CORTEZ RACING ASSOCIATION

A CALIFORNIA NONPROFIT CORPORATION





French Bio Beach FALL REGATTA

Saturday, November 14, 2015

SAILING INSTRUCTIONS

1. RACING RULES:

- 1.1 The regatta will be governed by the rules as defined in *The Racing Rules of Sailing*, including US Sailing Prescriptions, except US Sailing Prescriptions to Rules 60, 63.2 and 63.4 will not apply.
- 1.2 The USCG "Navigation Rules, International-Inland" (www.navcen.uscg.gov/) apply when a boat sailing under the Racing Rules of Sailing meets a vessel that is not.
- 1.3 Class Rules of PHRF San Diego (www.phrfsandiego.org) will apply to classes #1-6, including the requirement for each boat to have a current, valid PHRF-SD certificate. However, Rule 8 (MIR rule) of the PHRF class rules will not apply. PHRF "RLC" ratings will be used to score all races. PHRF non-spinnaker offsets will not be used for scoring.
- 1.4 Rules of any other class entered as a class will apply to that class.
- 1.5 Amendments to these Sailing Instructions will be distributed using the CRA web site (www.cortezracing.com) and will be available at the R/C Boat on race day(s) when code flags "L" and "A" are on hoist during Race Check-In.
- Racing boats encountering non-racing craft shall conform to 1.2 above, USCG Navigation Rules, International-Inland. Be advised that no vessel has the "right-of-way" over a large ship in the deep-water channel. <u>USCG Navigational Rules 9(b) and 10(j)</u> will be strictly enforced. All competitors are asked to observe USCG Navigational Rule 9, which in part reads "a sailing vessel shall not impede the passage of a vessel that can safely navigate only within a narrow channel or fairway" and Rule 10 which in part reads, "a sailing vessel shall not impede the safe passage of a power-driven vessel following a traffic lane." Further, USCG Navigational Rule 34, in part reads "...When vessels in sight of one another... doubt whether sufficient action is being taken by the other to avoid collision, the vessel in doubt shall immediately indicate such doubt by giving at least five short and rapid blasts on the (horn)." Any boat participating in a CRA race that is identified in any complaint from the Coast Guard, Harbor Pilot or commercial vessel captain that has sounded 5 horns will be presumed to have infringed this instruction. RRS 60.2, 63.1 and A5 are modified to add that the R/C may disqualify a yacht infringing this instruction without a hearing.
- 1.7 NAVAL and CRUISE SHIP PROTECTION ZONE: No vessel is allowed within 100 yards of NAVAL and CRUISE SHIP traffic.
- 1.8 Per RRS 42.3(h), competitors may use an engine or other propulsion method to avoid situations in 1.6 or 1.7 provided they gain no significant advantage in the race.
- 1.9 RRS 55 is changed by adding the following sentence to the rule: 'However, discarding biodegradable bands when setting a sail is permitted.'
- 1.10 Sailing Instructions 1.6, 1.9, 5.7, 6.2, 9.2, 10.3, 10.4, 11, 12.1, 13, modify the RRS.

2. SCHEDULE OF RACES

- 2.1 Two races are scheduled.
- 2.2 The scheduled time of the warning signal for the first race is **11:55am**. The warning signal for the second race will be as soon as possible after the completion of the first race.

3. ENTRIES & CHECK-IN:

- 3.1 All eligible boats will have entered on-line at www.cortezracing.com, no later than 6:00pm on Friday, Nov 13, 2015.
- 3.2 The entry fee for this regatta is \$40 for non-CRA members, with a \$5 discount for USSA membership. No charge for CRA members.
- 3.3 Late entries will only be accepted from CRA members. Late entrants may **not** check in by radio, but must provide to the R/C, <u>in writing</u>, the owner's name, DOB and zip code, boat name and type, sail number, class, and RLC rating, to complete their entry.

3.4 Yachts will have completed their "Check-In" when they check-in with and are acknowledged by the R/C, while clearly displaying their sail number and backstay pennant. Check-In will commence when the "L" flag is hoisted. Visual and radio check-in (VHF 68) are acceptable until the first Warning Signal. Visual check-in <u>may</u> continue after the first warning at the sole discretion of the R/C (but not within one minute of any start).

4. CLASSES, CLASS FLAGS AND STARTING ORDER:

- 4.1 A numeral pennant, matching the class, must be flown from the backstay of all yachts while checking in, while racing, and while finishing.
- 4.2 The Starting Order is as follows:

| Initial Sta | arting Order | | Pennant |
|-------------|--------------|---|---------|
| Class 1 | Spinnaker | Random Leg Rating of +6 and below | #1 |
| Class 2A | Sport Boats | Random Leg Rating of +57 and below | #2 |
| Class 2B | Sport Boats | Random Leg Rating of +60 and above | #2 |
| Class 3 | Spinnaker | Random Leg Rating of +9 through +84, or | #3 |
| | | Random Leg Rating of +87 through +135 | |
| | | with LOA 42 feet or greater | |
| Class 4 | Spinnaker | Random Leg Rating of +87 through +135 | #4 |
| | | with LOA less than 42 feet | |
| Class 5 | Spinnaker | Random Leg Rating of +138 and above | #5 |
| Class 6 | Non-Spin | All Ratings | #6 |
| Class 8 | Multi-hulls | All Ratings | #8 |

NOTE: The R/C may cancel or combine starts. For example, Classes 2A and 2B will be combined. It is the responsibility of a boat to start at her signaled start time.

5. THE START AND RACING AREAS:

- 5.1 The starting area is in the vicinity of the ½ mile marker mid-Harbor Island and the east end of Harbor Island.
- 5.2 The racing area covers the general locale known as San Diego Bay. For navigation, refer to NOAA Chart #18773, San Diego Bay.
- 5.3 The "L" flag, when on hoist, indicates the R/C is "On Station" for race Check-In procedures.
- The Starting Line will lie between a staff with an orange flag on the R/C vessel and an inflatable buoy ("A" Mark) near the R/C boat. (NOTE: "A" Mark is also the Pin End of the Start/Finish line.)
- An inflated distance buoy may be streaming from the R/C vessel and this buoy is considered part of the R/C vessel. For purposes of RRS 31.1 (Touching A Mark), this buoy is to be considered a permanent part of the starting mark. If the Race Committee boat is damaged as a result of a boat breaking a rule, that boat shall pay for the repairs.
- 5.6 Yachts whose Class Warning Signals have not been made shall keep clear of the starting area and vessels attempting to start.
- 5.7 After properly starting, a yacht shall not sail through the "Starting Line" or "Finishing Line" unless actually finishing. This ranks as an obstruction for the purposes of Part 2 of the RRS. Skippers in violation of this paragraph may be subject to a DSQ imposed by the R/C without benefit of a hearing. This modifies RRS 63.1, Requirement for a Hearing, and Appendix A5, Scores Determined by the Race Committee.
- 5.8 All races will be started in accordance with RRS 26. To signal the "Sequence Start" warning, one minute prior to the first warning the R/C may sound 4 long horn blasts as a courtesy. The hoisting of the appropriate class pennant(s) and a warning sound will signal "Sequence Start Time". Generally, classes will be started in the order beginning with Class 1 and ending with Class 8. NOTE: The R/C may cancel or combine starts. It is the responsibility of a yacht to start at its signaled start time.

6. RECALLS:

6.1 Individual Recalls will be signaled by a horn blast as the long sound signal, in accordance with RRS 29.1. As a courtesy, the R/C will attempt to hail boats "On Course Side" (OCS) as soon as possible over a loud hailer and/or on VHF 68, but it is the responsibility of each yacht to start properly.

- 6.2 Failure of electronic equipment, failure to hear a hail, order of hail, or delay in hailing will not be grounds for redress. This modifies RRS 62.1 (a).
- 6.3 A R/C assist vessel may be stationed near the Pin Buoy end of the starting line and is also authorized to identify and hail premature starters.

7. COURSES:

- 7.1 The Race Course Number will be displayed onboard the R/C boat no later than the first warning signal for each class. Courses may be posted and changed up to the warning signal for any class.
- 7.2 The course will be selected from the attached course sheet. All marks listed are considered rounding marks.

8. THE FINISH:

- 8.1 The Finish Line will be between an Orange Flag onboard the R/C boat and a nearby buoy ("A" Mark).
- 8.2 In the event that the pin mark is missing, yachts may finish by passing on either side of the R/C, within 3 boat lengths.
- 8.3 Yachts finishing during a "Start Sequence" may elect to finish within 2 boat-lengths distance outboard of the Pin End buoy or the R/C boat.

9. TIME LIMIT:

- 9.1 If no yacht in a class has finished by 5:00 PM on the day of the race, the race will be abandoned for that class.
- 9.2 Yachts not finished by 6:00 PM will be recorded as DNF. This modifies RRS 35.
- 9.3 If an "E" (echo) signal flag is raised and on hoist prior to the first warning of a race, these finish deadline times may be extended at the discretion of the R/C.
- 9.4 When a yacht retires from a race, the R/C must be notified before leaving the course area. Informing the R/C vessel can be accomplished by either (a) sailing (motoring) past the R/C vessel OR (b) radioing the R/C vessel (VHF 68). Failure to do this may result in entry rejection for other CRA races. If the R/C vessel does not answer, leave the information with another race participant to avoid punitive action, or keep trying.

10. SCORING:

- 10.1 The Low Point Scoring System of Appendix A will apply.
- 10.2 One race is required to be completed to constitute a series.
- 10.3 Each boat's score shall be the total of her race scores. No score will be excluded. This modifies RRS Appendix A2.
- 10.4 All boats shall have clearly visible sail numbers. Missing, improper, inconsistent, unclear, illegible, or numbers other than those used for Check-In, are not permitted and may result in being scored DNF. This modifies RRS Appendix A5.
- 10.5 Boats will be scored using the latest information in the CRA Roster database, based on membership forms or latest entry forms.

11. PENALTIES AT THE TIME OF THE INCIDENT:

For all classes, the first two sentences of Rule 44.1 are changed to: 'A boat may take a One-Turn Penalty when she may have broken one or more rules of Part 2 in an incident while racing or rule 31. However, when she may have broken one or more rules of Part 2 in an incident while in the zone around a mark other than a starting mark, her penalty shall be a Two-Turns Penalty.'

12. PROTESTS:

- 12.1 RRS 61 is modified to add the additional requirement: A boat intending to protest shall report her intentions and the boat(s) being protested to the R/C boat on station upon finishing or retiring and obtain R/C acknowledgment.
- 12.2 Red Protest Flags shall be displayed from the backstay. On yachts without backstays, the protest flag will be displayed in a prominent position on the stern.
- 12.3 Written protests shall be lodged with a representative of the Race Committee at the post race meeting area within 60 minutes of the R/C Boat docking at the finish of the race day. The Protest Committee may extend this time if there is good reason to do so.

12.4 The parties involved will be listed, in the order of filing, at the post-race meeting area and protests will be heard as soon as practicable. This posting constitutes the notice required by RRS 63.2, Time and Place of the Hearing.

13. PENALTIES TAKEN AFTER A RACE (Appendix T2)

- T2.1 After a race, a boat that may have broken a rule of Part 2 or rule 31 while racing may take a Post-Race Penalty for that incident. The penalty shall be a Scoring Penalty, calculated as stated in rule 44.3(c), except the percentage will be based on the number of boats starting in that class. This changes Rule 44.3(c). However, rules 44.1(a) and (b) apply. A boat takes a Post-Race Penalty by informing the race committee in writing and identifying the race number and when and where the incident occurred.
- T2.2 The Post-Race Penalty shall be
 - (a) 20%, if taken before the protest time limit, or
 - (b) 30%, if taken after the protest time limit but before the beginning of a hearing involving the incident.

14. PROTEST ARBITRATION (Appendix T5)

- An arbitration meeting may be held prior to the protest hearing for each incident resulting in a protest by a boat involving a rule of Part 2 or Rule 31, if a USSA Judge or Umpire is available, and only if each party is represented by a person who was on board at the time of the incident. No witnesses will be permitted. However, if the arbitrator decides that rule 44.1(b) may apply or that arbitration is not appropriate, the meeting will not be held, and if a meeting is in progress, it will be closed.
- T5.2 Based on the evidence given by the representatives, the arbitrator will offer an opinion as to what the protest committee is likely to decide:
 - (a) the protest is invalid.
 - (b) no boat will be penalized for breaking a rule, or
 - (c) one or more boats will be penalized for breaking a rule, identifying the boats and penalties.
- T5.3 A boat that may have broken a rule may take a Post-Race Penalty as provided in Section 13. However, the penalty in rule T2.2(a) is available only until the protest time limit or until the beginning of the arbitration meeting, whichever is earlier. During a meeting, a boat may take a penalty by acknowledging her acceptance of the penalty in writing.
- T5.4 If a boat asks to withdraw her protest, the arbitrator may act on behalf of the protest committee in accordance with rule 63.1 to accept the withdrawal.
- 14.1 When the protest is referred to the jury, the arbitrator shall not be a member of the jury hearing the protest.

15. RESPONSIBILITIES, SAFETY & PERSONAL FLOTATION:

- 15.1 It is the sole responsibility of the skipper of each yacht to decide whether or not to start and/or continue to race.
- 15.2 After the starting sequence is complete, the R/C vessel will make every attempt to monitor VHF channel 68.
- 15.3 Not withstanding any safety requirements, the ultimate safety of a yacht and her crew is the sole and inescapable responsibility of the owner or charterer. He/she must do his/her best to ensure that the yacht is fully sound, thoroughly seaworthy and manned by an experienced crew who are physically fit to face bad weather. He/she must be satisfied as to the soundness of hull, spars, rigging, sails and all gear. He/she must ensure that all safety equipment is properly maintained and stowed, and that crewmembers know where it is stowed and how it is used.
- While racing, each competitor will be required to have onboard and accessible, a "wearable" PFD. The use of PFDs by individuals and skippers is encouraged at all times. If in the opinion of the R/C conditions warrant the use of PFDs, the R/C will signal the "Y" flag accompanied by multiple rapid horn blasts, indicating RRS 40 is in affect.

16. RADIO COMMUNICATION

16.1 The Race Committee will monitor VHF Ch.68 for radio traffic regarding the regatta. Please contact them in the event of an emergency requiring outside assistance or to notify the Race Committee of a boat's intent to withdraw from racing per 9.4.

16.2 Except in an emergency, a boat shall neither make radio transmissions while racing nor receive radio communications not available to all boats. This restriction also applies to mobile devices.

17. RACE RESULTS & TROPHY AWARDS:

- 17.1 Race results will be announced at the after race party at Fiddler's Green Restaurant, Shelter Island, SD, and published on the CRA web site (www.cortezracing.com). Meet ASAP after the race for refreshments sponsored by CRA and re-hashing of the day.
- 17.2 Regatta prizes will be awarded using the listed procedure: one prize in each class of 4 yachts, two for 5-7 yachts, three for 8 or more, based on the number of starters in the class.

18. DISCLAIMER OF LIABILITY

Competitors participate in the regatta entirely at their own risk (see RRS 4, Decision to Race). The organizing authority will not accept any liability for material damage or personal injury or death sustained in conjunction with or prior to, during, or after the regatta.

CRA Race Committee Chair Colleen Cooke (619)852-5010 sailorcookie@cox.net



Cortez Racing Association 2015 FALL REGATTA COURSE TABLE

All races start and finish at "A". Marks are to be rounded to port unless they are followed by "s". Marks followed by "s" are to be rounded to starboard. Distances are calculated from current charts and are subject to change due to occasional buoy repositioning by the US Coast Guard.

| Course # | | | Ma | ırks | | | Handicap Distance | Course # | | | | Mar | ks | | | Handicap Distance |
|-------------|-----------------|------------|-------------|-----------|----|------|----------------------|-------------|----------|------------|----------|--------|----|------|--|----------------------|
| 1 2 | X | 21 20 | 21 | | | | 2.0 2.2 | 68 69 | 20 20 | 24 FM19 | Z 20 | 23 | Z | | 5.8 6.9 | |
| 3 | X | FM19 | 21 | | | | 2.4 | 70 | 20 | 26 | Z Z | 23 | | | 0.9 | 8.6 |
| 4 | X | 20 | FM19 | | | | 2.6 | 71 | 20 | 26A | Z | | | | | 9.3 |
| 5 | X | 19 | 21 | FM19 | | | 3.2 | | 20 | 20/1 | | | | | | 0.0 |
| 6 | X | Z | | | | | 3.4 | 72 | Χ | 18 | Z | | | | | 4.3 |
| 7 | Χ | FM19 | 20 | 21 | | | 3.8 | 73 | Х | 14 | Z | | | | | 6.9 |
| 8 | Χ | 22 | | | | | 3.9 | 74 | Χ | 16A | Z | Χ | Z | | | 9.0 |
| 9 | Χ | 21 | Χ | 21 | | | 4.0 | 75 | Χ | 9 | Z | | | | | 9.4 |
| 10 | X | 20 | 22 | FM19 | | | 4.2 | 76 | Х | 9 | 22 | Z | | | | 10.3 |
| 11 | X | 22 | Z | | | | 4.4 | 77 | Х | 11 | Z | X | Z | | | 11.8 |
| 12 | X | 20 | FM19 | X | 21 | | 4.6 | 78 | X | 11 | FM19 | X | Z | | | 10.9 |
| 13 | X | FM19 | X | FM19 | | | 4.8 | 79 | X | 5 | Z 22 | 7 | | | | 11.9 12.9 |
| 14 15 | X | 23 23 | FM19 | | | | 5.1 5.3 | 80 81 | X | 5 9 | Z | Z X | Z | | | 12.9 |
| 16 | X | 23 | Z - FIVI 19 | | | | 5.5 | 82 | X | 18 | 22 | | | | | 4.8 |
| 17 | X | 24 | | | | | 5.8 | 83 | X | 18 | 24 | | | | | 6.7 |
| 18 | X | Z | Χ | FM19 | | | 5.8 | 84 | X | 16A | 22 | Х | Z | | | 9.4 |
| 19 | X | 24 | FM19 | I WITS | | | 5.9 | 85 | X | 18 | 26 | | | | | 9.5 |
| 20 | X | 24 | Z | | | | 6.3 | 86 | X | 16A | 24 | Х | Z | | | 11.2 |
| 21 | X | 20 | Z | Χ | Z | | 7.1 | 87 | X | 16A | 26 | X | Z | | | 14.0 |
| 22 | X | FM19 | X | Z | X | FM19 | 8.2 | 88 | X | 16A | 28 | X | Z | | | 15.3 |
| 23 | Χ | 26 | | | | | 8.6 | | | | | | | | | |
| 24 | X | Z | X | Z | | | 8.6 | 89 | X | 22 | 18 | 21 | | | | 6.4 |
| 25 26 | X | 26 26 | FM19 Z | | | | 8.7 9.1 | 90 91 | X | 22 22 | Z | Z X | Z | | | 7.3 7.8 |
| 27 | X | Z | X | FM19 | Х | Z | 9.3 | 92 | X | 22 | X | 22 | 7 | | | 8.2 |
| 28 | X | Z | X | Z | X | Z | 10.3 | 93 | X | 24 | 18 | 21 | | | | 8.2 |
| | | _ | | _ | | | 10.0 | 94 | X | 24 | X | Z | | | | 9.1 |
| 29 | 19 | 21 | | | | | 2.7 | 95 | Χ | 24 | Z | Х | Z | | | 9.6 |
| 30 | 19 | FM19 | | | | | 3.1 | 96 | Х | 24 | Х | 22 | Z | | | 10.0 |
| 31 | 19 | Z | | | | | 4.1 | 97 | Χ | 26 | 18 | 21 | | | | 11.0 |
| 32 | 19 | 21 | Χ | 21 | | | 4.6 | 98 | Χ | 24 | Χ | 24 | Z | | | 10.8 |
| 33 | 19 | 22 | Z | | | | 5.1 | 99 | Χ | 26 | Χ | Z | | | | 11.9 |
| 34 | 19 | 21 | 19 | 21 | | | 5.2 | 100 | Χ | 28 | Χ | Z | | | | 13.2 |
| 35 | 19 | FM19 | X | FM19 | | | 5.5 | | ., | 0.4 | ., | | | | | |
| 36 | 19 | FM19 | 19 | FM19 | | | 6.1 | 101 | X | 21 | X | | | | | 3.2 |
| 37 | 19 | 23 | Z | | | | 6.2 | 102 | X | FM19 | X | | | | | 3.6 |
| 38 | 19 | 24 | Z | EN440 | | | 6.9 | 103 | X | Z | X | | | | | 4.7 |
| 39 40 | 19 19 | Z Z | 19 X | FM19 Z | | | 7.1 7.6 | 104 105 | 19 19 | FM19 Z | 19 19 | | | | | 5.0 6.1 |
| 41 | 19 | Z | 19 | Z | | | 8.2 | 106 | X | 17 | X | 16 | | | | 6.7 |
| 42 | 19 | 26 | Z | | | | 9.7 | 107 | X | 19 | Z | 16A | | | | 7.4 |
| 72 | 10 | 20 | | | | | 0.1 | 108 | X | 15 | X | 16 | | | | 7.9 |
| 43 | 18 | FM19 | | | | | 3.2 | 109 | X | 18 | Z | 17 | | | | 8.1 |
| 44 | 18 | Z | | | | | 4.1 | 110 | X | 18 | 24 | Z | Х | | | 8.4 |
| 45 | 18 | 22 | Z | | | | 5.1 | 111 | Χ | 20 | Z | 21 | 23 | FM19 | 18 | 8.9 |
| 46 | 18 | 21 | 18 | 21 | | | 5.1 | 112 | Χ | 17 | Z | 17 | | | | 9.9 |
| 47 | 15 | FM19 | | | | | 5.8 | 113 | X | 15 | Z | 17 | ,- | | | 10.7 |
| 48 | 18 | 23 EM10 | <u>Z</u> | EM40 | | | 6.2 | 114 | Х | 15 | Z | 19 | 15 | | | 11.6 |
| 49 50 | <u>18</u> 17 | FM19 22 | 18 Z | FM19 | | | 6.3 | 115 | Χ | 21 | 18 | | | | | 3.9 |
| 50 51 | 18 | 24 | Z | | | | 6.9 | 115 | X | 22 | X | 1 | | | | 5.1 |
| 52 | 17 | FM19 | 19 | FM19 | | | 7.6 | 117 | X | 23 | X | | | | | 6.3 |
| 53 | 15 | 22 | Z | 1 10110 | | | 7.7 | 118 | 19 | 22 | X | 19 | | | | 6.7 |
| 54 | 17 | 23 | Z | | | | 7.7 | 119 | 19 | 23 | 19 | 1.0 | | | | 7.6 |
| 55 | 18 | Z | 18 | Z | | | 8.1 | 120 | 19 | 24 | 19 | | | | | 8.3 |
| 56 | 17 | 24 | Z | _ | | | 8.4 | 121 | X | 24 | X | 16A | | | | 9.1 |
| 57 | 17 | FM19 | 17 | FM19 | | | 9.1 | 122 | 19 | 26 | X | | | | | 10.5 |
| 58 | 18 | 26 | Z | | | | 9.7 | | | | | | | | | |
| 59 | 17 | Z | 19 | Z | | | 9.7 | 123 | 20 | 21 | 18 | | | | | 3.4 |
| 60 | 17 | 26 | Z | | | | 11.2 | 124 | 20 | Z | 20 | | | | | 3.8 |
| 61 | 17 | Z | 17 | Z | | | 11.2 | 125 | 18 | FM19 | X | 18 | | | | 5.3 |
| 62 | 20 | 21 | | | | | 1.5 | 126 | 16A | FM19 | X | 19 | | | | 6.4 |
| 63 | 20 | FM19 | | | | | 2.0 | 127 | 17 | FM19 | X 47 | 18 | | | | 6.9 |
| 64 65 | 20 | Z EM10 | 20 | EM40 | | | 3.0 | 128 | 17 | 21 | 17 | | | | | 7.6 |
| nn | 20 | FM19 | 20 | FM19 | | 1 | 3.8 | 129 | 18 | Z | 15 | | | 1 | | 8.6 |
| 66 | 20 | 22 | Z | | | | 4.0 | 130 | 17 | Z | 17 | | | | | 9.2 |

| 400 | 404 | | | | 1 | | 2.0 | 470 | EN40 | V | 7 | 1 | | | ı | 1 | 4.0 |
|-----|------|----|--------|----|--------|----|------|-----|-------|------|--------------|-----|--------|------|----|------|------------|
| 132 | 16A | | | | | | 3.2 | 179 | FM19 | X | Z | | | | | | 4.6 |
| 133 | 17 | 40 | | | | | 3.6 | 180 | Z | X | Z | | | | | | 5.6 |
| 134 | X | 16 | | | | | 4.0 | 181 | Z | 19 | Z | | | | | | 6.3 |
| 135 | 15 | | | | | | 4.7 | 182 | Z | X | 18 | Z | | | | | 6.5 |
| 136 | 12 | | | | | | 6.1 | 183 | Z | X | 1 <u>6</u> A | Z | =1110 | | | | 7.4 |
| 137 | 10 | | | | | | 7.2 | 184 | Z | X | Z | X | FM19 | | | | 8.0 |
| 138 | 11 | 14 | 9 | | | | 8.9 | 185 | Z | X | 14 | Z | _ | | | | 8.9 |
| 139 | 5 | | | | | | 9.8 | 186 | Z | 19 | Z | 19 | Z | | | | 10.3 |
| 140 | 10 | 17 | 10 | | | | 11.0 | 187 | Z | 17 | Z | X | Z | ., | | | 11.3 |
| 141 | 5 | 9 | 5 | | | | 12.3 | 188 | Z | X | Z | X | Z | X | Z | | 12.5 |
| 142 | 5 | 11 | 5 | | | | 13.4 | 189 | Z | 19 | Z | 19 | Z | 19 | Z | | 14.4 |
| | | | | | | | | | | | | | | | | | |
| 143 | FM19 | X | | | | | 2.4 | 190 | 21 | X | 21 | | | | | | 2.7 |
| 144 | FM19 | 19 | | | | | 3.1 | 191 | 21 | 19 | 21 | | | | | | 3.3 |
| 145 | Z | X | | | | | 3.4 | 192 | 22 | Х | 21 | | | | | | 4.6 |
| 146 | Z | 19 | | | | | 4.1 | 193 | 22 | 19 | 21 | | | | | | 5.3 |
| 147 | Z | X | FM19 | X | | | 5.8 | 194 | 23 | X | 21 | | | | | | 5.8 |
| 148 | Z | X | Z | X | | | 6.9 | 195 | 24 | Х | 21 | | | | | | 6.5 7.1 |
| 149 | Z | 19 | Z | 19 | | | 8.2 | 196 | 24 | 19 | 21 | | | | | | 7.1 |
| 150 | Z | Х | FM19 | 19 | FM19 | 19 | 9.5 | 197 | 24 | 22 | 23 | X | 21 | | | | 7.7 |
| 151 | Z | X | Z Z | X | Z Z | Х | 10.3 | 198 | 24 | 22 | 24 | X | 21 | | | | 8.4 |
| 152 | Z | 19 | Z | 19 | Z | 19 | 12.3 | 199 | 26 | X | 21 | | | | | | 9.3 |
| | | | | | | | | 200 | 26A | Х | 21 | | | | | | 10.0 |
| 153 | 21 | X | | | | | 2.0 | 201 | 26A | 19 | 21 | | | | | | 10.6 |
| 154 | 21 | 19 | | | | | 2.7 | 202 | 28 | 19 | 21 | | | | | | 11.2 |
| 155 | 22 | X | | | | | 3.9 | | | _ | | | | | | | |
| 156 | 22 | 19 | | | | | 4.6 | 203 | 22 | Z | ., | 0.1 | | | | | 3.2 |
| 157 | 23 | X | | | | | 5.1 | 204 | 22 | Z | X | 21 | | | | | 5.2 |
| 158 | 24 | X | | | | | 5.8 | 205 | 22 | FM19 | 19 | 21 | =1.110 | ., | | | 5.4 |
| 159 | 24 | 19 | | | | | 6.5 | 206 | 21 | FM19 | X | 21 | FM19 | Χ | 21 | FM19 | 6.1 |
| 160 | 24 | 22 | 23 | Х | | | 6.9 | 207 | FM19 | 19 | 21 | 19 | 21 | | | | 6.3 |
| 161 | 24 | 22 | 24 | Χ | | | 7.6 | 208 | 22 | FM19 | X | 21 | Χ | 21 | | | 6.8 |
| 162 | 26 | X | | | | | 8.6 | 209 | 22 | X | 22 | Z | | | | | 7.0 |
| 163 | 26A | X | | | | | 9.3 | 210 | 24 | Z | X | 21 | _ | | | | 7.0 |
| 164 | 26A | 19 | | | | | 9.9 | 211 | 22 | Z | Х | 22 | Z | | | | 7.5 |
| 165 | 28 | 19 | | | | | 10.6 | 212 | 22 | X | 22 | 21s | Z | | | | 8.0 |
| 100 | 0.4 | | E1440 | | | | 0.4 | 213 | 26 | Z | X | 21 | 0.4 | | | | 9.8 |
| 166 | 21 | 20 | FM19 | 20 | | | 3.4 | 214 | 24 | X | Z | X | 21 | | | | 10.0 |
| 167 | 21 | 20 | FM19 | 19 | | | 4.5 | 215 | 26 | Х | Z | Х | 21 | | | | 12.8 |
| 168 | FM19 | 19 | 21 | 19 | | | 5.6 | 040 | EN40 | 00 | 7 | | | | | | 2.2 |
| 169 | 22 | X | FM19 | X | | | 6.3 | 216 | FM19s | 22 | Z | | | | | | 3.3 |
| 170 | 22 | X | Z | X | | | 7.3 | 217 | FM19s | 24 | 7 | 004 | 00 | | | | 4.7 |
| 171 | 23 | X | Z | X | | | 8.5 | 218 | 22s | 22A | Z | 22A | 22 | | | | 5.7 |
| 172 | 24 | X | Z | X | | | 9.2 | 219 | FM19s | 22A | Z | 22A | 22 | | 1 | | 5.9 |
| 173 | 24 | 19 | Z | X | | | 9.8 | 220 | FM19s | 26 | - | 004 | - | 00.4 | 00 | | 7.5 |
| 174 | 26 | X | FM19 | X | | | 11.0 | 221 | 22s | 22A | Z | 22A | Z | 22A | 22 | | 7.8 |
| 175 | 26 | X | Z | X | | | 12.0 | 222 | FM19s | 26A | | | | | | | 8.1 |
| 176 | 26A | X | Z | Х | | | 12.7 | 223 | FM19s | 28 | 00 | 00 | | | | | 8.8 |
| 477 | ENAC | V | EN440 | | | | 2.5 | 224 | FM19s | 24 | 22 | 26 | | | | | 9.3 |
| 177 | FM19 | X | FM19 | | | | 3.5 | 225 | FM19s | 28 | 22 | 24 | | | | | 10.6 |
| 178 | FM19 | 19 | FM19 | | | | 4.1 | 226 | FM19s | 26 | 22 | 26 | | | 1 | | 12.1 |

Navigation Mark Descriptions:

"A" CRA YELLOW or ORANGE Inflatable, South of the middle of Harbor Island "X" CRA YELLOW or ORANGE Inflatable, South of the west end of Harbor Island

"Z" CRA YELLOW or ORANGE Inflatable, Southeast of the Embarcadero, near Star of India

FM19 Cement Fleet Mooring Buoy, SSE of the east end of Harbor Island

Navigation Buoys - (refer to NOAA Chart 18773):

| 5 | SD 5, green channel buoy | 16A | SD 16A, red channel buoy | 23 | SD 23, green channel buoy |
|----|---------------------------|-----|---------------------------|-----|---------------------------|
| 9 | SD 9, green channel buoy | 17 | SD 17, green channel buoy | 24 | SD 24, red channel buoy |
| 10 | SD 10, red channel buoy | 18 | SD 18, red channel buoy | 26 | SD 26, red channel buoy |
| 11 | SD 11, green channel buoy | 19 | SD 19, green channel buoy | 26A | SD 26A, red channel buoy |
| 12 | SD 12, red channel buoy | 20 | SD 20, red channel buoy | 28 | SD 28, red channel buoy |
| 14 | SD 14, red channel buoy | 21 | SD 21, green channel buoy | 30 | SD 30, red channel buoy |
| 15 | SD 15, green channel buoy | 22 | SD 22, red channel buoy | | |
| 16 | SD 16, red channel buoy | 22A | SD 22A, red channel buoy | | |

CRA Course Chart, Rev. 3/2011