

*The model of Peter Webb's earlier proposal featured retractable hydro-foils to help the craft onto the planing pads, but these are no longer believed to be necessary.*

water to power the craft forward all the time. I have noticed that model hydroplanes tend to suffer from fatigue cracking at the point where the sponsons join the hull, and can be uncontrollable in rough water. Fitting model car off-road type suspension, like in sketch 2, might overcome these problems.

***It's not that new!***

Many others have thought along similar lines. Convair wrestled with such a suspension system during the development of the 'hydro-ski' for their Sea Dart seaplane jet fighter. Saunders Roe (more later) worked on a similar project, while the mono-ski bobs used by the winter Para-Olympic athletes also come close, as do the shock absorbing qualities of bended knees when snow skiing or water-skiing.

Peter Webbs' radical proposal for an attempt on the world water speed record incorporates what he calls 'Hydropad' planing surfaces on the end of suspension outrigger arms. As speed builds up, the craft lifts from the water to be supported only on the hydro-pads skis.

The sus-

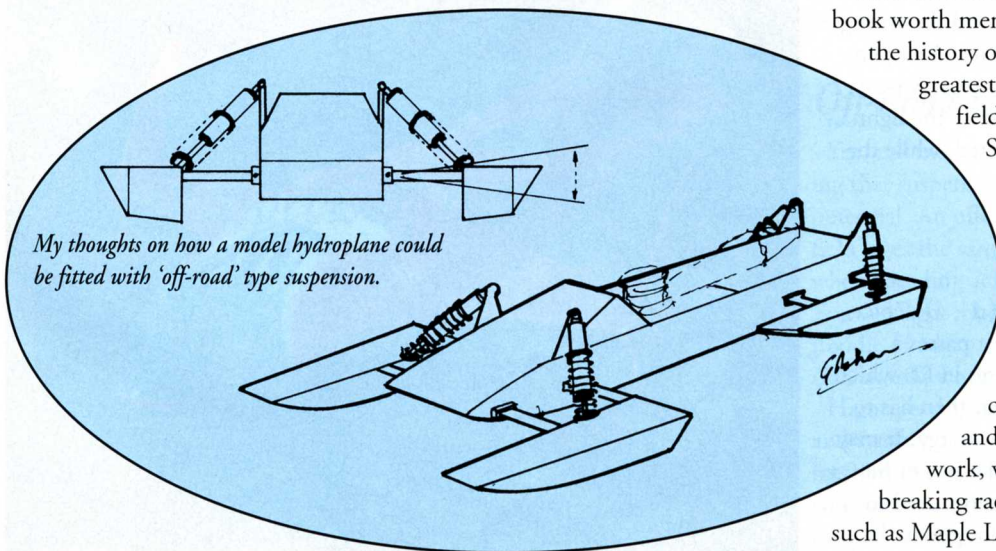
pension system is used to counter the effect of swell, which can be a real problem at 350mph! The model of this machine can be seen at the National Motorboat Museum, Basildon, Essex. Note that the craft has two separate parts: the bow end which accommodates the pilot and two jet engines, and the rear, which stabilises the craft and prevents what hydroplane racers call 'blowover'. At the present time a half size demonstration craft is under construction, to be powered by one jet engine.

In Japan, Mitsubishi Heavy Industries Ltd have spent several years experimenting with craft fitted with a gyroscope-controlled hydraulic suspension system which maintains the passenger cabin section of the vessel steady while everything else bobs about.

So you see, boat suspension is not as daft as it first sounds and may well have a place in the future of high speed boat design. After all, you don't see cars driving around with vee shaped tyres to cut through lumps in the road!

***And now the book!***

While I'm on the subject of R&D, I came across a book worth mentioning to those of you interested in the history of boat development. One of England's greatest centres of alternative thinking in the field of marine technology was S.E Saunders Ltd (Saunders Roe Ltd) and is the subject of a recently released book by Raymond Wheeler. In 'From River to Sea' (Cross Publishing, £25.00 approx.), Raymond Wheeler traces the marine history and development work undertaken by this unique company. The book contains extensive and rare photographs of Saunders Roe work, which included many of the record breaking racing craft of the early 20th century such as Maple Leaf, Miss England II, and the



*My thoughts on how a model hydroplane could be fitted with 'off-road' type suspension.*