

# 'ECO TENDER'

## SOUTHERLY GOES ECO



Western Australia-based Eco Abrolhos Charters approached Southerly Designs in December 2015 for a fleet of four new tenders to support its tourist activities around the West Australian coastline from the Abrolhos Islands to the Kimberly.

There were numerous challenges for the build specifications – the vessels needed to be able to support fishing, diving, sightseeing and other adventure tourism activities in both offshore waters and on extended trips in the protected rivers and inlets of the Kimberly coast.

The combined passenger capacity needed to reach 38 to cater for the entire guest complement of the customer's flagship, the 'Eco Abrolhos'. The vessels also needed to provide easy and safe access both from the mothership and for beach landings that were suitable for guests of all ages and abilities.

The boats were restricted to a maximum length of six metres in order to be stowed in existing positions on board the mothership and also be light enough to be handled by the existing ships cranes. Additionally, all four craft needed to be delivered surveyed and sea trialled prior to departure for the Kimberly cruising season in May 2016.

To meet this demanding delivery schedule the construction of the four vessels

was divided amongst three separate boat builders. One craft each was constructed by C-Side Marine Engineering and Reel Boats in Geraldton and two vessels were constructed at Dongara Marine in Port Denison. Dividing the build in this way did present some challenges in the coordination of detailing and outfitting in order to achieve a consistent result across all four craft.

The final design for the tenders came in at 6.0 metres by 2.4 metres, fitting the available space with millimetres to spare, and powered by a single 105kW four-stroke Suzuki outboard. In full AMSA class 2D survey the vessels have a capacity of eight passengers and two crewmembers, at which load they still feel steady and comfortable and are able to reach a speed of 25 knots. In addition, they are registered as auxiliary craft to the mother ship, enabling operations in offshore areas.

Based on a typical Southerly Designs small craft hullform these new craft boast a number of special features to suit their purpose. Most notable is the dropdown bow incorporating stairs for beach landings and access to and from the mothership.

With the bow door closed there is an internal stairway with handrails leading up to a push up bow. This arrangement, in combination with a new landing platform on the stern of the mothership, allows the tender to push up to the stern and the passengers can then step comfortably from one vessel to the other in a similar way to what has now become the preferred method of personnel transfer in the offshore oil and gas and windfarm service industries.

No more stepping over the bulwark of a tender bobbing vigorously across the width of a marlin board! For a beach landing scenario the bow door opens, similar to a conventional landing craft, with the assistance of a single boat trailer style winch. The internal stair then flips over to provide a clear walk through bow and an easy stair access down to the sand.

The completed vessels have drawn significant praise from the owners and operators alike who have been impressed by the ride handling stability and comfort of the new vessels. The bow loading and landing facilities have also proved extremely effective, with a 100-year-old guest at the ANZAC day ceremonies at the Abrolhos islands able to negotiate both without difficulty.

### 'Eco Tender'

#### SPECIFICATIONS

<b>Type of vessel:</b>	Adventure tourism tender
<b>In survey to:</b>	NSCV 2D / Auxiliary
<b>Home port:</b>	Geraldton
<b>Owner:</b>	Eco Abrolhos Charters, Western Australia
<b>Designer:</b>	Southerly Designs, Western Australia
<b>CAD Software:</b>	Maxsurf, Microsation, Shipconstructor
<b>Builder:</b>	C-Side Marine Engineering, Reel Boats, Dongara Marine, Western Australia
<b>Hull construction material:</b>	Aluminium
<b>Length overall:</b>	6.0 metres
<b>Length Measured:</b>	6.0 metres
<b>Beam :</b>	2.4 metres
<b>Draught:</b>	0.3 metres
<b>Displacement:</b>	2.2 tonnes (full load)
<b>Main engine:</b>	Suzuki 4-stroke outboard, 105kW
<b>Steering:</b>	Electric/hydraulic
<b>Maximum speed:</b>	25 knots full load
<b>Electronics:</b>	Geraldton Marine Electronics
<b>Engines:</b>	Midwest Marine
<b>Plotter/Sounder/GPS:</b>	Simrad Evo 9
<b>Radio:</b>	Icom
<b>A.I.S:</b>	Simrad class B
<b>Other electronics:</b>	Fusion Sound System
<b>Fuel capacity:</b>	2 x 30 litres portable tanks

