

Beyond the Triangle: Building Dynamic Race Courses

Divergent designs handle course configurations differently

470s at a jibe mark



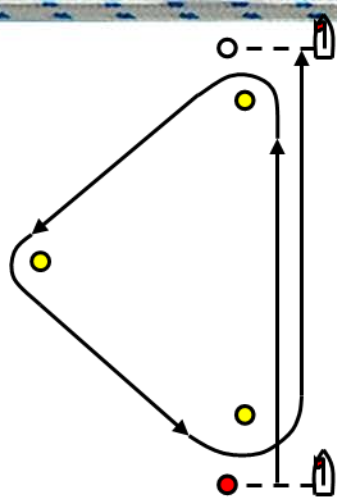
Wianno Seniors after a jibe mark



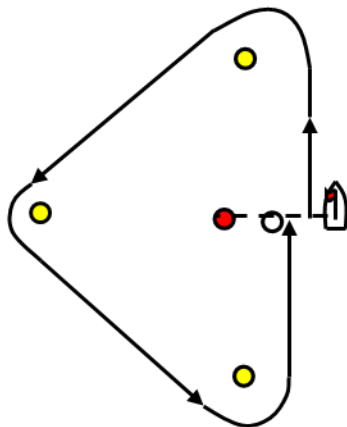
Photos by Ken Legler

So what's on your Appendix A?

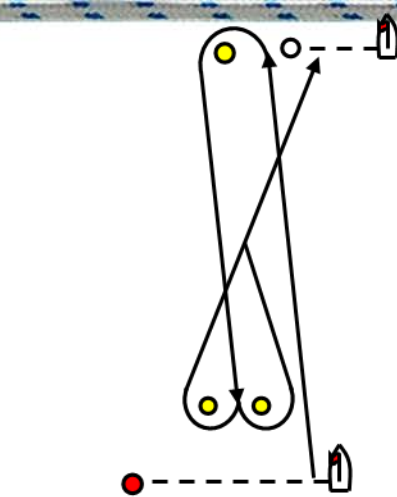
APPENDIX A - COURSES



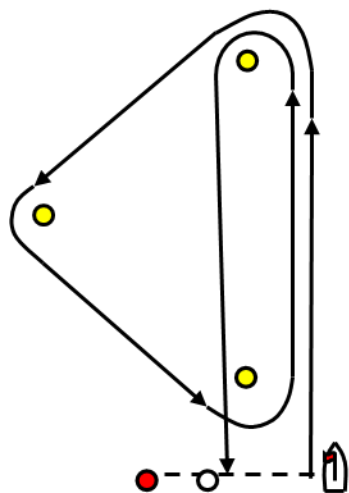
Triangle(T2)



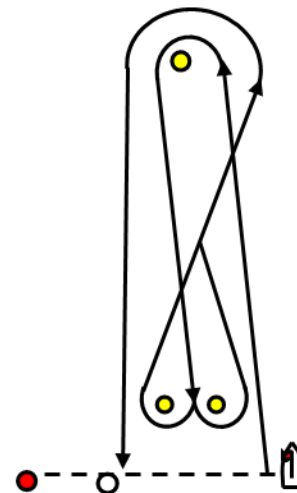
Modified Triangle (T)



Windward - Gate - Finish
(W3)

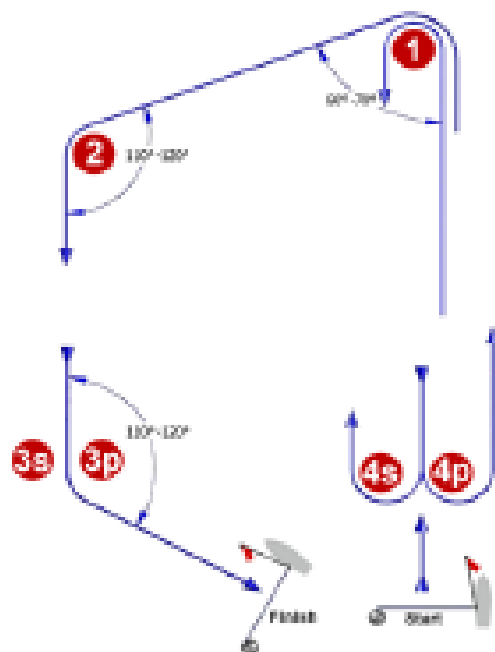


Gold Cup (G)



Windward - Gate - Windward - Finish
(W4)

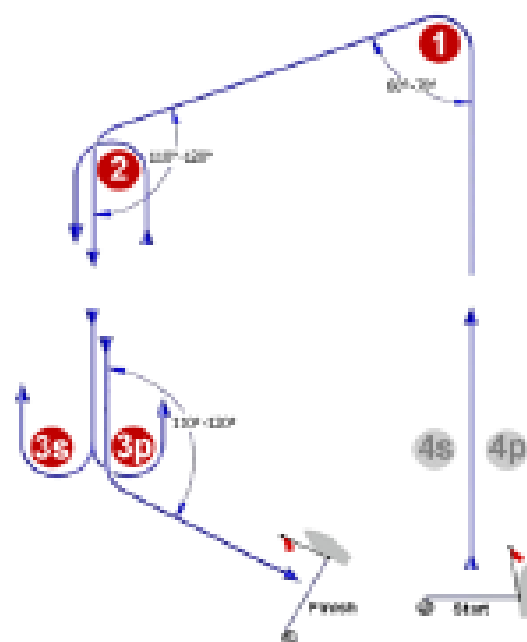
I



Course: Inner Trapezoid

Signal	Mark Rounding Order
I2	Start - 1 - 4s/4p - 1 - 2 - 3p - Finish
I3	Start - 1 - 4s/4p - 1 - 4s/4p - 1 - 2 - 3p - Finish
I4	Start - 1 - 4s/4p - 1 - 4s/4p - 1 - 4s/4p - 1 - 2 - 3p - Finish

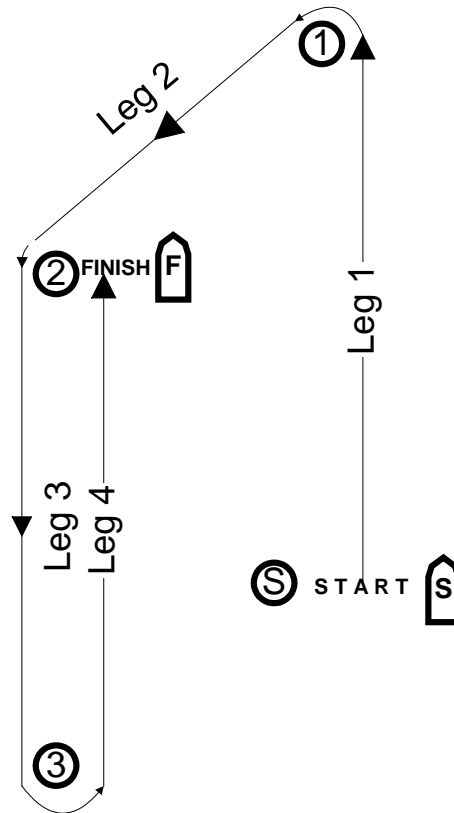
O



Course: Outer Trapezoid

Signal	Mark Rounding Order
O2	Start - 1 - 2 - 3s/3p - 2 - 3p - Finish
O3	Start - 1 - 2 - 3s/3p - 2 - 3s/3p - 2 - 3p - Finish
O4	Start - 1 - 2 - 3s/3p - 2 - 3s/3p - 2 - 3s/3p - 2 - 3p - Finish

Optimist Modified Trapezoid



Which course for what boat?



Ensigns in a scenic race, ME



Around the Island, Shelter Island, NY

Photos by Ken Legler

Which course for what boat?

Lasers heading for the offset, Newport, RI



420s reaching

Photo by Ken Legler

Which course for what boat?

Atlantics in a Around the Island Race



Photo by Ken Legler



Collegiate FJs on a M course in practice

The College Sailing Classic



Windward-Leewards aren't all bad

"I never sausage a thing"

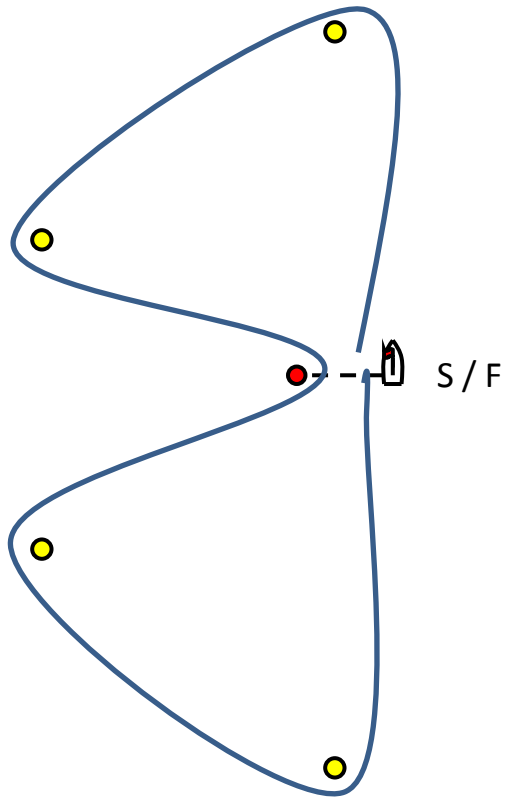
- Good championship course for fleets with even boat speed.
- Keeps racing close
- Designs with deep off the wind angles
 - Asymmetrical fleets
- High performance fleets like skiffs, F18s, anything that foils
- Gates keep fleets close and tactical, keeping boats on same ladder rung.
- Gate strategy
- Great for short course, near shore
- Minimal race management assets needed
- Combined with reaches for trapezoids with split fleets
- In marginal surfing or planning conditions technique can make a big performance difference in the Opti, Laser, Finn, etc..

The forlorn Triangle

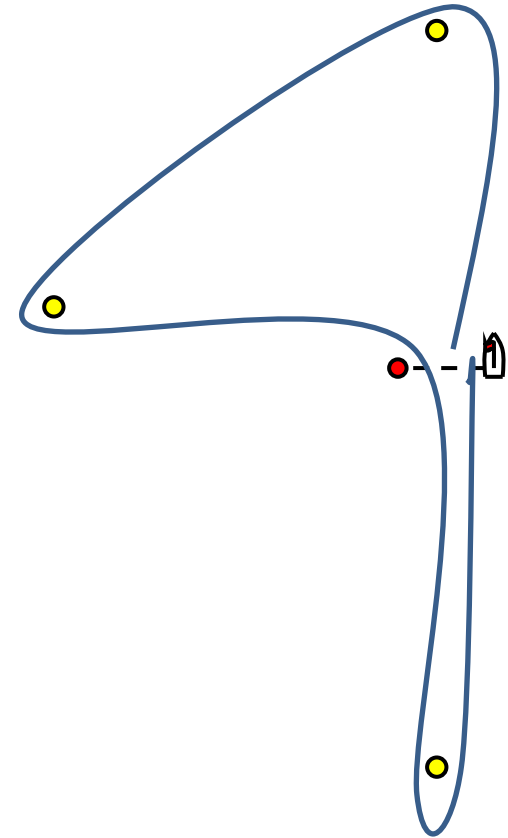
- Triangles were killed by the short broad reaches that become parades
 - Often set with interior angles of 40-90-40
 - Too short to provide tactics and strategy in the same leg.
 - Fight for mark-room, huge pin wheels
- Equilateral triangle (interior angle of 60-60-60) provides deeper downwind angles better suited for faster designs.
 - Breezier conditions may require deeper angles still
 - Set reach angle to optimize fleet performance
 - J-105 has optimal angle of 120° in 14 knots. Higher wind angle is lower.
- Heavy symmetricals might want deeper angles when the wind is over 15.
- Big breeze blast reaches are fun in the right boat, with good crew work.
 - Etchell Class is full of pro level crews, but the boat doesn't like to reach, so you won't see much reaching.
 - 505 Class does a Windward – Leeward followed by a triangle.
- Heavy classic designs need a breezy reach to really light up.
- Underpowered dinghies like the 420 need reaches in medium to heavy air to really get their ya-yas out.

How about something different?

The M course



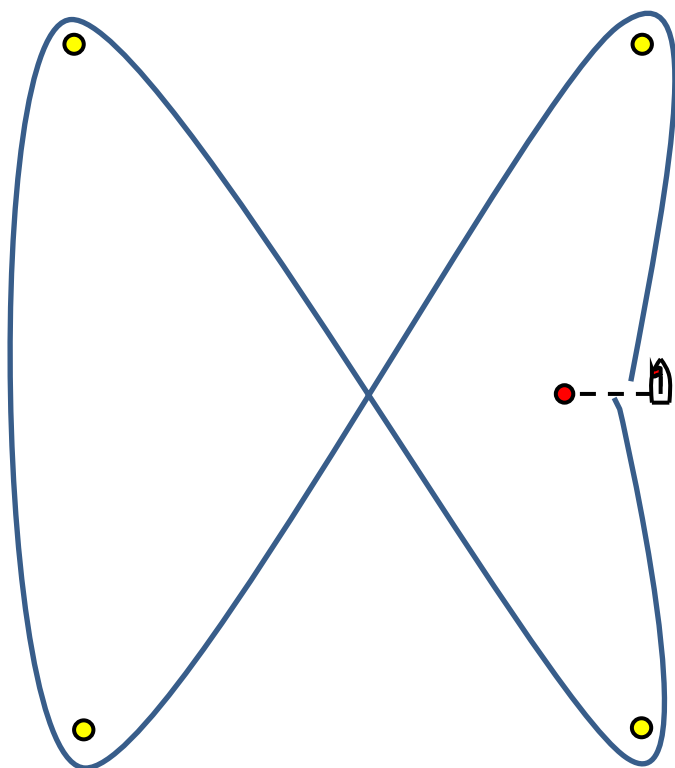
The Harry Anderson



Check out the smiles, and the carnage in the background

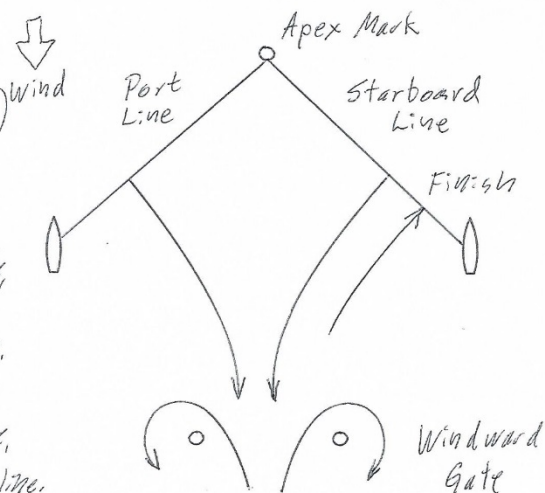


The Butterfly course



Apex Course (A4) ^{Wind}

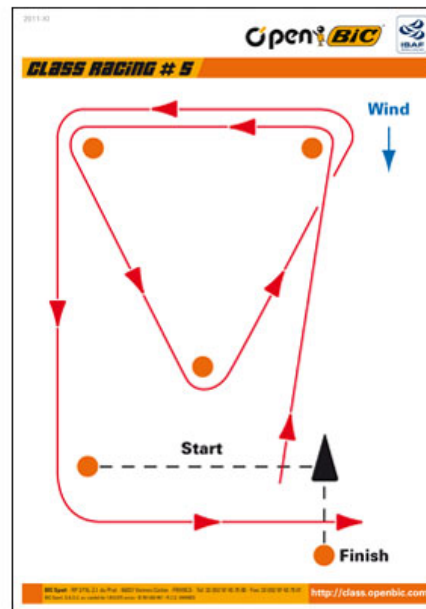
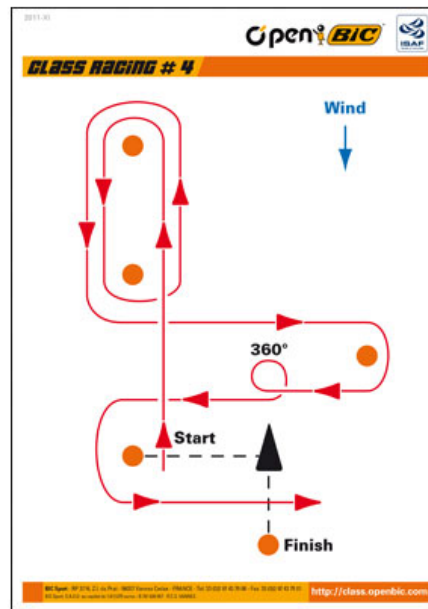
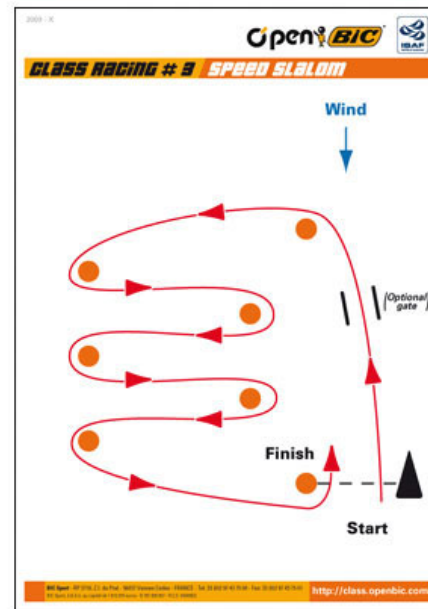
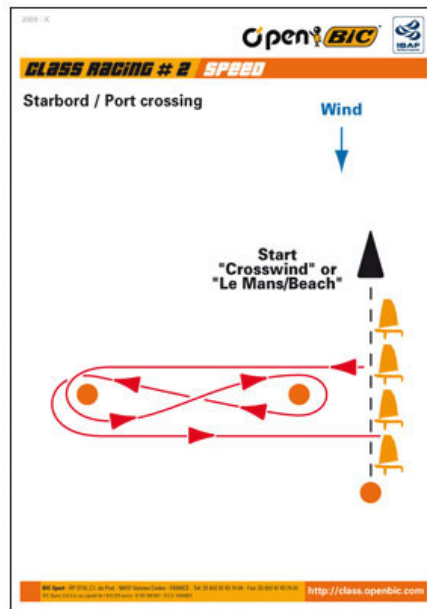
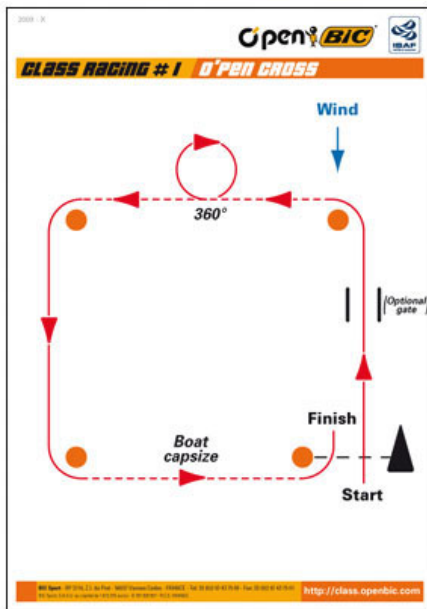
Start: on port or starboard line.
 Through windward gate,
 through leeward gate,
 through windward gate,
 through leeward gate,
 through windward gate,
 finish on starboard line.



Short Course (A2)

Start: on port or starboard line.
 Through windward gate,
 through leeward gate,
 through windward gate,
 finish on starboard line





Bay, Sound, Ocean, or Coastal Course

- Coastal or long day race
 - Around the Island,
 - Lighthouse Challenge
- Navigators' Special
- Pursuit Race
- Point to Point
 - Delta Ditch Run
 - Dutch Shoe
- Its about the sailing
- Change of Scenery
- Variety of angles may benefit different boat designs
- New challenges
- Practice missing skill sets
- Timed records to keep and be broken

Considerations

- Mark-set personnel and capabilities
- Water depth over the intended course for the fleet
- Total length for both forecast and wind at the start
(No one wins when it becomes alphabet soup on the score sheet)
- Navigational Hazards
- Weather Safety
- General ability or skill of the fleet

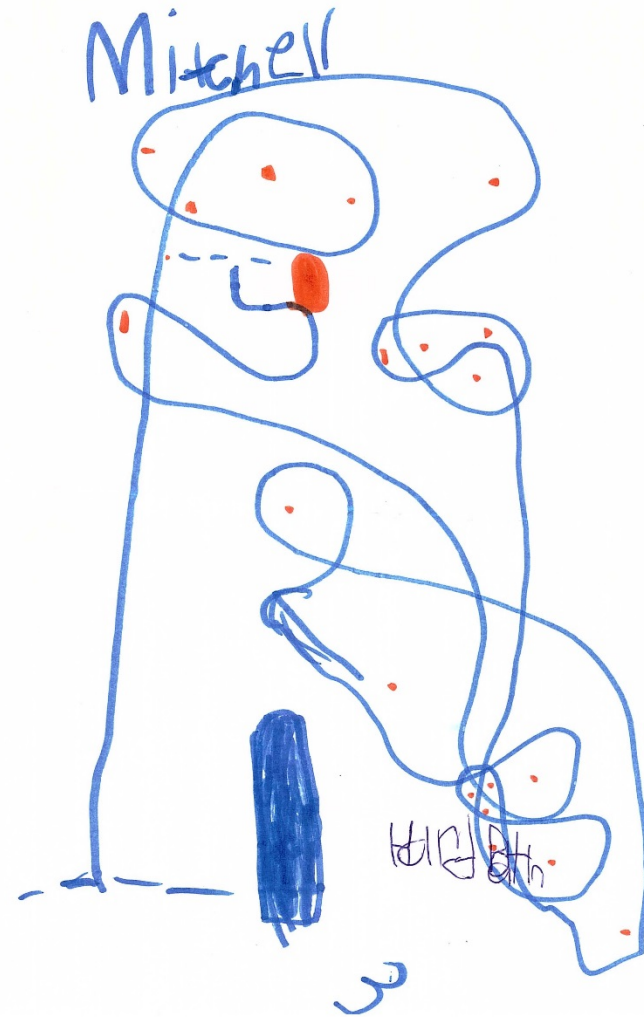
Want to spice up your races?

- Survey a cross section of the fleet.
- Look at types of boats racing
- How is the level of the racers?
- How is the level of the race management team?
- If the fleet isn't greatly eager to try something new, start small
- Gimmicks are ok. Mix it up.
- Well-planned and executed course management will bring greater enjoyment.



Photo by Ken Legler

A fun course in the mind of a 5 year old





Much thanks to Ken Legler for the help with many of the photos and much of the content.

Your Opinion Matters

Please open the **Sailing Leadership Forum app** and complete the **session survey** found in the **menu bar**.

Thank you for attending this session