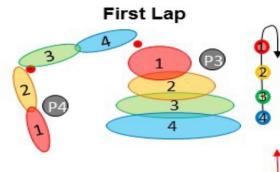
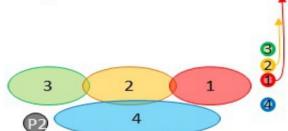
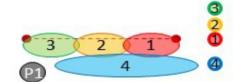
L-R

Radio Controlled Umpiring: a Positioning Framework

Developed 2010 - 2017.

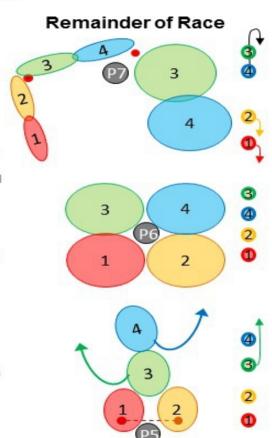




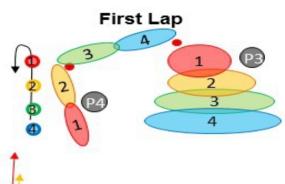


Notes

- Each umpire takes ¼ fleet plus 1. With 20 boat heats, umpires watch 6 boats (so umpires overlap).
- P1-2: U1 takes front boats nearest to the shore, U3 those furthest. After P2, U1 & U2 walk ahead of U3.
- 3. U4 takes the back group for Lap 1.
- At P3, U1 switches to 1st group, and U2 & U3 switch to 2nd & 3nd groups. Umpires should be close enough so that U1 can tell U2 the last boat he is watching; likewise U2 tells U3.
- During P3-4, all umpires advance to be level with Mark 1 to watch their boats round Marks 1 & 2, then promptly start walking downwind as their boats leave Mark 2.
- From P4 onwards, umpires should walk level with the leading boat of their group.
- 7. At P5, U1 & 2 watch all boats' approach and round the Gate. U1 chooses which mark to watch normally the mark that most of the 1st group rounds. U2 watches the other. U3 & 4 switch to take the leaders on the beat from when they pass through the running boats.
- At P6, U3 takes front far, U4 front near. U1
 U2 take the back, same side as at the Gate.
- At P7, U3 & U4 watch all boats round Marks 1 & 2. U1 reverts to front group on the run, and U2 to 2nd group, as these boats leave Mark 2.
- If boats are well-spread on the final beat, U4 takes the 1st group, U3 the 2nd, U2 the 3nd and U1 the 4sh until each group finishes.
- If only 3 umpires, delete U4 on 1st lap and U2 for remainder. If only 2, delete U2 & U4.

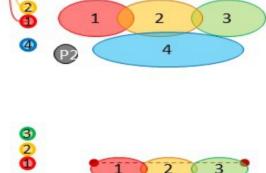


Radio Controlled Umpiring: a Positioning Framework



R-L

3



4

Notes

- Each umpire takes ¼ fleet plus 1. With 20 boat heats, umpires watch 6 boats (so umpires overlap).
- P1-2: U1 takes front boats nearest to the shore, U3 those furthest. After P2, U1 & U2 walk ahead of U3.
- 3. U4 takes the back group for Lap 1.
- At P3, U1 switches to 1st group, and U2 & U3 switch to 2nd & 3nd groups. Umpires should be close enough so that U1 can tell U2 the last boat he is watching; likewise U2 tells U3.
- During P3-4, all umpires advance to be level with Mark 1 to watch their boats round Marks 1 & 2, then promptly start walking downwind as their boats leave Mark 2.
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- At P6, U3 takes front far, U4 front near. U1 & U2 take the back, same side as at the Gate.
- At P7, U3 & U4 watch all boats round Marks 1 & 2. U1 reverts to front group on the run, and U2 to 2nd group, as these boats leave Mark 2.
- 10. If boats are well-spread on the final beat, U4 takes the 1st group, U3 the 2nd, U2 the 3nd and U1 the 4sh until each group finishes.
- 11. If only 3 umpires, delete U4 on 1st lap and U2 for remainder. If only 2, delete U2 & U4.

