

RNLI Hovercraft H006

“John Russell”

Designed and built by Tony Middleton



In 1999, an initiative to revisit Hovercraft as a possible Search and rescue tool was launched.

The response criteria, was for a craft to effect search and rescue operations in that area between high and low water where conventional lifeboat cannot operate due to lack of water, and shore based resources cannot operate easily due to the hazards of soft mud and quicksand.

After over two years of development and trials, the Griffon 47OSAR emerged and was given approval to introduce Inshore Rescue Hovercraft IRH into operational service. H-002 the Hurley Flyer was the first operational RNLI rescue hovercraft offering a declared search and rescue capability 24 hours per day and 365 days per year.

H006 - "John Russell" was the final machine and took up the role of standby support for the other machines in service. Since then H007 has been added as a second support machine and training aid.

I planned to build a model of the Griffon 47OSARs when I first saw the modified Griffon 450 used for the RNLI trials. A visit was arranged and three of us went to Poole to photograph and assess the latest arrival H006.

With the help of a three view drawing of H004 and the photographs the model was started four years ago. A scale of 1/6th was chosen once the estimated weight had been calculated following choice of building materials. Cushion area is dependent upon the weight of a hovercraft and 1/6th was the smallest size that would cope with the estimated weight.

The rear ducts were the first item to be made, entailing the making of a mould to produce the two fibre glass units. This task took one year to complete.

The model is designed to allow all components above deck level to be removed for maintenance so the rear ducts are mounted on a module that carries all the power train components. This means that the unit can be removed from the model and tested without any damage occurring to the rest of the model.

The lift fan housing forms another module and the front cabin completes the above deck structure. The extensive metal work is bent up from Brass and aluminium.

Working lights are incorporated and include Mast Head, Yellow and Blue beacons, port and starboard navigation lights and searchlights. It is planned to add the extensive dashboard later.

The current estimate for the completed weight is 16lbs, well within the calculated maximum weight of 25lbs.

Extensive trials are taking place to assess the motor and power requirement for thrust and lift. Lift will be via a centrifugal fan and thrust will be via close to scale six blade props. An example of these can be seen with the model.

This has been a very challenging model due to the many jigs and moulds need to make the various components.