It's taken a long while to get here, but it looks like the wait has been worth it. Introducing one of the most significant new outboard engine systems released in recent years, the Mercury Optimax series featuring the Australian designed Orbital DFI (direct fuel injection) engineering.

The OPTI MAX Is Back !

Last month, we were able to put together a new release Signature 550 C with the first 135 hp Optimax we've had all to ourselves for testing and sea trials. In this fascinating report, read how Mercury has not only responded to the 4-stroke Honda 130 hp challenge, but in some cases moved ahead.

That really is the story in a nutshell. Amazingly, this new 135 hp Optimax recorded figures that were as good if not slightly better than the remarkable 4-stroke Honda 130 hp outboard.

In a total sense, it's probably not the ultimate solution for the environmental issues facing the giant "black" multi national.

No doubt the cynics would point out that the 2-stroke Mercury is now a highly developed, sophisticated engine nearing its theoretical peak output, whereas the Honda 130 hp 4-stroke is merely burbling along at the beginning of its development. But cynicism aside, the fact remains that Mercury's enormously experienced marine engineers have not only given their world wide network of dealers a vital psychological boost, they've provided the ammunition to fight back and sustain Mercury's dominance in the market place for quite a few more years to come.

Is this engine that important?

In a word, yes, it is. Both Mercury and OMC camps have been struggling to sustain their market share throughout the world as the 4-stroke momentum continues to build apace. Neither has an answer in their spare parts bin; neither organisation has ever built motor bikes or small saloon cars, and neither Mercury or OMC have the billions of dollars necessary to re-tool for the coming 4-stroke revolution. To manufacture the "green" outboard engines needed to meet the tough new environmental regulations foreshadowed in the next century, outboard manufacturers appear to have little choice: 4-stroke technology is going to rule the waves.

To evidence this point, we have to look no further than Mercury Marine's increasing joint venture involvement with Yamaha's 4-stroke outboards, and a similar involvement by OMC with Suzuki's 4-stroke engines. These new Suzuki-sourced 4-stroke outboard engines are now aggressively marketed in Australia as an OMC Evinrude product.

Clearly, both American outboard companies are deeply concerned about the trend to 4-stroke, and are having 'two bob each way' just in case things don't work out quite as well as they should with their much modified 2-stroke engineering.

It doesn't really affect Australian buyers directly, but the much vaunted Californian emissions control legislation scheduled to make its full weight appearance in the year 2006, has just been ring barked by yet another piece of American legislation, that actually brings the deadline forward nearly four years to 2002. This new legislative development in America has sent shivers through the outboard camps, and no doubt encouraged them to do further business faster, with their Japanese 4-stroke suppliers.

The Optimax Alternative:

Mercury Marine describe Optimax engineering as "the logical step", and there's no doubt it is.

Unable to invest the billions of dollars necessary to retool complete new engines with 4-stroke technology, the next best alternative was to invest just millions into the re-development of their own 2-stroke engineering.

Mercury first became involved with the West Australian based Sarich Engineering more than a decade ago. They were one of the first companies in the world to become partners in the subsequent development of what has become known as the Orbital DFI ("Direct Fuel Injection") system.

Curiously, OMC were also Orbital licensees at one stage, but they decided to go with the German FICHT system instead, partly, one suspects because they didn't want to share such important technology with their arch rival. Mercury had jumped the claim first, so it was going be hard for OMC to stay on the same technological pace as their arch rival. No doubt this was part of the reason why they headed back to Europe to secure the rights to the equally acclaimed FICHT system.

For more than 10 years Mercury has gamely soldered on through the ups and downs, trials and tribulations of the one-time Ralph Sarich founded operation. Sarich himself has long been out of the business. The remainder company, Orbital Engineering, is a world listed public company that has devoted most of its energy to continuing the development of the fuel injected systems Sarich pioneered.

In the initial stages, Mercury Marine and Orbital Engineering shared a joint venture research company called Meteor Technology, but as the Optimax Direct Fuel Injection system (as it is now known)