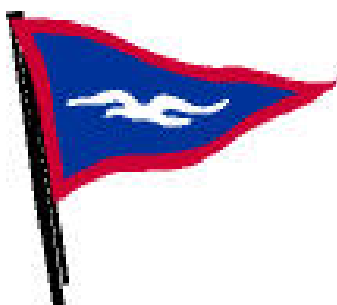


HERRINGTON HARBOUR SAILING ASSOCIATION



HHSA COURSE BOOK 2019

Approved by the Board of Directors, Herrington Harbour Sailing Association, February 2019



Table of Contents

Thumbnail Course Summary	2
North Strong Wind	3
North Light Wind	3
Northeast Strong Wind.....	4
Northeast Light Wind.....	5
East Strong Wind	5
East Light Wind	5
Southeast Strong Wind	6
Southeast Light Wind	6
South Strong Wind	7
South Light Wind	8
Southwest Strong Wind.....	9
Southwest Light Wind.....	9
West Strong Wind.....	10
West Light Wind.....	10
Northwest Strong Wind.....	11
Northwest Light Wind.....	11
Very Light, Variable Wind	12
Variable Very Light Wind	12
Sharps Island Race	13
Bloody Point Race	14
Poplar Island Race	15
Windward/Leeward Courses.....	16
Alternative Frostbite Courses.....	17
Mark Information.....	20
Chart of HHSA Marks.....	21



Note:

The course diagrams and thumbnail summaries are provided for convenience. If there are discrepancies between the course diagrams, alpha-numeric course descriptions (e.g., 83A(P)→A(P)), the Text Course Summary, or the Thumbnail Course Summary, then the alpha-numeric course descriptions associated with each course diagram shall take precedence. Furthermore, if there is a discrepancy between the Course Book and the event Sailing Instructions, the Sailing Instructions shall take precedence.



Text Course Summary

Course A - North Strong Wind

Long Course: (7.2 nm)

Start → B(S) → 83A(S) → 81A(S) → G1(P) → A(P)

Short Course: (5.3 nm)

Start → B(S) → 81A(S) → G1(P) → A(P)

Course B- North Light Wind

Long Course: (4.0 nm)

Start → B(S) → C(S) → G1(S) → A(P)

Short Course: (3.1 nm)

Start → B(S) → G1(S) → A(P)

Course C - Northeast Strong Wind

Long Course: (7.7 nm)

Start → 83A(P) → A(P) → C(P) → A(P)

Short Course: (4.6 nm)

Start → 83A(P) → A(P)

Course D - Northeast Light Wind

Long Course: (6.2 nm)

Start → C(P) → A(P) → C(P) → A(P)

Short Course: (3.1 nm)

Start → C(P) → A(P)

Course E - East Strong Wind

Long Course: (8.0 nm)

Start → G1(P) → C(P) → B(P) → A(P) → G1(P) → C(P) → B(P) → A(P)

Short Course: (5.4 nm)

Start → G1(P) → 83A(P) → B(P) → A(P)

Course F - East Light Wind

Long Course: (4.0 nm)

Start → G1(P) → C(P) → B(P) → A(P)

Short Course: (3.0 nm)

Start → G1(P) → B(P) → A(P)

Course G - Southeast Strong Wind

Long Course: (9.1 nm)

Start → 81A(P) → B(P) → 81A(P) → G1(P) → A(P)

Short Course: (6.6 nm)

Start → 81A(P) → G1(P) → 81A(P) → G1(P) → A(P)

Course H - Southeast Light Wind

Long Course: (5.5 nm)

Start → 81A(P) → B(P) → A(P)

Short Course: (3.2 nm)

Start → G1(P) → B(P) → A(P)

Course I - South Strong Wind

Long Course: (7.5 nm)

Start → G1(P) → 81A(P) → 83A(P) → G1(S) → A(P)

Short Course: (5.7 nm)

Start → G1(P) → 83A(P) → G1(S) → A(P)

Course J - South Light Wind

Long Course: (5.5 nm)

Start → 81A(P) → C(P) → A(P)

Short Course: (3.2 nm)

Start → G1(P) → C(P) → A(P)

Course K - Southwest Strong Wind

Long Course: (7.7 nm)

Start → 83A(P) → A(P) → C(P) → A(P)

Short Course: (4.6 nm)

Start → 83A(P) → A(P)

Course L - Southwest Light Wind

Long Course: (6.6 nm)

Start → A(P) → C(P) → A(P) → G1(P) → A(P)

Short Course: (3.4 nm)

Start → A(P) → G1(P) → A(P)

Course M - West Strong Wind

Long Course: (8.0 nm)

Start → G1(P) → C(P) → B(P) → A(P) → G1(P) → C(P) → B(P) → A(P)

Short Course: (5.4 nm)

Start → G1(P) → 83A(P) → B(P) → A(P)

Course N - West Light Wind

Long Course: (4.9 nm)

Start → A(P) → 81A(P) → G1(P) → A(P)

Short Course: (2.8 nm)

Start → A(P) → G1(P) → A(P)

Course O - Northwest Strong Wind

Long Course: (7.3 nm)

Start → B(P) → 81A(P) → B(P) → G1(P) → B(P) → A(P)

Short Course: (5.2 nm)

Start → B(P) → G1(P) → C(P) → B(P) → A(P)

Course P - Northwest Light Wind

Long Course: (5.6 nm)

Start → B(S) → 81A(S) → A(P)

Short Course: (3.3 nm)

Start → B(S) → G1(S) → A(P)

Course Q - Very Light, Variable Wind

Long Course:

Start → B(P) → A(P) → B(P) → A(P)

Short Course:

Start → B(P) → A(P)

Course R - Variable Very Light Wind

Long Course:

Start → G1(P) → A(P) → G1(P) → A(P)

Short Course:

Start → G1(P) → A(P)

Course U - Sharps Island Race

Long Course

Start → 81A(S) → Sharps Light (P) → G1(P) → A(P)

Short Course

Start → 81A(S) → 82 (P) → G1(P) → A(P)

Course V - Bloody Point Race

Long Course

Start → E.B.1(P) → 83A(P) → A(P)

Short Course

Start → 84A(P) → 83A(P) → A(P)

Course W - Poplar Island Race

Long Course

Start → 81A(P) → 84(P) → 84A(P) → C(P) → A(P)

Short Course

Start → 81A(P) → 83(P) → C (P) → A(P)

Course X – Great Bay Race

Long Course

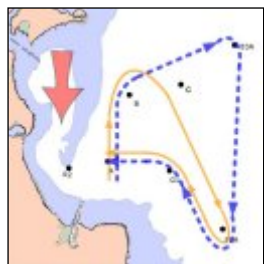
Start → 84A(S) → 82(S) → 83(P) → A(P)

Short Course

Start → 83(S) → 82(S) → A(P)



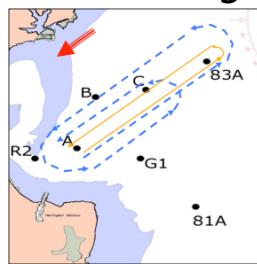
Thumbnail Course Summary



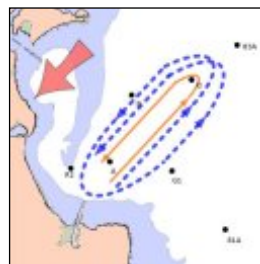
A



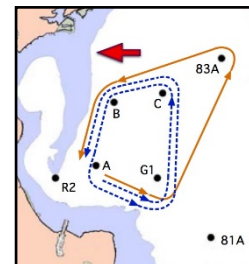
B



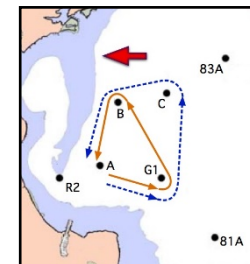
C



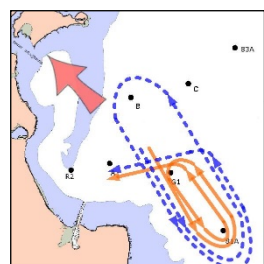
D



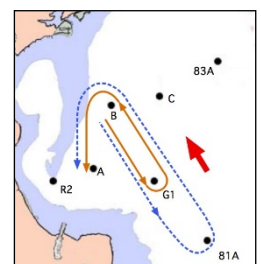
E



F



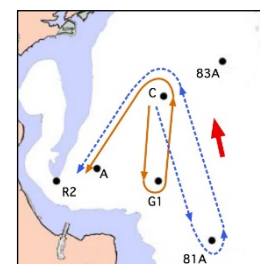
G



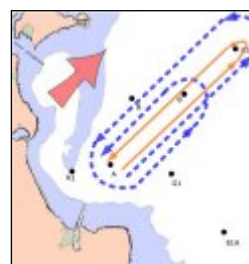
H



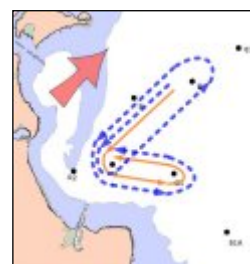
I



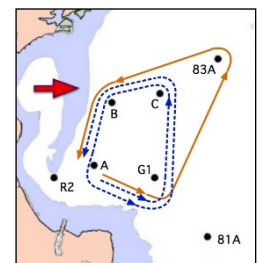
J



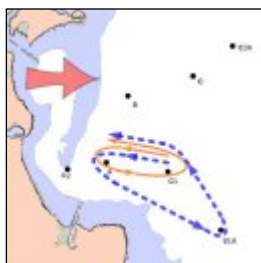
K



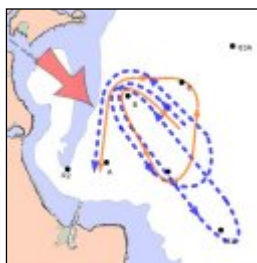
L



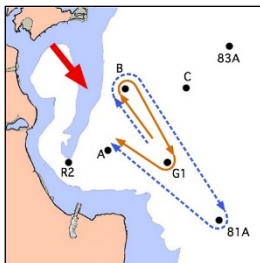
M



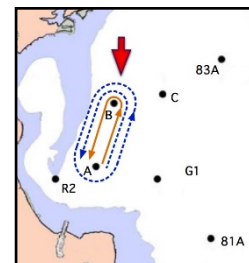
N



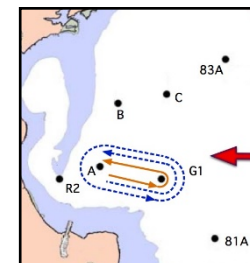
O



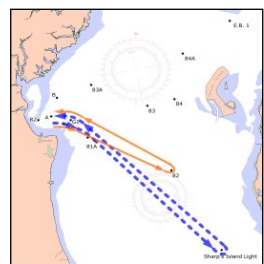
P



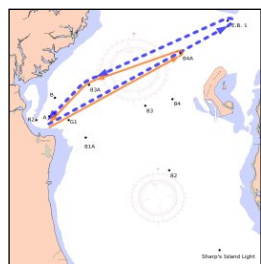
Q



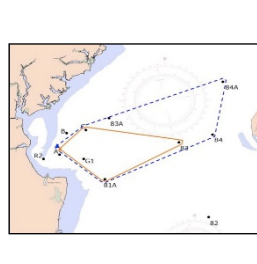
R



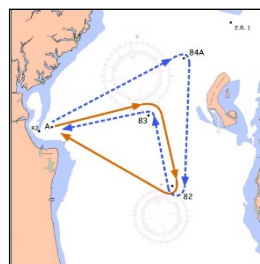
U



V



W

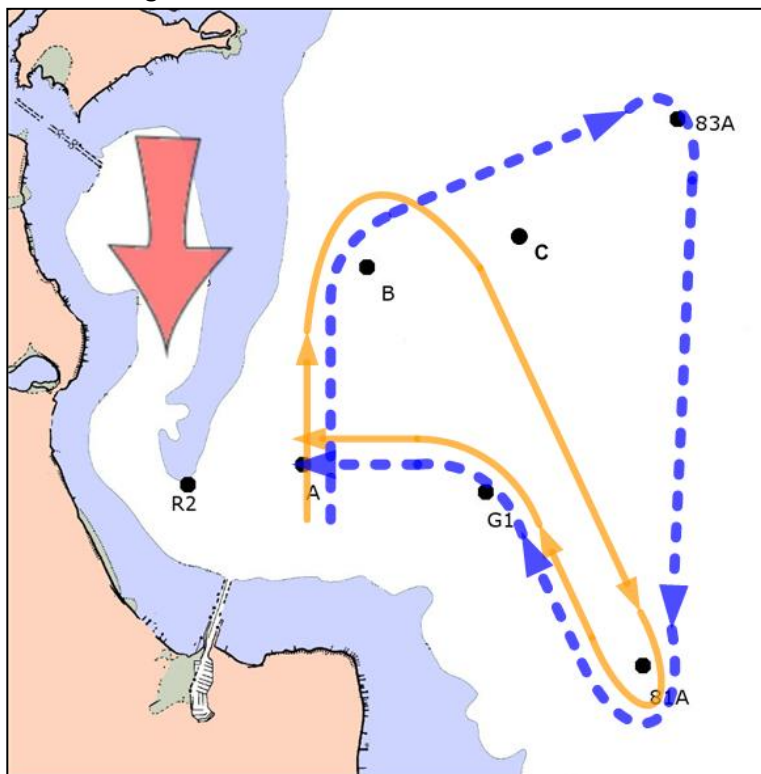


X



Course A

North Strong Wind



Long Course: (7.2 nm)

Start → B(S) → 83A(S) → 81A(S) → G1(P) → A(P)

Short Course: (5.3 nm)

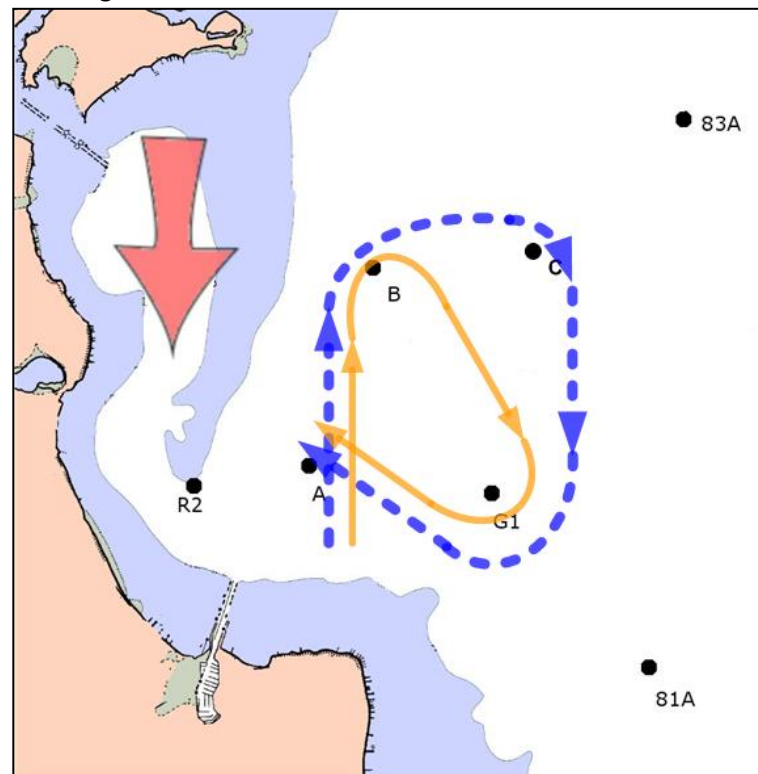
Start → B(S) → 81A(S) → G1(P) → A(P)

Notes:

- Set starting line with inflatable mark directly downwind from "B" approximately 0.9 nm.
- Courses can be shortened to "G1".
- Reset finish line square to final leg of course.

Course B

North Light Wind



Long Course: (4.0 nm)

Start → B(S) → C(S) → G1(S) → A(P)

Short Course: (3.1 nm)

Start → B(S) → G1(S) → A(P)

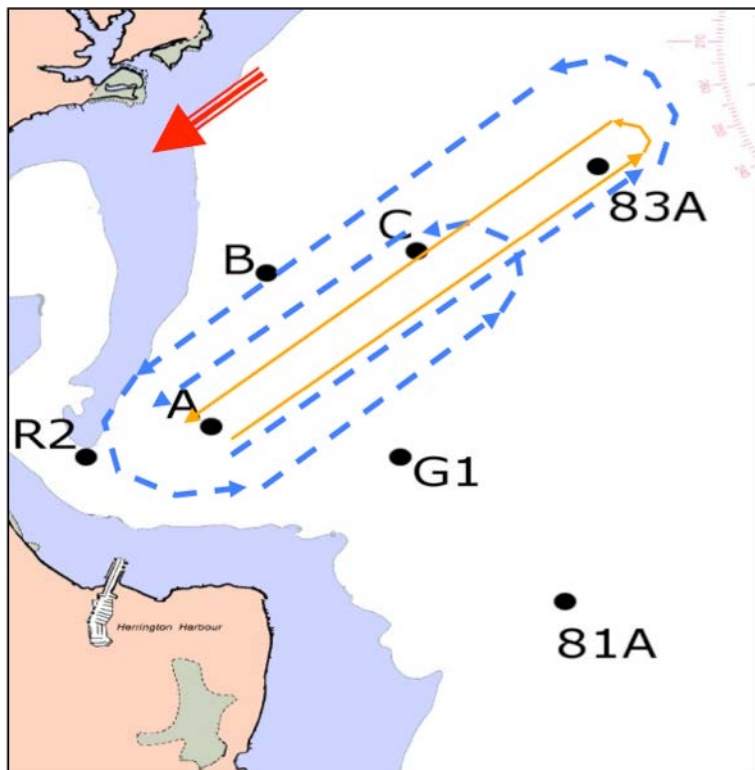
Notes:

- Set starting line with inflatable mark directly downwind from "B" approximately 0.9 nm.
- Reset finish line square to final leg of course.



Course C

Northeast Strong Wind



Long Course: (7.7 nm)

Start → 83A(P) → A(P) → C(P) → A(P)

Short Course: (4.6 nm)

Start → 83A(P) → A(P)

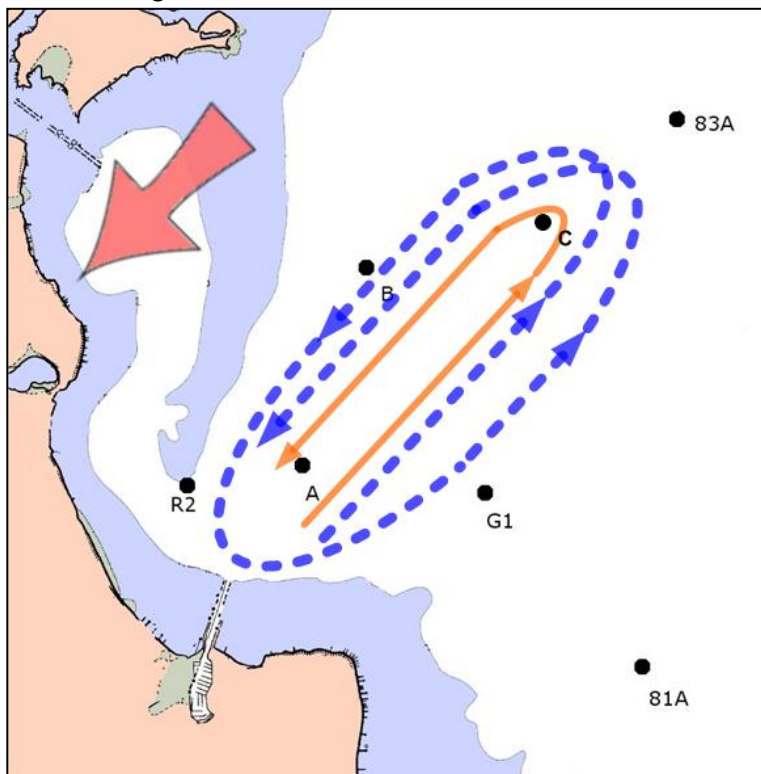
Notes:

- Set starting line with inflatable mark directly downwind from "83A" in the vicinity of "A".
- Plan on moving to set finish line at "A" after the starts.



Course D

Northeast Light Wind



Long Course: (6.2 nm)

Start → C(P) → A(P) → C(P) → A(P)

Short Course: (3.1 nm)

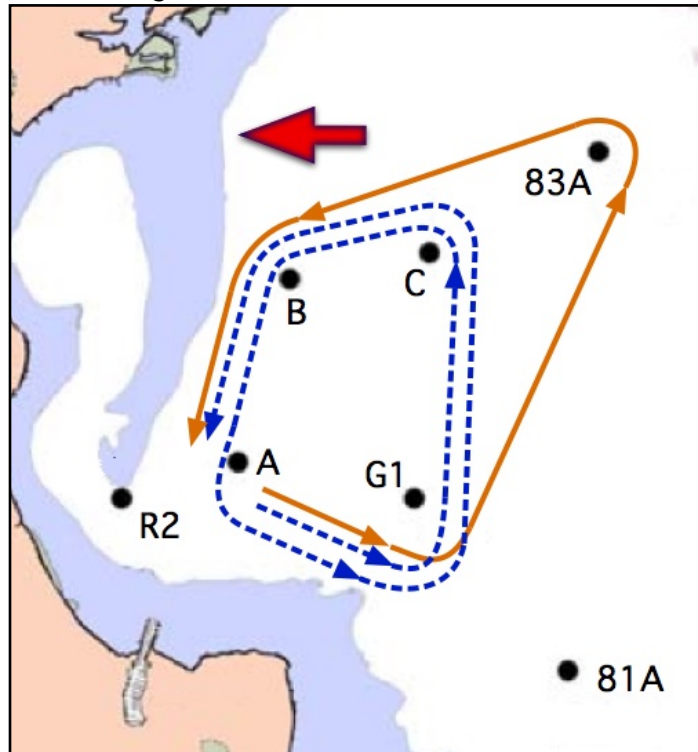
Start → C(P) → A(P)

Notes:

- Use inflatable mark for starting line directly downwind from "C"; leave sufficient room for maneuvering between start line and Long Bar.
- Plan on moving to set finish line at "A" after the starts.

Course E

East Strong Wind



Long Course: (8.0 nm)

Start → G1(P) → C(P) → B(P) → A(P) → G1(P) → C(P) → B(P) → A(P)

Short Course: (5.4 nm)

Start → G1(P) → 83A(P) → B(P) → A(P)

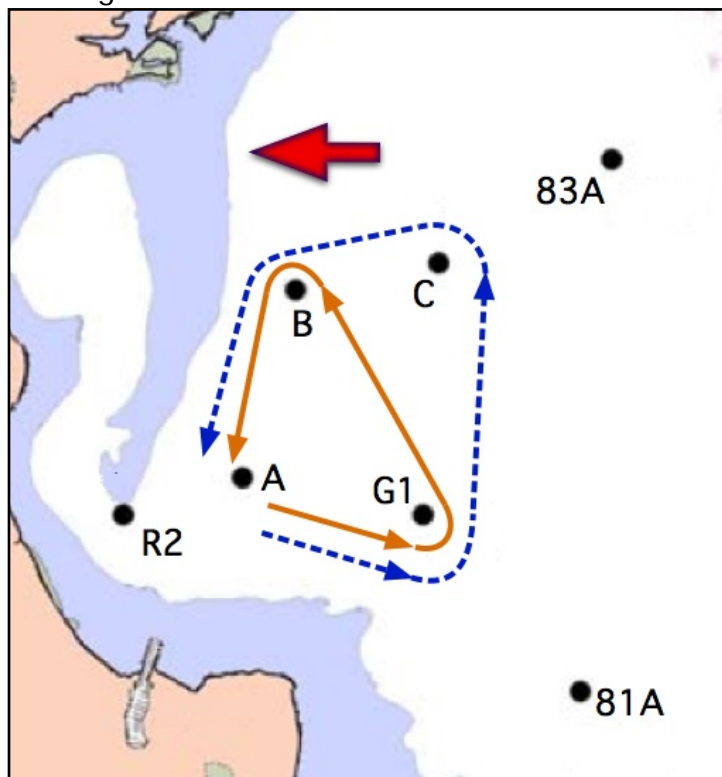
Notes:

- Use inflatable mark for starting line directly downwind from "G1" in the vicinity of "A".
- Reset finish line square to final leg of course.



Course F

East Light Wind



Long Course: (4.0 nm)

Start → G1(P) → C(P) → B(P) → A(P)

Short Course: (3.0 nm)

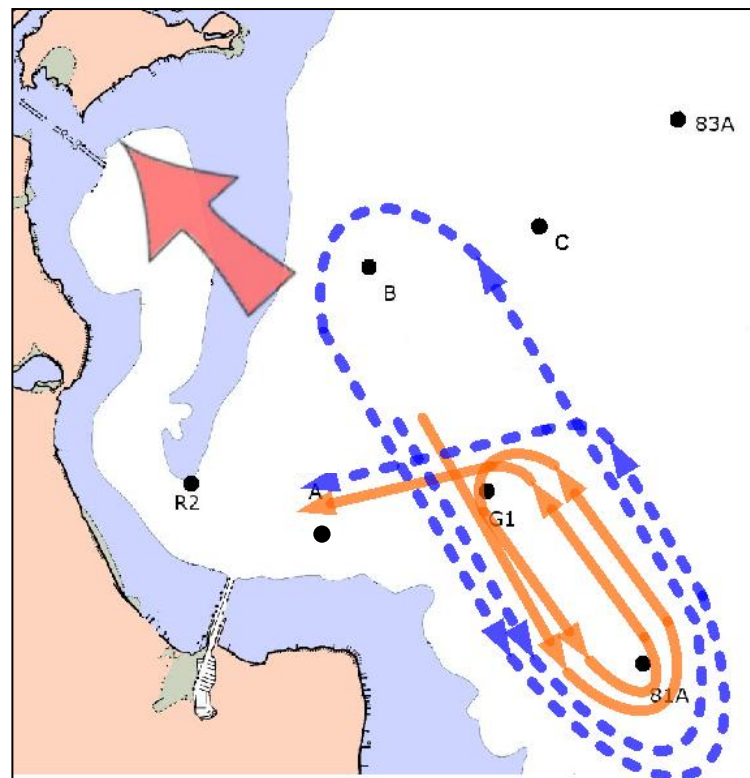
Start → G1(P) → B(P) → A(P)

Notes:

- Use inflatable mark for starting line directly downwind from "G1" in the vicinity of "A".
- Reset finish line square to final leg of course.

Course G

Southeast Strong Wind



Long Course: (9.1 nm)

Start → 81A(P) → B(P) → 81A(P) → G1(P) → A(P)

Short Course: (6.6 nm)

Start → 81A(P) → G1(P) → 81A(P) → G1(P) → A(P)

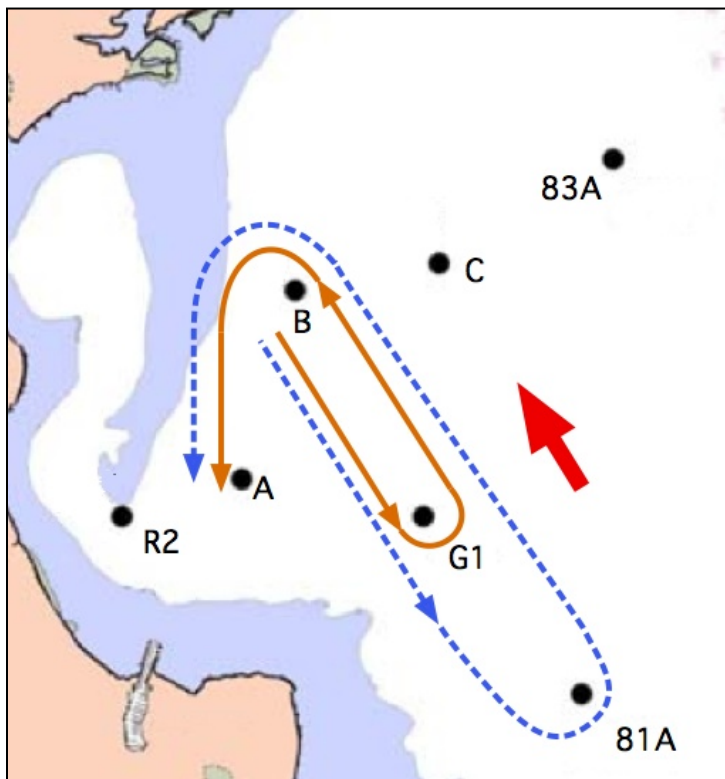
Notes:

- Use inflatable mark for starting line directly downwind from "81A" in the vicinity of "G1".
- Starting line may be moved upwind to reduce the length of the windward leg as conditions warrant.
- Courses may be shortened to "G1".



Course H

- Courses may be shortened to "B".



Southeast Light Wind

Long Course: (5.5 nm)

Start → 81A(P) → B(P) → A(P)

Short Course: (3.2 nm)

Start → G1(P) → B(P) → A(P)

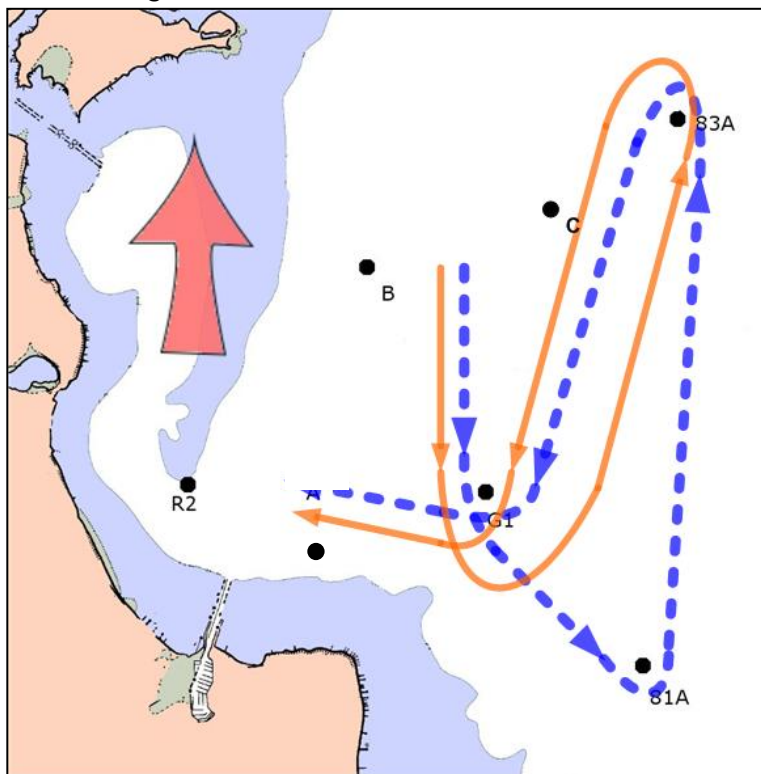
Notes:

- Set starting line in the vicinity of "B", downwind of the first mark.
- Set line far enough on course side of "B" to provide deeper draft boats room to maneuver.



Course I

South Strong Wind



Long Course: (7.5 nm)

Start → G1(P) → 81A(P) → 83A(P) → G1(S) → A(P)

Short Course: (5.7 nm)

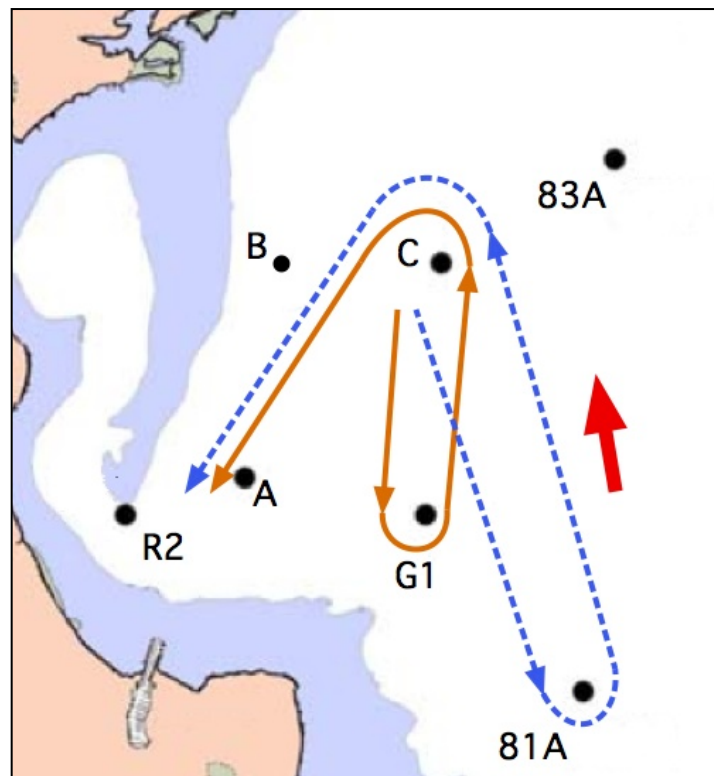
Start → G1(P) → 83A(P) → G1(S) → A(P)

Notes:

- Set tetrahedron about 1 nm downwind from "G1".
- Both courses can be shortened to "G1".
- Alternatively, use Course A w/ downwind start.

Course J

South Light Wind



Long Course: (5.5 nm)

Start → 81A(P) → C(P) → A(P)

Short Course: (3.8 nm)

Start → G1(P) → C(P) → A(P)

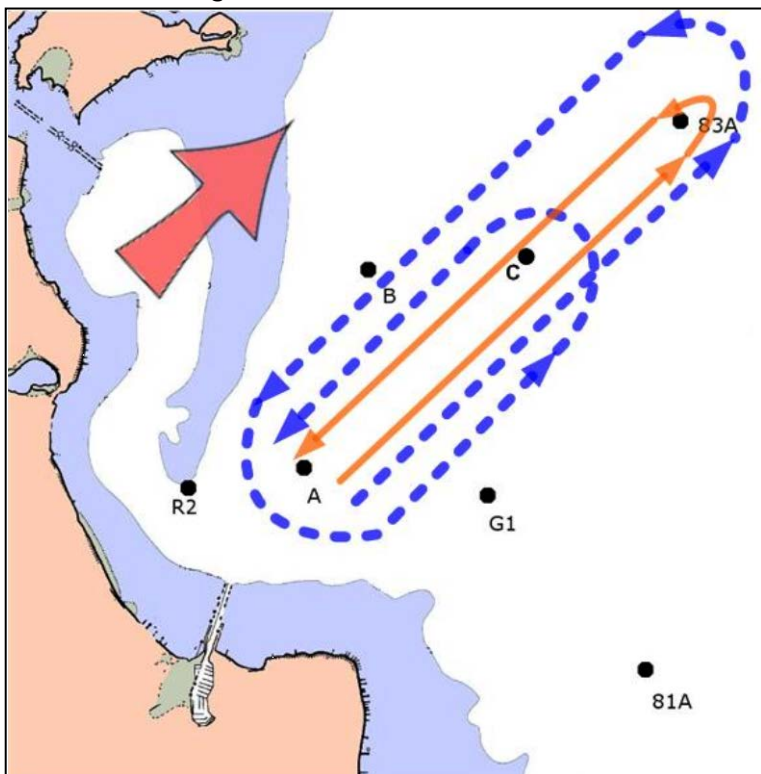
Notes:

- Set tetrahedron in vicinity of "C" downwind from "81A".
- Select a long enough course to allow repositioning for finish.



Course K

Southwest Strong Wind



Long Course: (7.7 nm)

Start → 83A(P) → A(P) → C(P) → A(P)

Short Course: (4.6 nm)

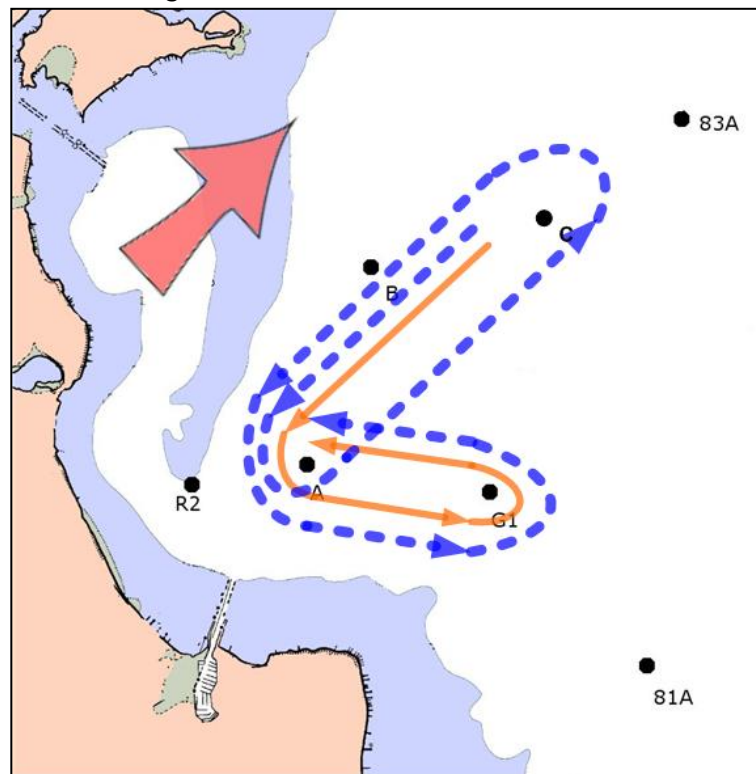
Start → 83A(P) → A(P)

Notes:

- Downwind start!
- Set starting line with inflatable mark directly upwind from "83A" in the vicinity of "A".

Course L

Southwest Light Wind



Long Course: (6.6 nm)

Start → A(P) → C(P) → A(P) → G1(P) → A(P)

Short Course: (3.4 nm)

Start → A(P) → G1(P) → A(P)

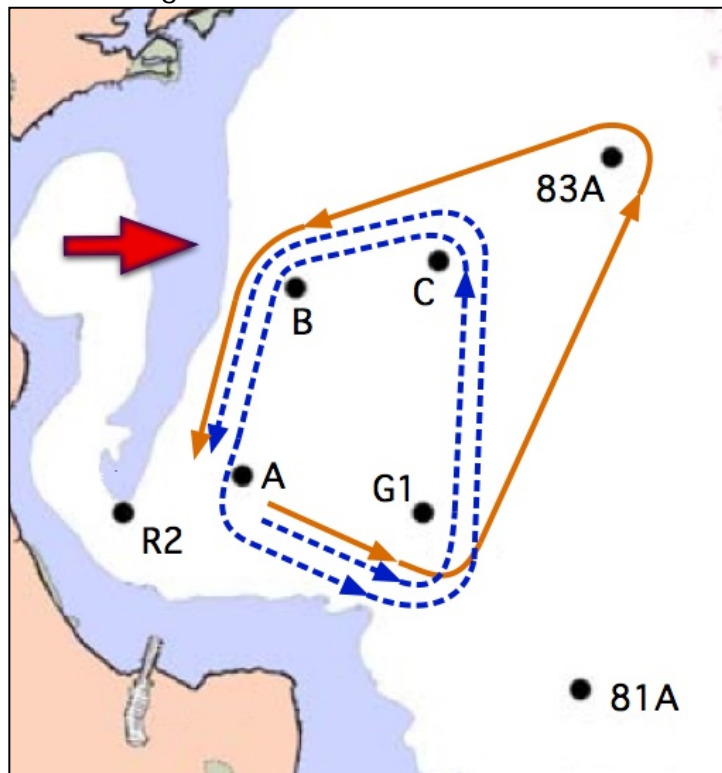
Notes:

- Set starting line with inflatable mark directly downwind from "A" in the vicinity of "C".



Course M

West Strong Wind



Long Course: (8.0 nm)

Start → G1(P) → C(P) → B(P) → A(P) → G1(P) → C(P) → B(P) → A(P)

Short Course: (5.4 nm)

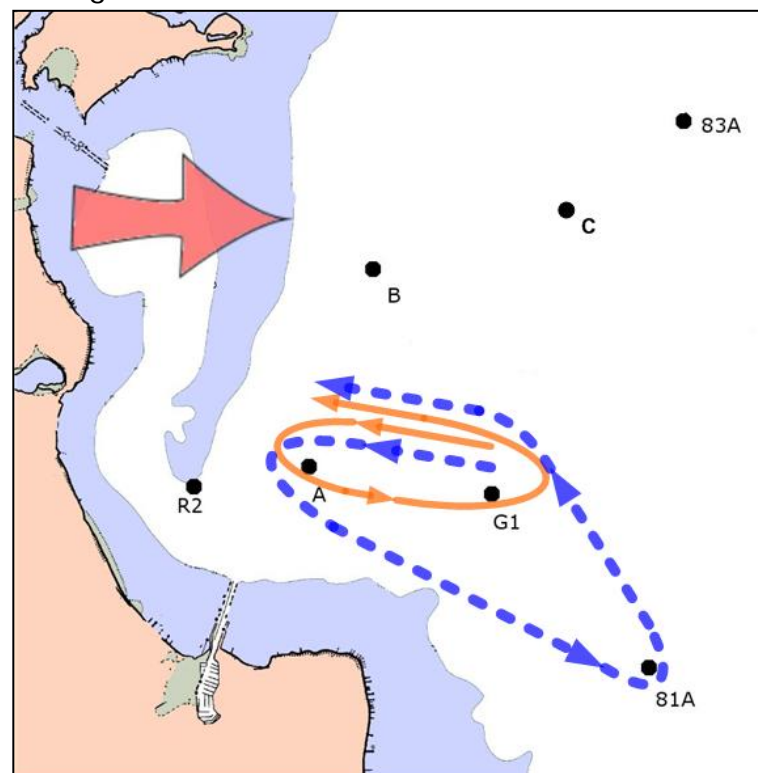
Start → G1(P) → 83A(P) → B(P) → A(P)

Notes:

- Downwind Start!
- Set starting line with inflatable mark directly upwind from "G1", in the vicinity of "A".
- Both courses may be shortened to "B".

Course N

West Light Wind



Long Course: (4.9nm)

Start → A(P) → 81A(P) → G1(P) → A(P)

Short Course: (2.8 nm)

Start → A(P) → G1(P) → A(P)

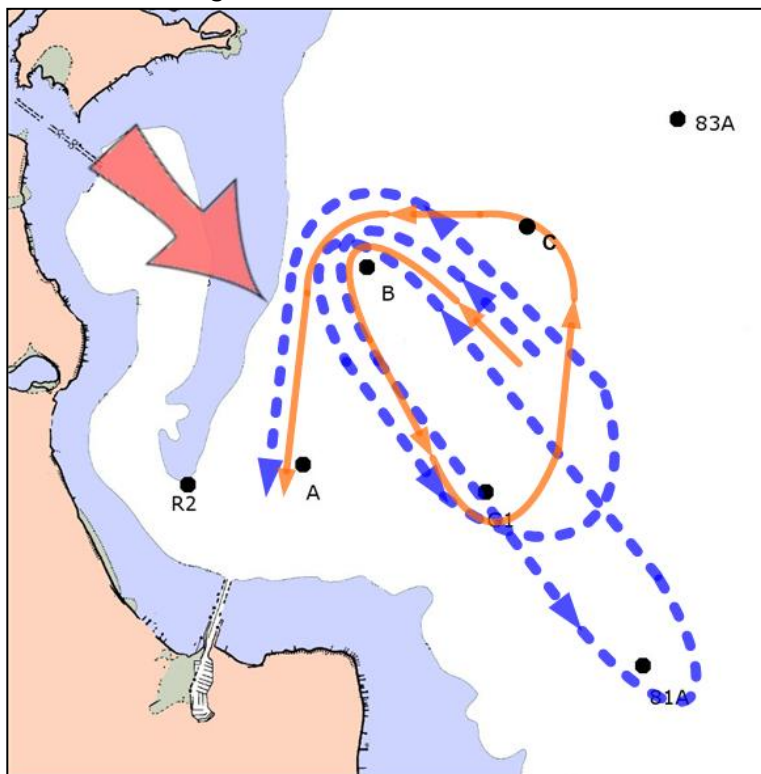
Notes:

- Set starting line with inflatable mark directly downwind from "A".



Course O

Northwest Strong Wind



Long Course: (7.3 nm)

Start → B(P) → 81A(P) → B(P) → G1(P) → B(P) → A(P)

Short Course: (5.2 nm)

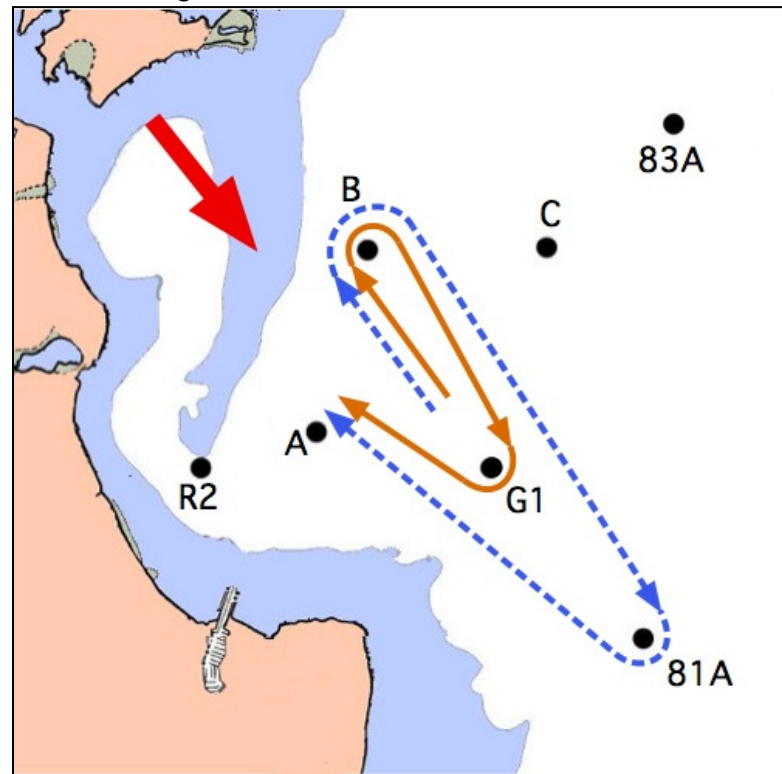
Start → B(P) → G1(P) → C(P) → B(P) → A(P)

Notes:

- Set starting line with inflatable mark directly downwind from "B", north and slightly east of "G1".
- Both courses may be shortened to "B".

Course P

Northwest Light Wind



Long Course: (5.6 nm)

Start → B(S) → 81A(S) → A(P)

Short Course: (3.3 nm)

Start → B(S) → G1(S) → A(P)

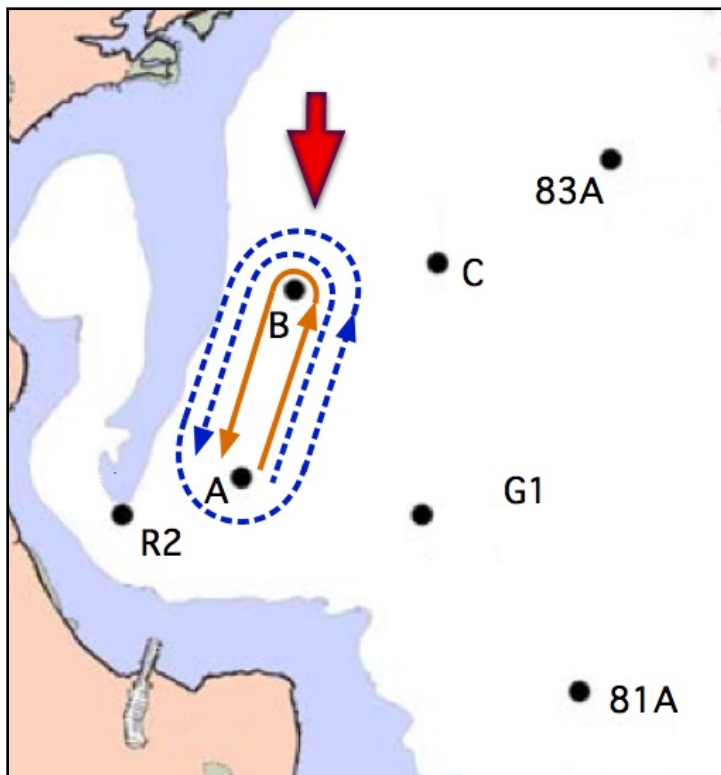
Notes:

- Set starting line with inflatable mark directly downwind from "B", north and slightly west of "G1".
- Either course can be shortened, but only if both fleets use the same course.



Course Q

Very Light, Variable Wind



Long Course:

Start → B(P) → A(P) → B(P) → A(P)

Short Course:

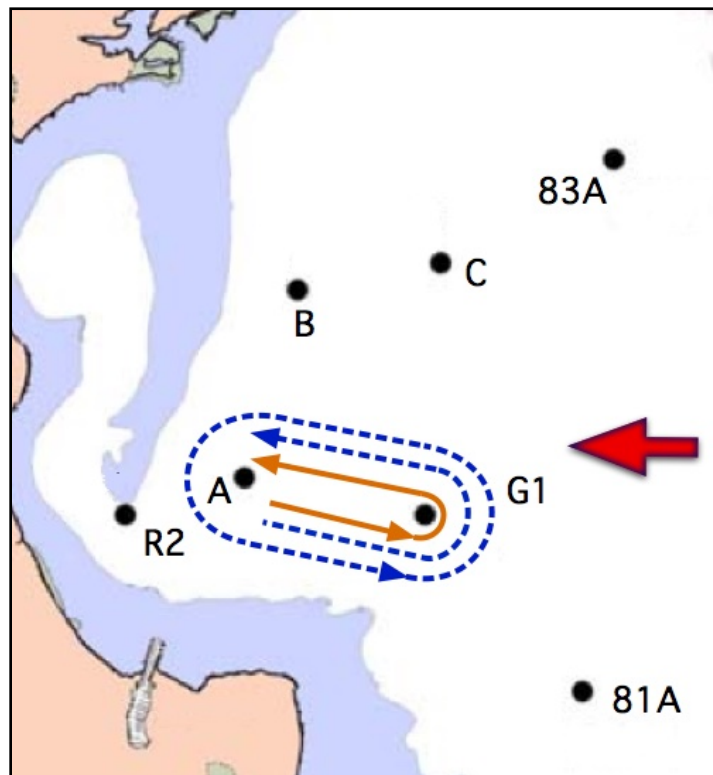
Start → B(P) → A(P)

Notes:

- Set starting line close square to the median wind not more that 2/3rd of the distance from "A" to "B".
- In extremely light conditions, consider postponing ("Answering Pennant" flag) until conditions improve.

Course R

Variable Very Light Wind



Long Course:

Start → G1(P) → A(P) → G1(P) → A(P)

Short Course:

Start → G1(P) → A(P)

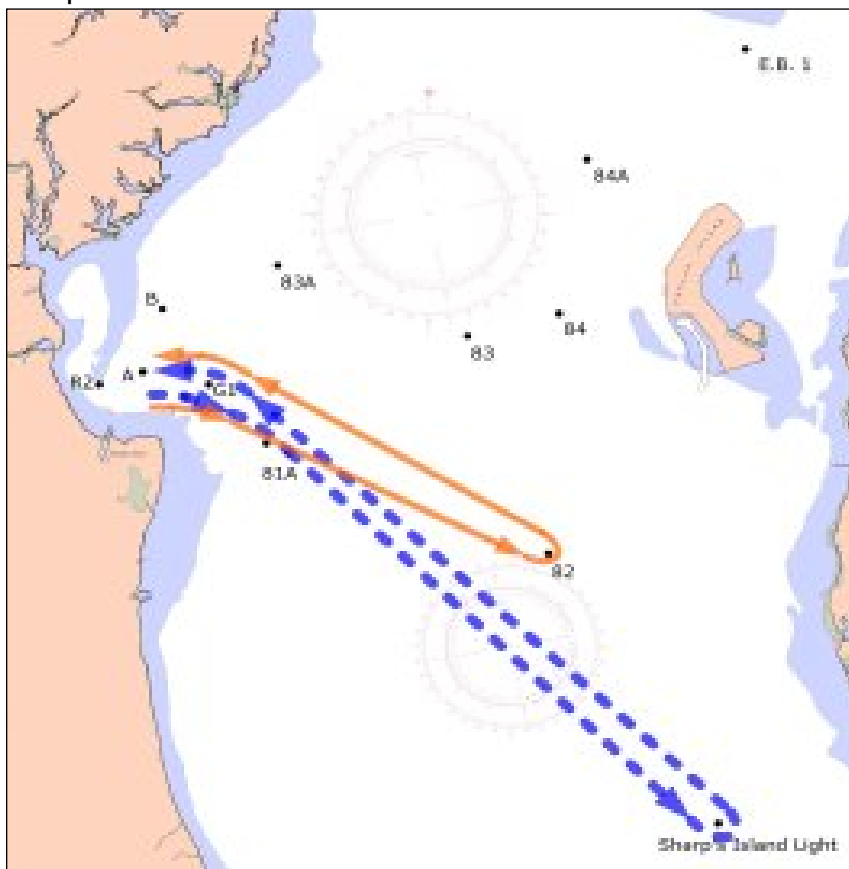
Notes:

- Set starting line close square to the median wind not more that 2/3rd of the distance from "A" to "G1".
- In extremely light conditions, consider postponing ("Answering Pennant" flag) until conditions improve.



Course U

Sharps Island Race



Notes:

- Set starting leg using "A" as pin end and making line perpendicular to first leg.
- If necessary, both courses may be shortened to "G1".

Long Course: (22.5nm)

Start → 81A(S) → Sharps Island Light (P) → G1(P) → A(P)

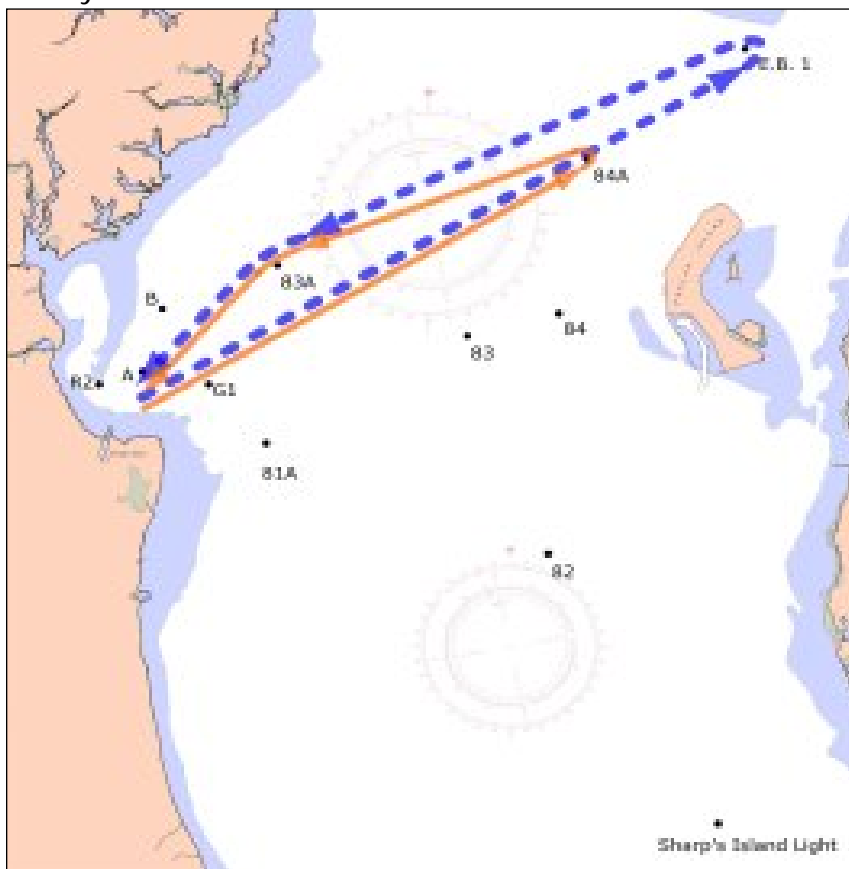
Short Course: (13.5 nm)

Start → 81A (S) → 82 (P) → G1(P) → A(P)



Course V

Bloody Point Race



Long Course: (20.6 nm)

Start → E.B. 1 (P) → 83A (P) → A(P)

Short Course: (14.9 nm)

Start → 84A (P) → 83A (P) → A(P)

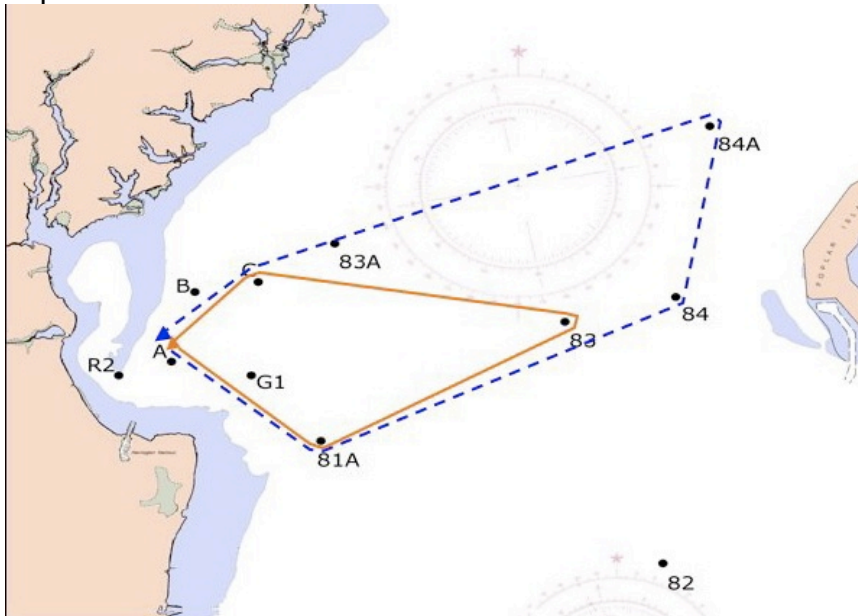
Notes:

- Set starting leg using "A" as pin end and making line perpendicular to first leg.
- Courses may both be shortened to "83A".



Course W

Poplar Island Race



Long Course: (16.2 nm)

Start → 81A(P) → 84 (P) → 84A (P) → C(P) → A(P)

Short Course: (10.5 nm)

Start → 81A(P) → 83 (P) → C(P) → A(P)

Notes:

- Set starting leg using "A" as pin end and making line perpendicular to first leg.
- "83A" is not a mark of the course.



Course X

Great Bay Race



Long Course: (19.43 nm)

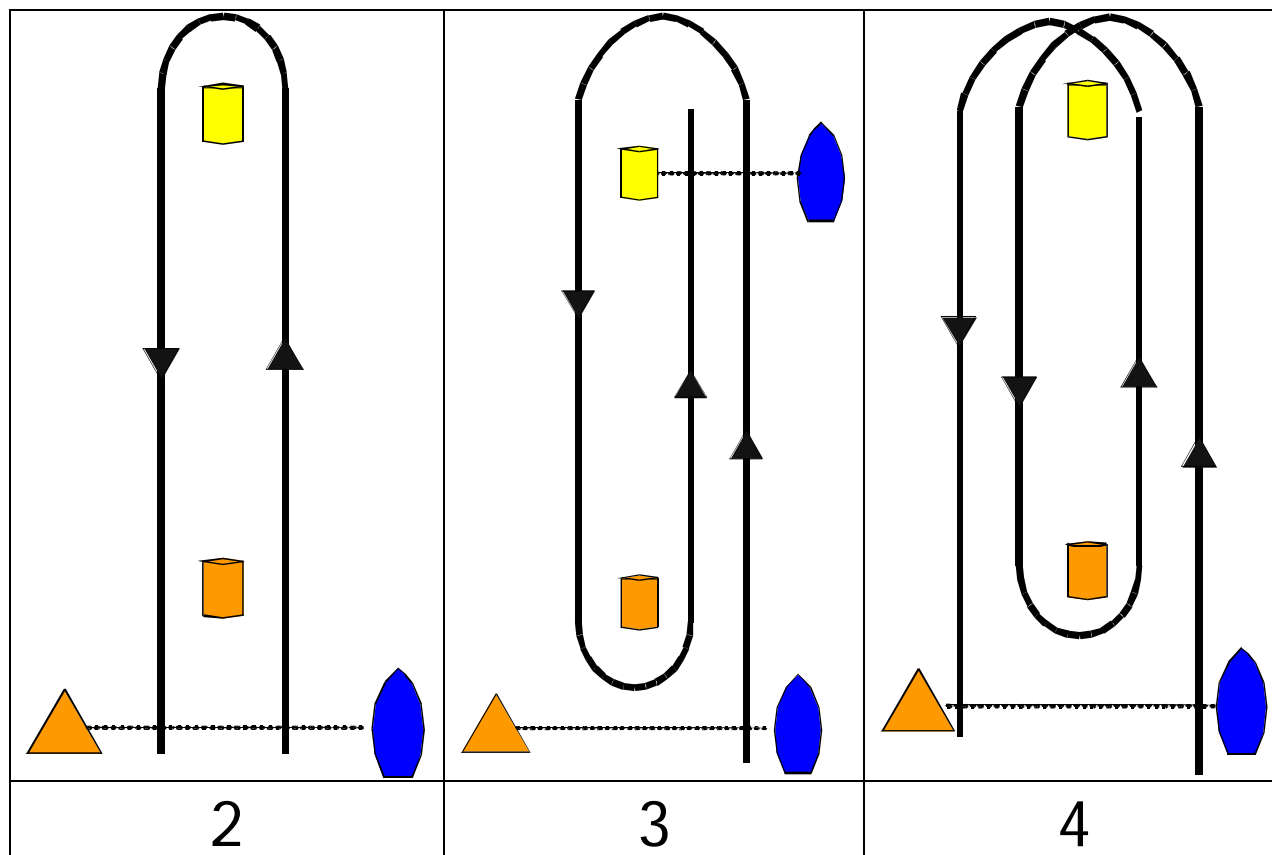
Start → 84A(S) → 82(S) → 83(P) → A(P)

Short Course: (13.2 nm)

Start → 83(S) → 82(S) → A(P)



Windward/Leeward Courses

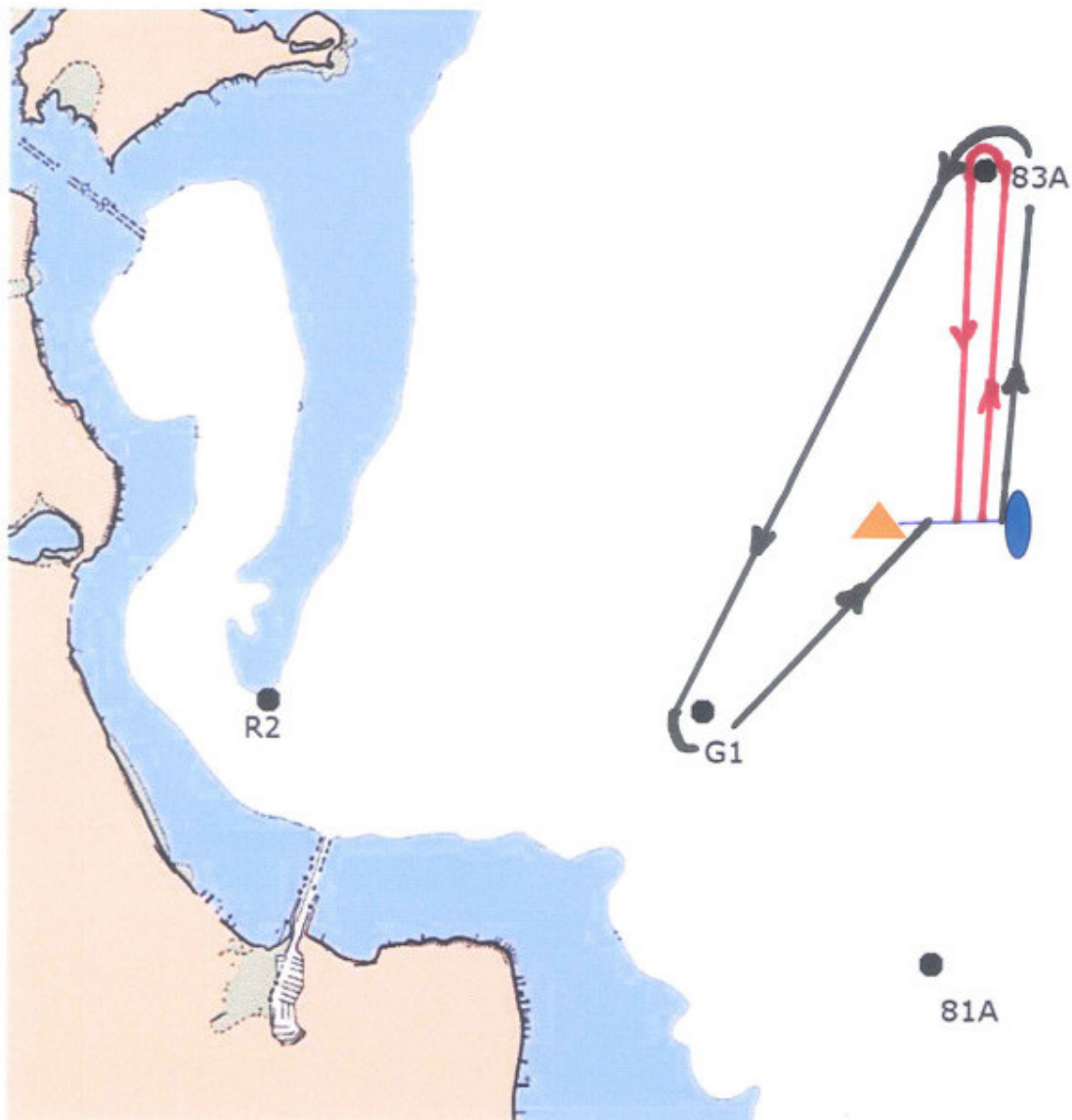


Notes:

- Use of a second boat as a mark boat is required for windward/leeward courses.
- Except in extremely light wind conditions, do not set legs shorter than 1/2 nm in length.
- Ideally, use a white board to indicate compass direction and distance to the windward mark on committee boat prior to start.



Frostbite Course A – North Wind



Short Course:

Start -> 83A -> Finish

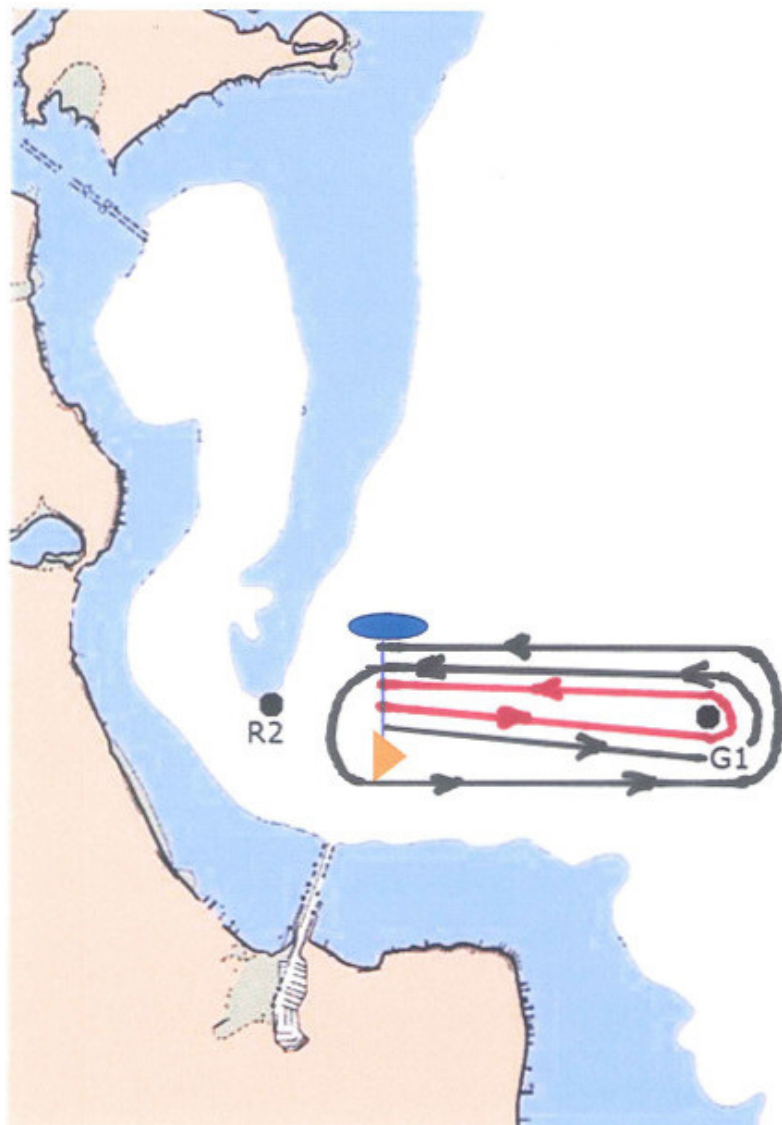
Long Course:

Start -> 83A -> G1 -> Finish

Note: All rounding marks to Port, finish between RC and inflatable mark.



Frostbite Course B – East & West Wind



● 83A

Short Course:

Start -> G1 -> Finish

Long Course:

Start -> G1 -> Start -> G1 -> Finish

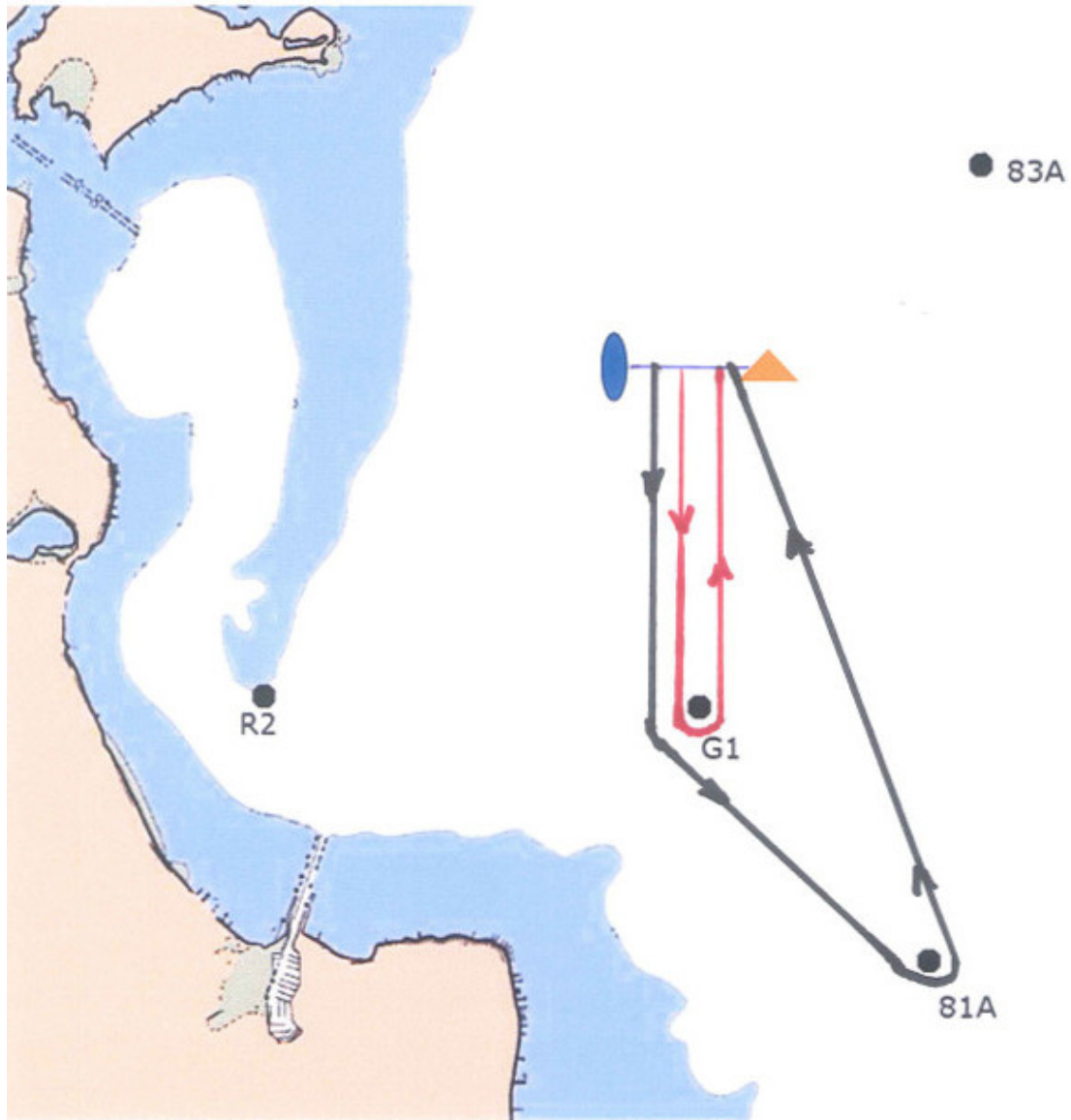
Note: All marks to Port.

●

81A



Frostbite Course C – South Wind



Short Course:

Start -> G1 -> Finish

Long Course:

Start -> G1 -> 81A -> Finish

Note: Finish between RC and inflatable mark. For Long Course pass or round G1 to Port and round 81A to Port.



Mark Information

Marks designated on signboards by a letter in **red** shall be left to port. Marks designated by a letter in **green** shall be left to starboard. One lap shall be sailed unless the course designation is followed by a number which specifies the number of laps to be sailed.

Mark*	Latitude (N)	Longitude (W)	HHSA	CBYRA
Eastern Bay 1 (Green)	38° 49.133'	076° 22.126'	L	L
Herring Bay 2 (Red)	38° 44.526'	076° 32.698'	Y	None
Herring Bay 1 (Green)	38° 44.433'	076° 30.838'	W	None
79 A (Green)	38° 38.654'	076° 29.188'	N	None
80 A (Red)	38° 39.626'	076° 22.987'	X	None
81A (Green)	38° 43.576'	076° 29.939'	I	None
82 (Red)	38° 42.070'	076° 25.334'	T	None
83 (Green)	38° 45.142'	076° 26.642'	K	K
83A (Green)	38° 46.134'	076° 29.701'	O	None
84 (Red)	38° 45.466'	076° 25.111'	R	R
84A (Red)	38° 47.600'	076° 24.693'	Q	Q
85A (Green)	38° 49.954'	076° 27.734'	M	None
86 (Red)	38° 51.996'	076° 23.541'	E	E
Sharps Island Light	38° 38.399'	076° 22.544'	S	None
West River 1 (Green)	38° 51.851'	076° 26.999'	Z	Z
HHSA A (Yellow)	38° 44.647'	076° 31.993'	A	None
HHSA B (Yellow)	38° 45.45'	076° 31.65'	B	None
HHSA C (Yellow)	38° 45.500	76.30.320	C	None
HHSA Orange Tetrahedon	Variable	Variable	U	None
HHSA Orange Cylinder	Variable	Variable	G	None
HHSA Yellow Cylinder	Variable	Variable	H	None

* Not to be used for navigation.



Chart of HHSA Marks

