



**Strike 18 trimaran
beach cat conversion
using beach cat rig and hulls.**

Strike 18
Study Plan
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The Strike 18 can be built with 3 different deck layouts: open, rigid dodger or cuddy cabin.

Specifications:		
LOA:	18'	5,5 m
Max. Beam:	14'	4.3 m
Material:	Plywood epoxy	



(Written by Richard Woods)

The 18ft STRIKE is a trimaran design that uses a 16ft beach cat as the outriggers/amas and rig. The main hull is plywood and has a dory shape that is extremely easy to build. The cabin top is removable to convert a fast day sailing boat that sits six in dry comfort into a simple pocket cruiser that sleeps two. You can use most 16 ft beach cats as outriggers (but I do not recommend using the Hobie 16). If you cannot find a suitable donor beach cat then you can build the Quattro 16 to use for outriggers. Please ask for advise if you are uncertain which boat to use. The prototype Strike 18 is one of our personal boats and we sail it as much as we can. So check the Year Reviews for more videos, photos and comments. The Plans Update Strike page has some more detailed photos of the boat and trailer.

[CLICK HERE](#) for a pdf study plan

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After a year of slow, part time, building the prototype Strike was launched in Canada on September 2nd 2009.

NOTE: Most of these comments also apply to the Strike 16, the smaller sister to the 18, so I suggest you also check out that design on its own page. The Strike 15 and 20 are designed primarily for racing, not day sailing and cruising.

The Strike is available as both an open deck boat, as we have built, and also one with a removable cuddy for a basic one/two person micro cruiser. In its open deck form I recommend this as an inshore Category D boat. That is because it has a large open cockpit which could get swamped.

However, in 4 years sailing we have never had more than light spray on board. And of course the boat will still be safe when swamped as there are big built in buoyancy compartments in the bow and stern of the main hull, never mind the sealed outriggers. With the cabin attached the boat is Cat C, Coastal, as it then has a "watertight" main hull



One reason why I build prototypes is to refine the design. Even before launching our Strike I decided to raise the wing bottoms slightly and to lower the front windscreen. Even with the raised wing and lowered windscreen there is still plenty of room below with the cuddy fitted. So the boat you build will look more streamlined than ours. On the prototype the outriggers are cut down 18ft singlehander hulls. The mast is a shortened Tornado mast while the mainsail was originally a cut down 18sqm but was changed in 2010 to one from a Trac 16. The original jib was also from a Tornado, but 38 years old. Later this too was changed to a sail bought on ebay. So, as you can see, with a bit of time spent modifying things, you can use parts from most beach cats.



Photo from the BCMS website, showing Strike on a very windy day and on its third sail at around 9 knots with original mainsail and, soon discarded, boomless rig, I found that the boomless mainsail is horrible. (Something I had

actually already learnt when sailing a Dart 18). For as soon as you ease the mainsheet the sail goes baggy and you can no longer point and tacking is hard. I also decided that for sensible cruising (as opposed to just burning around in the bay) I need a set of reef points, while a furling jib would also be nice. Other than that the boat sailed great! And it could definitely be pushed hard without problems.

Despite the evidence from the video above, which shows us sailing at a similar speed to a F24 trimaran, the Strike is not intended as a fast, "hairy" boat to sail. Instead it is for those who may be new to boatbuilding and multihulls and want to start with a quick and easy project. And it is also for those who already have a beach cat and enjoy it, but who also want to be able to take the whole family out on gentle sails. The windscreen serves several purposes. Obviously it helps keep the crew dry and is also used as the front of the removable cabin. But it also means the boom is well above head height, important for family crews. Furthermore, a beach cat mast and mast foot can be used without modification. If a windscreen is not used then a complicated extension would be needed to raise the boom, and unfortunately such an extension would be in the most loaded mast area. It is a "sit in" boat, rather than a "sit on" boat, which is more comfortable and a lot more reassuring for nervous crews and for those with young children. Even on windy sails I usually sail without foul weather gear and no spray comes on board. In part that's because of the big wings/cockpit extensions. Again, they may look ungainly, but they sure do keep spray down! Check out videos of other similar trimarans on youtube and you'll see how wet some of them are to sail. It's not just the sea-waves that can come onboard but also the bow wave and spray can flick over the gunwale to soak the crew. Comment from an owner "We can get the whole family (5) plus friends on board...I've had 7 people and could get one more I think. It's VERY stable."



Bill Of Materials:

To build two hulls takes more time than to build a single one. The process is not complicated but requires more labor than the building of a monohull. Count on 25 hours per hull, plus the pod, beams and deck: 100 hours minimum for a hull with a bare deck.

(Excerpts from our BOM)

The BOM list materials for the complete boat as designed.

Plywood standard sheets 4x8'		
6 mm (1/4")	10 sheets	
Boards and Battens		
2in x 1in	25m	
1 1/2in x 1in	40m	
1in x 1in	10m	
5in x 1in (or laminate from 2in x 1in)	3m	
3in x 2in kingpost	1.3m	
Fiberglass fabric 50" wide (125 cm) or tape 3" wide (15 cm) (totals)		
Woven fabric 6 oz. (200 gr)	8 yards (minimum)	7.3 m
Woven tape 6 oz. 3"(200 gr)	50 yards (minimum)	45.6 m
Resin		

Epoxy, total	3 gal (Minimum)	10 Kg
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This BOM covers all the supplies for boat as designed.

Usage of materials will vary in function of several factors. An experienced builder will use less resin. Our resin usage calculations are based on a 50% glass content.

Options, customization and variations in fabric and foam cutting preferences will also affect the Bill Of Materials. Our figures show an estimated average.

Small variations in fiberglass specifications are acceptable, consult us for substitutions.

Cost:

The cost of materials varies depending on your location, your choice of epoxy brand, core type and options. Use our Bill Of Materials with the local cost of materials.

All materials are available for purchase online from the web sites below:

Epoxy, fiberglass, foam, paint and more: BoatBuilderCentral.com

Despite the cost of shipping, those materials may cost less online than purchased locally.

Labor:

The hull shell can be build in 200 hours but a finished boat will require 300 to 800 hours depending on the level of detail and the skills of the builder.

More:

Visit our message board, help pages, tutorial pages and read our FAQ: most questions are answered there.

License:

As with all our plans, you have the right to build one boat from those plans. The designer holds the copyright to the design and you purchase a license to build one boat. If you plan to build more than one boat, please contact us about licensing fees.

Building standards:

These plans were drafted according to the ABYC rules. The ABYC (American Boat and Yacht Council) defines the boat building standards in collaboration with the USCG.

Professional builders may be subject to more requirements. Consult the designer.

The ABYC standards are very close to the ISO norms and CEE requirements but no European certification was applied for since this is not required for amateur boat building in Europe. CEE/ISO certification is available to professional builders for a fee.