

Mitsubishi's Voyager 'Hi-stable' suspension craft works like an inside-out ground flight simulator capsule, keeping the passenger cabin steady whilst everything else bobs around.



SUSPENSE ANIM

Graham Taylor invites you to suspend your disbelief for a thought provoking look at water-borne suspension systems and other aspects of marine R&D.

One of the exciting things about modern boat design is the great diversity of ideas. Only a few years ago, anybody who suggested that a boat could be anything other than pointed at one end and blunt at the other would have been regarded as decidedly wacky! These days anything goes, yet there are still many areas left to explore and so many ways of

combining the technology we already have that the possibilities seem infinite. So many of today's new craft started from simple experiments of the "lets see what happens if...?" variety by people who were bold enough to give something new a try, or to bring across concepts from other forms of transport such as aerodynamics from aircraft design, or even suspension from car design!

Off-Road boats!!

Yes, call me crazy if you like but I can't help thinking that suspension systems for boats hold some potential. An off-road vehicle driving over a ploughed field faces the same sort of challenge as does a boat when speeding across lumps and bumps on water. You can't get much more 'off-the-road' than in the middle of a lake, so the principles of vehicle suspension should work for boats too.

High speed boats have to contend with both chop and swell. Until now, boats have used only one method of countering both. This involves the careful combination of the inertia (weight) of the craft and the vee of the hull, with the result that craft perform