of the wind in the lake such that the use of the entire lake area is maximized with adequate sailing distance on both sides of the course. Make sure the marks are not too close to the shore, in wind shadows or near obstructions. Set the length of the course such that the expected length of the race is about 45 min.

Anchor the Signal Boat with adequate scope in the anchor line making sure the anchor is fast to the bottom

## Setting the course

Set the starting pin at a 90 degree angle from the average wind readings reported by the weather mark boat.

Set the windward mark and the leeward marks such that the string from the windward mark boat points directly to the middle of the starting line and directly at the leeward mark.

Set the starting line at 90 degrees off the wind direction with a length of 1.25 to 1.5 X the combined boats lengths of the largest fleet expected to start.

Post your course and the fleet starting order, get all the flags you expect to use on deck with the starting sequence flags, postponement and recall flags on their respective poles

## Standard flags / locations

Fleet / warning

Prep

AP – Postpone

Individual Recall

General Recall

Hoist rapidly!

## Fleet flags

### Course designation

Placards are placed in the tower ladder to inform sailors of the course for the race. See SI.

### Sound devices

Ollie

Air Horn

Megaphone

### Starting a race

Make sure all your flags are on the poles in the cans; Warning signal 5 min Class flag; Prep Flag P ; General Recall Flag and Individual Recall Flag

Make sure timer is ready to go

Have recorder write down on Race sheets the sail numbers by fleet of all boats in the starting area.

All quiet on the deck during sequence

Timer announces periodically time to next flag or drop of flag

At start of 5 min timing sequence Class Flag goes up with sound signal; at 4 min to start P flag goes up with sound signal; at 1 min to start P flag goes down with sound signal; at start Class flag goes down with one sound signal;

Individual recall one sound signal with X flag; General recall two sound signals with First Substitute flag. Can have a General recall after an Individual recall. On individual Recall the signal must be prompt. Try to announce individuals over early on bull horn.

Start next fleet when prior fleet is well clear of the line so no confusion re recalls

### During a race

Periodically take wind readings (direction and velocity) and report them to Signal.

Be prepared for changes in course or shorten course. Have flags, cards, sound signal, inflated replacement mark, black band ready for deployment.

### Finishing a race

Anchor RC boat such that line between finish mark and the finish flag (orange flag on signal or S flag if course shortened)

When in position display blue flag.

When first boat in fleet finishes make a sound signal. Subsequent boats as finish announce sail number

Recorder lists sail numbers in order of finish

Identify any boats which were OCS or did not finish

Have PRO review and sign off on results

### Changing a race

### *Change course*

Designate a mark boat to make change of course audio and visual signals at the mark preceding the course leg that is changing.

Designate second mark boat to place change mark. Attach a black strap to the change mark tetrahedron.

### *Shorten race*

Designate a Mark Boat to take finishes and make the audio and visual signal.

Direct the Mark Boat to anchor to the right of the mark at which the race will finish (as boats are to approach it) establishing a finish line between S flag on RC boat and the mark, which is square to the preceding mark

When ready, direct the Mark Boat to display S flag and make two loud sound signals. Signal does NOT have to be made before first boat rounds prior mark, just before the first boat is to round the mark where the finish will be.

## Return

### After the last competitor has finished

Pulling Anchor

Keep adequate number of safety boats on course until all boats have returned to dock

Clean out the engine... run full throttle for 2 minutes

### Equipment Storage

Store chairs in cabin

Store flags in cabin

Return Ollie, blower batteries and radio to RC closet. Plug into charging stations.

### Score sheets

The race sheets are to be copied for each fleet and a copy placed in each fleet's slot in the cube in the storage closet.

The original goes in the AYC slot

For 2019, please provide a score sheet even if no race was sailed. Designate which race(s) were not sailed or did not complete.

Y-Flyers request score sheet indicate "no crew" when applicable

Notice to Race Committee Chair, Club Motorboat Chair, Vice Commodore for any issues with equipment or operations

## Mark / Safety Boat Operations

### Equipment & Supplies

#### Stored on the boat

- At least one life jacket
- At least one throwable
- Danforth anchor + line to anchor the boat
- Tow bridle and line
- Fenders
- Air horn
- Extendable Retrieval Hook
- Fire extinguisher
- Boat registration?
- First aid kit?

#### Stored in club house RC closet

- Radio
- Distance gauge
- Blower batteries

#### Stored in dock equipment shed

##### *Supply Box Contents*

- First aid kit
- Knife
- Thermal blanket
- Compass
- Wind stick
- Flags
  - Change Course C Flag
  - Shorten Race S Flag
  - Missing mark M Flag
  - ...
- Red Square
- Green Triangle
- + Sign
- Sign
- Black strap for change of course tetrahedron

##### *Marks*

- Tetrahedron
- Cylinder...large, small
- Hippity Hops

##### *Blower, battery*

##### *Mark anchors & line*

##### *Torpedo weights*

#### Bring your own

- Cell phone
- Appropriate clothing...layers, etc,
- Hats, sunglasses, sunscreen, water bottle, snacks
- RRS

### Departure

#### Where are the boats?

- Boat slips for RC1,2,3,4
- RIB – typically dry docked on trailer? Where do we keep it usually? (Mike Carlson)
- Jet boat – make arrangement with dock master in advance if jet boat will be used. Otherwise jet boat typically dry docked on trailer.
- Keys, key lock box

#### Starting

- Engine tilt
- Squeeze bulb

Choke  
Troubleshooting starting issues

## Operations on the Water

### Safety is job 1

Do you have life jackets on and a throwable with line attached available?  
Do you have Bridle and Tow Rope?  
Must have a minimum of two capable people on board.  
Keep up with the count of boats racing in each Fleet  
Get sailors out of cold water without delay  
Always shut engine down when rescuing from a stern ladder. ALWAYS  
Watch for weather conditions... thunderstorms  
Wearing a life jacket is required when operating the jet boat.

### Communications

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Over & Out – the most misused terms.  
OVER - means I expect a reply.  
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#### No Contact or Lost Contact Procedure

Is Radio turned on, Volume turned up, and Squelch adjusted  
Is Radio on low power (1 watt)  
Is radio on Proper Channel (69)

### Bilge pump


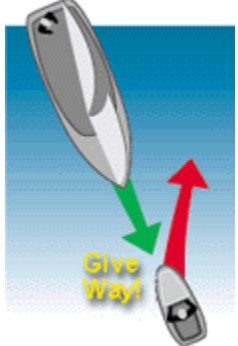
### Depth finder

### Navigation & Operations



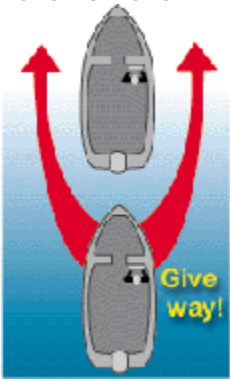

Avoid idling the engine for extended period of time as this will reduce the lifetime of the engine.  
Right of Way Rules:

**Stand-on boat** The boat or PWC which should maintain its course and speed

**Give-way boat** The boat or PWC which must take early and substantial action to avoid collision by stopping, slowing down or changing course

Power vs. Power	Meeting Head-On	Power vs. Sail
	<p>Power vs. Power: Neither boat is the stand-on boat. Both boats should keep to the starboard (right).</p> <p>Power vs. Sail: The powerboat is the give-way boat. The sailboat is the stand-on boat.</p>	



<b>Crossing Situations</b>		
<p>Power vs. Power</p> 	<p>Power vs. Power: The boat on the port (left) is the give-way boat. The boat on the starboard (right) is the stand-on boat.</p> <p>Power vs. Sail: The powerboat is the give-way boat. The sailboat is the stand-on boat.</p>	<p>Power vs. Sail</p> 
<b>Overtaking</b>		
<p>Power vs. Power</p> 	<p>Power vs. Power: The boat which is overtaking another boat is the give-way boat. The boat being overtaken is the stand-on boat.</p> <p>Power vs. Sail: The boat which is overtaking another boat is the give-way boat. The boat being overtaken is the stand-on boat.</p>	<p>Power vs. Sail</p> 

### *Maneuvering*

Neutral/Shifting/throttle controls

Casting off from the dock

Minimum control speed

Acceleration: These boats can jump when accelerated. Make sure everyone is alerted when accelerating or making sudden course changes. For example, "Everybody Ready?" or "Going Forward", "Going Faster".

Make sure your crew understands your signals.

Pivot Turn

### *High Speed Turns*

At about  $\frac{3}{4}$  throttle on plane make a gradual turn to starboard or port making sure the skipper looks back in the direction of the turn making sure no boats pose a threat.

### *High Speed Stop*

### *Docking procedures*

### Wind readings

Compass + wind stick

Collaborate with PRO

Average between oscillations

Reciprocal reading back

Wind stick at windward mark location pointing to middle of start line

### Setting Marks

#### *Blowing up marks*

Unscrew valve cap.

Insert nozzle of blower and turn on the blower.

fill Mark until it is barely standing. DO NOT OVERFILL as in Illustration DON'T DO IT  
Screw on valve cap. Be very careful to not cross thread. Do not over tighten.



Over inflated Mark. Bottom should be flat, Corners should droop down.

*How long should anchor line be for a mark?*

*Windward & Offset Mark*

*Turn Mark*

*Leeward Mark / Gate*

*Start Pin*

*Streaming a mark*

1. The objective is to tow the Mark in the water upwind to a precise location as needed for a Starting Pin or a Gate.
2. Check the Anchor Line for proper length.
3. Place Mark in the water directly downwind from the intended setting.
4. Keep the anchor in the Boat. Pay out all the line.
5. KEEP LINE CLEAR OF PROPELLOR
6. Tow the Mark windward until directed to drop by the PRO on the Signal boat.
7. At this time the Anchor line must be fully extended, with only the Anchor in the Boat. Drop the Anchor, the Mark will remain in place.

Note on towing versus pulling with a boat: By pulling the mark in reverse the propeller is out of play. Also, when using a light outboard such as the red boat direction control, left or right, can only be maintained by running in reverse.

## Anchoring

### Rescue & Recovery

*When to render assistance?*

- Whenever assistance is requested
- Whenever it is clear that the situation has ended racing for this boat and assistance is necessary
  - As a rescue boat you may make a unilateral decision that the person in the water (PIW) is not safe or unable to make a rational decision
  - Always err on the side of caution
  - It's just a sailboat race/event

*How to approach*

*Retrieving Person in the Water*

*Righting capsized / turtled sailboat*

Towing and Righting Equipment, Carabineer with a long line. Towing Bridal attached to both sides of transom Approach boat from leeward. If righting assistance is needed, throw long line and request they hook carabineer onto side stay and lead line over bottom of the boat. Go to windward side, fasten line to bridle and tow boat sideways to right it. Do not use reverse to right turtled boat.

## Towing

## Return

### After the last competitor has finished

Keep adequate number of safety boats on course until all boats have returned to dock  
Clean out the engine... run full throttle for 2 minutes

## Equipment Storage

Sort anchor line and place in bucket

Return all flags, signs, compass, wind stick, etc. to storage bin. Return storage bin to dock shed.

Return mark anchors, buckets of line, marks, torpedo weights to dock shed.

Marks should be hung from the D-hooks on the bottom of the mark.

Return blower batteries and radio to RC closet. Plug into charging stations.

## Docking

- Maneuvering into slip
- Tying up and securing the boat
  - Fenders
  - Bow chain + stern lines
- Shut-down procedure
  - Water pumped out
  - All switches off
  - Return the keys to key box
- Pick up all trash

Notice to PRO, Race Committee Chair, Club Motorboat Chair, Vice Commodore for any issues with equipment or operations