The Rebuilding Of 'Dad & Dave'

Introducing a great yarn by a bloke called Dave Long, from Ballarat in Victoria. It's a story of how a father and son spent nigh on 20 years building a dream together; a plywood fishing boat they could share.
It's also a story about a couple of battlers having a go. Not for them the slick, shiny fibreglass boat or trick tinnie.These blokes started with just $350 and the unshakeable belief that one day, they would finish their boat, and go fishing together.
Well, as things turned out, Dad didn't see the boat finished, but on November 1st last year, his son, Dave Long, launched the boat in the memory of his Dad. We're pretty sure he was there, too. And very proud.

It all started in 1983, when a workmate said that he and his father had an old 20 foot plywood cabin cruiser that they had started to restore, but the job had become too big for them. I always had an interest in old wooden boats, and so I told my father about the boat and my desire to have a large boat that we could both use to go on fishing trips together.

After a discussion with Dad, I arranged to go and have a look at the boat. My first viewing of the boat was on my own as I had no idea of what I was going to find.

Finding the address I'd been given, I proceeded to the back yard to find the boat, and I could not believe what I saw. The boat was sticking half out of the shed, upside down and no paint on it. It was obvious the boat would need lots of work to restore it to its former glory.

I went home and told Dad about it, and we decided to go and have another look it, to see if he thought it could be restored. To my surprise, Dad was very excited about what he saw. He climbed in under the upturned boat to assess its condition. Being a trade qualified painter and decorator, with some carpentry experience Dad was able to spot any rot or other damage the boat may have had. What he found was lots of rot, but a boat that could be repaired with lots of work, effort - and of course, lots of money.

We went home and decided what the boat was worth, what it might cost to fix, and refit it to suit our requirements. The total cost

***Right:** The remains of Dad & Dave once all the rot was removed and it was time to start rebuilding. (My late father inside the remains of Dad & Dave).*

of the project far exceeded our expectations and budget, so we thought about it some more, and come up with a figure we could scrape together.

The next day, I went to work and hesitantly made our offer to my workmate. To my surprise, he accepted. The offer was $500, but a down payment of $250 would be sufficient until all the accessories that had been removed from the boat were found, and given to me.

The next challenge was how to get the boat to my house, a job that was made easier by the fact that my workmate had not informed me that he had the trailer for the boat, but it was also in bad repair and in storage at another friend's house.

It was then decided that we would need some help to get the boat up the right way and onto the trailer, and I would come the following weekend with some mates to pick up the boat.

Getting It Home

The day came finally to go and collect the boat, and to my surprise we found the boat sitting on the trailer outside my workmate's house. Apparently he had decided to visit the hotel across the road from his house and meet some mates, and after a few drinks, they decided that there was enough of them to do the job.

My workmate's assessment of the trailer proved correct as the trailer was in a very bad condition, but would be good enough for the short trip to my place. After pumping up the tyres and tying down the boat to the trailer, we were on our way.

The next task, once home, was to get the boat and trailer into the back yard of my parent's house, as there was no access to the backyard, except through the next door neighbour's backyard. After a short discussion with our friendly neighbour, she gave us permission to the access we needed, providing we took her fishing when we finished the boat. A done deal !

Once we got the boat into the backyard we made a better assessment of the

condition of the boat, which proved that the boat was in worse condition than we had first thought.

Not only because my workmate and his father had removed all the paint and tried unsuccessfully to fibreglass the hull, but because the boat was only half in his shed, the environment had reaped havoc on the bare timber, ply, and the interior of the hull.

Rot had got a good hold in most of the hull ply, some of the framing, the bow timber, as well as all the deck ply and cabin. We removed all the hull ply, decking, cabin and interior of the cabin.

The next task was to support the hull on the trailer so that the rotted framing could be removed and replaced, which was done by using the trailer and 8'0" lengths of 4"x 4" redgum and some scrap lengths 2" x 1" hardwood to ensure that the hull remained in its true shape.

Once all the support to the hull was in place the rotted bow timber was removed and a replacement was made from oregon and fitted into its new position.

The next task was to remove both chines, top, and lower stringers and make replacements (also from oregon) and refit the new timber. On closer inspection of the ribs of the hull, it was decided that the three ribs at the front of the hull required replacement. Once all the new sections of the hull framing were in place the next task was to splice the new sheets of ply for the hull together.

Splicing the ply required me to purchase a router and making a jig to ensure the quality of each splice. On completion of the splicing the next problem was to purchase a large quantity of marine glue, a job that proved harder than I first thought. Because Ballarat does not have a marine chandlery, this made it even harder to obtain. The local marine dealer was unable to help, and suggested that I get the Melbourne Yellow Pages and contact a Melbourne marine dealer, who may be able to help me.

***Above:** The hull with the new ply and keel fitted and ready to be turned up the right way.*

My search of the Yellow Pages proved successful as I found a company called Epicraft who could supply me with the quantity of marine glue I needed. A trip to Melbourne would be required to talk to the people at Epicraft and purchase the glue. The trip to Melbourne proved to be the best thing I could have done, because there were lots of the products that Epicraft manufacture I would need to complete the boat.

Once all the ply was glued together, it was time to begin to fit the ply to the hull. This required approximately 2,000 #8 x 11/4" brass screws to screw the ply to the frame of the boat.

Fitting the ply to the hull was a lot easer than I expected. The sides were fitted to the hull framing first, so that it could be planed down flush to the bottom stringer.

Getting It All Together

While all this work was going on my workmate was busy looking in his shed for all the accessories that he had removed from the boat during his repair effort. As l suspected, not all the accessories that he had promised were to make an appearance, and as a result l had to renegotiate the final payment of $250 to a price that would allow me to purchase the missing accessories. The final payout figure agreed upon was further $100, making it $350 in total.

After fitting the new sides to the hull it was time to call on some friends to help me turn over the hull so the old ply could be removed. Having done that, I had to splice the new sheets of ply together before fitting them to the framework.

While removing the old ply I discovered that at some time the hull must have been either dropped or left sitting on the skeg on the ground causing the keel to be broken at the position were the skeg bolted to the hull. The keel required the broken section to be removed, a new section made, and then lap-jointed into the old keel. Also at some time during in the boat's life it had been fitted with another inboard engine, which must have been fitted by someone who knew very little about hull strength, because they removed sections of the ribs, obviously effecting the integrity of the hull. New sections were made and then fitted before fitting the new ply to the hull. Once all the new ply was fitted all seams in the hull were sealed using Epicraft Dynal Sheathing and resin.

As the hull was going to be fitted with a larger and somewhat higher cabin, it was decided that a keel should be fitted to improve the handling of the boat in the water. The keel's deepest measurement (230mm, tapering along the hull to stop at the first rib) also ensured the hull's weight would be correctly supported when it was on the trailer.

It was then time to start fairing and filling all the screw holes in the hull to ensure a smooth finish for

painting. This process took quite some time, as anyone who has done it, could tell you. Once all the filling and sanding was completed it was time to apply some red lead primer to ensure that the new ply was suitably protected.

It was time again to call on some friends to help turn the hull up the right way so that the fitting out work could begin. Before the hull was turned over, a cradle was made to sit the hull in, to ensure that the hull was properly supported.

Once the hull was up the right way the real work began.

The old interior of the cabin was not very well laid out, with only a couple of bunks in it. As the boat was going to be used for holidays and overnight fishing trips, it was decided that a few more comforts would be needed, such as a LPG gas stove, LPG gas, 12/240 volt fridge and a sink fitted with a fresh water pump.

The old bunks did not go right under the front decking as the more modern bunks do.

Into the Bunk Frames

So that's where we began, removing the old framing so the job of designing the new bunks could begin. As other boat builders would know the bow is the tightest and curviest place in a boat, and as such, any work in this area is difficult.

Nevertheless, as the framing of the hull already existed in the front section of the boat, we were able to utilise this for the bunk framing, so the new framing was fairly minimal.

Once all the bunk framing was completed, it was then time to utilise the bunks for some much needed storage space. This was achieved by fitting the bunk tops with lift up lids that allowed access to the inside of the bunks. It also required the fitting of three air vents to ensure that air flow was adequate to make sure anything stored in the bunks did not become musty.

On closer inspection of the space under the bunks we decided that it was possible to fit a marine toilet under the port side bunk. The next problem was to purchase a marine toilet in Ballarat – and that just wasn't possible. Luckily, it was time again for the Melbourne Boat Show, so off we went in pursuit of a marine toilet. It didn't take long to find a supplier who could deliver the toilet.

The next job was to fit the toilet. This required some framework to be made which took a couple of weekend's worth of work. Once that was completed, we were able to make and fit false floor sections under the bunks to enable the storage space under the bunk to be better utilised.

Stove, Fridge & Engine Issues

The next job was to decide how much additional space was required in the cabin for the 12/240 volt fridge, LPG gas stove and sink before the bulkhead could be fitted at the rear of the cabin.

This job was quite daunting, and required a lot of compromise and the realisation that not everything was going to fit perfectly. Once all the adjustments were made, the bulkhead location could be found, made and fitted into the hull. Once the bulkhead was in place the decking was fitted, which required some form of anchor rope and chain storage to be fitted into the bow section of the deck. Allowance also had to be made to fit an anchor winch at a future date.

When all the decking and anchor storage was completed, the cabin sides could be made and fitted. All this work took some 12 months and made a huge dent in my bank account.

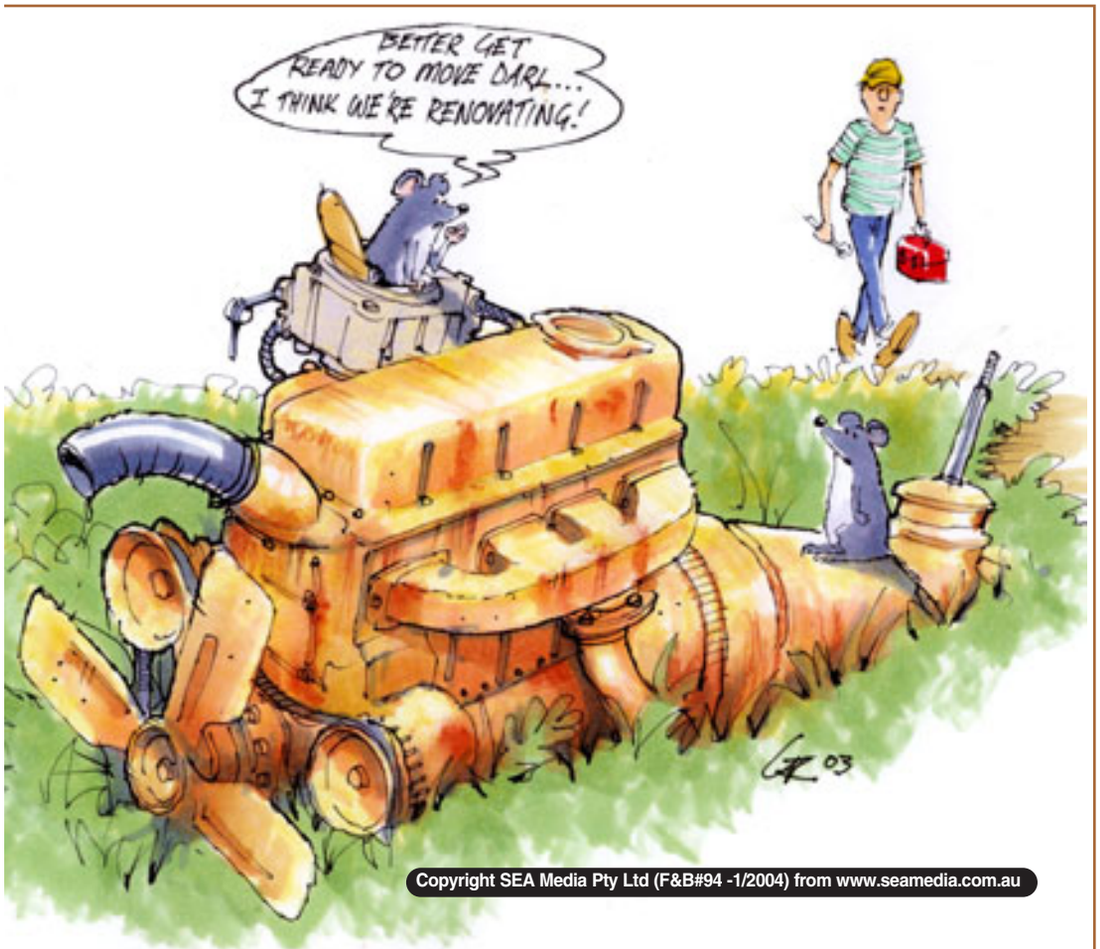
But before the cabin roof could be made the inboard engine had to be fitted.

The next problem was that as no engine had come with the boat, an engine had to be sourced.

A search in the Melbourne Trading Post was the next port of call. My next realisation was that an engine already marinised was going to require a large sum of money, money l didn't really have.

It was in the Trading Post that l saw an add for a new bookshop in Melbourne called The Boat Bookshop. I decided that a trip to Melbourne was called for, to see if l could buy a book on how to marinise a car engine, as a second hand car engine was in my price range.

The trip to Boat Bookshop proved successful, as l was able to purchase a book titled Marine Conversions by Nigel Warren. After reading



***Above:** The engine and transmission fitted into the boat prior to the painting being done.*

the book, Dad and I decided that we were mechanical enough to attempt a conversion ourselves.

The search was then on to find a suitable engine.

The original engine fitted to the boat was a Holden Gray from the mid fifties, which produced about 80bhp, so therefore I was looking for an engine of about the same horsepower.

At the time I was doing my apprenticeship as a boilermaker, and of course I had to attend trade school once a week. It was while I was at school that a conversation with a fellow apprentice, uncovered a Ford 2 litre V-4 engine from a Ford Transit van.

The engine was in good going order with an automatic transmission fitted to it. I was able to purchase the engine for $200, which was in my price range.

Dad and I decided that an inspection of the internals of the engine before it was fitted to hull would be a good move.

Another reason for checking the engine was that the marinising required that some of the engine components be removed and modified before refitting to the engine. The automatic gearbox was also sent to a specialist to check its condition, which was just as well, as it was discovered that the gearbox required a full rebuild.

While the gearbox received a rebuild, the cylinder heads were removed to check the condition of the valves. This also revealed that the heads need reconditioning. The cylinder heads also proved a challenge as the rocker stud needed replacing, and a phone call to the local Ford spare parts dealer revealed that replacements were no longer available.

The salesman at the Ford dealers provided me with a phone number of a company in Melbourne called Yesterford, who he thought may be able to help me. The phone call proved successful, as they had the replacement parts in stock. Arrangements were made for a trip to Melbourne to pick them up. The engine was reassembled and preparations were made to fit it to the hull.

The engine's compactness proved to be an advantage, as it fitted into the hull very well. The engine was lowered into the hull and lined up with the propeller shaft. Engine mounting bearers were made and fitted to the hull at this point, too. Once this was completed, the engine was removed and the rebuild of *Dad & Dave* was continued.

Once the cabin roof was fitted, it was then time to design the dodger cabin. As I did not have a design to work off, it took quite some time to come up with a design that suited the boat.

With the final design decided, the sides of the dodger were cut out and fitted to the boat. As any space is at premium in a boat, what is there must be utilised carefully, so it was decided that fishing rod storage would fit up in the roof of the dodger. Upon completion of the dodger cabin, false floors, live bait tank, and battery storage were made and fitted. The fitting out of the cabin was also completed, and then it was time to remove any bolted on fittings so the painting could start.

The painting took 12 months as any short cuts in this area could cause problems later on. And as Dad was a painter and decorator, the job had to be done correctly, which included priming with red lead primer and applying two coats of undercoat and finally applying the gloss top coat.

While the painting was in progress it was time to have a boat trailer made. This proved to be a problem because the trailer would have to be custom made and a trailer manufacturer willing to make a custom trailer proved hard to find. A couple of phone calls to known boat trailers manufacturers confirmed that they were not in the business of making custom trailers. Another trip to the Melbourne Boat Show pointed me in the direction of Easytow Boat Trailers. A phone call to their Design Engineer Mick indicated they would be more than happy to build a trailer for me. A trip to Heathcote (Vic) to meet Mick and order the trailer was done, and eight weeks later I took delivery of the trailer.

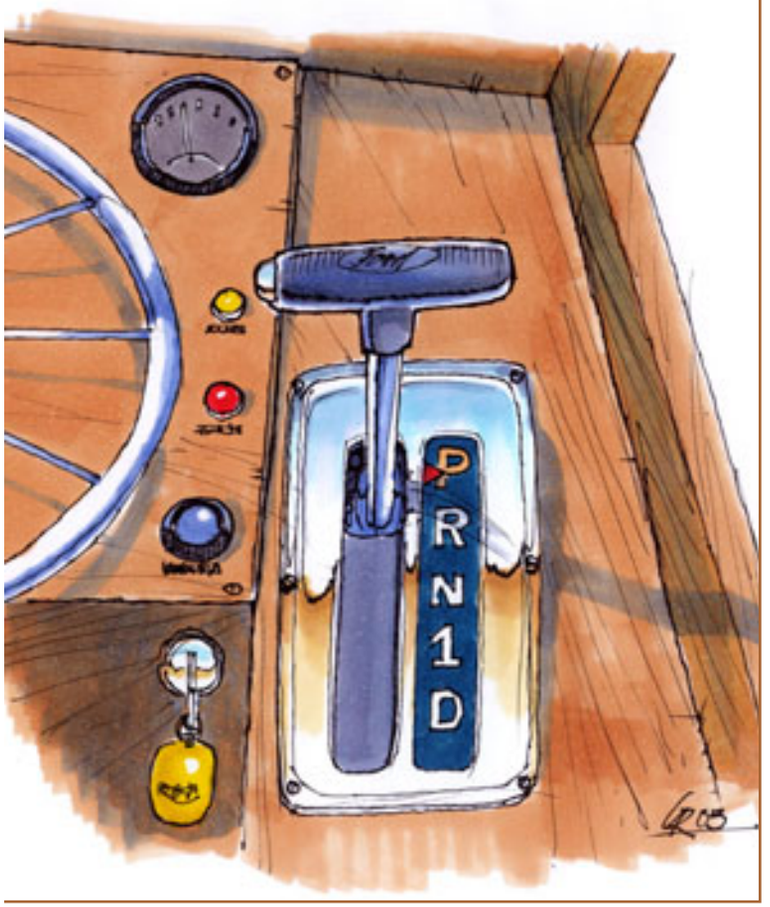
I decided that the boat should be put on the trailer before any fitting out was done because the boat would become too heavy to lift onto the trailer afterwards.

Once the boat was on the trailer, it was time to refit all the accessories including the installation of the LPG piping and gas cylinder storage.

The LPG regulations for boats is quite stringent, as my interpretation of the regulations showed that the gas cylinder storage I had built did not comply with the regulations, and required some rework. Although the rework was not extensive, it showed that I should have done more homework in this area before I started to build the cylinder storage.

The regulations require that the cylinder storage be fully sealed to prevent any leaking gas from making its way into the bilge. It also must have a vent in the bottom of the cupboard that vents to the outside of the boat, and also a minimum of 230mm above the waterline of the loaded boat. The

***Below:** The painting completed and the boat's on the boat trailer and ready to start fitting out. My late father is on the right.*



regulations also make it impossible to have a gas fridge in the cabin of the boat, because if there is provision for sleeping in the cabin the cabin is then deemed as a bedroom, therefore a gas fridge cannot be fitted. Also any bulkheads that the gas piping passes through must be grommeted and fully sealed to prevent damage to the piping.

Once the gas installation was completed, it was time to have an inspection by the Office of Gas Safety, whose inspector was quite helpful in providing the information requirements of the regulations. He asked that some further items be done, and said he would return to re-inspect the boat. The additional requirements included that I have some signs made regarding the operation of the stove and turning off the gas cylinder when not in use. The inspector returned and issued me with the Certificate of Compliance.

It was at this time that my father lost his battle with cancer. Unfortunately he was never to see the boat finished.

The engine and fuel tank were refitted and the engine's electrical wiring was made and connected to the boat's electrical system. On completion of that work it was time to start the engine. This proved to be a real problem as my brother and I spent a whole day trying to get the engine to start.

We could get the engine to turn over, but it would not fire. I called in the assistance of a retired friend, who once worked for the RACV; it took him about 10 minutes to establish that I had the firing order set up incorrectly. Once this was rectified the engine ran like a Swiss watch. With a few adjustments to the engine and transmission, the boat was completed and made ready for its first sea trials.

Australia Day 2003 was the day that *Dad & Dave* was to hit the water after some twenty plus years out of the water. The location for the trials was St Helens Boat Ramp in Geelong. The day was sunny and Port Phillip Bay was calm. The trip from Ballarat to Geelong was no problem for my 1982 Ford F250 and the Easytow boat trailer.

Once at the boat ramp, the boat was made ready for the water and the boat and trailer was reversed down the ramp. However, due to the size and weight of the boat, the boat has to be floated off the trailer which requires that the trailer be fully submersed into the water.

Once the boat was floating it was tied to the jetty and with fingers crossed, the engine was started and the transmission put into gear. The automatic transmission worked very well, allowing the boat to move off very slowly and once out of the harbour the engine revs were increased

Below: ***Dad & Dave ready for its first sea trial.***

***Above:** Dad & Dave back on the trailer and back up the ramp.*

and Dad & Dave moved along really better than expected and reached a top speed of 10 miles per hour.

Any increases in engine revs however did not increase boat speed so it was decided that this will be her top speed. The only problem was the boat had a slight list to the starboard side.

The next task was to get the boat back on the trailer, this proved very easy because the trailer was fitted with an electric winch which easily pulled the boat back onto the trailer.

The next problem was pulling the boat and trailer back up the boat ramp. This proved to be more difficult as the vehicle was only two wheel drive, and with the rear wheels spinning on the wet ramp, there was no way that we were able to get it up the ramp. However, help was not too far away, as this ramp is a Volunteer Coast Guard ramp. They were having a BBQ at the time, and a number of them came over and climbed onto the Ford's tray, adding some needed weight (and traction) to the back wheels. This enabled the truck to pull the boat and trailer up the ramp. Their advice to me was to get a 4WD vehicle before my next trip.

Once the boat was home again, a couple of modifications were required to get rid of the list.

This was overcome by relocating the fresh water tank and installing another battery, as the 12 volt fridge put a huge power draw on the two batteries required for engine starting and other boat electrics.

Another vehicle was then required, and a search on the web provided me with information about a 1991 F150 4WD that would suit me down to the ground. A trip to Melbourne followed, to trade in my old truck and purchase the new truck.

By this time, it was Easter and with the new truck and a mate of mine, we headed to Geelong again. This time for a fishing trip, but it was also to be our first overnight trip, so we would also be testing out the bunks in the boat. The trip proved very successful with a bag limit of fish being caught. The overnight stay also was great. I must say that l get a great deal of satisfaction fishing and sleeping in a boat that we've built ourselves.

Since then l have had a couple of other fishing trips in the boat, and wherever l take the boat, the boat get lots of looks and complements from other fishermen at the ramp.

I believe that my late father would be looking down and smiling with pride whenever l take the boat out. My father's dying request was to have his ashes scattered in Port Phillip Bay from the back of the boat.

I will be doing this on the 1st of November 2003, my father's birthday.

People ask me, why build a wooden boat. My reply is: *Why not?*

Their next question is: How much did it cost? Saving money was not the main reason for building *Dad & Dave;* it was more about having a go than the cost.

Footnote: I have since found out that the boat was originally built by Whittley Brothers of Melbourne in the mid-fifities to a Hartley design.

In memory of my Dad Leo Richard Long 1-11-1936 to 11-12-2002 – GONE FISHING!

Dad & Dave's Specifications.

Length 6.1 metres (20').
Beam 2.48 meters (8'2'').
Draft 0.7 metres (30 inches).
Weight 2,000 kgs.
Engine Ford 2 litre V4 (80 BHP).
Transmission Borg-Warner 35 automatic (Using 1st gear only).
Engine position Mid-mount
Prop Size 13" dia x 14" P.
Top speed 8.5 knots.
Fuel capacity 100 litres.

If any readers would like to contact me l can be contacted at the following address and phone numbers,
David Long,
28 Canterbury St,
Ballarat VIC 3350.
Phone A/H (03) 53316334.
Email ***d.long@smbits.ballarat.edu.au.***

F&B