

LAURENT GILES ARCHIVE

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STUDY NOTES



Equity of Hamble & Mistral **Moody 44**

Design Nos. 0622, 0651 & others

For: xxxx

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The Laurent Giles Archive

The Recreational Directive (94/25/EC) Notice to boat builders

This is Important Notice for boat builders who are planning or undertaking boat building projects where the vessel will be built or sold within the member states of the European Economic Area.

The Recreational Craft Directive (94/25/EC)

Implementation dates The Directive came into force on 16 June 1996, with a transition period, which ended on 15 June 1998. This means that all new built craft must be CE marked. While in theory The Treaty of Rome should ensure that legislation governing CE marked products is the same across the whole of the EEA, the reality is that the regulations implementing and enforcing the Directives are drafted individually in each member state and do sometimes interpret the Directives differently. It is important, therefore, to check the interpretation of the Directive in every country in which a product is to be marketed. Complying with the regulations of one Member State does not automatically guarantee compliance in others and it does not ensure against interference from other responsible authorities or even from prosecution.

Purpose and application The Recreational Craft Directive has been introduced by the European Commission to ensure a uniform level of safety in the design and manufacture of recreational craft throughout the European Economic Area. The Directive applies to all craft that it is intended will be used for sporting and recreational purposes with a hull length of between 2.5 metres and 24 metres. Certain particular items of equipment are also covered, including ignition-protected equipment for inboard and stern drive engines; start-in-gear protection devices for outboard engines; steering wheels, steering mechanisms and cable assemblies; fuel tanks and fuel hoses and prefabricated hatches and port lights.

Exclusions There are also certain specific exclusions from the Directive. The Directive does not apply to: Craft intended solely for racing, canoes, kayaks, gondolas and pedalos, surfboards and sailboards, historical replicas, submersibles, hovercraft and hydrofoils or craft intended to be crewed and to carry passengers for commercial purposes (these are covered by another directive). Craft built for use by the builder are also excluded from the Directive provided they are not subsequently placed on the market for at least five years.

Administrative requirements The Directive has both administrative and protection requirements. The administration requirements are that the product be marked with the CE logo, and that the manufacturer compiles a file of technical information. In the case of complete craft or hulls, this file is to include test reports or calculations demonstrating that the craft has adequate stability in the anticipated sea conditions. The manufacturer also has to complete a Declaration of Conformity. The Directive also lays down requirements for type testing by a notified body and/or quality control procedures. These are set out in a series of 'modules' and are based on the size of the craft and whether any of the appropriate harmonised standards have been used when designing the craft.

Protection requirements The Directive lays out the essential requirements of recreational craft in some depth. These are based upon the conditions for which the craft have been designed: In all there are thirty separate headings under which safety requirements are listed. These include requirements for marking, stability, fire protection, gas equipment, engine protection and many other items. Some are already the subject of harmonised standards, while others have standards in preparation.

The majority of designs provided by **The Laurent Giles Archive** fall into one of the four design categories:

A: Ocean: Designed for extended voyages where conditions may exceed wind force 8 (Beaufort scale) and significant wave heights of 4m and above, and vessels largely self sufficient.

B: Offshore: Designed for offshore voyages where conditions up to and including wind force 8 (Beaufort scale) and significant wave heights up to, and including 2m may be experienced.

C: Inshore: Designed for voyages in coastal waters, large bays, estuaries, lakes and rivers where conditions up to and including wind force 6 (Beaufort scale) and significant wave heights up to, and including 2m may be experienced.

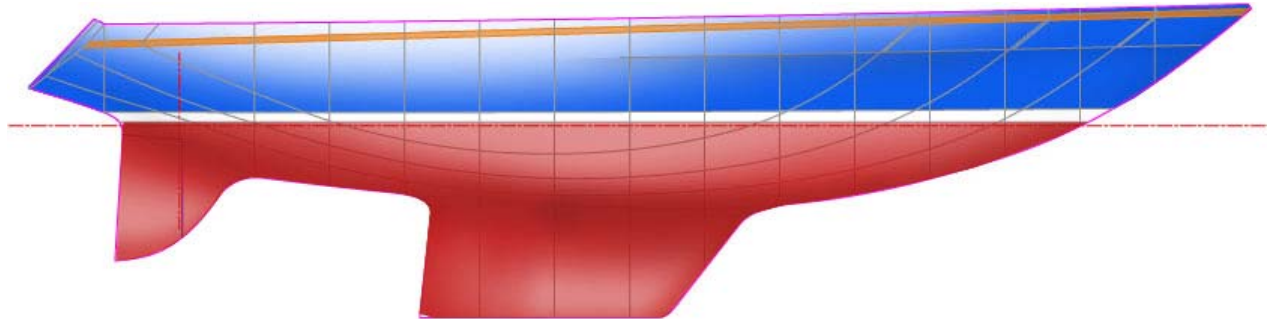
D: Sheltered waters: Designed for voyages on small lakes, rivers and canals where conditions up to and including wind force 4 (Beaufort scale) and significant wave heights up to, and including 0,5m may be experienced.

An indication for the appropriate category (as far as stability issues are concerned) is given in the Study Package. Vessels whose design remain unchanged and were first designed and built before 1950 are classed as Historical Vessels and are therefore exempt. Certain of the designs have been modified since their inception pre 1950, particularly those that have been updated to strip-plank or steel construction. For the majority of designs it may be possible to bypass much of the paperwork insofar as a case can be put to prove by record, each vessels seaworthiness and hull strength. This will not however be true for other aspects of the outfit such as (but not limited to) the fitting of ignition-protected equipment for inboard and stern drive engines; start-in-gear protection devices for outboard engines; steering wheels, steering mechanisms and cable assemblies; fuel tanks, fuel hoses and prefabricated hatches and port lights, or safety equipment (L.S.A) fitted on each vessel.

Purchasers of plans from the Laurent Giles Archive are therefore reminded that under the terms of the requirements of the Directive, it is the sole responsibility of the builder to ensure that their craft is constructed in a way where it is compliant with the Directive.

Introduction

This performance cruising design was prepared for A.H. Moody & Sons and the first yacht from the mould tools *Equity of Hamble* was launched in 1972 and production lasted for just three years but in this time fourteen were built, both sloops and ketches.



Design Number 0622 *Moody 44*, F.R.P production fast cruising yacht

All hulls were moulded by Halmatic and, with the exception of hull no. 6 *Kea* which was finished by McGruer, were finished by Moody at the Swanwick yard.

At the end of 1973 the design was developed for a South African client (0647) and later Giles Turkish representatives built Mistral (0651). Mistral was very competitive in her racing fleet and subsequently the wooden design was licensed with builders in Spain, Australia and New Zealand.

Principal Dimensions

Length Overall	44' 0"	13.41 m
*Length Waterline	34' 0"	10.36 m
Beam	12' 7"	3.83 m
Draft	6' 6"	1.98 m
Draft (Shoal Draft option)	5' 9"	1.75 m
Sail Area Sloop (100% Fore Triangle)	795 ft ²	73.86 m ²
Sail Area Ketch	810 ft ²	75.25 m ²
Sailing Displacement		14 tons
Total Ballast		4.2 tonnes

* The datum waterline is established for the purposes of design and building and is intended to represent only the approximate flotation of the yacht on completion.

Powering, Machinery & Tankage

The standard engine Perkins 4.108 four cylinder diesel developing 40.5 hp with TM hydraulic reduction gearbox. One flexible coupling fitted to the shaft.

Heat exchanger and water injected cooled exhaust system fitted complete with mixing chamber, silencer to skin fitting in the counter

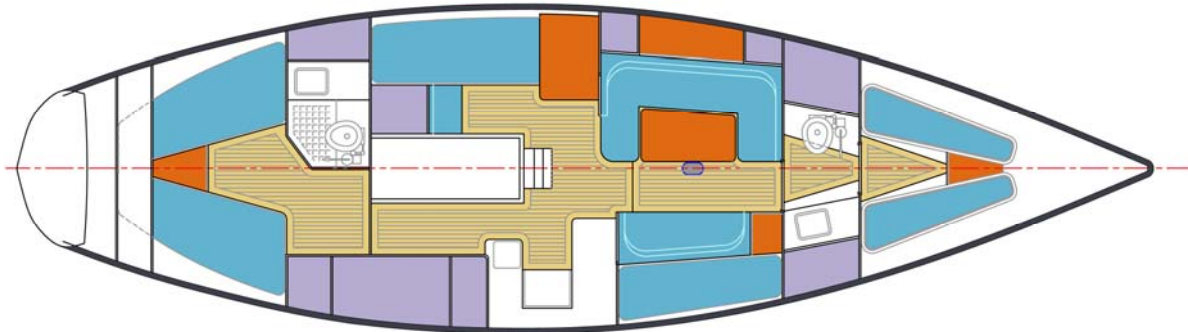
A 12v alternator fitted to the engine, single lever morse control and instrument panel (at helm)

A larger 62 hp engine was offered as an option.

Fuel 100 imperial gallons, fresh water 120 imperial gallons – in integral F.R.P tanks

Accommodation Layout

It is often forgotten that Jack Laurent Giles, among his more notable design breakthroughs such as lightweight wood construction, welded aluminium hull construction and the 50/50 motorsailer was also one of the first, if not the first advocate of an enclosed walk-through beneath the cockpit. We see the first examples of its inclusion on cruising yachts in the 50's and 60's and the first production yacht to feature was our 1969 *Salterns Salar* – itself a design milestone.



Design Number 6224 *Moody 44*, standard layout of the production yacht

The layout adopted tends more towards what was popular in racing circles before the need to strip out everything in an effort to save every kilo of interior weight. But we can see the direction that designers were starting to move in with the forward berths being cots rather than fitted berths.

Four cabins: Aft twin accessed from within the starboard accommodation beneath the starboard cockpit seat. Port side navigation cabin with full size chart table and chart stowage. Main saloon, which has a convertible port 'U' shape settee that with the saloon table converts to a double, starboard settee berth and pilot berth over. The forward cabin was originally specified with twin folding cots but later these were replaced with a fixed 'V' berth arrangement.



The aft cabin *Moody 44*, standard layout of the production yacht.
Twin pillars support the mizzen mast

The aft cabin is well specified with full length wide berths, a central dressing table with fitted drawers, lockers and shelves outboard port and starboard. There is a ventilation/escape hatch over and the cabin door can be closed off from the rest of the accommodation and adjacent galley.



Galley *Moody 44*, standard layout of the production yacht.

The galley is placed close to the main companionway and is of a reasonable size. Originally designed U shape but later modified with the removal of one peninsular. Plenty of locker and shelf stowage and full standing headroom as well as an adjacent skuttle.

The saloon is very large and, with the starboard pilot berth, has space for a generous ‘U’ shaped settee to port and starboard settee berth. There are large lockers outboard and a shelf on the port ship side. The water tanks are located beneath these settees port and starboard. The mast is keel stepped and passes through the centre of a twin drop-leaf table. Partial bulkheads with grab pillars at the aft end leading from the saloon up one step aft to the navigation and galley areas.



Galley *Moody 44*, the standard layout of the production yacht has a pilot berth to starboard.

So few cruising yachts have the benefit of a worthwhile chart table – The Moody 44 was of the generation where navigation was still effected manually, without GPS, chart-plotters and Smartphone Apps and the table is large enough to spread a full sized chart, has plenty of chart stowage in drawers and space for instruments on three sides. The navigator’s seat is

the forward end of the navigator's berth which could prove a disadvantage should the navigator be asleep off watch.



Chart table *Moody 44*, the standard layout of the production yacht has the navigators berth aft.

The navigation station and chart table faces forward and is conveniently close to the main companionway and opposite to the galley.

There are two separate heads compartments; one within the aft cabin and the other forward of the saloon forward bulkhead. Both are equipped with w/c, hand wash basin, shower with deep shower tray and lockers. The heads are full ventilated.



Aft head *Moody 44*, the head compartments are built on Separate internal F.R.P mouldings.

This contemporary style yacht has probably the best use of interior volume of all of our cruiser racer 43-48' designs (13.2 - 14.5) and as you would expect while head-rooms are very generous they do not impact on the design's external aesthetics. Freeboard is not large and, as the straight sheerline is unusual for Giles who is better known for conventional bold dipping or reverse sheerline.

Rigs & Sail Plans

Two rig options were offered as standard; sloop (drawing number 62222) and ketch (drawing number 6225 as cover image).

Later a 'Racing' version of the sloop was fitted to hull No. 9 *Downley*

Sloop Sail Plan No. 62222

I	=	51.150'	15.590 m
J	=	17.875'	5.448 m
P	=	44.150'	13.457 m
E	=	14.750'	4.495 m

Standard Mast Section Proctor U2



Downley, hull no. 9 sloop rig

Ketch Sail Plan No. 6225

I	=	49.000'	14.935 m
J	=	17.170'	5.233 m
P	=	42.330'	12.902 m
E	=	14.330'	4.367 m
PY	=	24.000'	7.315 m
EY	=	8.000'	2.438 m
IY	=	28.580'	8.711 m

Standard Mast Section Main Proctor S7 Mizzen Proctor S13

Construction

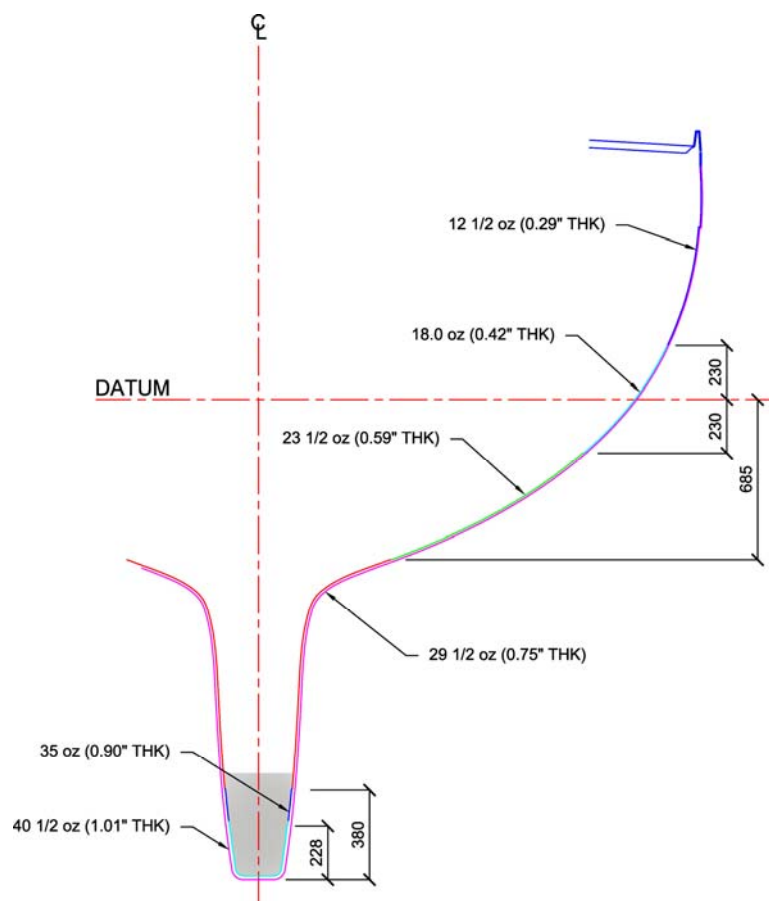
F.R.P

The F.R.P deck and deck works moulding is joined to the hull moulding below the deck at side level, making access to the joint during construction, much more simple. The joint is bonded and mechanically fastened and the whole is covered by the stylised teal rubbing band.

The heads compartments are also built on F.R.P moulds which contribute to the structural strength. Scantlings were drawn in accordance with Lloyds regulations, longitudinal stringers and transverse frames and floors were constructed as ‘Top Hat’ sections over foam cores.

Decks and house roofs were layed-up balsa and plywood cores with

F.R.P Scantlings



Moody 44, production F.R.P lay-up scantlings

0622 Moody 44 - List of Boats Built on Halmatic Hulls

0622-510	1	Equity of Hamble	1972
0622-517	2	Eccola Ancora	1973
0622-519	3	Isolde of Hamble	1972
0622-522	4	New Melody	1972
0622-	5	Unknown	1973

0622-524	6	Kea	1973
0622-528	7	Candida	1973
0622-529	8	Ouzo (Greyhound of Yealm)	1973
0622-534	9	Downley	1973
0622-531	10	Holworth Lady	1973
0622-536	11	Vallela	1973
0622-540	12	Unknown	1973
0622-542	13	Springhill Lady	
0622-543	14	Bettysmink III	

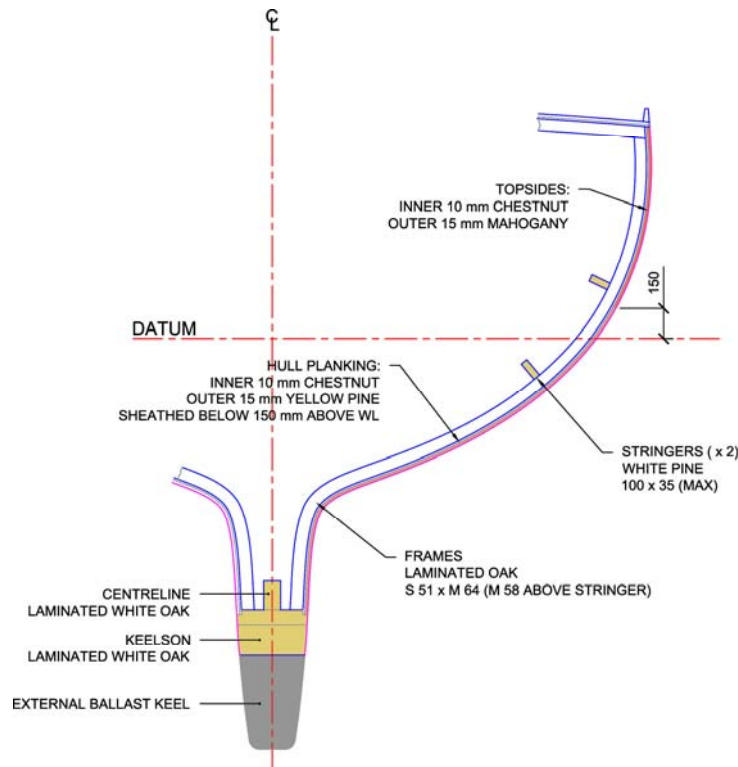
0622 Moody 44 - List of Drawings

622.01	Lines Plan
622.02O	Table of Offsets
622.04/1	General Arrangement Plan & Profile
622.04/2	General Arrangement Sections
622.05	Sail Plan (Ketch)
622.06	Lead Keel
622.07	Body Plan
622.08	Revised Rudder Profile & Offsets (Supercedes 622.10)
622.09	Deck Moulding Outline
622.10	Revised Rudder Profile
622.11	Standing Rigging Schedule
622.12	Deck Plan
622.13/1-2	Running Rigging Schedule
622.14	Reproduction General Arrangement
622.15	Upper Rudder Stock – Guidance Drawing.
622.16	Main Shroud Plates
622.17	Engine Compartment & Cockpit
622.18	Proposed Aft Cockpit Layout
622.19	Propeller Shaft Bracket
622.20	Main Hatchway
622.21	Stemhead Fitting
622.21	General Arrangement - Galley & Chart Space
622.22	Sail Plan (Sloop)
622.23	Cockpit Coaming Pockets
622.24	General Arrangement - Galley & Chart Space
622.25	Sail Plan (Sloop)
622.26	Sketches - Sprayhood
622.27	Cabin Table
622.28	Shroud Plates
622.20	Sail Plan – Conversion to Cutter
622.0031	Arrangement of Headstays
622.00/A84	Free Masthead Stay System
SKETCH	Forward End of Coachroof
SKETCH	Guidance for Masthead Modifications

Wood

The wooden version was built on a nearly identical lines plan, without the forward knuckle or flat in way of the rubbing band. 0651 *Mistral*, the first was built in Turkey and the timbers selected were unusual. Elsewhere Oak, mahogany, Elm Douglas Fir and White Oak were specified in place of Chestnut and Yellow Pine

Wood Scantlings



Mistral, timber scantlings (drawing number 6515)

0651 *Mistral* - List of Drawings

651.01	Engine Installation
651.02	Table of Offsets
651.03	Body Plan
651.04	Preliminary General Arrangement & Sail Plan
651.05	Sail Plan (Sloop)
651.05	Construction Plan (Hull)
651.06	Construction Plan (Deck & Deckworks)
651.07	Rudder & Skeg
651.08/1	Accommodation Plan & Profile
651.08/2	Accommodation Sections
651.09	Sail Plan (Ketch)
651.10	Spar Plan
651.11	Masthead Fitting
651.12	Deck Plan
F.753	Fly to Shroud Plates & Crosstree Sockets
F.361	Standard Mast Ironwork for Wood Crosstrees
F.264	Mizzen Masthead Fittings

Cost of Drawing Copies

Individual drawing copies are available at our standard rate of NZ 85.00 per sheet (plus GSD applicable only to New Zealand) except lofting drawings which are only available as part of the Stock Plan package. The price includes airmail postage.

Cost of Plans

The cost of a full set of plans including the licence to build one vessel is currently NZ\$ 5,285.00 (plus GSD applicable only to New Zealand), which at the time of going to press is approximately £ 2,650.00GBP and €3,650.00 in Europe)

Should you wish to build further vessels to the design, a Royalty payment would become due.

The cost of plans includes reasonable support from Laurent Giles in the interpretation of plans. A building supervision service is offered at extra cost.

The rigs, engine and construction methods mentioned refer to the standard drawings. Naval Architects' advice for any major alterations should be sought

When ordering stock plan set please stipulate chosen construction method, keel configuration and rig

Notes

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