Building Bob's 8.4m DORY

Words by Bob Davis, Photography by Han Jie Davis

Introducing perhaps the most unusual DIY series we've ever published in F&B. Written (and built!) by husband & wife team of Bob and Han Jie Davis, it describes how they set about building a comfortable, practical cruising fishing rig they can use in the Whitsundays, around their home state's Far South Coast - powered by a 60hp outboard - and towed by a normal 4WD. Bob is determined to prove it can be done - all up - for less than $50K - and he wants to share his methodology and thinking to inspire other readers to similar projects.

His theme? 'There has to be another way' - and we all agree that's a concept worth pursuing!

This tale covers the construction, launch and early life of an eight metre timber and plywood power Dory. It offers an affordable alternative for people who want a bigger trailable power boat with overnight accommodations, that's sea capable, easily driven and economical to run, with low horsepower needs, reducing engine emissions and making it greenhouse friendly.

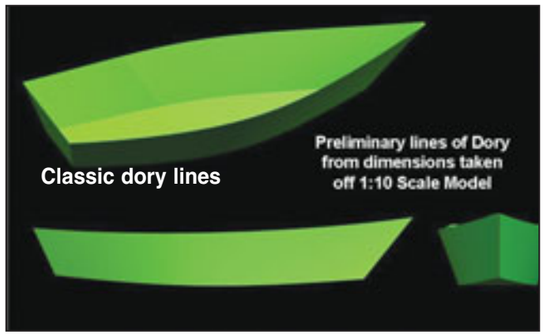
This story has many facets, embracing DIY construction and outfitting of the boat, and its trailer. Both subjects require too many words and pictures to do them justice for readers interested in doing such a project, in the confines of a magazine article format. Hence, additional information on the project, in the form of Project Chat Sheets, is provided on the www.Seamedia.com.au website.

Why Build This Boat?

Project **Chat Sheet #1** (**There is Another Way**) sets out my thinking. After 40+ years of boating, I contemplated moving away from planing hulled boats requiring big engines. Consider the combination of global efforts towards reducing greenhouse gas emissions, the ever tightening shortage of oil supplies, forecasts of oil pricing over $US200 a barrel by 2020, the inevitable impacts on costs of building aluminium and GRP boats, and anticipated steep hikes in the costs of energy for manufacturing, as a consequence of carbon trading schemes. The current global financial recession just makes it all seem worse.

Close to home, the rising costs of manufacturing alloy or GRP boats are forcing prices beyond the reach of average families. Apart from the adverse impacts on commercial boat builders and their employees, it's sad that there are so many families who would like to go boating - but don't, because they currently can't afford to buy and run a big enough boat.

However – perhaps they can, choosing a simple semi-displacement hull form that will be sea kindly and easily driven, requiring significantly lower horsepower and thus making it more greenhouse-friendly than an equivalent sized V-form planing hull. This 8 metre dory can be efficiently driven using a 60HP outboard motor. Think about that – space for a family, dramatically reduced future fuel bills, delivered using eco-friendly plywood to make an affordable hull



This story is for the many people who simply can't afford to buy and operate a new manufactured boat requiring a big and high-fuel-consumption motor. The project is about proving that a semi-displacement boat is do-able and affordable and greenhouse friendly.

For over 40 years, manufactured V-form planing hulls have been a big part of my life, and I'm not advocating a DIY epidemic to the detriment of our struggling boating industry. It's inevitable that boat manufacturers will have to turn their attention to designing new displacement and semi-displacement hulls that require lower power and consume less fuel. It's a matter of when, not if. That's the reality today. Long-proven and eco-friendly dory hulls just might be a good starting point for the resurgence of our struggling powerboat building industry.

The Preparatory Work

Before starting a boat build, there's a lot of preparatory work. The matter of modelling and development of the Dory design is covered in **Project Chat Sheet #1**.

This was the first build using the design, so we had to plot how to build it, and develop an initial bill of required materials, including:

- Materials with which to construct the boat – in this case, Hoop Pine plywood and timber (see **Chat Sheet #2** on use of exterior grade plywood).
- Steel to build the trailer (see **Chat Sheet #3** on the trailer).
- Tools (see **Chat Sheet #4** for my take on tools).
- Long bench for working long ply panels (see **Chat Sheet #5** on creating one).
- Glue and fasteners – epoxy supplies, ring lock marine nails, and stainless steel screws, bolts, coach screws.
- Materials for the electrical system – cabling, connectors, protected switch panels with circuit breaker or fuse items, navigation and cabin lights, battery boxes, isolator switches – and more.
- Epoxy primer and paint.
- Items for fitting out – hatches, bollards, cleats, a bow roller, gunwale strip, hand rails, bilge pumps, inspection ports, slop stoppers, hinges, skin fittings etc.
- Fuel system – tanks, fillers, breathers, hoses, filters.
- Steering system – wheel and helm unit (hydraulic pump or cable), hoses or cables, engine connection unit.
- Galley – the proverbial kitchen sink, a stove, the freshwater system.
- General boating stuff – compass, anchor, ropes, chain, safety equipment etc.

Project **Chat Sheet #6** is my initial materials list. Instead of trickle-feeding all of this stuff, with inevitable lead time delays, I decided to get the majority of it organised up front.

I sourced my Hoop Pine plywood and timber locally, from Johnson's in Ulladulla. They also supplied select grade Celery Top Pine timber at a very competitive price.

For the fasteners – like silicon bronze ring nails, stainless