

Yamaha upgrade

IT is surprising how quickly time flies by when you are committed to a world of boating and fishing on a full-time basis.

It is now close to three years since taking delivery of my Cruise Craft Explorer 685 and to say it has served me well is a massive understatement.

Reel Affair is the third consecutive Cruise Craft I have put to work as a commercial passenger carrying vessel over almost the last 15 years.

The operating environment that is its home as a training vessel for the mix of coastal bar crossing tuition, offshore fishing tuition and selected charter services is tough and demanding, yet each of these Cruise Crafts I have bought has been a quantum leap forward in design, performance, safety and longevity.

Consistent with a great workhorse is the choice of engine.

The F250 Yamaha on the Explorer 685 was my first foray into the world of four strokes and it complemented the heavy build of the legally trailerable surveyed vessel nicely.

The torque and load carrying capability of the V6 four stroke was the only logical choice for longevity and as so many of my clients have found, as I did after making the change from the two stroke motor, it offered a new dynamic that was appreciated after the initial period of adjustment.

Despite the rate of serious engine hours being clocked, I wasn't really considering an engine upgrade until the new range of big bore V6 four strokes hit the market.

While the list of features and the 25kg weight saving were great marketing tools that had me champing at the bit, it was the performance figures and results of serious field testing undertaken by the crew from Cruise Craft and Wynnum Marine that convinced me to make the change.

Now I did give them the third degree, and the user feedback and data sets that backed it up were so unmistakably positive the rest is now history.

There are so many things that have impressed me with the new model F250 and since buying this engine it feels as though I have just taken delivery of a new boat.

Having already been used to the variable camshaft timing system



Engine Review

by BILL CORTEN

on my previous motor, it is the substantial punch the big bore 4.2 litre engine delivers in hole shots and the big boost of increased power right through the low and middle rev ranges that now stand out on my normal working day.

Put frankly, with typical crew numbers the boat just sizzles with a single F250 V6 when working my way around the channels of South Passage Bar.

There is noticeably much more power held in reserve for when needed while tracking in on the back of big swells and it comes in so handy when searching for that extra edge in throttle response in the face of steep waves over the shallow banks.

Feedback from clients has been really positive too and the confidence they get working their way around the coastal bar entrances from the feel of the motor and throttle responses tends to make them less hesitant to get out of their previous comfort zones when at the helm.

Now anyone going from a 3.3 to a 4.2 litre engine of the same horsepower would normally expect an increase in fuel consumption with so much extra cubic capacity on tap, but fuel economy has noticeably improved thanks to the technical advances of this engine.

Bar crossing work in a heavy built surveyed boat with a big, full fuel tank and up to four crew plus the skipper makes for a fuel thirsty day given the amount of throttle work required.

Further, blue water boating in onshore summer breezes does not return those magnificent fuel figures featured in glossy magazine boat tests, but with fuel prices on the rise and the engine hours already clocking up, the technology and weight savings in the new F250 have come at the right time to make a noticeable difference in keeping the fuel burn well under control.

With the new 1.75:1 gearbox ratio, the ideal prop selection was always going to be a journey into the unknown given my heavier than normal hull weight, the big passenger payload and need for

frequent sharp throttle responses.

The choice of props was narrowed down to a 15.5 inch x 17 pitch or a 15.75 inch x 15 pitch.

After spending a couple of days with each while working the bar, I pretty much knew which one was the go for my needs.

To confirm this I wanted to document what each one really did, so my son Ashley and I spent a morning water testing and changing props and subsequently spread sheeting a swag of carefully recorded data.

He loved the responses of the engine so much we struck a deal where he did the driving, I was relegated to scribe and he did the spreadsheets.

The engine now sports one of Yamaha's high-performance Saltwater Series II 15.75 inch x 15 pitch stainless props that features their new shift dampener system (SDS).

Thanks to the new lower ratio gearbox, the best cruising revs were clearly lower in the rev range at around 3700 to 4000rpm but with a faster cruise speed than at the preferred higher revs of the previous model engine.

Maintaining pace close to this level really helps with the overall fuel burn at day's end and fits nicely with comfortable offshore cruising too.

The 15.75-inch prop pulled engine revs right in the middle of the recommended range, was more economical travelling into the wind, delivered the fastest hole shots and provided the best grip in tight high speed turns.

Comparing the old and new engines on the same boat, it was interesting to observe there was less slippage and ventilation in tight turns from the new generation notched props.

Thanks to the SDS built into the prop, the splined rubber hub delivers the softest and quietest gear changes you can experience from an outboard engine.

It is another key improvement over my old motor given the number of times clients initially unfamiliar with the control box, change gears during a normal work day.

Light and sensitive throttle responses are another major feature on this engine.

This comes from the digital electronic control system of cutting edge technology that delivers what is now found in most modern cars into a marine application.

It eliminates the old style throttle and gear change cables, using sensors instead to deliver the most sensitive and effortless throttle that is streets ahead of so much of the marine engine competition.

Having worked the previous engine for nearly three years, the lower engine noise levels at idle and right through the range are very noticeable and complement this really sweet but punchy mega cubes engine.

Rather than stick with traditional Yamaha gauges, I opted for the new high-definition multi-function display.

It is easily customised to suit your own preferences of engine data, fuel flow and economy with easy-to-use settings for day or night use.

Cruise Craft cleverly modified the carbon fibre dash to accommodate the new multi-function display and worked with Wynnum Marine to ensure a highly professional seamless transition from the old to new motor.

When I finally made the choice to upgrade, I was pleasantly surprised at the strong interest in the second-hand market for my old F250 despite clocking up plenty of hours.

The brand has again proven it retains good market value thanks to its exceptional reliability and is keenly sought after.

It is no surprise that so many marine dealers want Yamaha engines in their product range these days.

The first service delivered a perfect set of figures and went without a hitch and I can't recommend the fully trained and experienced mechanics at Wynnum Marine more highly.

For the record, the engine upgrade has made such a difference to the way the exceptional blue water hull of the Explorer 685 performs and handles that I really wanted to document the changes so others may not hesitate to share the same experience.

Additionally, making the call to dig deeper into the pocket for all the bells and whistles has been worth every cent. ↵



The author's Yamaha F250 engine in action.



The new Yamaha model F250.