

Notice of Race

9th Annual

FIRST COAST OFFSHORE CHALLENGE

"Stars on the Water"
April 3rd thru 6th, 2013
(http://www.fcoc2013.com)



The First Coast Offshore Challenge (FCOC) is a series of three races representing over 100 miles of offshore sailing with the historic city of St. Augustine, Florida as the start and stop point for each race. Getting from your marina to the start line is about 30 minutes. Race 1 begins Wednesday morning off the beaches of St. Augustine for a day of long-leg buoy triangles, followed by an awards event that evening on the Conch House Marina party dock. Race 2 will be Thursday starting at the St. Augustine entrance buoy, heading out to sea to a fixed line of longitude and returning, followed by an awards party brunch Friday morning at the St. Augustine Yacht Club. Early evening Friday Race 3 begins with a pursuit start, then an overnight navigational challenge to the St. Johns River entrance buoy and returning to the St. Augustine entrance buoy. The final awards ceremony and party will be held Saturday evening at the St. Augustine Yacht Club. Each awards party will include meals, beverages, and live musical entertainment. A "Long Boat" class may be created for five or more yachts with PHRF ratings of 60 or less, with appropriate longer courses established for the class. A Skippers' Meeting is scheduled for 1900 April 2nd at the St. Augustine Yacht Club.

- 1 RULES The First Coast Offshore Challenge Series (the "Series") shall be governed by the "2013-2016 Racing Rules of Sailing" (RRS) as amended by the US Sailing Prescriptions; the PHRF rules of the First Coast Sailing Association (http://www.sailjax.com); and class rules for any One-Design class established. The North Florida Cruising Club (NFCC) is the Series Organizing Authority.
- 2 ADVERTISING Comply with current ISAF Regulation 20: http://www.sailing.org/documents/regulations/isafregulations/index.php
- **FEES** The FCOC Event Fee of \$325 will cover entry in all 3 races as well as meals, beverages, and entertainment for 3 persons after each race at the respective awards parties. A discounted fee of \$275 will apply if paid before February 17. After March 8, the late registration fee will be \$375. Optionally, individual race fees will be \$125. Withdrawals after March 22 will forfeit \$75 of the entry fee. No refunds will be made for withdrawals after March 29. Entries tendered after March 29 are subject to rejection at the discretion of the Race Committee. Additional Event Passes will be \$60 (Wed \$25, Thur \$15, Sat \$20 when paid with registration). Event Passes at the door will be \$73 (Wed \$30, Thur \$18, Sat \$25).

4 ELIGIBILITY AND ENTRY

- **4.1** The Series is open to all seaworthy cruising sailboats that are not less than 24 feet in length. Smaller boats not less than 20 feet may be eligible on an individual basis at the discretion of the Race Committee.
- **4.2** The designated skipper shall be 21 years of age or older.
- 4.3 Minimum crew size shall be 2 (including skipper) except for the overnight race which requires a minimum crew size of 3.
- 4.4 All one design classes shall comply with the maximum crew numbers in their class rules.
- 4.5 There will be no restriction on crew changes between races. Children aged 14 and under will not count as crew.
- **4.6** Modifying RRS Appendix G, a yacht shall have identifying symbols on each mainsail, spinnaker, and headsail having a clew that can extend behind the mast 30% or more of the mainsail foot length. The identifiers shall be the same for each sail used.
- **4.7** Yachts shall conform to all U.S. Federal regulations. Additionally, yachts shall conform to Category 5 requirements of the latest "ISAF Offshore Special Regulations Governing Offshore Racing," (Appendix J). It is strongly recommended that yachts also conform to Category 4 requirements. http://offshore.ussailing.org/SAS/ISAF_Special_Regulations/Extracts.htm
- **4.8** All participating yachts shall be provisioned with the following:
 - a) Radio a 25 watt minimum VHF transmitter / receiver with a manufacturer's recommended antenna (masthead preferred). The radio must at least be capable of tuning to channels 9, 13, 16, 22A, 68, 69, 71, 72, and 78.
 - b) GPS a GPS device at least capable of displaying real-time latitude and longitude location data.
- 5 SELF-STEERING Cruising Class yachts may be sailed with assistance of self-steering gear, electric or wind (modifies RRS 52).
- **ENTRY FORMS AND OTHER DOCUMENTATION** Prior to racing, each yacht shall be registered and shall submit (1) the proper Fee; (2) a Crew Declaration form including a landside emergency contact (which may be updated at the Skippers Meeting); and (3) a copy of a current PHRF certificate or similar (if not issued by FCSA) for possible adjustment to conform to FCSA ratings. Register and obtain forms at (http://www.fcoc2013.com) or link from (http://www.sailjax.com).
- 7 CLASSES AND DIVISIONS Classes will be established for PHRF Spinnaker, PHRF Non-Spinnaker, PHRF Cruising, PHRF Cruising Spinnaker, Multi-hull, and One Design yachts. A minimum of five entrants are required to establish a class. Yachts using performance sail materials (non-Dacron) cannot compete in Cruising Classes. If there are too few to form a Cruising Spinnaker Class, Cruising yachts may fly a spinnaker if declared prior to the Skippers Meeting, but with the FCSA standard Non-Spinnaker adjustment applied for all three races. If there are too few to form any One Design classes, those shall compete in the PHRF Spinnaker Class.
- **8 PRIZES** Trophy flags for individual races will be awarded for 1st, 2nd, and 3rd place finishers in each class or division of class. Series Trophies will be awarded for 1st thru 3rd place in class, depending on class size.
- 9 SAILING INSTRUCTIONS Obtain Sailing Instructions and scratch sheets from the regatta website or at the Skippers' Meeting.

Race Committee questions: Adam Norwood (904) 398-7343. Event/Venue questions: Guy Anderson (904) 396-6382.

Crew Declaration Form



PO Box 24268 Jacksonville, FL 32241-4268

9th Annual FIRST COAST OFFSHORE CHALLENGE

"Stars on the Water" April 3rd thru 6th, 2013

www.FCOC2013.com

This form must be completed and submitted to Race Committee prior to racing.

Yacht Name	;	DS	C Radio #	#	
					(optional)
Skipper's Name			Ag	e	(must be 18 or olde
Cell Phones Carried on Yacht(enter 10 digit #s)					
Shore (Emergency) Contact Name			Ph	one 1	
Address			Ph	one 2	
City	State	Zip	Ph	one 3	
CREW MEMBER		<u>AGE</u>	Crew fo	or Which	Races?
			Race 1	Race 2	Race 3
NAME:					

Note any other information the Race Committee should know in case of emergency:

SAILING INSTRUCTIONS



FIRST COAST OFFSHORE CHALLENGE

April 3rd thru 6th, 2013

9th Annual "Stars on the Water"

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1 RULES

1.1 The First Coast Offshore Challenge Series (the "Series") shall be governed by the "2013-2016 Racing Rules of Sailing" (RRS); the CURRENT "ISAF Offshore Special Regulations Governing Offshore Racing; the PHRF rules of the First Coast Sailing Association (www.sailjax.com); and class rules for any One-Design class established. The North Florida Cruising Club (NFCC) is the Organizing Authority for this Series. The St. Augustine Yacht Club is graciously providing their facility as the primary venue for the Series.

ISAF Cat 5 and Cat 4 Regulations: http://offshore.ussailing.org/SAS/ISAF Special Regulations/Extracts.htm

1.2 ALTERATIONS TO THE RULES

The following sections of these Sailing Instructions alter provisions of the RRS:

- **1.2.1** Sailing during the hours of darkness Sailing Instructions 1.3
- 1.2.2 Recalls on VHF Sailing Instructions 1.6.1 and 4.3
- **1.2.3** Failure to start within time limit Sailing Instructions 9.5.4
- **1.2.4** Time limit Sailing Instructions 11
- **1.2.5** Rules governing the flying of a protest flag Sailing Instructions 13.1
- 1.2.6 Establishment of arbitration procedures Sailing Instructions 13.4
- **1.2.7** Steering Assistance Notice of Race 5
- **1.2.8** Even if not racing, if the Race Committee observes a participating yacht obstructing the passage of a vessel not involved in the Regatta and in violation of the International Regulations for Preventing Collisions at Sea, the Race Committee may proceed against the yacht under RRS 60.2.
- **1.3 SAILING DURING THE HOURS OF DARKNESS** From sunset to sunrise, the Rules contained in RRS Part 2 will cease to govern the race which will be continued under the corresponding parts of the International Regulations for Preventing Collisions at Sea. An infringement of the IRPCS during that time will be considered as an infringement of RRS Part 2.
- **1.4 TIME -** All published times used in association with the race will be Eastern Daylight Saving Time (UTC minus 4 hours) in 24-hour format. Official Race Committee time will be synchronized with the US Naval Observatory Master Clock telephone voice announcer: 202-762-1401 or 202-762-1069.

1.5 USE OF ENGINE

- **1.5.1** In accordance with RRS 42.3(i) In an emergency, an engine or other means of propulsion may be used when appropriate to avoid collision or in grave emergency. Full details shall be given to the Protest Committee who, after a hearing, may impose a penalty or, when it judges significant advantage was gained, disqualify the yacht.
- **1.5.2** An engine may be used to supply power for charging batteries, pumping, weighing anchor, or other necessary purposes, provided mechanical propulsion is not engaged.

1.6 RECALLS

- **1.6.1** The Race Committee will *attempt* to announce sail numbers of premature starters on VHF Channel 72.
- **1.6.2** Altering RRS Rule 29.2, in the event of a general recall, the First Substitute will be raised (two sounds), and then lowered (one sound) one minute before the warning signal for the next scheduled class. The new warning signal for the class which has had a general recall will be 10 minutes after the start of the last class (as described in 9.5 of these instructions). If more than one class is subject to a general recall, the second of these classes will start after the first and so on. *"If your class is recalled, go to the end of the line for new start."*
- **2.0** RADIO COMMUNICATION The Race Committee will monitor VHF Channel 72 during races, and may, as the circumstances dictate, communicate with a yacht while racing.
- **3.0 SIGNALS MADE ASHORE** No signals will be made ashore.

4 NOTICES TO COMPETITORS

- **4.1** Prior to the Tuesday Skippers' Meeting, Notices to Competitors will be posted on the regatta registration website (link thru www.FCOC2013.com). After that, duplicates and new Notices will be posted on the exterior bulletin board of the St. Augustine Yacht Club. Whenever possible, the times and venues of protest hearings and other general information will be given on VHF Channel 72.
- **4.2** Changes to the sailing instructions will be posted at least 3 hours before the scheduled start of a race.
- **4.3** All VHF announcements are only an aid to competitors and are supplementary to any flag signals or official notices. Failure to make any announcement via VHF will not be grounds for redress.
- **<u>5</u> RACING AREA** The racing area will be in the Atlantic Ocean as depicted on NOAA Chart 11480.

6 SCHEDULE OF THE RACES

6.1	Race	<u>Date</u>	First Warning Signal
	1. St. Augustine Buoy Race	Wednesday Race Week	0925
	2. STA Out-and-Back	Thursday Race Week	0925
	3. STA to STJ and Back	Fridav Race Week	(See 6.2)

- **6.2** For Race 3, each yacht will be assigned a start time based on its handicap. The last start for the fastest rated yacht will be ten minutes before sunset as predicted for St. Augustine by the US Naval Observatory.
- <u>COURSES</u> All coordinates, courses, and distances are approximate and are not for navigational use. Lat/Lon values presented here were obtained from the current published US Coast Guard Light List.

7.1 Race 1: St. Augustine Buoys

Start: Vicinity of St. Augustine Entrance Buoy 'STA' @ N 29° 54.912' - W 81° 15.280'.

Course: 45-45-90 triangle buoy course with 2.5 nm long leg and 1.75 nm short legs; consisting of three inflated buoys (designated 'A', 'B', and 'C' depending on the course selected - see Race 1 Course Sketch). The course selection will be posted on the starboard side of the RC boat. Round all marks to port.

- Cruising Classes (18.0 nm)...3 circuits: (start) C = A B C, A B C, A B C (finish)
- Non-Spinnaker Class (20.5 nm): (start) \underline{C} $\underline{-A-C}$, $\underline{-A-B-C}$, $\underline{-B-C}$, $\underline{-A-B-C}$ (finish)
- Spinnaker Class (22.0 nm): (start) C A C, A B C, A B C C C C



Shortening Course: If wind/sea conditions dictate, the Race Committee may shorten course by displaying the "S" flag (2 short horn blasts). The shortened course will consist of elimination of the final -A-B-C circuit for all classes.

7.2 Race 2: St. Augustine Out-and-Back

Start: St. Augustine Entrance Buoy 'STA' @ N 29° 54.912' – W 81° 15.280' (RC boat starboard, 'STA' port).

Head: Easterly to longitude 'A', 'B', or 'C' as designated here to be posted on the starboard side of RC boat.

'Turn': At the designated longitude for your respective class. Record your latitude at this intersection / turn.

Finish: St. Augustine Entrance Buoy 'STA' @ N 29° 54.912' - W 81° 15.280' (leave to port) -

Each yacht shall record its own finish time when it is within 300 feet of 'STA', and 'STA' bears 90° magnetic.

Class:	<u>'A'</u>	course distance	<u>'B'</u>	cour	se distance	<u>'С'</u>	course	<u>e distance</u>
Cruising/Non-Spin	W 80° 59.	000' 28.296 nm	W 81° (01.000	24.820 nm	W 81° 04	4.000' 1	9.606 nm
Spinnaker	W 80° 55.	000' 35.248 nm	W 80° !	58.000'	30.034 nm	W 81° 0′	1.000' 2	4.820 nm

7.3 Race 3: St. Augustine to Mayport and Return

Start: St. Augustine Entrance Buoy 'STA' @ N 29° 54.912' – W 81° 15.280' (RC boat starboard, 'STA' port).

Head: 353° True for a distance of about 28.804 nm.

Turn: At the St. Johns Entrance buoy 'STJ' (N 30° 23.589' – W 81° 19.140'), leaving 'STJ' to port

Finish: St. Augustine Entrance Buoy 'STA' @ N 29° 54.912' - W 81° 15.280' (leave to starboard) -

Each yacht shall record its own finish time when it is within 300 feet of 'STA', <u>and</u> 'STA' bears 000° magnetic.

8 CLASS FLAGS Class Flag Color

Cruising Pink All Others Gold

9 THE START

- **9.1** The starting line will connect between an orange flag displayed on the RC boat and a pin-end inflatable buoy or the St. Augustine entrance buoy 'STA'.
- 9.2 Once the RC boat is on station at the start line (indicated by display of the orange start line flag), each yacht shall check in with the Race Committee prior to the warning signal of the first class in Races 1 and 2, and no earlier than 20 minutes prior to its individual start time for Race 3, by sailing past the stern of the RC boat and hailing its sail number. Alternatively, yachts may hail the RC boat on VHF channel 72. Yachts failing to check in may be scored DNC.
- **9.3** A yacht shall disengage all engine propulsion systems prior to the preparatory flag for its class, or otherwise within 4 minutes of its start time (RRS definition for *Racing*.)
- 9.4 Rule 30.1 "I Flag Rule" (sometimes called the 'Round-an-End Rule') will be in effect for all races.

9.5 Races 1 and 2

9.5.1 Races will be started using RRS Rule 26: 5 minute warning signal

Cruising Class All Other Classes

5 minutes before start: Raise Class flag, sound short horn

4 minutes before start: Raise Preparatory flag 'I', sound short horn



1 minutes before start: Lower Preparatory flag 'I', sound long horn

0 minutes before start: Lower Class flag, sound short horn



- 9.5.2 The warning signal for succeeding starts will be made 10 minutes after the start of the preceding class.
- **9.5.3** Yachts whose warning signal has not been made shall avoid interfering with yachts whose preparatory signal has been made (RRS 24.1).
- 9.5.4 Yachts that have not properly started within 15 minutes of the final class start may be scored DNS.

9.6 Race 3

- **9.6.1** Each yacht will be assigned a start time based on its PHRF handicap. The last start for the fastest rated yacht will be 10 minutes before sunset as predicted by the US Naval Observatory for St. Augustine. A list of individual start times will be published at the Tuesday Skippers' Meeting.
- **9.6.2** Yachts shall avoid the starting area prior to 20 minutes before their assigned start time.
- **9.6.3** No timed start signal flags (or associated horns) will be displayed (or sounded) from the RC boat, except that the race committee will implement RRS 29.1 using the 'X' flag to indicate individual recalls.

9.7 RC Boat Not on Station

In the case that the RC Boat is unable to come to the start area and set a start line as detailed in 9.1, the following changes and start procedures will apply:

- 9.7.1 Races 1 and 2 The race format will be the Race 2 course 'C' format.
- **9.7.2** Races 1 and 2 No yacht shall start prior to its class start time listed here as synchronized with USNO time (refer to 1.4). A yacht shall have started when it is within 500 feet of St. Augustine entrance buoy 'STA', and 'STA' bears 000° magnetic. Rule 30.1 shall not be in effect.

Cruising Class yachts shall start at or after 09:30:00.

Other Class vachts shall start at or after 09:45:00.

9.7.3 - Race 3 - No yacht shall start prior to its published individual start time (refer to 9.6) as synchronized with USNO time (refer to 1.4). A yacht shall have started when it is within 300 feet of St. Augustine entrance buoy 'STA', *and* 'STA' bears 270° magnetic. Rule 30.1 shall not be in effect.

10 THE FINISH

- **10.1** When the RC Boat is on station for taking finish times it will display a solid blue flag indicating such. The finish line will connect between a solid orange flag displayed on the RC boat and the designated finish mark.
- **10.2** When finishing during conditions of low visibility, a yacht shall make every attempt to identify itself to the RC boat by shining a light on its sail numbers, or by hailing the RC boat on VHF channel 72, or by other means.

- **10.3** For Races 2 and 3, there will be no RC boat on station at the finish. Using a timepiece that is synchronized with USNO time (refer to 1.4), a yacht shall record its own finish time (to the second) as described in 7.2 and 7.3. As a courtesy, the finishing yacht should simultaneously sound a horn to indicate it has finished racing. When possible, note the sail numbers and finishing times of other nearby yachts (*hence the courtesy horn*).
- 10.4 As soon as practical after finishing, a yacht shall report its finish time to the Race Committee via VHF channel 72. If unable to communicate by radio for this purpose, a yacht may telephone or text the RC at 904-398-7343. In no case shall a yacht fail to report its time directly to the RC any later than 2 hours following its finish (messages accepted). The RC will be available via VHF and at each after-race event area for this purpose.
- **TIME LIMITS** Modifying RRS 35, there will be a fixed time limit for Race 3 of 16:00:00 Saturday; yachts finishing after the time limit will be scored DNF.
- **12 REPORTING PENALTY TURNS** A yacht that has taken a penalty under RRS 44 shall report such to the Race Committee immediately after finishing by hailing the RC boat or when otherwise reporting its finish time.

13 PROTESTS AND REQUESTS FOR REDRESS

- **13.1** A protest flag need not be displayed continuously until the finish, provided it is initially displayed for at least 30 minutes (amends RRS Rule 61.1).
- **13.2** A Yacht intending to file a protest shall notify the Race Committee of that intent immediately after finishing by hailing the RC boat or when otherwise reporting its finish time.
- **13.3** Protests shall be filed on an official US SAILING protest form with the Race Committee not more than 2 hours after the final yacht finishes that race.
- **13.4** ARBITRATION For protests involving an alleged breach of the rules of Part 2 of the RRS, an optional short arbitration hearing may be held prior to proceeding with an official protest hearing (modifies RRS Part 5, B).

14 SERIES SCORING

14.1 Race and Series scoring will be in accordance with RRS Appendix A, Low Point System as modified here:

DNF, RAF = number that started the race for that division

DNS, DSQ = number that came to the starting area for that division

DNC = number entered in the race for that division

DNE = number entered in the Series for that division

- **14.2** Two scored races are required to constitute the Series.
- **14.3** Modifying RRS Appendix A2, there will be no excluded scores.
- RACE RESULTS Results for each race will be announced at its respective after-event party. Overall Regatta Results will also be e-mailed to the addresses given on the registration documents. Any request for clarification of the results shall be raised as soon as possible, and in any case, within 5 days of e-mail publication. Results will also be posted on the regatta registration website and on www.sailjax.com.

16 RESPONSIBILITY AND LIABILITY

- 16.1 The safety of a yacht or sailing vessel and its crew, the decision as to whether or not to start, and having started, whether or not to continue is the sole and exclusive responsibility of each yacht's designated skipper. For the purpose of this section, the term "yacht" shall mean the designated skipper as representative of the owner, and in the absence of the designated skipper, members of the remaining crew.
- **16.2** A yacht is entirely responsible for its own safety, whether afloat or ashore, and nothing, whether in the Notice of Race or Sailing Instructions or anywhere else, reduces this responsibility.
- **16.3** It is for the yacht to decide whether it is fit to sail in the conditions in which it will find itself. By going to sea the yacht confirms that it is fit for those conditions and its crew is competent to sail and compete in them.
- 16.4 The yacht is required to hold adequate insurance and in particular to hold insurance against third party claims.
- **16.5** Nothing done by the organizers can reduce the responsibility of the yacht.
- **16.6** The provision of patrol boats does not relieve the yacht of its responsibilities.
- 16.7 The yacht is responsible for ensuring that it is equipped and seaworthy so as to be able to face extremes of weather; that there is a crew sufficient in number, experience, and fitness to withstand such weather; and that the safety equipment is properly maintained, stowed, and in date and that crew members know how to use it.
- 16.8 The yacht is responsible for adhering to all local, state, federal, and international laws and regulations governing the operation in the body of waters where the race and race events shall be held. This includes conformance to the United States Coast Guard Safety Regulations.
- 16.9 Inspection of a yacht by the Race Committee does not reduce the responsibilities of the yacht set out here.

2013 FCOC - Race 1 Offshore Triangle Courses (45 - 90 - 45)

B 1.75 nm A Wind

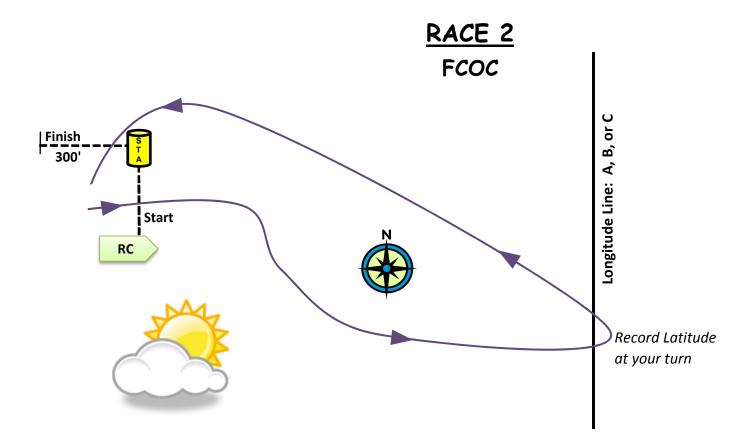
Wind

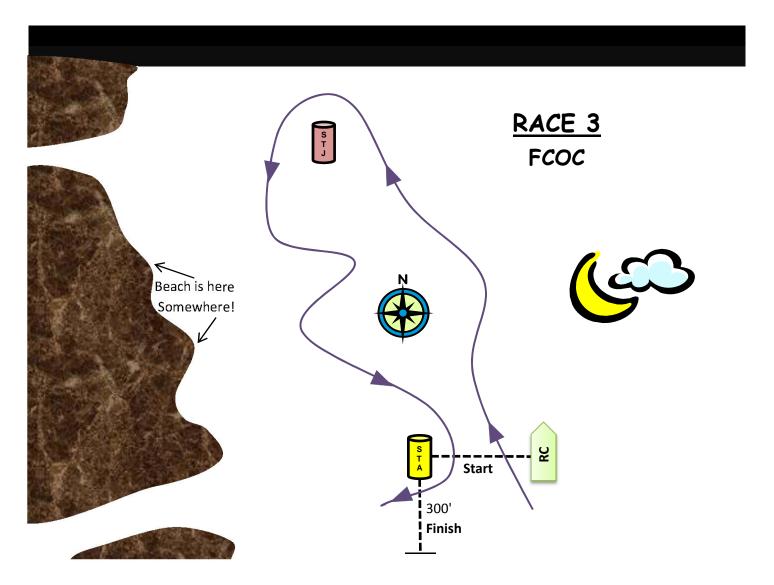
Start

Start

Shading represents 0.3 nm north of STA or 0.3 nm south of STA

	Course Wind ID Direction		Approximate Position	Approximate Position			Approximate Magnetic Bearing From- to-					
			"C"	"A"	"B"	C to A	A to C	A to B	B to C	C to B		
	D	ssw	N 29° 57.527' W 81° 14.179'	N 29° 55.212' W 81° 15.280'	N 29° 55.900' W 81° 13.427'	209	029	073	344	164		
ВS	F	sw	N 29° 56.984' W 81° 13.245'	N 29° 55.212' W 81° 15.280'	N 29° 55.230' W 81° 13.266'	231	051	095	007	187		
RSE	G	NNW	N 29° 55.212' W 81° 15.280'	N 29° 57.527' W 81° 16.381'	N 29° 55.900' W 81° 17.133'	344	164	208	119	299		
0 0	Н	N	N 29° 55.212' W 81° 15.280'	N 29° 57.718' W 81° 15.280'	N 29° 56.465' W 81° 16.690'	006	186	231	142	322		
S E	J	NNE	N 29° 55.212' W 81° 15.280'	N 29° 57.527' W 81° 14.179'	N 29° 56.839' W 81° 16.032'	029	209	253	164	344		
ORT	K	NE	N 29° 55.212' W 81° 15.280'	N 29° 56.984' W 81° 13.245'	N 29° 56.966' W 81° 15.259'	051	231	276	187	007		
Z	L	ENE	N 29° 55.212' W 81° 15.280'	N 29° 56.171' W 81° 12.622'	N 29° 56.825' W 81° 14.491'	074	254	298	209	029		
	M	E	N 29° 55.212' W 81° 15.280'	N 29° 55.212' W 81° 12.403'	N 29° 56.439' W 81° 13.842'	096	276	320	232	052		
	0	ESE	N 29° 54.612' W 81° 15.280'	N 29° 53.653' W 81° 12.623'	N 29° 55.266' W 81° 13.412'	119	299	343	254	074		
ES	R	SE	N 29° 54.612' W 81° 15.280'	N 29° 52.840' W 81° 13.246'	N 29° 54.594' W 81° 13.267'	141	321	005	277	097		
J R S	T	SSE	N 29° 54.612' W 81° 15.280'	N 29° 52.297' W 81° 14.180'	N 29° 53.924' W 81° 13.428'	164	344	028	299	119		
000	U	S	N 29° 54.612' W 81° 15.280'	N 29° 52.106' W 81° 15.280'	N 29° 53.359' W 81° 13.871'	186	006	050	322	142		
Ξ	V	wsw	N 29° 55.571' W 81° 12.622'	N 29° 54.612' W 81° 15.280'	N 29° 53.957' W 81° 13.412'	254	074	118	029	209		
0 0	X	W	N 29° 54.612' W 81° 12.403'	N 29° 54.612' W 81° 15.280'	N 29° 53.384' W 81° 13.842'	276	096	141	052	232		
S	Y	WNW	N 29° 53.653' W 81° 12.623'	N 29° 54.612' W 81° 15.280'	N 29° 52.998' W 81° 14.491'	299	119	163	074	254		
	Z	NW	N 29° 52.840' W 81° 13.246'	N 29° 54.612' W 81° 15.280'	N 29° 52.858' W 81° 15.260'	321	141	186	097	277		





Predicted Tides, Sun, Moon - 2013

All Times EDT

Vilano B	Vilano Beach Bridge / ICW N 29°, 55.0' - W 81°, 18.0' (SE of Fish Camp Pier)									
Date		Time	Height	Time	Height	Time	Height	Time	Height	
31-Mar	Sun	0003	5.06 H	0625	-0.16 L	1229	4.21 H	1828	-0.28 L	
1-Apr	Mon	0056	4.94 H	0727	0.01 L	1325	4.07 H	1931	-0.13 L	
2-Apr	Tue	0155	4.76 H	0829	0.10 L	1427	3.97 H	2036	-0.05 L	
3-Apr	Wed	0300	4.58 H	0929	0.10 L	1532	3.97 H	2140	-0.04 L	
4-Apr	Thu	0407	4.47 H	1027	0.04 L	1639	4.08 H	2242	-0.07 L	
5-Apr	Fri	0512	4.44 H	1125	-0.07 L	1742	4.29 H	2345	-0.14 L	
6-Apr	Sat	0611	4.47 H	1220	-0.21 L	1838	4.54 H			
7-Apr	Sun	0044	-0.24 L	0703	4.51 H	1310	-0.33 L	1926	4.75 H	

ML/LW predicitons (ref: chart datum in feet)

4.25' Mean Range

St. Aug	<u>ustine</u>	City D	<u>ock</u>	N 29°, 53.5' - W 81°, 18.6'				(Municipal Marina)		
Date		Time	Height	Time	Height	Time	Height	Time	Height	
31-Mar	Sun	0622	-0.35 L	1220	4.63 H	1828	-0.44 L		_	
1-Apr	Mon	0052	5.18 H	0718	-0.13 L	1313	4.51 H	1926	-0.21 L	
2-Apr	Tue	0150	5.03 H	0820	0.04 L	1412	4.41 H	2031	-0.01 L	
3-Apr	Wed	0252	4.88 H	0923	0.11 L	1516	4.37 H	2138	0.09 L	
4-Apr	Thu	0359	4.79 H	1026	0.07 L	1624	4.44 H	2245	0.09 L	
5-Apr	Fri	0506	4.78 H	1125	-0.05 L	1731	4.61 H	2348	0.01 L	
6-Apr	Sat	1807	4.83 H	1221	-0.20 L	1831	4.84 H			
7-Apr	Sun	0048	-0.11 L	0702	4.88 H	1313	-0.35 L	1924	5.05 H	

ML/LW predicitons (ref: chart datum in feet)

4.48' Mean Range

The Sun and the Moon			N 29°, 54' - W 81	(St. Augustine)		
Date		Sunrise	Sunset	Moonrise	Moonset	Vis %
31-Mar	Sun	0716	1943		1021	78
1-Apr	Mon	0714	1944	0033	1119	67
2-Apr	Tue	0713	1945	0131	1220	56
3-Apr	Wed	0712	1945	0224	1323	Qtr
4-Apr	Thu	0711	1946	0312	1426	34
5-Apr	Fri	0710	1946	0356	1528	24
6-Apr	Sat	0708	1947	0436	1628	15
7-Apr	Sun	0707	1948	0513	1728	8