



15-PV-90 Passenger vessel aluminium



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Passenger vessel for oil industry – lake of Maracaibo - Venezuela

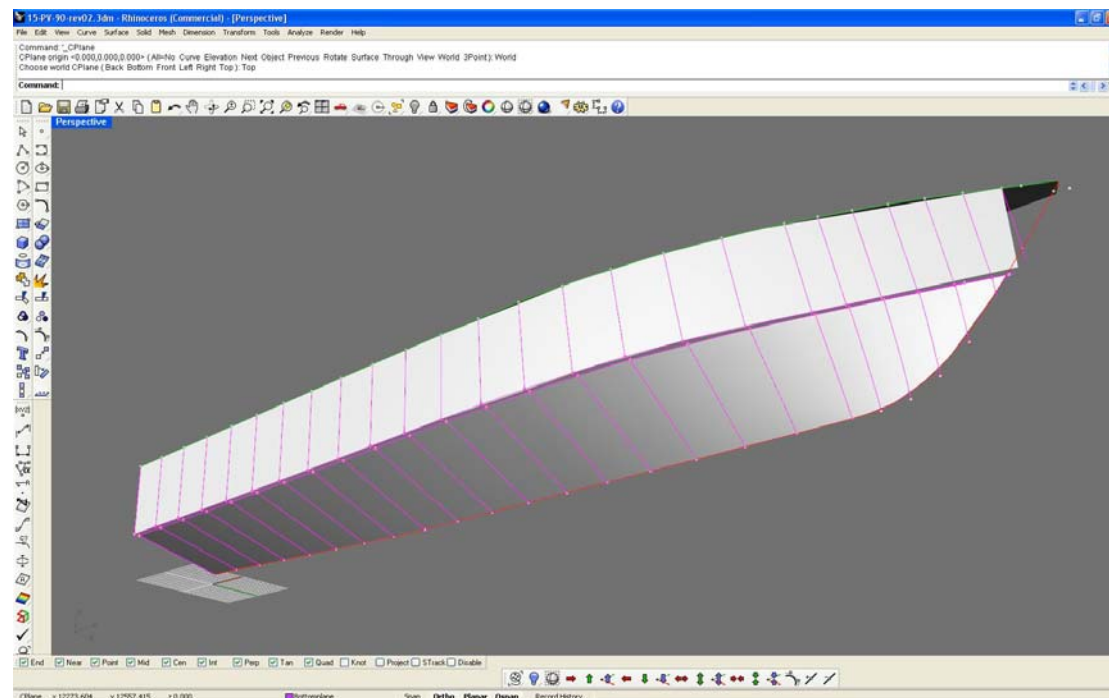
In 1990 a request came in for an improved fast passenger carrier – for transporting personnel to oil rigs in the lake of maracaibo.

The vessel needed to be fast (30 knots plus) and comfortable and of aluminium.

The hull design needed to have proper dynamic capabilities in order to handle the short wave periods and still maintain proper speed, while avoiding the propping risk.

Marin – the marin testing institute in Wageningen was requested to sample all their experience and design a unique shape. At first this proved difficult, as Marin was used to receive a design and test this. It took some pressure and explaining to get them to work and produce a proper linesplan.

They did a very good job. A test model (radio controlled) was made and tested till far over the model scale. A dynamic constant pressure point delivers a constant trim, however high the speed is raised!!! This gives excellent wave handling while not increasing or decreasing trim at higher speeds.



Here a set-up in the later originated rhino can be seen. The big trick of the design is in the aft underwater body.

The design was further detailed with twin detroit diesel engines (at first producing not enough kW) and twin fast props. After proper rating of the engines, the vessels made 34 knots.

In the first series a total of 8 vessels were kit-prepared, shipped to shore side of the lake and locally assembled.

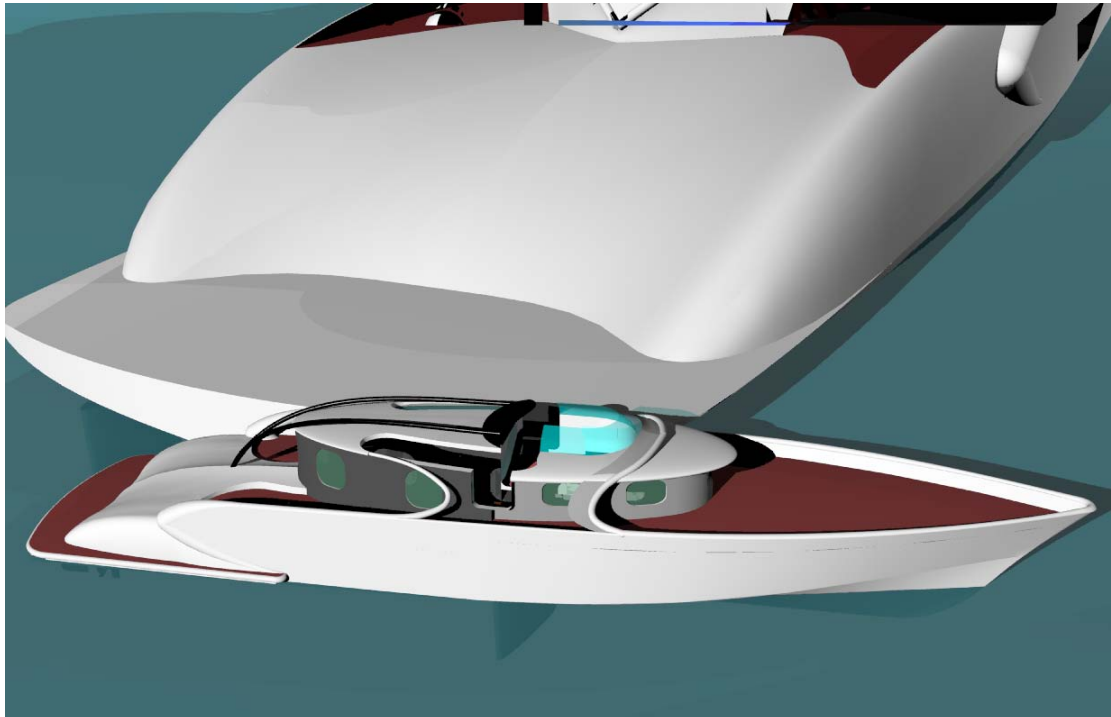
For this, NethShip designed a unique and simple construction, which was virtually not needing any sizing (egg-box construction) and therefore only gave minimal problems at construction of all 8 vessels.

The tested RC model;

The model carries twin e-engines coupled by a big Graupner gearbox to a single fast prop. The I-bracket is flexible mounted to the 1.5mm balsa hull, which carries the same internal structure as the final aluminium vessels.

The model resembles exactly the 8 fast passenger vessels build in 1990/1991.

Possibility of usage of the unique hull design;



A tender of a very large yacht design - 2004