### **NEW**

# **Ross** 780**E**

We are proud and excited to announce that production has been brought forward of the latest and greatest version of the Ross 780 the much improved 'E' for extended model.

This project will evolve over the next few months so some of these details, measurements and concepts may change. We reserve the right to do this to ensure the best possible outcome is achieved. We welcome any feedback.

What major improvements are planned to be made over the old Ross 780 Mk III?

- **Headroom** The hull sides are to be increased by **40mm** and the cabin redesign carries the maximum headroom almost to the main bulkhead/compression post area. These changes will create a significant increase in headroom in the following areas:
  - (i) Double v-berth sleeping and secondary toilet area: The headroom in this area at the head of the bed and in the location of the compression post should increase from around **1550mm** to about **1700mm**. Most people will have reasonable headroom.
  - (ii) Galley area: The galley will be radically redesigned so that it will run along the port side and one may pass through this zone to access the double v-berth area. Headroom should be around **1820mm**, more than enough for most people.
  - (iii) Bathroom area: This area is usually fitted with an electric toilet & shower. Headroom in the middle of this zone is currently **1600mm**. The cabin roof redesign plus some alterations to the floor/bilge mouldings increases headroom to around **1750mm** to suit most adults.
  - (iv) Saloon area: Headroom in the saloon should increase from around 1800mm to around 1830mm.
  - (v) King-sized rear double berth area: This area already boasts sitting headroom either side as a relaxing reading zone for people of all sizes. It is planned to raise the bunk base by the same **50mm** and add a second water tank of **100+ litres** capacity.
- **Stability** Stability will be improved by lowering the keel's centre of gravity. Alterations to the deck and keel mount system should allow the keel to be longer and therefore the lead is at a greater depth.
- Extended Cabin Areas The cabin is to be extended by approximately 210mm allowing for the following significant improvements:
  - (i) Bathroom The bathroom should now be 25% longer (1000mm). Along with increased headroom and width, it will be a much roomier and more comfortable space. The overall cabin redesign will turn the bathroom into a separate room, with the forward fully enclosed bulkhead providing a handy space for hanging wet weather gear, attaching an extending clothes line, etc;
  - (ii) Saloon A new improved side-mounted galley has been designed for the port side. An optional port side dinette is also planned. The saloon settee berths which are currently **1750mm** long should become approx. **1820mm** long.
- Galley The new and improved side-mounted galley should allow two people to operate in this area at the same time. The preferred and convenient stove orientation has been retained. The new design will allow much easier access to the icebox and at the same time enhances food preparation tasks.
- Other Exterior Enhancements (i) The front opening fore-deck hatch will be mounted on the forward sloping section of the cabin. This will allow better vision forward from inside the cabin and should also provide improved flow through ventilation;
  - (ii) Some 'softening' of the edges of some mouldings is planned, notably around the transom area and the main cabin edge;
  - (iii) A higher mast step should allow easier stepping of the mast. An optional rigging aid has been designed to assist in mast raising and lowering activities.

New Laminate – It is planned to build the boat with a foam core construction. The proposed new laminate may include a **12mm** foam core, vinylester resin and double bias cloth with unidirectional strands. The aim is for a stiffer and lighter boat. The foam core will also insulate the boat better, the practical benefits of which should provide a quieter environment, be warmer in winter and cooler in summer.

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Extended Cockpit Areas – It is planned to extend the cockpit by approximately **200mm** which will make improvements to the following features of this cockpit space :

- (i) Cockpit Seats: The longer cockpit seats should improve both the comfort and ease of boat handling activities for cruising and racing alike;
- (ii) Stern Lockers: Both the port and starboard stern lockers should be longer. These have been further redesigned to provide a little extra depth together with improved drainage.

#### Are there any performance/handling benefits over previous Ross 780 models?

Sailing Performance - It is expected that, with the additional hull length and increased stability, the boat should be slightly faster on all points of sail. Increasing the waterline usually means a slight increase in speed to windward and when reaching. Because the boat should be around 450mm longer there will be more buoyancy aft. Lengthening the cockpit by 200mm allows the crew to position themselves further forward. These enhancements mean that the stern should be a little further out of the water, creating less drag when running before the wind.

Mast and Rigging – For the full sized Class Racing rig, it is planned to replace the 3/4 fractional with a 7/8 fractional rig. This rig set-up means no overlapping headsails should be required to maintain similar performance to windward. Headsails which do not overlap the rigging stay wires should be easier to tack and the overall headsail package should be cheaper to purchase and maintain.

For the **Cruising** rig, the **3/4** fractional will be retained as this sail plan provides the best compromise between performance and ease of handling.

Both cruising and racing rigs will be available in either the standard aluminium section or the more expensive, high tech but lighter carbon fibre which should make standing the rig easier. The higher mast step should also make rigging the boat easier.

Sails – The aim of the new Class Racing rig is to develop a simpler, potentially cheaper and easier to handle sail plan. For cruising convenience an optional furling MPS will be available. For the sailing enthusiast, both symmetrical and asymmetrical spinnaker systems can be provided. With the higher fractional spinnaker hoist position, the standard spinnaker size could be increased by around 15%.

**Keel** – The redesigned cabin roof together with raised pulley blocks will allow for a longer/deeper keel. There will be some stability and lateral resistance benefits as the centre of gravity will be lower and more keel area will be under the boat. We may also increase the amount of lead by around 10%.

#### **Latest News**

Two boats have now been ordered. Construction of the first Ross 780E has now commenced. New moulds are also being made & this first boat launching is planned for late 2008..

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