

# FORMULA 18

## catamaran sailing

by MAL GRAY



### **WHAT IS FORMULA 18?**

Formula 18 Catamarans are fast, exciting, colourful, spinnaker-driven catamarans which are built to a rule which allows all manufacturers to design a boat which competes on an even footing. In essence, the rule encourages one-design racing between the classes. One class, the 'Hobie Tiger' has enjoyed phenomenal growth within the rule and has in three years, achieved 'International Sailing Federation' International Recognition and is well on the way to full status as an International Class.

### **WHY FORMULA 18?**

Not since the early 'plastic cat 16' days have we seen large mixed fleets of similar boats competing more-or-less equally. Today we have a few strong

catamaran classes, but interclass competition has evolved into a yardstick competition, where the yardstick can never allow for the vast range of variables which make certain designs more likely to perform in certain conditions. In yacht racing, the IMS YACHT MEASUREMENT RULE has attempted to allow for bumps in the performance curve of rated yachts by including a feature where the wind and sea conditions are factored into the corrected time calculation formula. I believe this is all too hard for catamaran sailing.

*We have three options if we want real competition*

1. Sail an established international one-design class which has strong National fleets (the choice is quite narrow)

2. Race 'XYZ' catamarans at mixed fleet regattas and hope that we sail well AND have weather conditions that suit our class of boat in order to succeed on yardstick.

3. Combine 1 and 2, and sail a Formula 18 cat built by our preferred manufacturer, and throw out the yardstick, to compete on even ground - the first across the line is 'the king of the castle'

Australia has some of the best catamaran sailors in the world. We have won Olympic medals and many world championships as well as challenged the best in long distance catamaran races. An Aussie was even on the first small cat to cross the Atlantic ocean. We have managed this with splintered competition amongst a plethora of unmatched classes. If we adopted a single successful rule which is already very strong in the largest, strongest, sailing continent, (Europe) who knows, Australia could totally dominate world catamaran sailing!

### **THE FORMULA 18 RULE**

The rule promotes a design of catamaran which is fast, strong, powerful yet manageable, has good weight-carrying capacity, seaworthy, made of non-exotic materials, exciting to sail, powerful, yet manageable and carries an easily-managed asymmetric spinnaker, flown from a fixed spinnaker pole.

*The rule specifies:*

- platform overall length and width
- minimum flotation requirements
- minimum boat weight
- maximum mast length and cross section
- maximum sail area
- minimum crew weight

### **WHAT COURSES SUIT F18?**

Regular catamaran courses are great for F18. In windy conditions it may not be possible to fly the spinnaker on some reaches but in strong conditions, the sailplan, with most of its area in the mainsail, is efficient and easy to handle. Naturally, F18s are very suited to the latest upwind /downwind/gate courses. Flying a hull upwind and downwind in most conditions is exhilarating!

### **FEATURES OF A TYPICAL F18**

Most manufacturers recognised worldwide, already have Formula 18 designs. They vary in appearance but are



similar in performance. The F18 rule allows enough design and fit-out flexibility to cater to individual preferences.

*All boats feature*

- buoyant hulls
- asymmetric spinnaker
- fixed spinnaker pole
- continuous spinnaker sheet with ratchet blocks



*Most boats feature*

- mylar mainsails and foam battens
- single line spinnaker hoist
- high aspect rudders and daggerboards

### **SPINNAKER SAILING ON AN F18 CATAMARAN**

The spinnaker can be carried quite shy in light conditions allowing the boat to develop awesome power quite early on reaches. In stronger breeze, depending on the wing mark angle, you may be unable to sail high enough to lay the wing mark unless you sail intentionally high after the weather mark before setting the kite. This allows you to make the wing mark without dropping and resetting for the second reach. No longer are reaches a follow-the-leader procession, because judgements and decisions need to be made. There is also more than a reasonable chance of 'crash and burn'.

The spinnaker is faster in all conditions if there is enough breeze to fill it. Speed downwind relies on generating apparent wind and driving low with it. It always pays to fly a hull if you can. With breeze you can gain height by trapezing, but when sailing downwind, it usually pays to do the 'wild thing' and position the crew to leeward.

Sets and drops are the critical moments with any spinnaker. It is vital to perform both operations with speed,

at the same time keeping everything in order. A knot in the sheet when you have the spinnaker halfway down at the downwind mark makes for an interesting mark rounding.

The spinnaker set has to be fast. Before hoisting, the boat must be headed fairly square, to bleed off apparent wind, so that the spinnaker can be fully hoisted in the lee of the main before it sets. If it sets partly hoisted, it is very difficult to raise to the top, particularly if you are using a purchase halyard system.

Once the chute is set, move to 'wild thing' trim, sheet the main in, head up enough to fly a hull and SEND IT! The apparent wind generated, almost makes travellers and barber haulers a thing of the past, because the main and jib are sheeted in to almost close-hauled setting.

An asymmetric spinnaker can be dropped either to windward or leeward, but either way, the crew should have hold of the sheet before firing the halyard to prevent the spinnaker from



blowing back and catching on the battens.

Until now, spinnakers have been considered to be unnecessary on small catamarans, largely due to the small downwind performance advantage gained at the expense of poor upwind capability because of extra weight carried. Recent asymmetric spinnaker development, combined with smarter set-up and handling techniques, could

well see spinnaker catamaran sailing become the 'sailing discipline of the Millennium'.

For more information about Formula 18 Check the following websites

**F18 Website**

<http://ocean.op.het.net/~ocean/f18/>

**Hobie Tiger Worlds**

<http://sailing.org/hobie/tiger99>

**Round Texel Race**

<http://www.rondeomtixel.nl/>

**Sailboat racing should be keen and fun, whether you lost or won.  
Bring on the Formula 18 and let's have some serious fun!**