

UPDATE JANUARY 2023

THE JUBILEE



ONE DESIGN CLASS YACHT



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THE JUBILEE

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Front Cover: "Stella" (Les Pound) — reaching off Brighton, Oct. '79.

Left: "Freydis" (Peter Banfield) — on the wind, circa 1975.

A brief history of the Jubilee Class Yacht

In the Jubilee year of the reign of our late King George V. (1935) the first yachtsman in our Empire, emerged from popular opinion the Jubilee One Design Class Yacht

During the previous yachting season yacht clubs on Port Phillip Bay had suffered heavy losses, and many fine yachts had foundered during two disastrous gales that swept our shores. Fleets were so depleted that the time was opportune to plan rebuilding along popular lines.

Mr. J. A. Linacre, then Commodore of Royal Brighton Yacht Club, had the inspiration for a One Design Yacht, moderately priced and suitable to withstand heavy seas and hard weather.

The idea aroused great interest Yachtsmen from many clubs met at Royal Brighton Yacht Club, and discussed ideas which were, a short time later, to realise themselves in the Jubilee One Design Class.

After much careful thought, it was unanimously agreed that the salient features of this new class would be as follow:

1. Boat must be powerful and stable design, so as to be able to withstand safely big seas and strong winds.
2. The boat must be of a handy size. so as to facilitate slipping and launching and beaching if necessary. The measurements therefore decided on were:

(a) Length overall	5.468 m (18 ft.)
(b) Length waterline	4.877m (16 ft.)
(c) Draught	0.406m (1 ft- 4 in.)

3. The design was to be tied up very closely by plans and specifications, to prevent boats being made obsolete by later boats improving on the original design

These points, together with others, were then turned over to Mr. W. D Higgins (R.B.Y.C.) and Mr. Chas. Peel (the well-known boat builder and designer), to draw up complete designs.

It is the genius of these two gentlemen that the finished design came up to the ideals required, and the spark of an idea became the glowing light of achievement.

Within six months ten boats were built; the rate of growth since its inception has been remarkable, and the class throughout Australia has approximately one hundred yachts to its credit.

The Jubilee Design has proved itself under all conditions, and even the most experienced yachtsmen are unanimous in their praise of the complete seaworthiness. ease of handling and safety margin of these yachts.

They are comparatively small boats. but nevertheless, will tackle with utmost safety the worst conditions. On the other hand, they "ghost" along most satisfactorily, even when there is no perceptible breeze at all.

Many owners go cruising in their Jubilee Boats during the Christmas and Easter holidays. and. again. nothing but the utmost satisfaction has resulted. In fact. they found that the shallow draught widened the scope of their cruising activity enormously. and explored parts of the coastline. islands and creeks which to many have been inaccessible in the past owing to shallow water

The chief attraction of owning a Jubilee Yacht. however. is in the racing of it. Picture to yourself a couple of dozen yachts "jockeying" for the best position for a start. All those boats are identical in design. sail area. and everything that counts. There are no handicaps, everyone is off scratch. Everything is even except luck and the skill of the skipper and his crew.

In 1967 the last timber Jubilee (to date) was constructed, due mainly to the rising cost in labour. scarcity of good quality timber and the general decline in boat building skills. The Jubilee Yacht Association set about designing and producing a hull and deck mould for a R.F.P. (reinforced fibreglass plastic) Jubilee. Many hours were spent in sanding and smoothing the hull and deck of J36 "GAYWIN".

This resulted in the current mould of hull and separately deck/coaming, which. when bolted together around the gunwales a smooth sleek and robust fibreglass Jubilee is produced- With a realistic price tag the fibreglass production technique revitalized the Jubilee fleets providing the class with 25 new yachts in the last twelve years the Jubilee has achieved its objectives and has proved extremely satisfying to all who have sailed them. The most pleasing aspect of the "Jube" is her ability to be sailed by one to four persons. to glide along in light airs and yet handle rough conditions with relative ease.

The Jubilee is a tribute to her designers and can proud ly stand among the most versatile and enjoyable yachts in the world.



Launching and christening "Freydis" J1, at Brighton, 1935.

Sailing a Jubilee

When selecting a yacht, one must establish the purpose for which the yacht is to be used, where it is to be sailed and finally, but most important under what conditions it will be sailed.

It is the versatility of the Jubilee that appeals to most owners. Their family, friends and crew.

Racing a Jubilee is its chief attraction, but because of its stability and safety it also makes a very good cruising yacht. Racing to win requires knowledge by the skipper and crew of the many pieces of equipment capable of suitably setting sails for varying conditions and racing takes place in winds of up to 40 knots. Fittings are located so that adjustments can be made quickly and with a minimum of effort by the crew. Basic equipment is as follows:

Jib Luff Tension, necessary to alter the jib shape with varying wind speeds.

Mainsail Luff Tension, necessary to alter the mainsail shape with varying wind speeds, to match the jib setting, and so achieve maximum performance. This adjustment can be made by using a sliding gooseneck or Cunningham Eye or both.

Mainsail Foot Tension can be effectively controlled by about a 4 to 1 advantage system, so that adjustment may be made while the boat is close hauled.

Jib Sheets, in either single or double purchase depending on crew strength and or wind strength. Fore and aft and athwartships adjustments are made by using slides or a Barber-hauler system.

Main Sheet, which may be fitted with either centre or boom-end sheeting fittings, provided that the maximum athwartships adjustment is made available. A 6 to 1 block system is about the optimum for mainsail adjustment.

Mast Bending Equipment, which is usually a simple lever installation to apply a load at the foot of the mast is used to quickly bend the mast to enable the sail to be flattened, and its shape altered to suit the prevailing wind speed.

Topmast Forestay, which is optional, is useful, where necessary, to control the bend of the upper mast, so that complete control of the sail is affected,

Spinnaker Gear, should be set up to provide simple adjustment of Brace, Sheet, Downhaul and Topping lift Cleats for the Brace and Sheet should be located so that they are easily operated under load and by the crew in any normal sailing position. The Jubilee spinnaker can be used in winds of up to and over 30 knots if the gear is of sufficient strength. On a close reach the spinnaker is of little use over 23 knots. The Jubilee will plane in a flat sea with a breeze of about 30 knots. Surfing in a sea would occur at a much lower wind speed.

The Centre Plate, which is of course lowered to the allowable limit for on the wind sailing, is raised for a square run, and may be lowered fractionally when reaching. The abovementioned equipment* which may be supplemented by fine tuning gear, together with compulsory safety equipment such as flotation. pumps, bucket, anchor etc. make the Jubilee a fine racing yacht as well as a very safe cruising boat.

The shallow draft (406 mm (1 ft. 4 ins.)), provides for easy beaching. Outboard motors may be fitted on well-designed brackets and covers may be fitted for overnight sleeping. The matters discussed above, indicate that the Jubilee is a very versatile yacht and provides excellent sailing for crews of three or four, which means that whole families can race or cruise. Trailers are common among Jubilee owners who can readily transport their boats to and from championship venues, and launch by crane and slings or launching ramp.

Wonderful enjoyment is derived from these sturdy, safe and inexpensive Jubilee One Design Class Yachts-



"Halcyone" – cruising off Mornington, 1979.

Constitution of the Class

1. The Jubilee Class Yacht Association of Australia shall be the supreme controlling body or the class and shall exercise all powers relating to the class as a whole not herein provided for. It shall have the custody of the Master Copies of the Rules, Specifications and Plans of the class, and shall have the sole right of selling copies of the same.

2. The Supreme controlling body shall consist of a committee of not less than seven persons of whom two-thirds at least shall be Jubilee yacht owners who shall be elected at a general meeting of the Jubilee yacht owners to be held annually not later than the month of November.

3. A local controlling body shall be appointed for such territory as shall be delineated by the supreme controlling body for the purpose of sponsoring and controlling the class within that territory. Such territory shall as far as possible be based on State, provincial or national boundaries but other boundaries may be adopted in any case the supreme controlling body shall think fit. Local control bodies shall have jurisdiction over the territories for which they are appointed and shall be self-governing in all local matters not conflicting with the Constitution or the Rules. Specifications and Plans of the Class.

4. Any other recognised yacht club or association may apply to the supreme controlling body for permission to adopt and sponsor -the class within any territory in which it is situated and the supreme controlling body may thereupon if it thinks fit appoint the recognised yacht club or association so applying to be the local controlling body for a territory to be defined by the supreme controlling body, provided no other local controlling body has been appointed in respect of that territory But notwithstanding that a local controlling body has been appointed for any territory such territory may be subdivided into two or more territories and a separate controlling body appointed for each in lieu of the previous one controlling body, but in such case the local controlling body previously in control of the whole area shall be appointed the local controlling body in respect of the new territories so created by subdivision Provided however that each Australian State shall comprise one territory and shall not be subdivided.

5. The appointment of any local controlling body other than those referred to in clauses 3 and 4 hereof may be withdrawn at any time by the supreme controlling body and another local controlling body appointed for such territory.

6. No yacht shall be considered as a Jubilee class yacht unless and until it shall have been registered with the supreme controlling body, and no yacht shall be eligible to take part in a Jubilee class race unless so registered. Every application for registration shall be in writing and shall be made through the local controlling body in whose territory the applicant is and must be accompanied by the Measurement Certificate

hereinafter referred to. Such application shall contain the name and address of the owner and such other information as shall from time to time be prescribed by the supreme controlling body.

On receipt of such application the supreme controlling body shall if the same be in order, have the details thereof entered in a register of all Jubilee class yachts, to be kept by the supreme controlling body and shall allot an official number to the yacht and issue a Certificate of Registration. In the event of any alteration being made in any of the registered particulars the Certificate of Registration shall be forthwith forwarded by the owner to the local controlling body and by that body to the supreme controlling body for amendment and if not so forwarded the Certificate of Registration shall become void. The supreme controlling body may cancel or suspend a Certificate of Registration where in its opinion there has been a breach of this rule or the yacht or owner becomes in any way ineligible in the opinion of the supreme controlling body.

7. Each local controlling body shall appoint such official measurers as it shall think fit and shall complete and supply Measurement Certificates for all yachts in its own territory.

No yacht shall compete in any Jubilee class race, or as a Jubilee class yacht, unless it shall hold a current Certificate of Measurement.

8. Each local controlling body shall appoint one or more committees to foster and manage the class in its own territory or any part or parts thereof. Such committee or committees may consist of any number of persons, but at least 50 per cent of the members of each such committee shall be owners or part owners of Jubilee class yachts. Unless otherwise specified one-half of the members of such a committee shall form a quorum.

9. Each local controlling body shall arrange and/or conduct races for the class in its own territory, and unless the local controlling body shall otherwise resolve such local controlling body shall each yachting season conduct a championship race or series of races to determine the champion yacht of its territory for that season.

10. Each local controlling body shall appoint one delegate to represent its territory and such delegate shall arrange all international interstate, interdominion and inter-provincial races and all races between yachts of different territories. Such races shall be held in accordance with the rules hereinafter provided for such races and such other additional rules and conditions as shall be from time to time prescribed by the delegates. The delegates need not meet together, but may make arrangements by correspondence and the procedure to be adopted by the delegates (including a quorum, if any) shall be as from time to time agreed by the delegates, and in default of agreement as prescribed from time to time by the supreme controlling body.

11. These rules, including the Constitution Racing Rules and the Plans and Specifications, may never be suspended, but may be amended in the manner following:

Any person or body desiring that any amendment shall be passed shall first submit the same to the appropriate committee appointed by the local controlling body of the territory in which he resides and such proposal for amendment shall be considered at a meeting of such committee called for such purpose. If such committee shall approve of

such proposal for amendment by a majority of three-fourths of those present the local controlling body shall forward the resolution for amendment to the supreme controlling body, together with the sum of \$5 or such other sum as the supreme controlling body shall from time to time prescribe to defray the expenses of the supreme controlling body in conducting a referendum of all financial registered owners of Jubilee class yachts. Such referendum shall be conducted by post, and the supreme controlling body shall prescribe a time within which votes must be recorded.

If three-fourths of the votes so recorded are in favour of the resolution for amendment the amendment shall be deemed carried, and shall thereupon be incorporated in the master copies of the Rules on a certificate of the chairman and secretary for the time being of the supreme controlling body, The supreme controlling body shall notify the result of the referendum to each local controlling body, which shall thereupon advise such result to the Jubilee class owners within its territory. In any such referendum there shall be one vote in respect of each Jubilee yacht, and in the event of more than one co-owner of a yacht recording votes the vote of the owner whose name appears first on the register kept by the supreme controlling body shall be recorded and the votes of all other co-owners rejected- Referenda conducted in accordance with this rule shall be held not more often than once in any calendar year. In any such calendar year resolutions for amendments shall be submitted by local controlling bodies to the supreme controlling body not later than 30th April. and the date to be prescribed by the supreme controlling body within which votes must be recorded shall be not later than 30th June. Any alterations or additions to the Constitution, racing rules of the class, rules relating to international, interstate races etc, specifications and plans and measurements arising out of any such referendum shall become effective on 1st October in the year in which such referendum is held.

12- In the event of there being any doubt as to the interpretation or construction of these Rules of the Jubilee Class (including the Plans and Specifications) the matter shall be referred to the supreme controlling body, whose ruling thereon shall be final and binding on all persons concerned. In so interpreting and construing these rules the supreme controlling body shall not be bound by the strict legal construction thereof, but may give effect to what it shall consider to be the intended meaning thereof and so place a broad and elastic interpretation on these rules. As no rules can anticipate every possible situation, the supreme controlling body may (and shall if so requested) where any subject is not covered herein or by the dictates of common sense issue a ruling thereon which ruling shall thereupon be deemed included in these rules. Any such ruling and any decision on the interpretation of these rules shall with all due expedition be notified to each local controlling body.



"Tawarrri" and "Wendy" — close racing off Shark Island, Sydney Harbour.

Racing Rules of the Class

All Jubilee Yachts shall have a total weight in the racing condition excluding crew, but including all gear normally carried whilst racing, of 952.56 kg (2,100 lbs.) subject to the tolerance limits or clause 11, no yacht shall carry less than 249.48 kg (350 lbs.) of ballast. In the ease where the overall weight of a yacht, carrying the minimum 249.48 kg (550 lbs.) weight of ballast, exceeds 952.56 kg (2,100 lbs.) (including tolerance) in overall weight, the overall weight restriction shall be waived. If the weight of ballast exceeds 381 kg (840 lbs.) a proportion shall be fixed to the underside of the deck. The proportion and location shall be as sh0'M1 on figure L

All bilge ballast shall be stowed within the length of the centreplate case.

2. The crew may consist of any number of persons not exceeding four. The owner (or owners) must be members of a recognised yacht club, and, when not sailed by an owner, the skipper in all cases, must be a member of a recognised yacht club.
3. Any of the specified sails may be mounted or set in any manner and at any time thought fit, subject to the following restrictions;
 - (a) No spars may be used other than those set out in the plans and specifications.
 - (b) The point of attachment of spinnaker halyard block shall not be more than 5.563 m (18 feet 3 inches) above the deck.
 - (c) When the spinnaker is used it must be set on the spinnaker boom, and the heel of the boom shall always rest against the mast.
4. Jubilee Yachts racing in any recognised race whatsoever shall all start from the same handicap mark.
5. The Official Code of Racing Rules which shall govern all Jubilee Class races, except as hereinafter mentioned, shall, unless otherwise specified in the circular inviting entries, be the rules for the time being adopted by the local controlling body of the territory in whose waters the race shall be held, except where they may conflict with these rules, in which event these rules shall supersede to the extent of the inconsistency.
6. Each yacht shall during each race carry on board for each member of the crew of such yacht a life-belt as prescribed by the Board of Trade, and shall also carry on board an anchor weighing 9-12.7 kg (20 to 28 pounds) (including ground chain, if any) with suitable line.
7. No yacht shall carry on board during a race, more than one spinnaker, however a yacht may carry on board more than one mainsail, and or jib, provided that not more than one of each of the said sails is hoisted at the same time.
8. International, Interstate and Inter-provincial races shall be conducted in accordance with the rules and recommendations of the Australian Yachting Federation.

9. Each yacht shall be fitted with at least one effective manually operated bilge pump.



"Sarina Lea", "Zest", "Lewana" just after a westerly start, Brighton, 1979.

Other Racing Rules of the Class

RULES RELATING TO INTERNATIONAL, INTERSTATE AND INTER-PROVINCIAL RACES AND RACES BETWEEN YACHTS OF DIFFERENT TERRITORIES.

1. All International, Inter-provincial and Interstate races shall be decided by a series of not less than five races.

2. Courses shall be of 13 km (eight miles) each and alternatively to windward or leeward, and return, and triangular.

3. Not more than three yachts shall represent each competing nation, state, province or territory. The winner of the contest shall be the yacht gaining the most points in the contest in accordance with the scale of points arranged by the delegates. In case there shall be a tie in aggregate points between two or more yachts, such tie shall be sailed.

4. All yachts must be entered by and through the local controlling body of the nation, state, province or territory which they are to represent. Every entry shall state the name of the yacht or yachts to represent the state, country, province or district, and the name of the owner or owners of each yacht, and the registered number of each yacht, and shall be accompanied by a copy of the Certificate of Measurement of such yacht.

5. The contests shall be under the control of the local controlling body in whose waters the contest is held, and shall be regulated by the racing rules (other than those relating to measurement) of the Yacht Racing Association in force in England (a) in the English summer previous to the contest if the contest is held in the southern hemisphere—(b) two months before the first race of the contest if the contest is held in the northern hemisphere—excepting so far as such rules are inconsistent with these rules. Such local controlling body shall appoint a sailing committee, which shall have all the powers of a sailing committee under the above rules.

6. No member of the crew of a competing yacht shall join or leave the yacht during a race.

7. No protest shall be valid unless lodged with the sailing committee of the local controlling body controlling the contest before 9 p.m. of the day on which the subject matter of the protest shall have occurred. Provided, however, that the sailing committee if they consider the circumstances warrant it, may entertain a protest lodged after that time. A protest shall be considered by the sailing committee, and its decision shall be final, except that an appeal from such decision shall be on matters other than of fact to the Yacht Racing Association of Great Britain.



"Kilfura" and "Le Murin". neck and neck off the wind. Brighton, 1974.



Deed of Gift of The Huntingfield cup

TO ALL TO WHOM THESE PRESENTS SHALL COME HIS EXCELLENCY CAPTAIN THE RIGHT HONOURABLE WILLIAM CHARLES ARCEDECKNE BARON HUNTINGFIELD, Knight Commander of the Most Distinguished Order of Saint Michael and Saint George Governor of Victoria (hereinafter called "the donor") sends greeting whereas the donor being desirous of encouraging the sport of yachting in Australian waters has donated a cup being the cup now in possession of the Victorian Yachting Council to be sailed for annually in friendly competition between the States of the Commonwealth of Australia AND WHEREAS the Donor is desirous of declaring the conditions on which such Cup shall hereafter be held now these present witness that the donor does hereby grant and assign the said Cup unto the Trustees hereinafter nominated to be held on the following conditions:—

1. The Cup shall be called "The Huntingfield Cup".
2. It shall be preserved as a Perpetual Trophy for the Interstate Championship of the yachts of the Jubilee One Design Class or for such other class of yachts as may from time to time be determined in the manner hereinafter provided with respect to the alteration of any of the conditions of this Deed.
3. The Trustees of the Cup shall be the Commodores for the time being of the four Senior Clubs for the time being comprised in the Victorian Yachting Council (hereinafter called "the Council") and the property in the Cup shall be vested in such Trustees (who are herein after referred to as "the Trustees") but the possession of the Cup shall from time to time be held by the local controlling body for the time being (appointed in accordance with the Official Rules of the Jubilee One Design Class adopted in October 1938 and filed with the Council or any amendment for the time being in force) (hereinafter referred to as "the Official Rules of the Class") or the State which shall be represented by the yacht winning the same in the annual contest last held until it shall be won by a yacht representing some other State and it shall be held subject to such conditions for its safe custody as may from time to time be deemed proper by the Trustees.
4. Contests shall be held annually in each of the States in rotation or in such order as shall be agreed by the delegates from the States which possess registered Jubilee One Design Class yachts. In the absence of agreement between the delegates the annual contests shall be held in the following order viz: New South Wales, Victoria and thereafter in the other States in the order in which local controlling bodies for such States are respectively appointed by the Victorian Yachting Council as the supreme controlling body of the class- Unless otherwise arranged by the delegates the State in the waters of which the next contest is due to be held shall notify the supreme controlling body before the first of July preceding the contest of its intention to compete for the Cup. If no such notification is received the supreme controlling body shall unless otherwise arranged by the delegates immediately inform all the States that it is intended that the contest be held in the State next on the list and the contest shall be held in the waters of that State if notification to compete is communicated to the supreme controlling body within one month after the receipt of such information and so on until the

place of the next contest shall have been fixed, provided that unless otherwise agreed by the delegates if the place of contest shall not be fixed before the Thirtieth day of November preceding the date of the contest such contest shall be held on the waters of Port Phillip Bay under the control of the Council.

5. Unless otherwise agreed by the delegates the local controlling body of each State which intends to enter for a contest in any year shall before the end of November in the year previous forward a notification of such intention to the supreme controlling body which shall forward a copy of such notification to the local controlling body for the time being or each of the other States.

6. Each local controlling body of each State intending to compete having selected the yachts to represent its State shall enter the yachts so selected in accordance with the manner specified in the Official Rules of the Class. Such entries unless otherwise agreed by the delegates shall be forwarded to the local controlling body in whose waters the contest is to be held not less than fifteen days before the date fixed for the first race and shall be accompanied by the sum of E 2/2/- in respect of each yacht so entered to be devoted to the purchase of a special trophy for the owner or owners of the winning yacht.

7. The contest shall take place in each year between the First Day of December in one year and the Thirty first day of March in the following year or upon any other days that may be agreed by the delegates. If the delegates shall not agree upon any dates the local controlling body controlling the contest shall decide such dates and in any event such local controlling body shall if reasonably practicable not later than the First Day of December and in any event not later than two months prior to the date of the first race notify the local controlling body of each of the States of the dates on which the races will be held.

8. The Official Rules of the Class for the time being (including Rules relating to International Interstate and Interprovincial Races and Races between different Territories) shall apply to all contests for the Cup and all contestants therein unless inconsistent herewith.

9. If the delegates shall not agree on the points to be allotted for each race in the series comprising the contest the points for each race shall be ten points for a first five points for a second and three points for a third. In the event of a tie on aggregate points the sail off shall be only between the yachts which shall have tied.

10. Any appeal from the decision of the Sailing Committee of the local controlling body shall if a Federal Yacht Racing Association be hereafter constituted be to such Federal Yacht Racing Association in lieu of the Yacht Racing Association.

11. All or any of the conditions of this Deed (including this power of amendment) may from time to time be altered and further conditions may be added hereto by a resolution of a majority of the local controlling bodies of the States (or such of them as shall have adopted the Class) provided that no alteration or addition shall be made if the Donor during such time as he shall be residing in the Commonwealth or the local controlling bodies of two or more of the States shall not agree to the proposed addition or alteration. Any alteration or addition shall be recorded by endorsement or annexure

to this Deed signed by the Donor if then residing in the Commonwealth and by the Trustees for the time being and the Secretary for the time being of the supreme controlling body.

IN WITNESS whereof the Donor has hereunto set his hand and Seal this twenty-first day of November one thousand nine hundred and thirty-eight. HUNTINGFIELD.

SIGNED SEALED AND DELIVERED by the Donor in the presence of A. W. P. ROBERTSON, Lieutenant, Royal Navy, Government House, Melbourne.



Start of The Huntingfield cup, Dec. 1947. off St. Kilda.

Winners of The Huntingfield cup

Presented by His Excellency

Captain The Right Honourable Lord Huntingfield, K.C.M.G.
Governor of Victoria for Perpetual Interstate Contest by Yachts of the
Jubilee Class

Note Although the Cup was presented in 1938. the first Huntingfield Cup was not sailed until 1946.

Note 2. Between 1952 and 1965 inclusive, states were represented as teams (of generally three Jubilees each).

Year	Yacht	State	Skipper
1946	Petrel	NSW	K. Clarke and A. E. Baldick
1947	Rotanes	VIC	J. Akhurst
1948	Freydis	VIC	J. Linacre
1949	Sarawaki	VIC	F. D. Linacre
1950	Triton	NSW	P. C. Taylor
1951	Triton	NSW	P. C. Taylor
1952	Team	NSW	S. H. Moray, G. T. Twibill, J. B. Griffin
1953	Team	VIC	S. J. Akhurst, N. McInnes, L. N. Pound
1954	Team	NSW	F. Barclay, P. Taylor, M. Porter
1955	Team	VIC	S. J. Akhurst, D. Jarrett, L. N. Pound
1956	Team	NSW	K. Clarke, F. Barclay, M. Porter
1957	Team	VIC	D. Jarrett, L. N. Pound, G. Stooke
1958	Team	NSW	R. F. Deakins, F. A. Barclay, W. Gilkes
1959	Team	VIC	S. J. Akhurst, L. N. Pound, G. Stooke
1960	Team	NSW	J. D. McCarthy, F. Barclay, J. Mitchell
1961	Team	VIC	R. Marshall, N. McInnes, L. N. Pound
1962	Team	VIC	G. Douglas, G. Stooke, L. N. Pound
1963	Team	VIC	J. B. Linacre, N. McInnes, R. Marshall
1964	Team	NSW	T. R. Smith, D. M. Taylor, W. Wood
1965	Team	VIC	L. N. Pound, J. B. Linacre, D. J. Atkinson
1966	Aeolus	VIC	L. N. Pound
1967	Freelance	VIC	N. McInnes

1968	Leander II	VIC	D. Atkinson	
1969	Lyla	VIC	A. Woodland	G.
1970	Lewana	VIC	D. Atkinson	
1971	Lewana	VIC	D. Atkinson	
1972	Aeolus	VIC	L.N. Pound	
1973	Aeolus	VIC	L.N. Pound	
1974	Lyla	VIC	A. Woodland	G.
1975	Lyla	VIC	A. Woodland	G.
1976	Le Marin	VIC	H. D. Tedstone	
1977	Beverley	VIC	D. C. Blanksby	
1978	Freydis	VIC	c. L. Banfield	
1979	Le Marin	VIC	H. D. Tedstone	
1980	Corella	NSW	D. M. Taylor	



"Corella" – the 1980 Australian Champion.

Club Racing

Over the years Jubilees have sailed at numerous clubs around Australia, with Royal Brighton Yacht Club being the original home of the Jubilee. The clubs that have been involved are:

- Royal Sydney Y.S.
- Royal Prince Alfred Y.C.
- Royal Brighton Y.C.
- Sorrento S.C.
- Ballarat YC
- Blairstown Y.S.
- Sandringham Y-C
- Royall Y-C. of Victoria
- Williamstown S.C.
- Corio Bay S.C
- Hastings Y.C.
- Royal South Australia Y.S
- Brighton & Seacliff YC

In the late '40s several Jubilees were built in Hong Kong and sailed from clubs on the harbour for many years. Jubilees are still sighted on Gippsland Lakes, Westernport Bay and the Hume Weir.

The Class runs both Australian and State championships with starters numbering around 20 yachts. Due to the location of entrants the national titles alternate between Sydney Harbour and Port Phillip Bay. Clubs also run their own aggregate series for the season (or part thereof) with numerous cups and trophies being offered on selected race days. Courses generally range between 11 km and 17 km in distance between buoys and consist of triangle, windward and return then a beat to the finish. Obviously dependent on the wind speed and length, races of this pattern usually last around 2 1/2 hours.

As with all "One Design Class" yachts no handicapping is used in these events to determine aggregate and trophy winners. However, there has been a move in this direction in recent years to introduce a handicap result (possibly with a pennant or trophy) in order to provide encouragement for the back-markers in reward for their continuous efforts. The handicap is calculated along similar lines to the Division classes.

The Rudder Shield event consists of team racing at a nominated club where several Jubilees are "pooled" for the morning and afternoon races. Lots are drawn for the yachts and then each club team selects the skipper and crew for their selected Jubilees. This day is considered to be an excellent family/picnic event, with the appropriate victuals being served in the luncheon break followed by a victory celebration after the second race. Safety is one item about which we are all concerned. Apart from the safety requirements included within the Specifications and Racing Rules of the Class, the Jubilee must meet the "Category 6 (Day Sailing) — Safety Requirements governing Keel Boats in Port Phillip Bay, Westernport Bay and Inland Waters.

It should also be mentioned that each Jubilee registered must comply with class rules and specifications. Measurements and safety requirements are regularly checked to ensure each Jubilee retains the high standards and uniformity of the class. The major reason that the class has been so popular for so many years.



Start of a Jubilee race— Hong Kong Harbour 1949,

How to build a Fibreglass Jubilee

SPECIFICATIONS, PLANS AND MEASUREMENTS

1. Design:

The original design is by Mr- Charles Peel and was of carvel plank timber construction and timber spars. In 1969 a referendum was conducted and the specifications subsequently altered to allow construction of hull and deck in Glass Reinforced Plastic and the use of aluminium alloy spars. However, the present rules still allow timber construction of all or part of the boat and reference should be made to the Association for governing rules.

2. Plans for Fibreglass Jubilees:

Three plans comprise the set. The first of these plans shows the lines, the second the sail plan, and the third the constructional details including scantlings. The plans and these specifications are to be strictly adhered to, except that scantlings may, at the owner's option, be made heavier than those specified. If it appears that the plans and these specifications conflict, these specifications shall prevail, and be considered the true meaning and intention, and shall be abided by as such. But any constructional details or dimensions not set out in these specifications, but shown on the plans, must be adhered to.

3. Dimensions:

The following and all other dimensions and measurements shall be strictly adhered to, subject to the margins of tolerance hereinafter allowed:

Length over all	5.49 m (18 ft. 0 in.)
Length load waterline	4.88m (16 ft. 0 in.)
Beam — extreme .	2.04m (6 ft. in.)
.....	0.40m (1 ft- 4 in.)
Draught	17.96 (19333 sq. ft.)
Sail area.....	

4. Construction Details in Fibre Reinforced Plastic:

4.1. General:

'These specifications are to be read in conjunction with the original Specifications, Plans and Measurements: and with Sheet No-4 of the Plans (Hull and Deck Construction in FRP.

It is intended that the construction of the yacht in terms of this Specification shall be in Fibreglass reinforced polyester resin, but subject to the specific approval of the Jubilee Association Committee, construction may be carried out with other approved fibres and resins.

Surveyor: The manufacture of the yacht shall be subject to inspection by a Surveyor appointed by the Jubilee Yacht Association. who shall have access to the manufacturing area at all times when the yachts are under construction.

Materials:

4.2. 1. Fibreglass

(a) All fibreglass reinforcement used in the construction of laminated parts shall be produced from "E" type glass filament with "Silane" or other approved finish. All filament used must conform with accepted commercial standards of composition, diameter, tensile strength and finish.

(b) Fibreglass mat shall be of densities 305 g/m² (1 oz/sq. ft.), 455 g/m² (1 1/2 oz/sq. ft.), and 610 g/m² (2 oz/sq. ft.) having even fibre distribution and a binder-system which is readily and completely soluble in the approved resin system. Fibreglass mat shall be free of physical imperfections such as holes, "hard-thick" sections, bundles of unseparated ends of rovings and lumps of fibreglass and grease or oil.

(c) Fibreglass Ravings. Where laminates are to be produced from chopped rovings they must comply with the physical and chemical requirements of sections (a) and In addition they must on cutting break into separate ends and disperse evenly.

(d) Woven Rovings shall be used in densities from 544 g/m² to 813 g/m² (16 oz/sq. yd. to 24 oz/sq. yd.) as specified and shall comply with the physical and chemical requirements of sections (a) and In addition they must be free of knots, tight selvedge loops, and shall be of a construction having minimum crimp.

4.2.2 Polyester Resins (Unsaturated). All resins used in the production of laminated parts and assembly operations shall be of orthophthallic, styrene modified thixotropic type specifically suited for the construction of marine craft. Such resins must be used strictly in accordance with manufacturer's recommendations (particularly with respect to shelf life and curing system). Fillers (other than thixotropic agents) may not be added and all laminating resin must be clear to facilitate inspection of laminates.

4.2.3 Gelcoats. All gelcoats shall be formulated from approved resilient gel coat resins to specified colours. Pigments used shall have maximum light-fastness combined with minimum inhibiting or accelerating effect. Gel coats applied to mould surfaces shall have minimum wax content to ensure adequate

cross-linking with laminating resin. Gel coats applied to overlays or as finishing coats to laminated surfaces shall have adequate wax additive to ensure "tack free" curing.

4.2.4 Polyester Bonding Compound Where bonding compounds are required for the fixing of small components, or in assembly operations of laminated parts, these shall be formulated and mixed to suit specific requirements. In general- they shall be formulated from approved resins with an addition of approximately one part in four of medium length asbestos fibre. Where applicable, resins may contain approved flexibilizing agents-

4.2.5 Polyester Syntactic Filling Compound. Where compounds are required for the filling of irregular shaped cavities or forming moulding fillets. these shall be formulated from approved resins with the addition of granulated cork, micro-balloons. or other approved low density fillers. Where required to improve the physical properties of the filling compound approved flexibilizing agents and/or asbestos fibre may be added.

4.2.6 Curing System for Polyester Resins. In general curing systems will comprise cobalt naphthenate accelerator and methyl-ethyl-ketone-peroxide catalyst. Where indicated by the recommendations of resin manufacturers alternate catalysts, combined accelerator systems and approved inhibitors may be used. Where deemed necessary tests shall be made to ensure that the activity of any one batch of catalyst is adequate to complete the Polymerization of the resins being used.

4.2.7 Laminate Cores.

(a) P- V, C Foam. Foam cored laminates requiring maximum compressive and surface bonding strength shall be constructed from closed cell grafted rigid P.V.C. foam of density approximately 32 kg/m^3 (2 lbs. per cubic foot).

(b) Polyurethane Foam. Foam cored laminates which are not highly stressed, or which require to be dressed to shape before laminating, shall be constructed from closed cell rigid polyurethane slab stock foam of density approximately 32 kg/m^3 (2 lbs. per cubic foot). Where irregular hull cavities require to be filled with polyurethane foam this shall be formulated, mixed and poured in place strictly in accordance with the recommendations of the raw material supplier' The resultant foam shall be free from large gas cavities and of a density not less than 40 kg/m^3 (2.5 lbs, per cubic foot).

(c) Plywood. Plywood used as structural cores in laminates shall comply with AS. 087-1963-Type A. and be constructed from species to which polyester resin has adequate adhesion. Under no circumstances may plywood cores have surface veneers of coachwood or any other species which inhibit the cure of polyester resin.

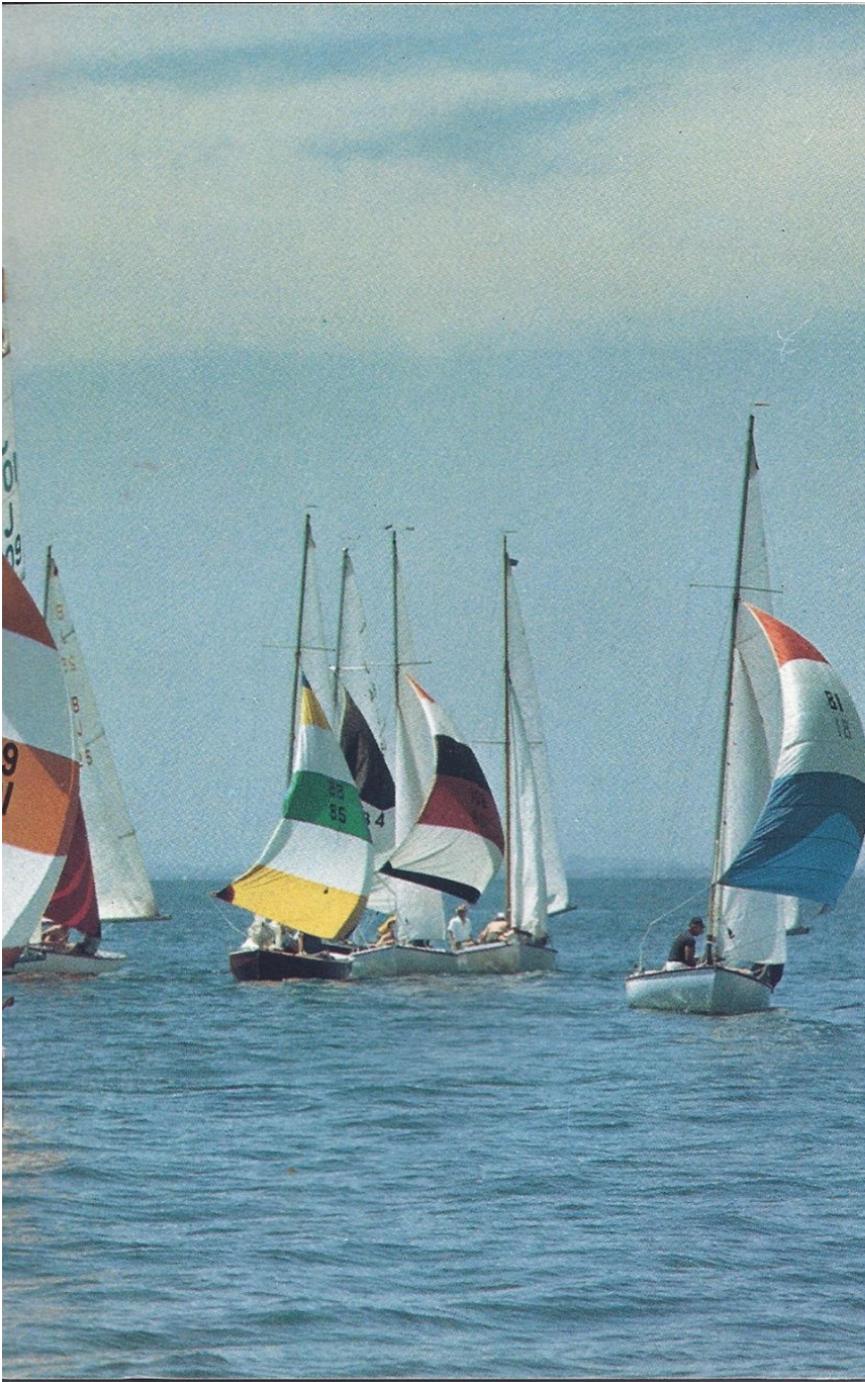
(d) Timber. Timber cores for laminates shall be out of Jarrah or other approved species having similar physical properties. Timber cores shall be straight

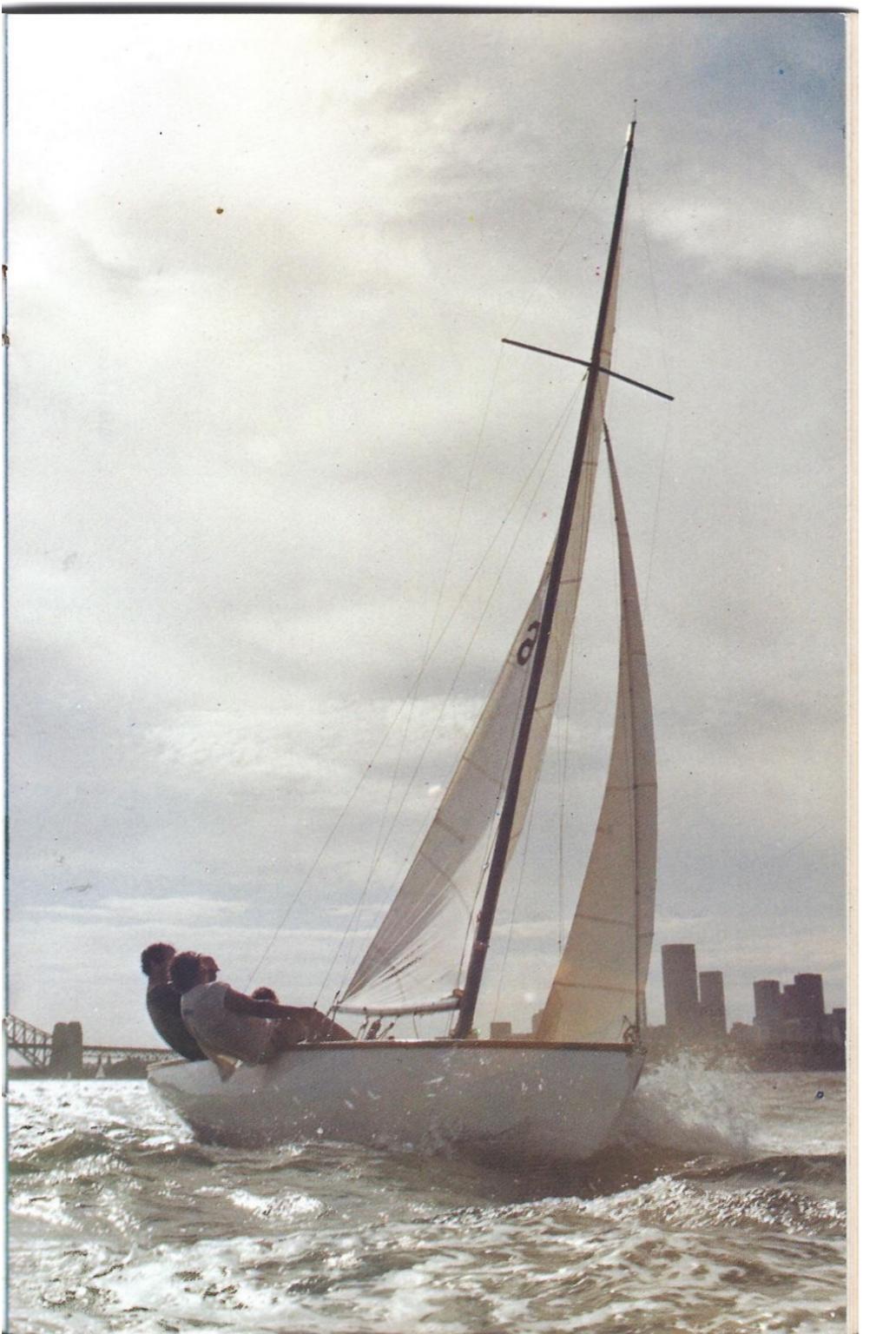
Right: "Beverley" and "Le Marin" on the run.



Overleaf: Australia Day Regatta at Mornington 1979 — (Sorrento and Brighton Fleets).







grained, free of large knots, gum veins, sap wood or other large defects and shall have a moisture content not exceeding 1 percent. Any alternative timbers must have known non-inhibiting properties or be tested to establish their compatibility with polyester resin.

4.3 Workmanship. All workmanship in laminating operations shall be of a uniformly high standard and shall be closely supervised by experienced laminators, Particular attention must be given to uniformity of laminates, thorough wetting out of fibres, correct resin-glass ratios, accurately controlled curing conditions, and neat finish.

4.4. Manufacturing Conditions.

4.4. L Storage and Handling of Laminating Materials. All materials used in the construction of laminates shall be stored under dry conditions. Under no circumstances may water, atmospheric condensate or inhibiting chemicals be allowed to contaminate fibreglass, polyester resins. or other materials used in the manufacturing process, and any such contaminated material must be rejected.

4.42. Laminating Area. The laminating area shall be in a weatherproof, draught-free building and artificial heating must be available to ensure that all gel coats and resin mixes will gel in not more than one hour after application to moulds. Where artificial ventilation is provided to remove styrene fumes, care must be taken to avoid movement of air at the surface of the laminate.

4.4.3. Curing of Laminates- Provision must be made for artificial heating to ensure that all laminates are adequately cured within the time specified by the resin manufacturer. Parts may not be removed from moulds until cured sufficiently to avoid subsequent distortion. The Barcol hardness measured prior to demoulding of the laminate shall be not less than 80 per cent of the resin manufacturer's value for the fully cured resin. Care must be taken to ensure that parts are not distorted by curing at excessive temperatures due to:

- (a) excessive catalyst-accelerator-resin ratios
- (b) application of curing heat before the laminate has reached peak-exotherm temperature.

Production must be scheduled to ensure that there is a minimum of delay between laminating of parts and assembly. Laminated parts may not be removed from moulds and stored unsupported prior to assembly, but should remain on moulds until commencement of assembly operations.

Where it is necessary to store moulded parts for long periods, they shall be adequately prepared at time of assembly to ensure that adequate bond strength is achieved. The bonding of joints in fully cured laminates must be carried out with the approval of the surveyor.

4.5- Testing:

4.5. 1. Materials. All raw materials shall be made available to the surveyor for testing and approval.

4.5. 2. Test Laminate, A test laminate approximately 600 mm X 300 mm (2' X 1') shall be produced at the time of manufacture of each hull. It shall be suitably

Left: "Tawarri" (Bob Simmat) — working Nor'--easter on Sydney Harbour-

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identified with the serial number of the hull. The Specifications of the test laminate shall be identical to the hull laminate, and it shall be produced in accordance with Australian Standard A.S.F.3 Appendix A.

4.5.3 Degree of Cure- At the discretion of the surveyor completed mouldings may be tested for degree of cure by measurement of the Barcol Hardness. The tests shall be carried out in accordance with Australian Standard A.S.F.3Appendix D.

4.5.4, Weighing. The individual weights of each hull and deck, and the combined weight of each hull-deck assembly shall be recorded and supplied to the Surveyor.

4.6 Scantlings:

4.6.1. Hull Shell.

Gel Coat 0.3 mm — 0.45 mm (0.012" — 0.018")

Laminate 305 g/m² (1 oz./sq.ft.) Chopped Strand Mat

1847 g/m² (6 oz./sq.ft.) Chopped Strand Mat or Chopped Rovings,,

813 g/m² (24 oz./sqeyd.) Woven Rovings.

4.6.2. Plate Case.

Gel Coat 0.38 mm — 0.50 mm (0.015" — 0.020")

Laminate 305 g/m² (1 oz./sq.ft.) Chopped Strand Mat

1847 g/m² (6 oz./scb ft.) Chopped Strand Mat or Chopped Rovinos,,

25 mm (1 POV.C. Foam boards laid vertically with webs at approx. 200 mm (8") centres

(Web Laminate: 610 g/m² (2 oz./sq-ft-) Chopped Strand Mat returned at least 25 mm (1") on to base laminate and overlay laminate.)

610 g/m² (2 oz./sq-ft.) Chopped Strand Mat or Chopped Rovings,,

813 g/m² (24 oz./sq yd.) Woven Rovings-

4.6.3. Hull Reinforcement.

Laminate 610 g/m² (2 oz./sqft.) Chopped Strand Mat or Chopped Rovings

1220 g/m² (4 oz./sq.ft.) Chopped Strand Mat or Chopped Foam Rovings.

Cores 813 g/m² (24 oz./sqeyd.) Woven Rovings.

4.6.4. Deck.

Gel Coat 0.3 mm — 0.45 mm (0.012" 0.018")

Laminate 305 g/m² (1 oz./sq.ft.) Chopped Strand Mat

1220 g/m² (4 oz./sq.ft.) Chopped Strand Mat or Chopped Rovings

12.5 mm (1/2") Balsa boards or 25 mm (1") P.V.C. Foam boards laid transversely with webs at approx. 300 mm (12") centres.

(Web Laminate: 610 g/m² (2 oze/sqft.) Chopped Strand Mat returned at least 25 mm (1") on to base laminate and overlay laminate)

305 g/m² (1 oz./sq.ft-) Chopped Strand Mat or Chopped Rovings.

540 g/m² (16 oz./sq.yd.) Woven Rovings. Overlay laminates to extend to extreme edge of cockpit coaming and deck-edge flange.

4.6.5. Hull-deck Assembly.

5 mm X 12 (³/₁₆" X long Mushroom Head Aluminium Pop Rivets at 100 mm centres (or equivalent fastening).

2 X 610 (2 oz./sq.ft.), 90 mm (3 $\frac{1}{2}$ ") wide Chopped Strand Mat Strip.

1 X 4880 g/m² (16 oz./sq.ft.), 75 mm wide Woven Rovings Strip.

4.6.6 Incidental Overlay Laminates of a non-structural nature shall be carried out with 610 g/m² (2 oz./sq.ft.) chopped strand mat and one layer of 813 g/m² (24 oz./sq. yd.) Woven Rovings (Hull) or 540 g/m² (16 oz./sq. yd.) Woven Rovings (Deck).

4.6.7. Resin/Glass Ratios, The fibreglass content of laminates should range between 28 per cent and 33 per cent by weight, as indicated by the test method described in Australian Standard A-S F 3 Appendix B.

4.6.8. Laminate Properties. The physical properties of the completed laminates shall be capable of meeting the requirements of Type I Laminates as described in Australian Standard A.S.F.3.

4.6.9. Surface Finish. The external surface finish of the hull and deck shall be the best possible consistent with the original quality of the moulds. The surface shall be free of surface defects incurred during manufacture including crazing, chipping, surface-abrasion and voids under gel coat.

4.7. Manufacturing Procedure.

4.7.1 Gel Coating. All gel coats to specified formulation and colours shall be sprayed evenly on moulds and gauged to specified thickness. Gel coats may be sprayed by approved catalyst injection system or in the pre-catalysed condition. Where high atomising pressures are used, styrene monomer shall be added in correct quantity to replace losses in spraying. Curing conditions must be controlled so that gel coats are gelled within one hour of application to the mould.

4.7.2 Laminating. Lay up of the laminate must be commenced after the gel coat has passed the peak exotherm stage but before it is fully cured- The first stage of laminating will in each case be a layer of 305 g/m² (1 oz. per sq. ft.) chopped strand mat. The second stage shall be commenced immediately after gelation of the first stage and will include all layers up to the application of core materials.

Cores shall be coated with a thin layer of resin before being placed in position and shall be held firmly under load until the laminate has passed the peak exotherm stage. Overlay laminates shall then be applied in a single operation.

Joins in laminates must overlap at least 50 mm and must not be located across lines of maximum stress, Joins in successive layers must be staggered at least 50 mm **277**.

Care must be taken in laminating to maintain the required resin-glass ratio. The laminate must be thoroughly wetted-out, evenly laid, and free from voids and foreign particles.

4.7.3 Overlay Laminating. The installation and overlay of internal structural and buoyancy components shall comply with the following:

- (a) Accurate sizing and location of cores.

- (b) Adequate preparation of overlay areas to ensure sufficient bond strength. (c) Filling and fairing of all joints and corners to ensure complete and effective overlay.
- (d) All overlays to extend a minimum of 38 mm (1 1/2") on to adjacent lamina les.
- (e) Accurate fairing of pour-in-place foam prior to overlay.

4.7.4 Assembly. The deck shall be accurately and neatly assembled to the hull with a fair sheerline maintained at all points. The joint shall be packed with Polyester Asbestos Compound prior to riveting, and subsequently laminated with the hull deck overlay.

4.7.5. Interior Finish. The interior surface of the hull and deck shall be maintained in clean condition during manufacture and all rough, sharp projections, resin runs, loose fibres and other undesirable features removed. All interior surfaces shall be coated with interior gel coat to the required colour, and a thickness of approximately 025 mm (0.010").

5. Centre Plate

609 mm X 1 118 mm (2 ft. X 3 ft. 8 in.), of steel, 6 mm (L in.) thick. The method of lowering or raising the centre plate is optional, however, it must be such that a positive stop is provided to prevent the centre plate from being lowered more than 813 mm (2'8") below the keel.

The centre plate is to be a true rectangle. The two upper corners and the forward lower corner may be cut back in order to give more clearance in the centre case, but the lower after corner (i.e., the lowest point when the plate is lowered) must not under any circumstances be cut.

6 Thwart:

6.1 of Kauri or equivalent timber, 178 mm x 25 mm (7 in. X 1 in.)

7. Chafing Barren:

7.1 Chafing battens shall be no more than 38 mm X 25 mm (1 1/2 in. by 1 in.)

8. Floors:

8.1 The yacht to be fitted with floors consisting of 12 mm thick marine plywood, carried on bearers of suitable strength to stand the weight of the crew.

9. Spars and Must Fittings:

9.1 Mast, boom and spinnaker pole may be of solid timber or extruded aluminium alloy section. Timber may be laminated.

9.2 Timber

9.2. L Mast and boom according (o the design. Spinnaker pole shall be not more than 2743 mm (9 feet) in length including end fittings, minimum diameter not less than 45 mm (1 1/2 in.) throughout the middle third and tapering fairly to not less than 38 mm (1 1/2 in.) at both ends.

9.3. Aluminium Alloy

9.3. Mast, boom and spinnaker pole shall be of section shown or available sections equal to or greater than those shown on the drawings. The mast may be tapered fairly over

the top 2438 mm (8 feet) to a minimum dimension fore and aft of 44 mm (1 1/2 in.) and athwartships of 54 mm in).

9.3.2. All fittings on mast, boom and spinnaker pole shall be placed as shown on the drawings. Where fittings are not specified by the drawings they are completely optional. Where fittings are specified by the drawings they may be of material other than mild steel but thickness and other dimensions shall be such that equivalent strength is attained. Stock manufactured items may be used but any such fittings must be approved jointly by the measurer and the local controlling body and be of equivalent strength of fittings shown on the drawings.

9.3.3- All halyards must be external to the mast.

9.3.4. Revolving masts are not permitted.

10. Rigging Gear and Equipment:

Shrouds, running stays and forestay shall have a nominal breaking strain of not less than 757 kg (1670 lbs). The top mast forestay shall have a nominal breaking strain of not less than 440 kg (970 lbs). Nominal breaking strain in accordance with BSS EN58L Materials used for rigging are optional but I X 19 stainless steel wire rope of 3 mm (1/8 inch) diameter is recommended for all standing rigging

except the top mast forestay which should be of 25 mm (3/32 inch) diameter.

Gear and equipment is optional, except that halyard and sheet winches, roller reefing gear, and jib furling gear, are not permitted. The position and method of attachment of shroud's forestays and running stays to the deck or hull are optional. The rake of the mast is optional. The only halyards permitted on the boat are as follows: 1 main halyard, 1 jib halyard, 1 spinnaker halyard, 1 flag halyard. but a topping lift is optional. All sheets for trimming sails are optional in every respect.

11. Tolerances;

As building to exact dimensions of structure subject to stresses is impracticable, variations from the designed dimensions not exceeding the following will not render a yacht ineligible for a Measurement Certificate:

	Allowed	
	Under	Over
Length over all	12 mm (1/2 in.)	50 mm (2 in.)
Length on load water line	Nil	Nil
Maximum beam	20 mm (3/4 in.)	20 mm (3/4 in.)
Draught	Nil	Nil
Frames position from correct centre	12 mm (1/2 in.)	12 mm (1/2 in)
Profile at any station	20 mm (3/4 in.)	20 mm (1/2 in.)
Other dimensions not covered by this table	1%	
	Under	Over
Height of upper black band above deck	12 mm (1/2 in.)	12 mm (1/2 in.)

Height of spreaders above deck	150 mm (6 in.)	150 mm (6 in.)
Height of running back-stays above deck	150 mm (6 in.)	150 mm (6 in.)
Height of mainstays above deck	150 mm (6 in.)	150 mm (6 in.)
Height of jib forestay attachment	50 mm (2 in.)	50 mm (2 in.)
Height of mast above deck	12 mm (in.)	12 mm (% in.)

12 Yachts of Peculiar Construction and Evasions.

Every measurer shall report fully to the supreme controlling body on any yacht which, in his opinion, technically complies with these specifications and the plans, but which from any peculiarity of build or other cause in his opinion evades the spirit of them. The measurer's report shall be considered by the supreme controlling body, and if after due inquiry the supreme controlling body shall be of the opinion that the yacht evades the spirit of these specifications and the plans, it may direct the measurer not to issue any measurement certificate, and may refuse registration of the yacht concerned.

13. Flotation:

All fibreglass Jubilee Yachts shall carry as a minimum, excluding all integral structural foam, flotation equipment of a volume calculated by the following formula:

Metric	Imperial
$\frac{0.77W + 1.94We + 2.2B - 270}{2118}$	$\frac{0.35W + B - 270}{60}$

V — volume m³ (cuw ftE) where W dry weight of hull and deck assembly kg (lbs)
 we 952.56 kg — B — W (kg) (2.100 — B - W (lbs))
 B — weight of ballast kg (lbs)

Density of notation material used shall not exceed 64 kg/m³ (4 lbs per cu- ft.)
 The minimum flotation equipment must be securely fastened and distributed under the deck in the following manner:

- | | |
|--|------|
| (a) That portion of the boat from the mast forward shall carry | 30% |
| (b) From the mast aft to the forward edge of the centre thwart | 40% |
| (c) From the forward edge of the centre thwart to the transom | 30% |
| | 100% |

In order to take care of unusual circumstances the Official Measurer may permit variation of the above percentages. The flotation equipment must be distributed equally between port and starboard.

As an alternative to flotation equipment referred to above, two watertight bulkheads may be included as shown in the drawings. These bulkheads may be constructed either of 9.5 mm (is in.) marine plywood or glass reinforced plastic as described in rule 4.6. I .

Bulkheads shall be sealed for their full perimeter to the hull and deck by overlay laminate in accordance with rule 4, 7.3. Compartments enclosed by these bulkheads shall be completely watertight. .

Penetrations other than access hatches in bulkhead hull or deck into the water-tight compartment may be made only if they are appropriately sealed by means of conduits by which gear and equipment may pass through the watertight compartment.

In any case the total face area of the penetration through a bulkhead other than access hatches shall not exceed .029 m: (45 square inches)m Similarly total face area of penetration through the hull or deck or into a watertight compartment shall not exceed 4029 m: (45 square inches) measured at the inside of the hull or deck.

Access hatches in hull or deck are not allowed.

Maximum dimensions of access hatches in bulkheads shall not be more than 51K) mm (20 inches) wide and 355 mm (14 inches) high.

14. Sails

The mainsail, jib and spinnaker must be made from the following materials:

(1) Mainsail and jib either from Cotton or synthetic sailcloth Of a weight not less than 235 g/m² (seven ounces per square yard).

(2) Spinnaker either Cotton or synthetic sailcloth of a weight of not less than 54 g/m² (one and one half ounces per square yard).

The width of cloths of all sails is optional,

Only one new suit of sails per sailing season is permitted to be used in recognised class racing. This suit of sails must be measured and registered by the Jubilee Yacht Association. or its representative and suitably labelled showing the date of its registration. A new boat shall be permitted two new suits of sails in the first year of its registration. In the event of a suit of sails or any one sail being damaged less than 12 months after registration to an extent which does, in the opinion of the Jubilee Yacht Association Committee or its representative. render them unsuitable for racing, a new sail or sails may be registered for use.

Further specifications of the sails are as follows:

(a) Mainsail: Hoist 7390 mm (24 ft. 3 in.), Foot, 3660 mm (12 ft.) The luff shall be of rope; a wire luff is not permitted. The measurement across the head board at right angles to the luff must not exceed 108 mm (4 1/8 in.). If the sail is attached to the mast and boom by slides, these must not exceed 31 in number. .

Three battens only are allowed spaced as per sail plan. Battens shall be no more than 100 mm (4 inches) wide and maximum lengths shall be as follows: top 500 mm (20 inches), centre 760 mm (30 inches) and lower 56 mm (22 inches).

Two lines of reefing pennons are allowed, spaced as per sail plan, or a Local Controlling Body supported by a three-fourths majority of local owners may rule that the inclusion of these reefing pennons in all mainsails within that territory is compulsory.

Mainsail must not be hoisted beyond a point 7390 mm (24 ft. 3 in.) above the tack bolt, this point to be marked on the mast by a black band 25 mm (1 in.) wide, easily distinguishable from the deck. Mainsail must not be stretched out on the boom beyond a point 3657 mm (12 ft.) from the tack bolt, this point must be marked on the boom by a similar band. Distinguishing letters on the mainsail to be "J" and the registered number supplied by the supreme controlling body. The above number and letter may, where so decided by the local controlling body in whose waters the yacht races, be surmounted by the distinguishing letter of the club under whose colours the yacht races. The height of each letter and number shall be 300 mm (12 in.)

(b) Jib: maximum dimensions shall be: Luff 4877 mm (16 ft.), Leech 4572 mm (15 ft.), Foot 2286 mm (7 ft. 6 in.).

The jib shall have a wire luff of 7 X 7 stainless steel flexible wire rope of 3.175 mm (1/8") diameter or of equal or greater breaking strain.

Jib battens may be used but only two are allowed spaced as per sail plan. Batten pockets shall be no more than 38 mm (1 1/2 inches) wide and maximum lengths shall be 230 mm (9 inches)

Not more than 7 (seven) evenly spaced fastening devices shall be used to attach the luff of the jib to the forestay, and the maximum width of each such device shall be 50 mm (2").

(c) Spinnaker: Luff 5486 mm (18 feet). leech 5486 mm (18 feet), foot 3557 (14 feet), measured and constructed in accordance with plan and the instructions for measuring and specifications shown thereon. In order to ensure conformity in the shape of these sails, each local controlling body shall have the right to issue them, and may prohibit the use during races of any spinnaker not issued by it. No hanks or similar devices may be used to attach the luff of these sails to a forestay.

(d) Girths: The girths of all mainsails and jibs shall be measured in the following manner —

Mainsail: From a point half-way between the clew and the top of the headboard. to a point half way between the tack and the top of the headboard.

Jibs: From a point half-way between the clew and the peak of the sail to a point half-way between the tack and the peak of the sail.

Girth of the Mainsail shall not exceed 2057 mm (6 feet 9 inches). Girth of the jib shall not exceed 1818 mm (3 feet 8 inches). Measurements to be taken on a floor with only sufficient pull between the above-mentioned points of measurement to eliminate wrinkles in the cloth.

(e) A transparent window is permitted in a sail provided it complies with the I.Y.R.U, Yacht Racing Rules, Addendum, on Sail Measurement.

How to Build a Timber Jubilee

The purpose of this article is to describe, with the aid of carefully drawn diagrams, the steps to be taken in building a Jubilee Class 18-foot yacht. This entails a description of materials and tools to be used, directions for the initial planning, and a sequence of diagrams with accompanying text. The diagrams are for use in conjunction with the official plans and specifications for a Jubilee, and cannot serve as a substitute for them.

Although building advice given here naturally concerns the Jubilee alone, much of it will apply to all types of small sailing craft, and amateur builders with little previous experience will find in this article some very useful guidance for their future work.

The man who undertakes to build his own Jubilee has the satisfaction of knowing that he is building a yacht of sound, trustworthy design, proven in nearly fifty years of racing and pleasure sailing. It may be granted that a Jubilee is not a particularly simple boat for an amateur to build, but at least two dozen very successful Jubilees have been built by amateurs; and the thrill of building your own "Jube" is surpassed only by that of taking her out with a dozen of her sister yachts on a really hard day, when the crews of many other small craft are watching from the pier.

Plans and specifications for a Jubilee are obtainable from the Jubilee local controlling body in each State. Before you start building, make a detailed examination of any well-built Jubilee and ask the advice of a boat builder or a qualified amateur about any intricate or difficult points of its construction. A close study of the plans and specifications is also essential.

Because some timbers originally specified are hard to get, specifications have been amended to allow the use of almost any of the timbers now used in boatbuilding. Overleaf is the list of materials needed to build a Jubilee-

LIST OF MATERIALS

Keel. — 1. 4877 mm X 178 mm X 64 mm (16' X 7" X 2½") dressed, Jarrah, Spotted Gum or Blue Gum, etc.

Stem. — 2. 762 mm X 152 mm X 102 mm (26" X 6" X 4") dressed, Jarrah, Spotted Gum or Blue Gum, etc., or natural-grown crook of N.S.W. Ti-tree or equivalent.

Stern Knee—1. 457 mm X 178 mm X 51 mm (1'6" X 7" X 2") Jarrah, Spotted Gum or Blue Gum, etc.

Sternpost. — Off-cut from keel.

Plate Case Posts—2 610 mm X 51 mm X 19 mm (2' X 2" x Jarrah. etc.

Planking. 12. 305 mm X 14 mm (12 •6' X 9/16"). Cut two planks. Kauri, Oregon, Maple or equivalent.

Stealers.—2w2134 mm X 178 mm X 25 mm (7 X 7" X Kauri, Oregon. Maple or equivalent.

2.2438 mm X 127 mm X 51 mm (8' X 5" X Kauri. Oregon, Maple or equivalent.

Gunwales. — 2, 5791 mm X 64 mm X 38 mm (19' X X 1½"), Oregon. Plate Case. — 2, 1422 mm X 610 mm X 29 mm (4/8" X 24" X 1/8"),¹ Red Pine, Oregon, etc.

Floor Bearers. — 40. 57 mm X 25 mm (2 1/4" X Oregon. etc. Flooring. — Off-cut from planking.

Bilge Stringers. — 2. 3353 mm X 38 mm X 38 mm (11' X 1 1/2" X 1 1/2"), Oregon.

Carlins. — 3m 3048 mm X 44 mm X 44 mm (10' X 1 1/2" X 1 1/2"), Oregon Shelf. — 2. 1219 mm X 51 mm x 25 mm (4' X 2" X Oregon.

Tabernacle. — 2.813 mm X 152 mm X 25 mm (2'8" X 6" X Oregon.

Deck Beams. 1. 1829 mm X 229 mm X 38 mm (6' X Y' X 1 1/2"). I. 1829 mm X 152 mm X 32 mm (6' X 6" X 1 1/2"). I. 1524 mm X 152 mm X

25 mm (5' X 6" X 1"). 6. 1219 mm X 102 mm X 25 mm (4' X 4" X 1"), Oregon.



Timber Jubilee showing hull lines, skee and rudder.

Thwarts. — I. 2057 mm X 178 mm X 25 mm (6'9" X 7" X 1"). I.

1524 mm X 229 mm X 25 mm (5' X 9" X Oregon. Kauri or equivalent

Decking. I. 85344 mm X 102 mm X 16 mm (280* X 4" X is"). T. & G. lining, Oregon or Baltic Pine.

Coamings. — 2. 3353 mm X 178 mm X 13 mm (11' X 7" X 1/2") planking material.

I. 838 mm X 178 mm X 13 mm (2' 9" X 7" X 1/2"). 9144 mm X 13 mm X 38 mm (30' X X 1 1/2") quad mould.

Chafing Battens. — 2. 5791 mm X 38 mm X 25 mm (19' X 1 1/2" X Jarrah.

Rudder. — L 1219 mm X 229 mm X 29 mm (4' X X I ys*). L 686 mm X 229 mm X 29 mm (23" X X 1/8"). 1 2. 610 mm X 178 mm X 19 mm

(2' X 7" X 3/4").

Mast. — 9449 mm X 102 mm X 89 mm (31' X 4" X 3/8%), light Oregon or laminated Spruce.

Boom. — 3810 mm X 64 mm X 64 mm (126" X X 2 1/2"), Oregon or laminated Spruce.

Crosstrees. — 2. 1067 mm X 64 mm X 25 mm (3/6" X X Oregon.

Deck Canvas.— 5791 mm X 1829 mm wide X 339 g/m² (6% yds. 72", 10 oz.) canvas.

Miscellaneous.— 4.54 kg X 32 mm (10 lb l L") copper nails for planking. 70. 76 mm (Y) copper nails for gunwales and stringers. 2.72 kg 10 mm (6 lb. $\frac{7}{8}$) copper roves. 1.81 kg (4 lb.) red lead to preserve all timber junctions.

TOOLS YOU WILL NEED

Panel Saw, for general use.

Rip Saw, for ripping the keel, planking, mast, etc.

Ball Peen Hammer, for riveting.

Claw Hammer, for general use. Pair of Riveting Dollies, for riveting.

G. Clamp, 4 or more required, 200 mm opening.

Bar Clamps, 2 or more required, 1000 mm (Y) opening. For planking the hull and general purposes.

Chisels, 25 mm l' f) and 10 mm (1/1"), for use in shaping the keel and stem.

Screwdriver, for general use.

Brace & Bit, for drilling the rivet holes in the stem and keel and centre plate base. etc.

1000 mm (3 ft.) Rule and Square.

Smoothing Plane, to fit and dress the planks. etc.

Rabbet Plane, for cutting the rabbet in the keel.

Throating Plane is needed to hollow some of the planking. so that this will fit snug with the ribs.

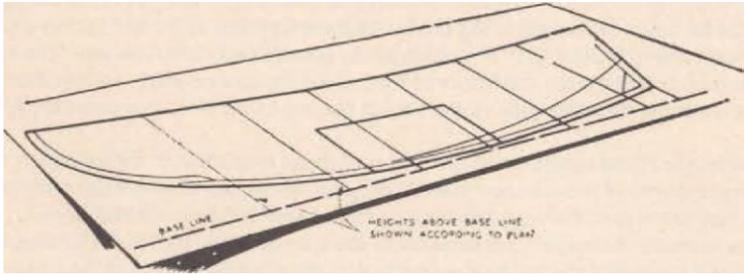
Spokeshaves, for shaping the rudder and stem. and for general use. Wheel Brace, for drilling each copper nail position in the hull.

LAYING OUT FULL-SIZE PATTERN

First practical step in building a Jubilee is to make a full-scale draft of the entire hull. with its details, from the official plans.

Sheets of wall board or thick paper measuring 6000 mm X 1200 mm (18 ft. X 4 ft.) will serve for this purpose. A black pencil line drawn perfectly straight at the bottom of this full-scale plan will be your "base line". The stations are marked along this base line from the stem to the stern. and are drawn at right angles up from it- The heights of the keel from the base line are marked at each station, and the camber of the keel. shape of the stem and angle of the transom are then drawn on this plan.

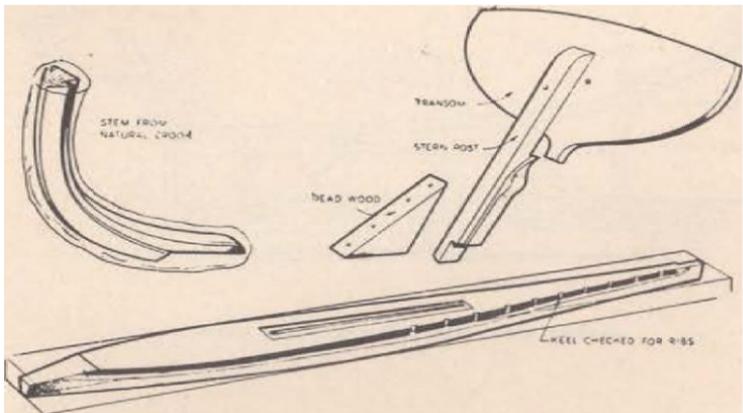
Details of the stem, stern post and knees, and the rabbet of the stem and the keel must also be indicated.



1. Full size layout of hull on paper.

SHAPING STEM, KEEL, STERN POST AND TRANSOM

Making use of the full-size drawing or the stem as a pattern. shape the stem post from a natural crook of suitable timber, or else construct the stem in two sections. scarphing and riveting these sections firmly together. Particular attention must be given to the angle of the rabbet in the stem, to ensure that it will fit accurately when the planking is attached to it, and will have no tendency to develop a hollow or a bluff bow.



2 Shaping the stern keel' & stern.

It is advisable to leave the stem post full so that it may be trimmed later to fair off in line with the planking. The junction of stem and keel needs careful attention, and reference to the full-scale drawing will give the correct angle of the stem scarph to fit the keel scarph. The angle of the rabbet at this spot also needs careful attention.

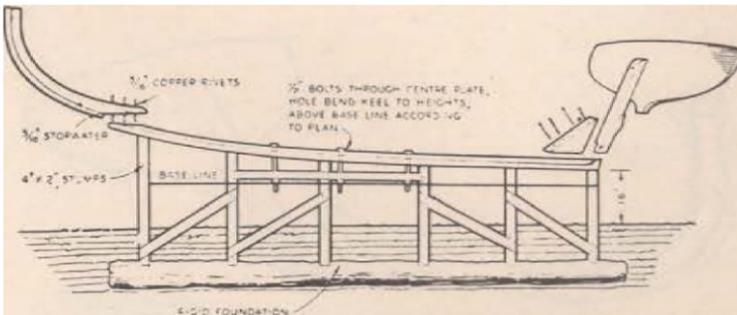
The keel is set out from a full-size drawing which you are advised to make from the full-size sections shown on the plan. It is advisable to have this checked by an experienced man before attempting the arduous work of shaping the keel and cutting the rabbet. This is done by ripping out the broad shape of the keel and hand-shaping the parts of the keel to conform with dimensions given on the plan. The rabbet is cut the length of the keel, with the exception of the few inches where the stern post is halved to it. A rabbet plane greatly facilitates this job. The keel is checked to receive the timbers and slotted for the centre plate. and a rabbet is run at an angle on either side of the keel at the top of the slot, 10 receive the plate case.

The angle of the sternpost to the keel is of great importance. Reference to the full-scale drawing you have prepared will give the angles to which the stem post knee and stern post halving, which is to fit the keel halving, should be cut.

The transom is marked out accurately from a full-scale pattern. The angle at which it is cut is determined by the direction of the planking meeting the transom.

BUILDING FOUNDATION

Some form of foundation or base must be made, on which the hull can be set up and built. This foundation must be quite rigid, for any movement caused by the great stresses during construction will throw the shape of the hull and keel out of their correct alignment. A large log or a beam about 6000 mm (20 feet) long, similar in dimensions to a telegraph pole, will do very nicely for this purpose.



SHAPING STEM, KEEL, STERN POST AND TRANSOM

Laying the keel

Diagram 3 shows a method of constructing an effective base. A straight log or beam of 1(K) mm 100 mm (4 in. x 4 in,) timber, about 5000 mm 10 5500 mm (16 to

18 feet) in length, has 100 mm X 50 mm (4 in X 2 in.) stumps firmly nailed to it, at intervals corresponding to the stations of the hull. These are rigidly braced, and the log and stumps are set solidly in the ground in horizontal position, at a depth of about 610 mm (two feet). The stumps should project above ground level 450 mm (18 in.) or so at the lowest point — that is the after end — to facilitate working on the lower parts of the hull-

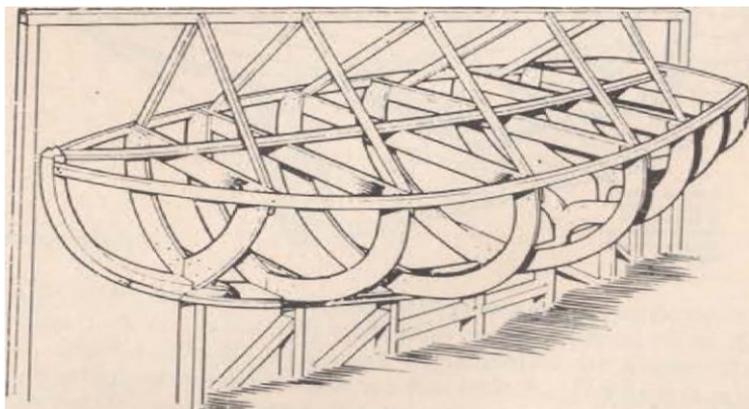
A base line of taut cord, or a straight edge corresponding to the base line in the large-scale Plan is now set perfectly level between uprights at stem and stern. The stumps of this foundation are then trimmed to represent the camber or the keel, by measuring at each station the heights above the base line shown on the plan.

LAYING THE KEEL

Having completed the job of shaping the keel, stem and stern post, the next job is to set these on to the foundation. The keel, having been shaped from a flat beam of wood, now has to be bent 10 conform to the camber shown in the plan, This is done with the aid of long 12 mm ($\frac{1}{2}$ in.) diameter bolts, passed through the plate slot and on to the cross-bracing of the foundation.

The stem and the sternpost are riveted to the keel with a liberal application of red lead at the junction of the scarphs- The transom is now attached to the stern post by means of the rudder gudgeon and several 76 mm (3 in.) brass screws or copper rivets.

Now we pass on to the vital state of hull shaping and construction. And let the reader remember that the basic principles discussed in this article are applicable to the building of most small craft using a type of construction similar to that of the "Jube",



4, Setting the moulds up.

MOULDS

Unless it is possible to hire or purchase a set of correctly shaped Jubilee moulds from a boat builder or other reliable source, it will be necessary to construct these from the table of offsets shown on the official plans- In all there are six moulds, one at each

station. A study of diagram 4 will give an idea of construction of the moulds, which can be made from 1-5 mm or 20 mm (F's in. or % in.) thickness of oregon or other pine.

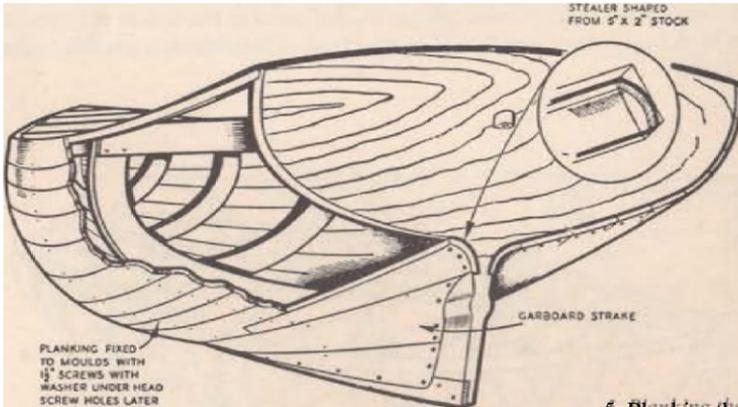
SETTING MOULDS IN PLACE

The moulds are placed in position at their respective stations on the keel and are temporarily supported. Temporary gunwales of 50 mm X 25 mm (2 in. X 1 in.) hardwood are attached at the stem and are secured to each mould and to the transom by brackets. The moulds are trued, and a batten is attached along the centre line of the hull, to the top rail of the moulds and to the stem post and transom.

Having been attached to the keel, the moulds are now given rigid support, either from struts to the ground on each side or preferably by means of a solid overhead framing, as shown in diagram 4.

ATTACHING THE PLANKING

Twelve or thirteen planks on either side is the usual number required to plank the hull. The centre mould should be spaced off around its edge, so that narrower planks are used where the sharpest curves occur in the hull. Alternate mould and stem and transom are marked in the same manner.



5. Planking the hull.

It is important that this spacing of the planking be carefully considered. Keep a thin, narrow plank handy; you will find it of great assistance in this respect and also as a template for establishing the shape of each plank to be fitted.

Keep in mind that each of the twelve or so planks must be shaped from a very narrow part at the stem, to broaden out as the beam increases, and then to taper off slightly to the stern. You must realise that narrow widths of planks must be used to take the sharper curves of the bilges. This will ensure a smooth rounded hull when the planking is planed up and sanded. It follows that on the flatter parts of the hull — that is, around the bottom and after quarters — wider planks can be used.

The first plank, or garboard, usually at the stem and keel scarp and is attached 50 mm or 75 mm (2 in. or 3 in.) below the tuck. A stealer fills the space between the garboard and keel rabbet.

A second stealer is used at the tuck and is scarphed into the second plank. These stealers are hollowed out from 178 mm X 25 mm (7 in- X 1 in.) board and 127 mm X 50 mm (5 in. x 2 in.) board respectively

The second plank, being first attached to the stem, follows the garboard until about 2100 mm (7 or so feet) from the stern post. where it fits the tuck stealer and finishes at the transom.

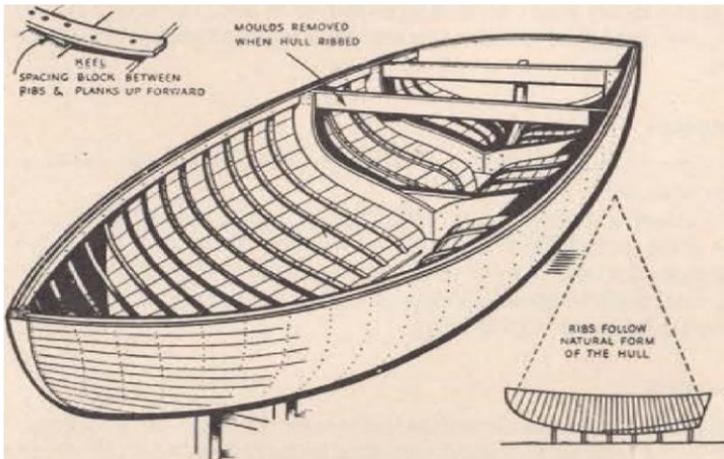
The rest of the planking is done in a similar manner on both sides of the hull, each plank being carefully fitted and attached first to the stem by 32 mm (1 1/4 in-) copper nails or brass screws, and then temporarily to each mould with very thin 38 mm (1 1/2 in.) iron screws, which are later removed. the holes being carefully plugged with wooden pegs.

Each plank when first fitted should be attached with the aid of clamps only. so that any adjustments can be made before finally attaching. The plank can then serve as a pattern for the corresponding plank on the other side of the hull

To ensure that the ribs fit up snug with the planking. some of the planks taking the rounded form or the bilge must be hollowed slightly.

RIBBING THE HULL

The next step is to rib the hull, and the simplest method of preparing the ribs for this job is to soak them first for several days and then boil them for 30 minutes in a 3000 mm (ten-foot) length of spouting or a similar trough, suitably supported over a fire.



Ribbing the hull.

The position and lay of each rib should first be marked by lines around the inside of the hull, with the help of a narrow strap of metal of 38 mm X L6 mm (1 1/2 in. x in.) gauge. An electric drill is then used to drill the nail positions through the planking around the rib lines, staggering the nail positions on either side of the line about 6 mm (L in.) from it; 32 mm (1 1/4 in.) copper nails are next pointed in these holes, ready to secure the ribs when they are steamed or boiled and set in their place.

Commence ribbing in the mid-section of the hull, working first aft and then forward, so that any ribs broken in the after section might be used as shorter lengths in the fore section of the hull.

One man should be employed inside the hull, to carefully "tread down" each steamed rib and set it in place, while another hammers the pointed nails through the plank and rib.

It should be mentioned here that difficulty may be experienced with the ribs at the tuck- If there is trouble at this point, it is suggested that a metal template, of 50 mm X 6 mm (2 in. X 1/4 in.) iron, bent to the curve the ribs have to take, be used to pre-bend the ribs under boiling water with the aid of small G clamps and a 6 mm gauge (1/16 in.) metal strap passed around this template.

When the ribbing of the hull is almost completed, the moulds are removed one by one and ribs replace each mould. Temporary braces are employed to hold the hull in its correct shape after each mould has been removed.

GUNWALES

The temporary gunwales are now replaced by permanent ones. It is perhaps as well to pre-bend these around a tree-trunk or other object, and leave in a wetted state for several weeks before fitting into the hull. After attaching the gunwales on either side of the stem and breasthook, the bend of the gunwales around the shape of the hull must be taken gradually, making use of clamps, struts and a rope tourniquet at the after ends.

The gunwales are finally secured by 64 mm or 76 mm (2 1/2 in. or 3 in.) copper nails, riveted through alternative ribs and planking and knees or brackets at the transom.

DECK BEAMS

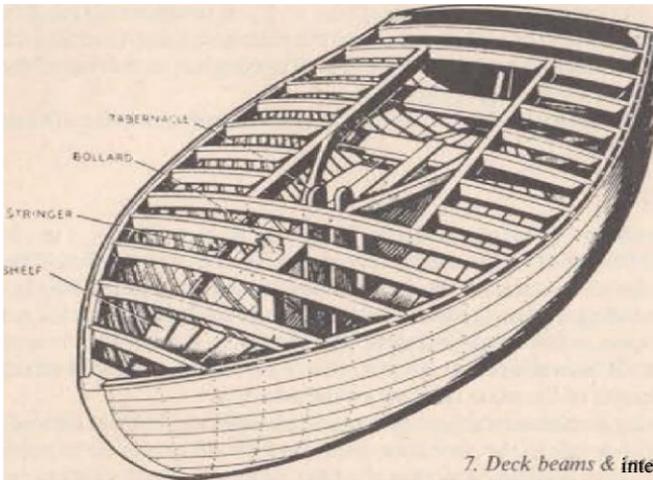
Having correctly shaped the camber of the deck beams, first fit the widest one at the mast position.

The next to fit is that at the rear of the cockpit, and the carlines are set in to the position of the cockpit. The deck beams forward of the mast are then firmly fixed into the gunwales with dovetail joints, and so are those around the sides of the cockpit. Care must be taken to ensure that the correct sheer and camber in the deck line are followed from the plan.

FITTING OUT

The sail shelf forward, the chainplate shelves and the bollard may be fitted. and after these the tabernacle is fitted according to diagram 8. which shows clearly how this is done.

The stringers are next bent down to their positions around the bilges by

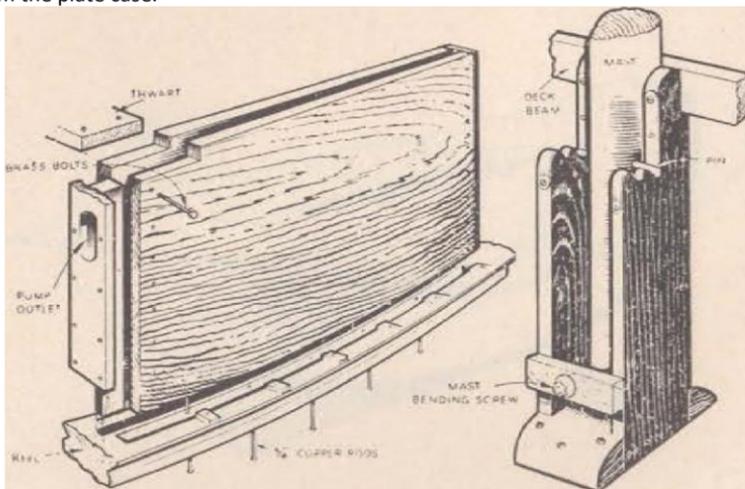


7. Deck beams & interior finings

temporary struts or braces, and firmly riveted through the hull with 64 mm or 76 mm in. or 3 in.) copper nails at each alternate rib.

The centreboard case needs to be well and securely fitted, to prevent leaking due to the strains imposed on the centre plate. The slot for the centre plate should be sufficiently long and wide enough to allow for the end posts of the centre plate case to protrude through the keel and finish flush at the base of the keel.

Diagram S shows the rabbet which is run on an angle on either side of the centre plate slot in the keel, to receive the side hoards of the plate case, which are angled to fit the rabbets in the keel. After laying a felt strip along the keel rabbet and red-leading the job, clamp the sides of the plate ease down and rivet or bolt through the end posts to form the plate case.



8. Plate case tabernacle details.

Ten 150 mm long X 8 mm diameter (6 in X 5/16 in.) copper rods are driven up slightly smaller holes through the keel into the plate case sides, to secure it firmly.

The thwart are fitted next, the centre thwart passing across the rear of the plate case and attached to it to give rigidity.

The after thwart is attached to cleats across several ribs. or 10 the after ends of the bilge stringers.

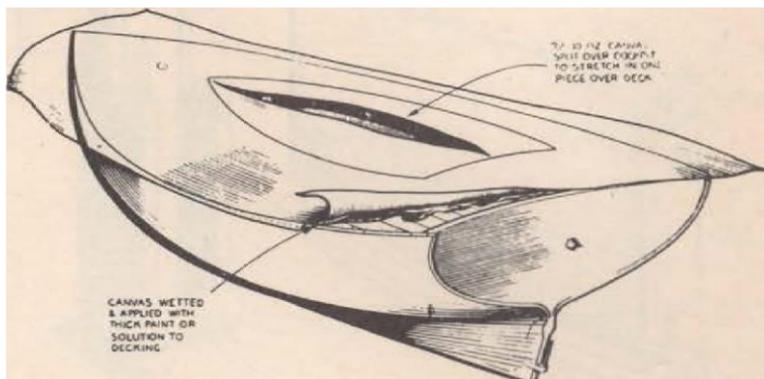
FLOORING

At the forward end of the plate case is a 76 mm X 76 mm (3 in. X 3 in.) bearer, which should be the first set in. At the rear end of the case, bearers should be fitted from the sides of the case to ribs on either side of the hull, at the height of the flooring according to plan. It is not practical to make a solid bearer at the rear end of the plate case, as this would interfere with the pump. A third floor bearer must be shaped to fit between ribs at the after end. Floor bearers are also attached to the entire length of the plate case, on either side of it.

The flooring is constructed from off-cuts of the planking, in three sections- One section on either side of the plate case, from the forward bearer to the rear of the case, and a triangular-shaped section aft of the plate case. The flooring boards are nailed or screwed to cleats, which rest on ribs at the outer sides, and on the bearers along the plate case sections. These cleats are required at every alternate rib only.

DECKING

Having completed the fitting out of the interior, the next stage is to lay the decking planks and clamp and nail them to the deck beams. For this purpose 38 mm long (1 1/2 in.) galvanised or copper nails are used, with an application of red lead to the seams and tops of the deck beams. The decking is trimmed off neatly to the shape of the cockpit and made to fit with a watertight joint on top of the hull planking: finally it is dressed with a smoothing plane to a smooth camber, so that no ridges of the planking show through the canvas.



9. Canvas covering the deck.

LAYING DECK CANVAS

Having first spread the canvas along the decking, draw a pencil line centrally, from 150 mm (6 in.) from the front to 150 mm (6 in.) from the after end of the cockpit. A cut is then made in the canvas along this line. The purpose of this cut is to allow the 1800 mm (72 in.) width of canvas to be stretched to take in the 2030 mm (6 ft. 8 in.) beam of the hull at the widest point.

After the canvas has been wetted thoroughly on the top surface, it is rolled up to facilitate handling.

Commencing at the bow, apply the canvas with thick paint (or some other suitable preparation) to the decking. unrolling the canvas straight in line with the hull as you apply the adhesive.

A roller or squeegee is used to stretch and flatten any irregularities in the canvas as you proceed.

The canvas is then pulled down 38 mm (1½ in.) around the edges of the decking about the hull and cockpit, secured with 12 mm long (½ in.) copper tacks at 50 mm or 75 mm (2 in. or 3 in.) intervals, and trimmed off.

The coamings are now fitted around the cockpit by the use of 50 mm long (2 in.) brass screws screwed into the carlines, and into the deck beam at the rear. The chafing battens are shaped and secured by 76 mm long (3 in.) brass screws passed through the planking and into the gunwales.

MAST

The 9500 mm X 100 mm X 90 mm (31 ft. X 4 in x 3½ in.) length of timber for the mast has to be sawn to as near the dimensions of the mast as possible.

To do this. first scribe a centre line up the entire length of the timber on one of the 90 mm in.) faces. This will be the back of the mast. From the official plans, mark out on this face, at the points indicated, the widths of the mast equidistant from the centre line. The tapering shape of the mast is then drawn in

with a thin black line. This marking out should be repeated on the opposite face, which will be the front or the mast.

With the mast lying on trestles at a convenient height, proceed to rip the long wedge-shaped offcuts from each side. From the plan, the tapering shape of the mast is drawn on both new faces thus obtained, to allow a long wedge-shaped off-cut to be ripped from the front side only Using a jack plane or draw knife, proceed to form the mast to the pear-shaped sections shown in the plan finishing off with a smoothing plane or spokeshave. and finally sandpapering.

BOOM

After consulting the plan as to the sizes of the boom. it can be shaped mainly with a jack and smoothing plane. It is advisable to give both mast and boom a coat of oil and two or three coats of varnish.

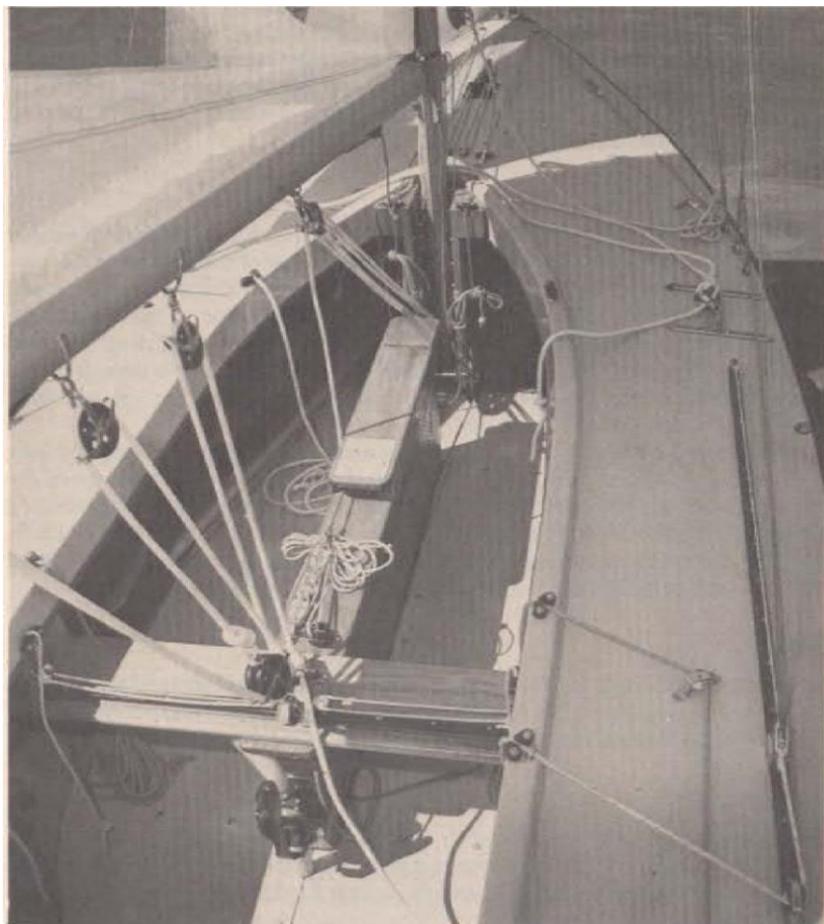
CROSSTREES

The crosstrees are shaped from two 1067 mm X 64 mm X 25 mm (3 ft. 6 in. X 2½ in. X 1 in.) lengths of Oregon, tapering from 64 mm X 25 mm in. to 1 in.), and streamlined to an oval section, except for 229 mm (9 in.) or so next to the mast.

PAINTING THE HULL

Having planed and sanded the hull to a smooth surface, the entire hull and deck should be painted with a red lead primer. Each nail or screw hole in the hull should then be neatly stopped with red or white lead and putty, -or an approved stopping compound. After this has thoroughly dried. the primed hull should again be sanded and painted with a reliable flat white paint, after which two coats of gloss white or any other desired colour should be given to the hull. A light cutting with wet and dry sandpaper after all but the final coat is recommended. This painting procedure is followed on the inside of the hull also. The deck should receive two coats of paint.

All you have to do now is set up the rigging, full details of which are given in the official plans and specification booklet, and your "Jube" is ready for the water. Good sailing!



Modern deck and cockpit layout of a fiberglass Jubilee.

A special tribute must be paid, firstly to those who conceived the class and kept it together over the years.

Throughout the history of the Jubilee Class Yacht many well known names have been involved at various stages, too numerous to mention, but several which stand out as untiring workers for the class are:

- Jim A Linacre, past RBYC Commodore
- Bill Higgins, RBYC
- Charlie Peel, boat builder and designer

The above were involved in establishing the class back in 1934-35 — Alan Baldick. RSYS

- Pat Taylor, RSYS
- Ralph Ross, RSYS (class measurer)

These gentlemen were responsible for establishing the Jubilee fleet at Royal Sydney Yacht Squadron and creating competition class racing at that Club. — W. (Bill) L. Ross, RBYC

In the role of Secretary for the class, he was responsible for the Huntingfield Cup being donated by Lord Huntingfield.

Roy Tapson, Blairgowrie Y.C.

Roy was a very strong supporter of the class and he was the instigator of the Australia Day Regatta weekend. — Les Pound, RBYC. And it is the last of these to whom a special tribute must be paid.

In 1934/35 Les Pound and Gil Douglas set to and built one of the first Jubilees — J4 "AEOLUS" — which Les sailed until 1978. During that time Les was chairman of the Jubilee Yacht Association (Vic) for 20 years and served on the committee in many other years. In 1974 Les was awarded the RBYC Yachtsman of the Year. Les actually sold AEOLUS in 1978, with much regret, to purchase a new fibreglass Jubilee — BJ 123 "STELLA" (named after his lovely wife, Stella) — which was fitted out and launched in September 1978. Her photo is on the front of this booklet.

Les Pound donated the funds to have this entire booklet produced.

Other thanks in the production of this booklet must go to:

Editor: Dale Burrows CR+B.Y.C).

Photos: Bill Wright (R.B.Y.C.) — Squire Photographics

Developing: Geoff Grant (R-B-Y,C-) — Squire Photographics

Technical Details: John Cowle (SX-C.) Ray Neville

(R.BX.C.) Ken Atkins (S.S.C).

Bob Simmat (R.S.Y.S.) and many others who contributed in various ways with photos, articles and details.

Class contacts:

Details below are provided in order that contact with the class may be obtained at the most convenient location: If you wish further details on the Jubilee Class Yacht* please write to:

Vic.:

Honorary Secretary
Jubilee Yacht Association (Vic.)
C/- Royal Brighton Yacht Club
253 St. Kilda Street,
Middle Brighton 3186.

NS.W.:

Honorary Secretary
Jubilee Yacht Association of N.S.W@
C/- Royal Sydney Yacht Squadron
Peel Street
Kirribilli, 2061

Clubs where Jubilees are actively sailed are:

Vic.:

Royal Brighton Yacht Club
Sorrento Sailing Club
Sandringham Yacht Club
Williamstown Sailing Club
Blairgowrie Yacht Squadron

N.S.W.:

Royal Sydney Yacht Squadron.

**ADDENDUM TO THE RACING RULES AND
RULES RELATING TO THE CONSTRUCTION OF JUBILEES
AS SET OUT IN THE "BLUE BOOK"**

RACING RULES

Racing Rule 9: Each yacht shall be fitted with at least one effective manually operated electric bilge pump in addition.

Page 11 (2009 Referendum)

Pumps

Racing Rule 10: Page 11 A foredeck breakwater may be fitted. Such device shall be in accordance with the annexed drawing which is hereby incorporated into the Class Plans.

Breakwater (1987 Referendum)

CONSTRUCTION RULES

Rule 4.2.4 Delete all words after the first sentence.

Page 24 (2009 Referendum)

Asbestos

Rule 4.2.5 page 24 Delete all words after the first sentence.

Asbestos (2009 Referendum)

Rule 4.5.2 Delete in entirety.

Pages 29 and 30 (2009 Referendum)

Test Laminate

Rule 4.6.4 Delete the sentence "12.5mm balsa boards or 25mm (1") PVC Foam board approx. 300mm (12") centres. "

Page 30 (JYA [VIC] Committee Resolution — August 1997)

Deck

Rule 4.7.4 Deletion of the word "Asbestos" and replacement with the word "bonded"

Page 32 (2009 Referendum)

Assembly

Rule 5	Add the following additional paragraphs after the word "cut":
Page 32	Where the king bolt penetrates the centreplate to provide reasonable bearing up in steel to a total maximum diameter centred on the centreline of the plate have a total maximum thickness of 3/4" (18mm).
Centre Plate	Where the point of attachment for raising and lowering the centreplate is up in steel to a total maximum of 3/4" (18mm), covering a maximum area of 100sq cm. In order to control the sideways play of the centreplate within the plate, packing above the line of the keel of the boat, when the centreplate is in the raised position in accordance with the Rules, may be packed with a material of a thickness of 10mm to prevent movement. The packing material shall not be of metal; and the fixing of the packing to the total weight of the packing shall not exceed 2.5kg. No portion of the packing may protrude below the keel-line when the plate is raised. (1986 Referendum)
Rule 9.3.1	Add the following paragraph after the figures (2 1/8"):
Page 33	The aluminium spinnaker pole shall be a minimum diameter of 35mm. (1987 Referendum)
Aluminium Spinnaker Pole	
Rule 9.3.1(a)	Add the following additional paragraph:
Page 33	The mast may be stepped utilising the tabernacle as on the plans, or direct to the deck if the tabernacle would otherwise be attached. (1987 Referendum)
Mast Stepping	
Rule 9.3.3	Delete in entirety.
Page 33	(2009 Referendum)
Internal Halyards	
Rule 14(b)	Delete 14(b) in entirety and replace with:
Page 36	(b) Jib: maximum dimensions shall be: Luff 4877mm (16 ft.), Leech 4572mm (15ft. 0in.) Centre measurement 4800mm (15ft. 9in.)
Jib Measurement	
	The Centre measurement shall be measured from the head of the jib to the foot of the jib. Offset of the foot below the line joining tack and clew: At either of the quarter points 162mm (6 3/8in.)

Mid point 215mm (8 1/2in.)

Luff, leech, foot and centre measurements shall be taken to be to the i lines of the edges of the sail as appropriate.

The jib shall have a wire luff of 7 x 7 stainless steel flexible wire rope of or greater breaking strain.

Jib battens may be used but only two are allowed spaced as shown in t more than 38mm (1 1/2in.) wide and maximum lengths shall be 230mm

(9in.)

Not more than 7 evenly spaced fastening devices shall be used to attac the maximum width of each device shall be 50mm (2in.)

(1987 Referendum)

Rule 14(e)

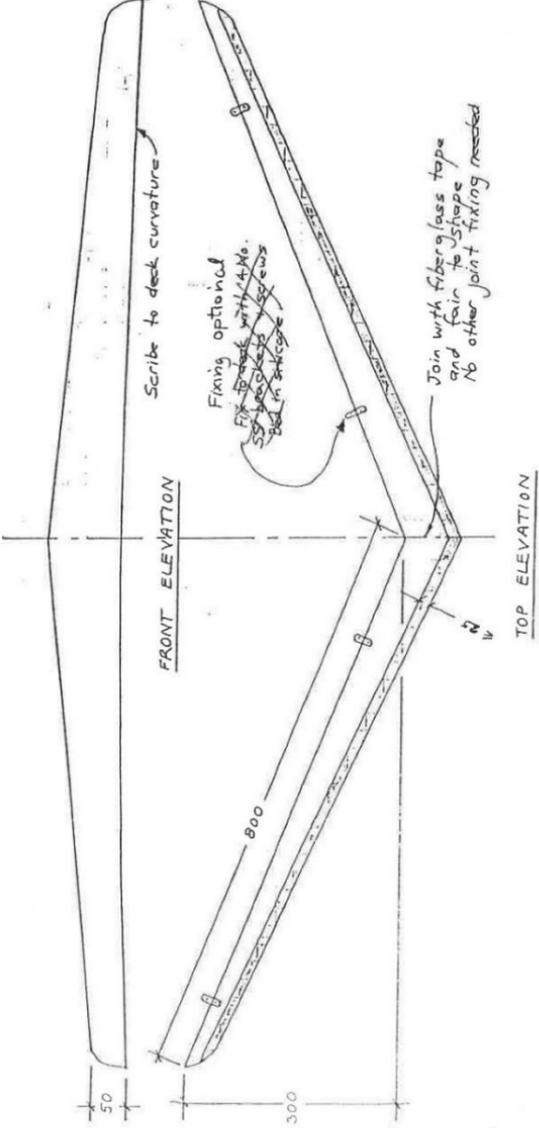
Delete the phrase "I.Y.R.U. Yacht Racing Rules, Addendum, on Sail Mea

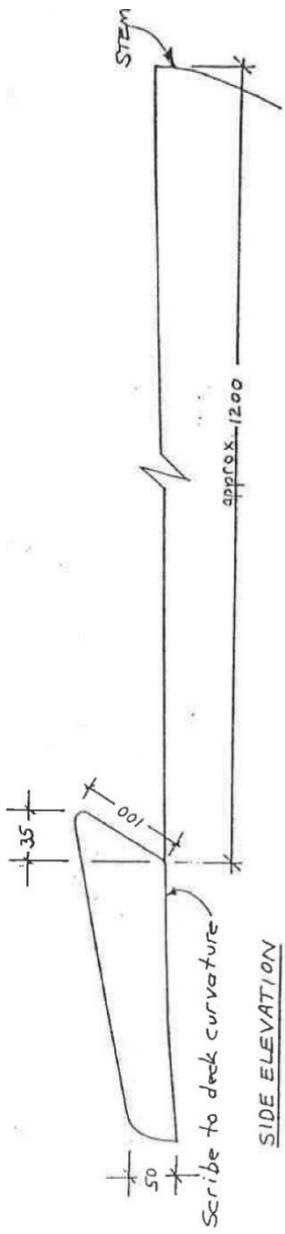
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"I.S.A.F.: The Equipment Rules of Sailing"

Sail windows

(2009 Referendum)





PROPOSED AMENDMENTS TO FIBREGLASS JUBILEE SPECIFICATIONS

4.1.1 General.

Deletion of the words "construction may be carried .out with other approved fibres and resins" in the seventh and eighth lines and substitution therefore of the words "the specification may be varied to accommodate changes in technology and availability of specified items or to rectify a specification that practical experience has found to be inadequate".

The Committee has from time to time had to address difficulties caused by the specifications being inappropriate. The weight of spinnaker cloth is one obvious example, and the deletion of core materials from the deck construction in the last five Jubilees to be constructed is another. The committee must be in a position to use common sense and allow the class to keep pace with modern developments that effect the specifications where such does not effect the generally conservative nature of the class that has enabled it to survive where many others have disappeared

4.2.4 Polyester Bonding Compound

Deletion of an words after "in general" in line four.

It is sufficient to specify that the bonding compound must be polyester based and formulate, or mixed to specific requirements. Most boat builders use p1(proprietary products .supplied by the two major distributors. They certainly do not contain asbestos fibre and if is unwise in the extreme for the Association to provide any prescription in respect to the fibres or agents to be added to the bonding compound.

4.2.5 Polyester Syntactic Pilling Compound, ,

Deletion of all words commencing "where required in the fifth line".

Exactly the same reasoning applies in respect to filling compounds as it does with bonding compounds.

4.5.2 Test Laminate.

This item should be deleted in it's entirety.

A test laminate was made for both J130 and 131. A specific mould was made for that purpose. It is a simple enough task to duplicate the hull laminate in that mould, but there is little or nothing to be gained in that process.

A surveyor needs to satisfy himself that the laminate in the hull is at least to specifications over the whole hull and there has not, . been any attempt to significantly change the specification or distribution of glass and resin to achieve a perceived performance advantage. The laying up of a test laminate does not prevent that process and is really only "window dressing", A boat builder that wishes to distort the integrity of the process will not hesitate to lay up a test laminate that has nothing to do with that in the hull.

4.6.4 *Deck Scantling.*

Delete from "12.5mm (1/2") Balsa boards" in line four through to "Chopped Rovings" in line ten and eleven and replacement with "1830g/m² 60z/sq.ft. Chopped Strand Mat or Chopped Rovings.
Suitable hollow reinforcing conduits or frames where required to stiffen and reinforce the deck shall be of the same laminate as this".

The use of Balsa boards or 1" PVC foam in the decks has proved not satisfactory as a long term construction method. Water penetration has a devastating effect over years and the core material achieves the consistency of wet blotting paper. It is far better to recognize the unsuitability of such core materials and replace them with a simple fibreglass laminate.

4.7.4 *Assembly.*

The word asbestos should be deleted from the third line and replaced with the word "Bonding".

Again it is unwise to be prescriptive in the type of bonding compound to be used. The word asbestos should certainly not appear and the Association should not be seen to be promoting one type of commercial bonding compound in preference to another.

9.3.3 Should be deleted in its entirety.

It was sensible for the Association to prescribe external halyards when a large proportion of the masts in the fleet were solid wooden masts. There should have been no additional advantage for someone using an aluminium mast by being able to lead their halyard internally when the owners of wooden masts could not do so.

Given the dimensions of the aluminium mast, the speed at which Jubilees progress through the water and the relatively unsophisticated nature of the rigs, it probably makes little difference to performance as to whether halyard are internal or external. It does however make a great deal of difference to ease of use and deterioration when not in use and exposed to the elements. There are very few wooden masts left in the competitive fleet and allowing internal halyard would be sensible and a reflection of the change of balance between wood and aluminium.

10. Remove the words "and jib furling gear"

It is considered that jib furling equipment should be allowed if desired. The dropping of the jib, whether hanked or not, can be difficult in strong winds. It generally requires a crew member on the deck. From a safety viewpoint, an easy means of removing the jib when short handed or in brisk conditions could be desirable especially with older or less strong crew. Modern jib furling equipment is cheap and reliable and should not be prohibited.

12. *Yachts of Peculiar Construction and Evasions.*

After the words "evades the spirit of them" in line five shall be inserted the following words "similarly every measurer shall report fully to the committee on any yacht which in his opinion fails to comply with the specifications and plan but which otherwise complies with the spirit of them and where such failure is unlikely to effect the speed, seaworthiness or durability of construction of the yacht".

The comma after the word "supreme controlling body" in line five shall be replaced with a full stop and the word "and" immediately thereafter shall be deleted.

After the final word "concerned" shall be added the following words "if after due enquiry the committee shall be of the opinion that a yacht fails to comply with the specifications and plans but such lack of compliance does not effect its speed, safety, durability of construction or appearance it may direct the measurer to issue a Measurement Certificate and may register the yacht concerned."

The rule as it currently stands is very sensible but does not go far enough. There are a number of yachts which do not comply with the strict specifications and yet are sailing in the fleets without any harm to themselves or to the class generally. A very obvious example is J12 (Sirocco). The cockpit has been enlarged at some time in the distant past. It is nevertheless an active member of the racing fleet at Ballarat and no one would suggest it is not a Jubilee and should not be registered. J11 (Tahiti) raced for 45 years of its life with a distorted mid-section where the weights were left in when the boat was placed on the hard. Although now rectified that distortion would have technically disqualified registration of the boat for this entire period.

It is sensible to give the committee the power to allow registration of boats which comply with the spirit of the rules but where for some reason the technical specifications are not met and cannot be easily rectified.

14. *Sails.*

The weight of the spinnaker cloth should be changed from 54g/m² (1½ oz/sq. yd.) to 32 g/m² (¾ oz/sq. yd).

Improvements in spinnaker cloth are such that 1½ oz is now the weight one would expect on a half tonne yacht or larger. Quarter tonners and yachts of up to 35 feet regularly use ¾ oz cloth and find it totally satisfactory. Most Jubilee spinnakers in the last ten years have been constructed from ¾ oz cloth and all have proved to be satisfactory.

Back Cover: "Tawarri" — Sailing for home

Right: "Lewana", Stella" and "Zest" close reaching in a 20 knot southerly

Primed by Wilke and Company Limited, Clayton, Vic

