

**SABVABAA - Inuit word meaning:  
"flows swiftly over it"**



A hovercraft rides over water and ice on a cushion of air, exerting a pressure on the ground that is less than that of a seagull standing on one leg or 1/10 that of a human. Modern, medium sized hovercraft are powered by conventional diesel engines and carry payloads of 1-4 tons. Present use of hovercraft under arctic conditions include craft for coastguard operations over ice in the Gulf of Bothnia by Sweden, Finland and Estonia, service over ice to a drilling platform offshore Alaska, as well as past service to Inuit communities in Alaska by the U.S. Postal Service.

Constructed at Griffon Hovercraft Ltd. in Southampton, Sabvabaa was built on the slightly larger Mark III 2000TD hovercraft at 12 m long and 6 m wide with a 2200 kg payload. The craft is exclusively used for over-ice scientific missions and stationed at UNIS, Longyearbyen. The name of this research hovercraft is R/H SABVABAA, which is an Inuit-Inupiaq word meaning 'flows swiftly over it'. R/H SABVABAA is registered in the US state of Delaware (DL 1519 AB).

The hovercraft has been designed as a research platform from the start. The 14 m<sup>2</sup> cabin provides scientific work space, kitchen, sanitary facilities and sleeping space for 4 persons. Deck space amounts to 25 m<sup>2</sup>. The craft is equipped with long range tanks for an additional 1500 litres of fuel, which will give a total endurance of more than 50 hours at an economy cruise speed of 20 knots.

Length (m) hovering - 12.7

Beam (m) hovering - 6.1

Passengers (excluding crew) - 8-15

Maximum payload (tonnes) - 2.2

Maximum Speed at full payload - 34 knots

Engine - 1 x Turbo-charged Deutz with 3 bladed variable pitch propeller.

Hull Material – Marine Grade Aluminium

## **The Model**

The plans for the hull of this hovercraft together with several photographs of the construction of the thrust and lift ducts etc are available on the very comprehensive web site of Tony Middleton [www.rc-hovercraft.com](http://www.rc-hovercraft.com) although the original design of the hull was by Mark Porter. Based on the Griffon 2000TD, which was produced in various different forms by varying the accommodation and superstructures, it's construction is almost entirely of 0.4mm and 0.8mm ply. They say "a picture is worth a thousand words" .....