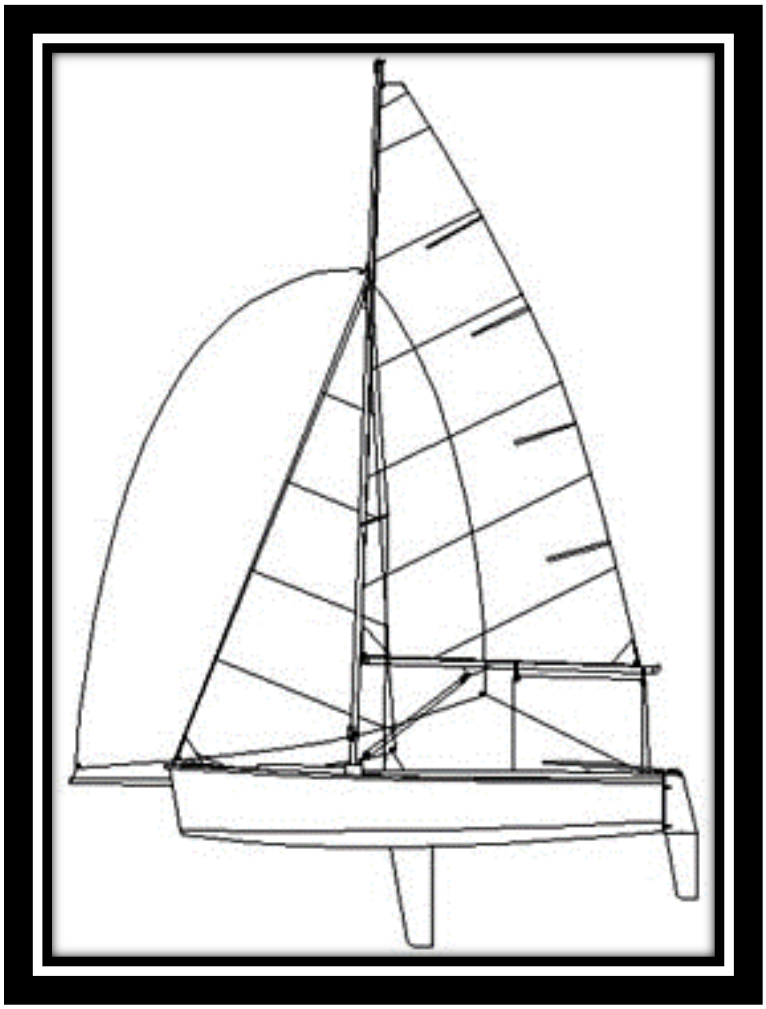

Alexa's Rocket is a performance sailing dinghy in the style of famous Australian dinghies like the Javelin.

SPECIFICATIONS		
LOA	15'- 6"	4.73 m
Max Beam	6'-1"	1.86 m
Hull weight *	140 lbs.	64 kg
Sail Area	140 ft^2	13 m^2
Material	Plywood Cored Epoxy Composite	
Building Method	Sharpie (on a jig)	

**weight is for hull only, built by an experienced builder using the best materials. With appendages and some waste, the boat without rig may weigh as much as 200 lbs., 90 kg.*

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DESCRIPTION

Alexa's Rocket is a performance sailing dinghy in the style of famous Australian dinghies like the Javelin. Those boats report speeds of up to 20 mph while planing. She differs from the Javelin by her mid-section: we designed her with 5 panels, 2 chines while the Javelin Class restricts the hull to one chine per side. Our design has a flat bottom panel that will help her get on plane faster. She is a pure sailing boat: no allowance is made for an outboard. While she is stable and safe, the handling of her large sail area will require a minimum of sailing experience. To get the maximum performance out of her, she can be rigged with trapezes. The large cockpit has ergonomic benches with rounded corners. Foot straps can be installed on the sole and on the railing for hiking out on the trapeze. A tiller extension is shown as well as suggested deck hardware layout. The well on the foredeck for the Asymmetric Radial Spinnaker is optional. ARS, gennaker or symmetrical tri-radial spi on regular poles can all be used. The retractable spi pole is made of carbon fiber. It is pulled out with a line running through the foredeck as shown on the plans, retracted with a shock cord. Again, this is optional, the boat can be built without it. Note the mast partner on top of the deck, it doubles as a breakwater. The mast is fitted with swept back spreaders, shrouds to chain plates on small partial bulkheads under the benches. The turnbuckles can be hidden under deck. The centerboard is a NACA profile as is the swinging rudder.

BUILDING METHOD

This sleek looking boat is built in epoxy-plywood-fiberglass composite like most of our designs. This produces a strong and light boat, easy and fast to build, fun to sail. At equal strength, epoxy-plywood is lighter than fiberglass and you will leave all the production boats of similar size (and some larger ones) in your wake. The hull is very stiff thanks to a web of frames and stringers.

REQUIRED SKILLS

As all our stitch and glue boats, the AR15 is easy to build. No woodworking skills or special tools are required. She is however a more complex boat than our open dinghies. The plans include all dimensions and patterns to cut all the structural parts flat on the shop floor. No scarfing required.

OPTIONS

Besides the retractable spi pole shown on the plans, this boat is highly customizable. Performance sailors have their own preferences about deck layout and rigging. There is almost no limit to what can be done: fixed rudder, carbon fiber mast, foam sandwich interior, carbon fiber appendages etc. Going the other way, the boat could also be rigged with a smaller sail plan (less roach and no top plate for main, no spi), reinforced with an extra layer of glass on the bottom for abrasion and be used as a beach camping dinghy, Wayfarer style. There is plenty of storage room under the foredeck and foam poured under the sole will make her 100% unsinkable even loaded with 4 adults. Suggested capacity is 2 racing, 4 cruising.

LABOR

The AR15 hull and deck will require around 40 hours before painting but you will need another 50 to 100 hours to finish the boat.

MORE

Visit our forum, 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.

BILL OF MATERIALS

Plywood (4x8' – 122x244cm)		
6 mm (1/4")	10	
9 mm (3/8")	4	
Also see our CNC Kit, which is a precut plywood kit that includes all the plywood needed to build the boat as designed.		
Fiberglass Fabric and Tape		
Fiberglass Biaxial Tape 45/45 12 oz., no mat, 6 in.	63 yards	60 m
Fiberglass Tape 6 oz., 4 in.	37 yards	30 m
Glass Cloth, 6oz., 50 in. wide	9 yards	8 m
Resin		
Epoxy	5 gallons	20 liters
Also see our MarinEpoxy or Silvertip Epoxy kits which include all of the epoxy and fiberglass listed.		

This BOM covers all the supplies for this boat as designed. Usage of materials will vary in function of several factors. An experienced builder will use less resin. First time builders always use more resin, take that in account. 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.

PLANS PACKING LIST

Plans are available in metric or US units.

- B230_1 Plan and Profile
- D230_2 Construction & Lamination
- B230_3 Nesting
- D230_4 Stations
- D230_5 Frames
- D230_6 Expanded Plates
- B230_7 Appendages
- B230_7 Lamination Schedule
- E230_8 Sail Plan
- E230_10 Full Size Pattern - Rudder
- E230_11 Full Size Patterns - Transom & Frame B
- E230_12 Full Size Patterns - Frame D & E
- Specific building notes for this boat
- Help files reference list and more.