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Dibley Classe 950

DIBLEY CLASSE 950

The Class 950 is a box rule that was created by famed French solo sailor Jean-Marie Vidal in 2006. Aimed at coastal, semi offshore, and offshore short-handed racing, the rule intends to bridge the gap in both performance and cost between the Mini 6.50 and the Class 40.

The 950 is the perfect yacht for the Corinthian sailor looking for a mid-sized, competitive, fast, fun and affordable boat to race. But the rules also stipulate a minimal amount of interior which includes a small Galley, Head, Berths and Nav Station. This gives more than adequate accommodation for comfortable weekend cruising.

The Class Rules, though quite strict in as far as maximum beam, length overall, maximum sail area and maximum draft, most everything else goes and the designer has room to really push the boundaries in performance and aesthetics. The Dibley 950 has a total beam of 3.70 meters with U-shaped sections forward morphing to a carefully designed chined hull form aft. The result is a hull shape that will easily get on the plain off the wind, but also be a very stable and powerful platform on the wind. A maximum total sail area of 80 square-meters, as stipulated in the rule, results in a

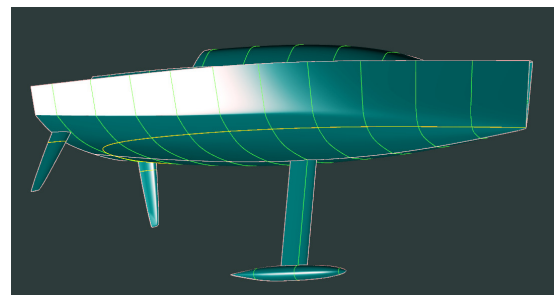
yacht that can really fly, and combining this with 450 liters of water ballast and twin rudders, this yacht will have total control, with speed, at all angles of the wind.

DIBLEY MARINE SERVICES

- Naval Architecture
- Yacht Design
- Design Modifications
- Stability, STIX, AVS & Trim Analysis
- Keel and Rudder Design
- VPP & Performance Analysis
- Racing & Cruising Yachts
- Planing & Displacement Launches
- Design Reviews

SPECIFICATIONS:

LOA:	9.50 m	31' - 2"	Displacement [measured]:	2,700 kg	5,952 lb's
B0A:	3.70 m	12' - 1"	Upwind sail area:	80 m ²	861 sq.ft
Draft:	2.40 m	7' - 10"	Downwind sail area:	155 m ²	1,668 sq.ft
Motor:	20HP YM 3YM20-SD20 Sail Drive				
Appendages:	fixed center line keel and twin rudders. [lift keel option]				
Construction:	Foam core with glass and epoxy resin.				
Water ballast:	2 tanks each side, total 450 liters per side				



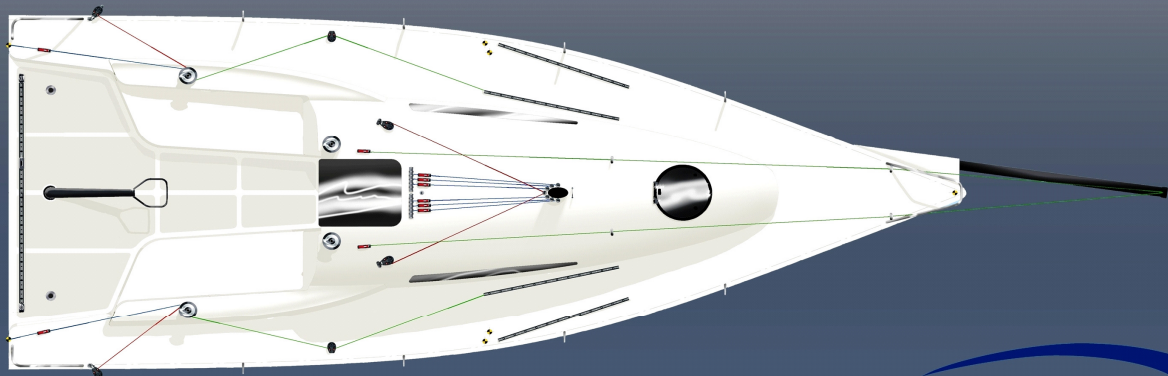
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DIBLEY CLASSE 950

(Continued)



Dibley Classe 950

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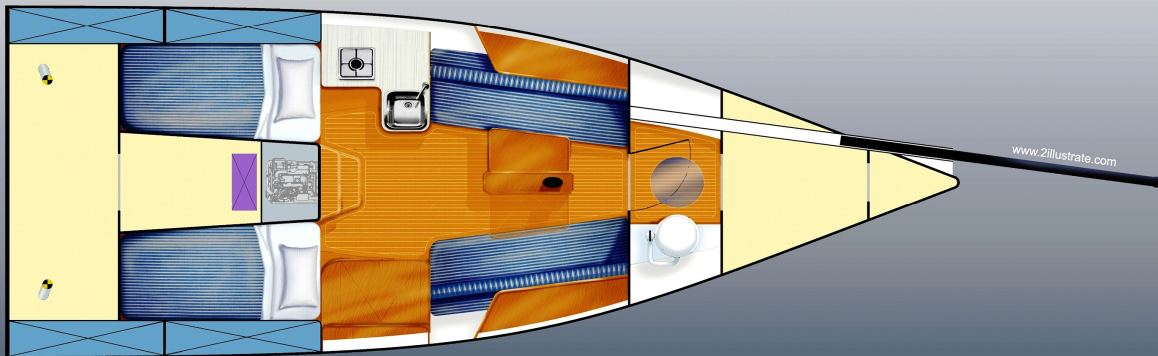
Yacht Designers

Part of the attraction of a box-type rule is it encourages home build and DIY type owners. A yacht can still be professionally built, of course, but some owners prefer to complete the projects themselves, saving labour costs and gaining knowledge and experience through the building process.

Dibley Marine has teamed up with Structural Engineer Nina Heatley in putting together a comprehensive set of home builder plans. Nina was previously with High Modulus NZ Ltd. (now SP-High Modulus) before branching off on her own. Her business 'Clever Fox Ltd', has been involved in a number of our projects and they do a great job whether it's a full on racing yacht, or a displacement cruising launch.

For this particular Class Rule, we are fairly locked in with internal layout and cabin volume, but we have the ability of customising the cockpit and deck layout to cater for those that are either Club Racing with weekend cruising, or full on offshore racing. Cockpit seats and coamings can disappear, opening up the cockpit further on the sacrifice of internal volume in the aft berths. We also have the ability of tweaking the hull lines to cater for certain conditions such as light or heavy weather, upwind, reaching or running preferences. Each client can have customised input.

If you are interested in a professionally built yacht; semi built hull, deck and internal structure; or a comprehensive set of plans for home build, give us a call or drop us an email.



www.2illustrate.com

IRC 34 UPDATE

DIBLEY 34 IRC OPTIMISATION:

In our last Newsletter we talked about the optimization that can be done during the design process, as well as the people we bring in to assist.

For the Dibley 34, we brought in Doyle Sails (NZ), as they are a crucial part of the IRC equation, not only in performance and rating, but also in the optimization of deck layouts and trimming ergonomics. All too often the sailmaker gets contacted far too late in the design process, after the deck layout and rig has been finalized and locked in. The designer and client then lose that opportunity to have crucial input in optimising the yachts deck and rig layout, to gain maximum end results.

When Doyle's received the Dibley 34 files, they imported the 3D hull model into their in-house software. They then designed the sails around the rig and tracks to maximise actual area while giving the lowest rated area in terms of IRC. Small deck gear and rig adjustments are made during this process, and as required.

The jibs, for instance, were purposely made short on the hoist so that the top battens can tack through without get-

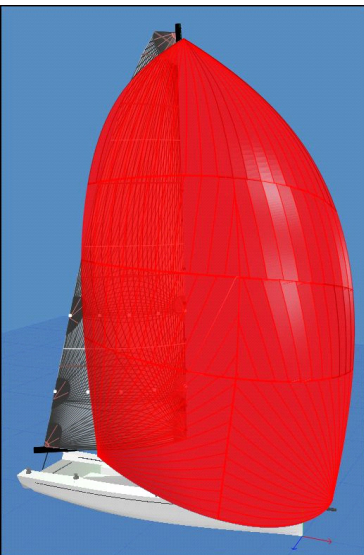
ting held up on the mast. This gives the added benefit of reducing the boat's 'LL max' which also helps lower the rating. It also moves the sail away from the turbulent flow of the mast, thus not only making the sail smaller which helps rating, but also makes the actual area being used, more efficient, being in cleaner flow.

Square-top mains are becoming quite popular as of late, but the RORC still, quite rightly, penalises the large roach it creates due to the power it can generate. So it is a matter of working out how large in the 'head' they can go to increase performance, before it crosses over into a rating that can't be sailed to. The main's roach is designed to induce the maximum twist at the top of the sail which increases efficiency and reduces the drag off the top. It is a fine line, but we have found that if we start off with a 'Head' that is 13% of E, and we base our VPP's on this, we can quickly work out a safe margin between good rating and good performance. And if we do this carefully, working alongside the sail designer, the lower girth measurements can still be within the safe modes of the rule 'default' measurements thus minimising rating penalties.

Doyle's are also maximizing the Area vs. Rating penalty on their downwind sails. In particular they've worked hard on promoting as much windward rotation as possible in their A2 Running Gennakers. As a result, they are now able to design these sails with a smaller rated area than they have in the past, in order to further reduce the IRC Rating.

IRC is only interested in the largest headsail that is carried onboard. This sail would usually be the #1 light. But as the wind picks up, past the 10 knot region, for instance, smaller more efficient sails need to be used. A good case in point are the regattas that take place on the East Coast of Asia. The **King's Cup in Phuket**, can produce very light winds and the sails need to be shaped accordingly. The month previously, however, the **Raja Muda Selangor International Regatta** has overnight races that produce both light and heavy winds. As such multiple headsails are required and cross over charts need to be created to allow the crew to use the most efficient sail to the winds encountered. Your sail maker can help with this cross-

over and in case of Doyle's with their in-house software, they worked all this out before our design had even left the design studio. This allowed us to fine-tune our deck layout to suit these sail transitions, thus further increasing performance through crew efficiency and trimming. A win-win for all.



Latest 2010 Launching Davidson 69 'PENDRAGON VI'

Recently launched in California, *Pendragon-VI* (P6) is Laurie Davidson's latest design to hit the water. A bigger sister to the Davidson 52, *Pendragon-IV* (P4), P6 has been designed for offshore and passage races such as the **Transpac Race** to Hawaii and the **Puerto Vallarta Race** to Mexico.

The design features an hydraulic lift keel, retracting prop shaft, twin rudders, and large masthead gennakers. All halyards and control lines run under the cabin and deck which allows a very clean and uncluttered deck layout. The interior is open, and comfortable for great entertaining when in port, but also providing safe offshore racing comfort.

Laurie Davidson is most notable for his design work in the America's Cup but has had a long list of other design successes under his belt making him one of the top designers in the world. As chief designer for Team New Zealand in 1995, Laurie designed NZL32 which won the America's Cup off Dennis Connor in five straight races out of San Diego. The 'Cup' came to New Zealand where in 2000, Laurie's new design, NZL60, winning 5 straight races off the Italian Challenger *Luna Rossa*, successfully defended the 'Cup'.

Laurie was inducted into the America's Cup Hall of Fame in 2007, but his design work continues on a number of different projects and Dibley Marine have the pleasure of working alongside him on all aspects of the design process.



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SPECIFICATIONS:

LOA:	21.30 m	69' - 11"
BOA:	4.82 m	15' - 10"
Draft:	4.74 m	15' - 7"
Displacement [measured]:	13,750 kg	30,300 lb's
P:	28.00 m	91' - 10"
E:	10.00 m	32' - 10"
I:	25.55 m	83' - 10"
J:	7.5 m	24' - 5"
Chief Designer	Laurie Davidson	
Full Design Support	Dibley Marine Ltd.	



WE ARE ON THE WEB!

www.dibleymarine.com

Sailing Links and News

2-Illustrate.

www.2illustrate.com

Crew.Org.nz

crew.org.nz

Westlawn Institute of Marine Technology

www.westlawn.edu

Royal New Zealand Yacht Squadron

www.rnzys.org.nz

Yacht Yakka

yachtyakka.co.nz

Scuttlebutt Europe

www.scuttlebutteurope.com

Sailing Anarchy

www.sailinganarchy.com

Yacht Forum

www.yachtforums.com



Design Studio, Westhaven Marina, Auckland, NZ , 2010

From the Design Office:

2010 has seen Dibley Marine tackle a wide variety of projects that were as diverse as they were interesting. Projects included a Gymnasium layout for a 179' Classic Ketch; a range of swimming pools for Laguna Pools (NZ); Appendage re-designs for a Reichel/Pugh 75-foot racing yacht and a Juan Kouyoumdjian designed TP52; a 12-meter Trimaran with David Wilkie; a 9-meter exhibition sailing Trailer Yacht for a Queenstown owner; and a folding 2.4-meter dinghy, to name just a few. Mixed within all that were some great designs like the Classe 950 and IRC34.

Dibley Marine get a lot of project proposals and requests coming to them throughout the year. Some we take up, and others we put aside. But the common link in all of them is that we are dealing with people first, projects second. It's the owners, clients, and the sub-contractors we deal with that make this job so interesting. We would like to wish each and every one of the above, as well as you readers, a very Merry Christmas and the Happiest of New Years. We look forward to sharing our news in 2011.

Kevin Dibley

NEWS & RACING RESULTS:



- Dibley design wins the NZ Marblehead Championships, two years running. Paul Goddard, racing the DM3-RM design (picture to left), took out the 2010 NZ Championships during the last weekend in November. By taking the 2010 Title, DM3-RM has the 2009 NZ Marblehead Championship, the 2010 North Island Championship, and the 2010 NZ Marblehead Championships to its credit. A new design, DM4-RM is currently being built.

- The Dibley 8-meter 'Springloaded' continued her winning streak through 2010 by taking out the overall win in the 2010 Naval Point Yacht Club Twilight Series out of Christchurch, New Zealand. This 10 Race series was highly contested with 22 entries this year. To the same design as multiple NZ trailer yacht champion 'Supergoove', 'Springloaded' has been under the helm of Daryl Pender for a number of years and her success is a testament to both the crew he has brought together and the design pedigree of this 18 year old design.



- The Dibley 650 'Stealth' was recently re-launched in Fiji by her new owner Nigel Skeggs, where she got a 2nd Overall in the 'Fiji 2010 National Sailing Regatta'. Complete with new paint job and updated deck gear and equipment, 'Stealth' will race out of Port Denarau Marina, and the owner is quite rightly excited. 'Stealth' has an interesting back ground since she was designed in 1994. She was built and owned by Carl Smith who went on to own 3 other Dibley designed yachts and is currently building his 4th, the Dibley 40 Canting Keeler out of Tauranga, New Zealand. Daryl Pender also owned and raced 'Stealth' for a number of years before he purchased the Dibley 8-meter 'Springloaded'. Obviously, both are happy Dibley owners.

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