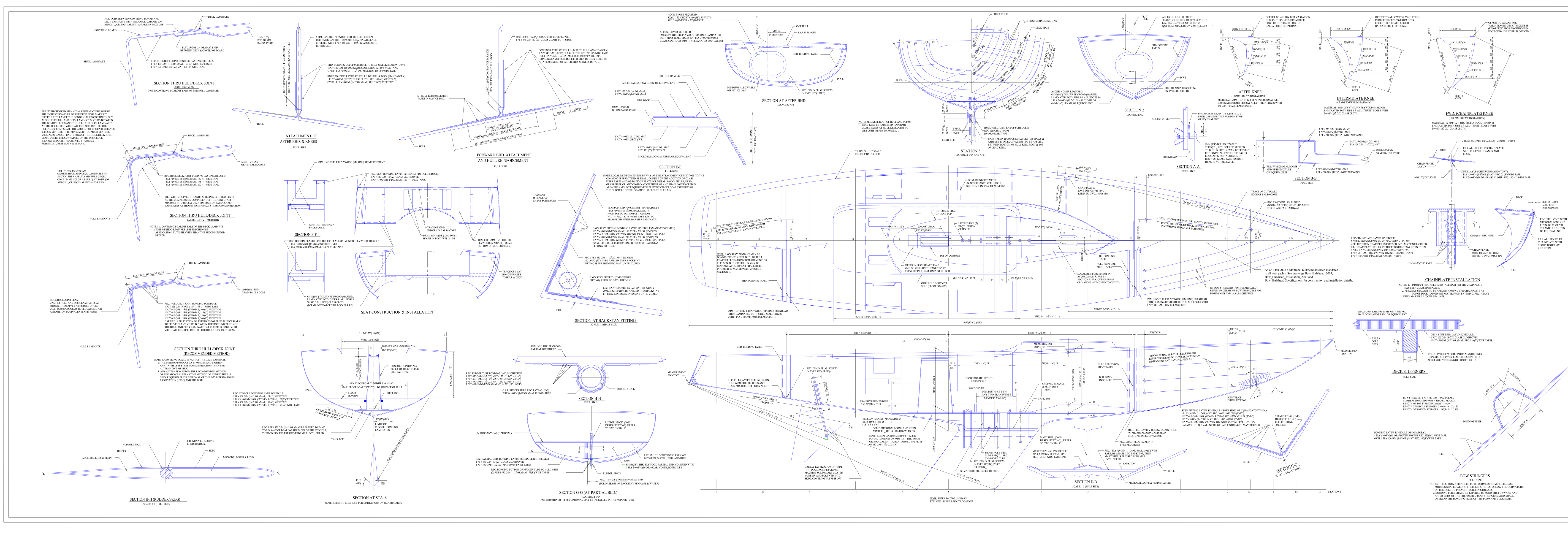

NOTES

1. THE HULL (INCLUDING DECK), KEEL, SKEG, RUDDER, STANDING RIGGING, SPARS AND SAILS ARE STRICTLY CONTROLLED IN ACCORDANCE WITH THE INTERNATIONAL E-22 CLASS RULES PERTAINING TO ONE-DESIGN CONTROL, THE OFFICIAL PLANS AND SPECIFICATIONS, MEASUREMENT FORM, MEASUREMENT DIAGRAMS AND CONSTRUCTION MANUAL, MATERIALS, LAYUP SCHEDULES, ASSEMBLIES, FITTINGS, PARTS, STRUCTURAL MEMBERS (SEAT, BULKHEADS, KNEES, BOW STRINGERS, DECK STIFFENERS) AND STRUCTURAL REINFORCEMENT SHOWN ON THIS CONSTRUCTION PLAN ARE MANDATORY UNLESS SPECIFICALLY NOTED AS "RECOMMENDED (REC.)" OR "OPTIONAL (OPT.)". DIMENSIONS WITH TOLERANCES INDICATED ARE MANDATORY. MEASUREMENTS REQUIRED FOR THE INTERNATIONAL E-22 CLASS MEASUREMENT FORM (1974) ARE SO INDICATED BY ENCLOSING THE ITEM NUMBERS LISTED ON THE MEASUREMENT FORM IN BRACKETS, I.E. [#20]. PARTS AND FITTINGS SPECIFIED AS "ONE-DESIGN FITTING" (I.E. STEM FITTING, CHAINPLATE, MAST STEP, BACKSTAY FITTING, RUDDER STOCK) ARE MANDATORY AND SHALL BE FABRICATED IN ACCORDANCE WITH DWG. NO. 3MKB-15G "FITTINGS DETAIL". THE DESIGN OF THE RUDDER HEAD, TILLER, TILLER EXTENSION AND LIFTING EYES IS OPTIONAL, EXCEPT NO EXOTIC MATERIALS SHALL BE USED. THE DETAIL DESIGN OF OTHER FITTINGS ON THIS CONSTRUCTION PLAN IS OPTIONAL PROVIDED THAT THEY ARE OF THE GENERAL TYPES SHOWN ON THIS PLAN. IT IS IMPOSSIBLE TO MENTION EVERY SUGGESTION THAT HAS BEEN RULED ILLEGAL IN THE PAST, AND TO FORESEE EVERY INNOVATION WHICH MAY BE THOUGHT OF IN THE FUTURE. THEREFORE WHEN CONSIDERING ANYTHING IN CONNECTION WITH THE YACHT OR ITS SAILS OR EQUIPMENT WHICH IS NOT CLEARLY COVERED BY THE PLANS, SPECIFICATION AND/OR RULES, IT MUST BE ASSUMED ILLEGAL UNLESS PRIOR APPROVAL HAS BEEN OBTAINED FROM I.Y.R.U. THROUGH THE E-22 INTERNATIONAL ASSOCIATION.

2. HULL, DECK, SEAT, SKEG AND RUDDER SHALL BE OF GLASS REINFORCED POLYESTER RESIN (G.R.P.) IN ACCORDANCE WITH THE RULES, OFFICIAL PLANS AND SPECIFICATIONS AND SHALL BE MADE ONLY FROM OFFICIAL MOULDS CONSTRUCTED SOLELY BY BUILDERS LICENSED FOR THAT PURPOSE BY THE I.Y.R.U. THE LAYUP SCHEDULE FOR THE HULL, DECK. SKEG, RUDDER, TANK TOP, AND SEAT IS AS FOLLOWS:
HULL LAYUP SCHEDULE:
STRAKE "A" - 2 PLIES 450 G/M (1-1/2 OZ.) MAT; 1 PLY 610 G/M (18 OZ.) WOVEN ROVING
STRAKE "B" - 2 PLIES 450 G/M (1-1/2 OZ.) MAT; 2 PLIES 610 G/M (18 OZ.) WOVEN ROVING
STRAKE "C" - 3 PLIES 450 G/M (1-1/2 OZ.) MAT; 3 PLIES 610 G/M (18 OZ.) WOVEN ROVING
STRAKE "D" - 4 PLIES 450 G/M (1-1/2 OZ.) MAT; 4 PLIES 610 G/M (18 OZ.) WOVEN ROVING
TRANSOM - 2 PLIES 450 G/M (1-1/2 OZ.) MAT; 1 PLY 610 G/M (18 OZ.) WOVEN ROVING
STRAKES "A", "B", "C", AND "D" LAMINATES SHALL OVERLAP 75 (3") ON EITHER SIDE OF THE CENTERLINE OF THE HULL.
DECK LAYUP SCHEDULE (INCLUDING CUDDY TOP):
PRIMARY BOND OR BARRIER LAMINATE. 1 PLY 225 G/M (3/4 OZ.) MAT. - CURE -
1 PLY 450 G/M (1-1/2 OZ.) MAT.
12 MM (1/2") END GRAIN BALSA CORE (OUTBOARD EDGE 75 (3") IN FROM DECK EDGE), VACUUM BAG CURE, OR EQUIVALVENT.
1 PLY 450 G/M (1-1/2 OZ.) MAT.
1 PLY 610 G/M (18 OZ.) WOVEN ROVING
ADDITIONAL PLY 450 G/M (1-1/2 OZ.) MAT IN WAY OF COAMING.
COVERING BOARD LAYUP SCHEDULE (MAY EQUAL OR EXCEED FOLLOWING SCHEDULE):
PRIMARY BOND OR BARRIER LAMINATE - 1 PLY 225 G/M (3/4OZ.) MAT. CURE -
2 PLIES 450 G/M (1-1/2 OZ.) MAT.
1 PLY 610 G/M (18 OZ.) WOVEN ROVING
SKEG AND RUDDER LAYUP SCHEDULE:
PRIMARY BOND OR BARRIER LAMINATE - 1 PLY 225 G/M (3/4 OZ.) MAT. CURE -
(1 PLY 450 G/M (1-1/2 OZ.) MAT MAY BE SUBSTITUTED FOR THE 225 G/M (3/4 OZ.) MAT
2 PLIES 450 G/M (1-1/2 OZ.) MAT (1 PLY OF 610 G/M (18 OZ.) WOVEN ROVING MAY BE SUBSTITUTED FOR 1 PLY 450 G/M (1-1/2 OZ.) MAT)
TANK TOP LAYUP SCHEDULE:
1 PLY 450 G/M (1-1/2 OZ.) MAT
1 PLY 610 G/M (18 OZ.) WOVEN ROVING
SEAT LAYUP SCHEDULE:
3 PLIES 450 G/M (1-1/2 OZ.) MAT
THE BUILDER SHALL FOLLOW PROCEDURES AND STANDARDS WHICH ENSURE STRICT CONTROL OF THE ONE-DESIGN SHAPE AND SHALL ASSEMBLE THE COMPONENTS IN ACCORDANCE WITH RULE 3.2 "HULL AND DECK ASSEMBLY", RULE 3.9.1 " THE GLASS HULL", AND RULE 3.9.2 "THE BARE YACHT". LOCAL REINFORCEMENT, AS SHOWN ON THIS CONSTRUCTION PLAN AND/OR DESCRIBED IN RULE 3.1 IS PERMITTED AT POINTS OR STRESS CONCENTRATION OR HIGH LOADINGS. SUCH REINFORCEMENT SHALL NOT AFFECT THE STRENGTH OR RIGIDITY OF THE HULL AND/OR DECK.

3. THE KEEL SHALL BE OF LEAD CAST IN AN OFFICIAL MOULD OBTAINED FROM A SOURCE APPROVED BY THE I.Y.R.U., AND SHALL BE IN ACCORDANCE WITH THE RULES, OFFICIAL PLANS AND SPECIFICATIONS, AND MEASUREMENT FORM. A SMALL AMOUNT (APPROXIMATELY 3% OR LESS) OF ANTIMONY MAY BE ADDED TO IMPROVE THE WORKING SURFACE.

4. THE ATTACHMENT OF THE DECK TO THE HULL SHALL FOLLOW THE EXAMPLES SHOWN ON THIS CONSTRUCTION PLAN. OTHER METHODS FOR JOINING THE DECK TO THE HULL REQUIRE PRIOR WRITTEN APPROVAL FROM THE I.Y.R.U. THROUGH THE INTERNATIONAL E-22 CLASS ASSOCIATION.

5. FLOORBOARDS: REFER TO RULE 3.3.3. THE TOP SURFACE OF THE FLOORBOARDS SHALL BE A SINGLE HORIZONTAL PLANE. THE FLOORBOARDS, INCLUDING TRANSVERSE, LONGITUDINAL & VERTICAL MEMBERS OR REINFORCEMENT, SHALL WEIGH NOT LESS THAN 15 KG-(33 LBS.) AND NOT MORE THAN 20 KG.(44 LBS.) WHEN DRY. THE DESIGN IS OPTIONAL, EXCEPT AS SHOWN ON THIS CONSTRUCTION PLAN AND NOTED IN RULE 3.3.3. THE MATERIAL IS OPTIONAL, EXCEPT NO EXOTIC MATERIAL (I.E. CARBON FIBRES, KEVLAR, ETC.) SHALL BE USED.

6. THE USE OF A CONSOLE OR SAMSON POST IS OPTIONAL. THE DESIGN IS OPTIONAL, EXCEPT AS SHOWN ON THIS CONSTRUCTION PLAN AND NOTED IN RULE 7.4. THE MATERIAL IS OPTIONAL, EXCEPT NO EXOTIC MATERIAL (I.E. CARBON FIBRES, KEVLAR, ETC.) SHALL BE USED.

7. THE GLASS IN ATTACHMENT OF METALIC HARDWARE IS TO BE DONE WITH EXTREME CARE IN ORDER TO DEVELOP CONTINUITY OF STRENGTH.

8. I.Y.R.U. PLAQUE NUMBER SHALL BE CUT INTO KEELSON OR MOULDED INTO THE GLASS OF THE HULL IN THE BILGE AREA.

9. BETWEEN THE FWD & AFTER B'H'D.S, THE INSIDE SURFACE OF THE HULL & UNDERSIDE OF DECK SHALL BE COATED W./GEL COAT. PAINT, INCL. ALIPHATIC POLYURETHANE COATINGS, ARE PROHIBITED.

10. As of 1 Jan 2008 a additional bulkhead has been mandated in all new yachts. See drawings Bow_Bulkhead_2007, Bow_Bulkhead_Installation_2007 and Bow_Bulkhead Specifications for construction and installation details.

NOTE: ALL DIMENSIONS ARE GIVEN IN MILLIMETRES, NUMBERS ENCLOSED IN PARENTHESES ARE CONVERSIONS TO THE ENGLISH SYSTEM GIVEN IN FEET AND INCHES OR INCHES. EXAMPLE: 3820(12'- 6-3/8") OR 150(6") $^{+5}_{-20}$ $^{+}_{-150}$
NUMBERS ENCLOSED IN BRACKETS REFER TO ITEM NUMBERS ON THE INTERNATIONAL E-22 CLASS MEASUREMENT FORM (1974). EXAMPLE: [#17]

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INTERNATIONAL YACHT RACING UNION
60 KNIGHTSBRIDGE
LONDON SW1 7JX ENGLAND

INTERNATIONAL E-22 CLASS
DWG. NO. 3MKB-10G

CONSTRUCTION PLAN

SCALE: 1:10, FULL SIZE, HALF SIZE
DATE: DEC. 9, 1981 DRAWN/APPROVED: TSL/