



ALTERATIONS		
NO	DATE	BY
1	4/78	TSJ
<p>1. CHANGED GOOSENECK FITTING TO PERMIT 'FIXED' GOOSENECKS AS WELL AS SLIDING GOOSENECKS.</p>		

NOTES																			
1.	THIS MASTER PLAN, 3MK8-25G-SHT 2, IS PREPARED FOR USE BY SPAR BUILDERS. ALL FITTINGS WELDED OR MECHANICALLY ATTACHED TO THE MAST AND BOOM SHALL ACCOMPLISH THEIR SPECIFIED AND/OR INTENDED FUNCTIONS AND SHALL BE LOCATED IN THEIR SPECIFIED POSITIONS. DIMENSIONS WITH TOLERANCES INDICATED ARE MANDATORY. THE DETAILED DESIGN OF THE FITTINGS IS OPTIONAL PROVIDED THAT THEY ARE OF THE GENERAL TYPES SHOWN ON THE SPAR PLAN, 3MK8-25G-SHT 1. IF OTHER TYPES ARE USED PRIOR WRITTEN APPROVAL IS REQUIRED FROM THE I.Y.R.U. THROUGH THE INTERNATIONAL E-22 CLASS ASSOCIATION. REFER TO SPAR PLAN, 3MK8-25G-SHT 1, FOR ONE-BRUSH MANDATORY MEASUREMENTS, ATTACHMENT POSITIONS, FITTINGS, ASSEMBLIES AND SYSTEMS. IT IS IMPERATIVE TO MENTION EVERY SUGGESTION THAT HAS BEEN REJECTED 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, SPECIFICATIONS AND/OR PILES, IT MUST BE ASSUMED UNLESS PRIOR APPROVAL HAS BEEN OBTAINED FROM I.Y.R.U. THROUGH THE E-22 INTERNATIONAL ASSOCIATION.																		
2.	MATERIALS: NO EXOTIC MATERIALS SHALL BE INCLUDED IN THE ALLOYS, OR ATTACHED TO, OR USED WITH THE FITTINGS AND SPARS. THE MATERIALS REFERRED TO ON THIS PLAN SHALL BE AS FOLLOWS OR EQUIVALENT:																		
	<table border="0"> <tr> <td>6061-T6 ALUMINUM ALLOY (CASTING)</td> <td>356-F ALUMINUM ALLOY (CASTING)</td> </tr> <tr> <td>NOMINAL COMPOSITION:</td> <td>NOMINAL COMPOSITION:</td> </tr> <tr> <td>92% ALUMINUM, 6% SİLICON, 1% MAGNESIUM, 0.25% CHROMIUM, ALUMINIUM & IMPURITIES CONSTITUTE THE REMAINDER.</td> <td>7% SİLICON, 0.2% MAGNESIUM, ALUMINIUM & IMPURITIES CONSTITUTE THE REMAINDER.</td> </tr> <tr> <td>TYPICAL PHYSICAL PROPERTIES:</td> <td>TYPICAL PHYSICAL PROPERTIES:</td> </tr> <tr> <td>WEIGHT: 2.70 KG/M³ (0.098 LB/IN³)</td> <td>WEIGHT: 2.65 KG/M³ (0.097 LB/IN³)</td> </tr> <tr> <td>MINIMUM MECHANICAL PROPERTIES:</td> <td>MINIMUM MECHANICAL PROPERTIES:</td> </tr> <tr> <td>ULTIMATE TENSILE: 300,000 N/M² (43,500 PSI)</td> <td>ULTIMATE TENSILE: 310,000 N/M² (44,800 PSI)</td> </tr> <tr> <td>YIELD TENSILE: 241,200 N/M² (34,500 PSI)</td> <td>YIELD TENSILE: 241,200 N/M² (34,500 PSI)</td> </tr> <tr> <td>ELONGATION: 9%</td> <td>ELONGATION: 9%</td> </tr> </table>	6061-T6 ALUMINUM ALLOY (CASTING)	356-F ALUMINUM ALLOY (CASTING)	NOMINAL COMPOSITION:	NOMINAL COMPOSITION:	92% ALUMINUM, 6% SİLICON, 1% MAGNESIUM, 0.25% CHROMIUM, ALUMINIUM & IMPURITIES CONSTITUTE THE REMAINDER.	7% SİLICON, 0.2% MAGNESIUM, ALUMINIUM & IMPURITIES CONSTITUTE THE REMAINDER.	TYPICAL PHYSICAL PROPERTIES:	TYPICAL PHYSICAL PROPERTIES:	WEIGHT: 2.70 KG/M ³ (0.098 LB/IN ³)	WEIGHT: 2.65 KG/M ³ (0.097 LB/IN ³)	MINIMUM MECHANICAL PROPERTIES:	MINIMUM MECHANICAL PROPERTIES:	ULTIMATE TENSILE: 300,000 N/M ² (43,500 PSI)	ULTIMATE TENSILE: 310,000 N/M ² (44,800 PSI)	YIELD TENSILE: 241,200 N/M ² (34,500 PSI)	YIELD TENSILE: 241,200 N/M ² (34,500 PSI)	ELONGATION: 9%	ELONGATION: 9%
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	<p>NOTE: ALL DIMENSIONS ARE GIVEN IN MILLIMETERS. NUMBERS ENCLOSED IN PARENTHESES ARE CONVERSIONS TO THE ENGLISH SYSTEM GIVEN IN EITHER METERS OR FEET AND INCHES. EXAMPLE: 300(250) IS 300 MM (250 IN) OR 125(10) IS 125 MM (10 IN). DIMENSIONS ENCLOSED IN BRACKETS REFER TO ITEM NUMBERS ON THE INTERNATIONAL E-22 CLASS MEASUREMENT FORM, 1974. EXAMPLE: [448]</p>																		
3.	INSULATION: STAINLESS STEEL OR BRONZE FITTINGS ATTACHED TO THE MAST SHALL BE INSULATED FROM THE ALUMINUM WITH ZINC CHROMATE PASTE, INSULATION TAPE OR EQUIVALENT.																		
4.	EXTERNAL SHROUD TANGS ARE REQUIRED. INTERNAL SHROUD ATTACHMENTS ARE PROHIBITED.																		
5.	A FUNCTIONAL MAIN HALYARD LOCK LOCATED ABOVE THE UPPER MEASUREMENT BAND SHALL BE FITTED BUT ITS DESIGN IS OPTIONAL.																		
6.	MAST HEEL MOVEMENT OF THE MAST HEEL IS PERMITTED ONLY IN A FORE AND AFT DIRECTION. ROTATING MASTS ARE PROHIBITED. DESIGN OF THE MAST HEEL PLUG AND SHOE IS OPTIONAL PROVIDED THAT THE COMBINED ASSEMBLY OF PLUG AND SHOE IS ATTACHED TO THE MAST STEP IN SUCH A WAY AS TO PREVENT FORWARD AND AFT MOVEMENT WHILE RACING.																		
7.	ALL WELDS ARE CONTINUOUS AND OF USER STANDARD PROPORTIONS, UNLESS OTHERWISE NOTED.																		
8.	EXTERNAL SPINNAKER TRACK REQUIRED ON THE FORWARD SIDE OF THE MAST. TRACK LENGTH SHALL BE NOT LESS THAN 1200MM. RECOMMEND THE TYPE TRACK SIMILAR TO KEYRON 1120A (SM 686 25MM (1") EXTRUDED ALUMINUM TRACK WITH SCHAEFER MARINE 973-32 SPINNAKER POLE SLIDER.																		
9.	A PERMANENTLY FIXED GOOSENECK OR A SLIDING GOOSENECK MOUNTED ON A TRACK IS PERMITTED.																		
10.	REINFORCEMENT SLEEVES ARE PROHIBITED, EXCEPT SLEEVES OF ONE (1) METRE OR LESS MAY BE INSERTED INTO THE MAST IN THE VICINITY OF A BREAK OR FRACTURE, SOLELY FOR THE PURPOSE OF REPAIR AND MAY BE FASTENED MECHANICALLY OR BY WELDING. WELDED REINFORCEMENTS WHICH ARE IN EXCESS OF THOSE REQUIRED TO RESTORE THE LOCAL INTEGRITY OF THE FRACTURED MAST ARE PROHIBITED.																		

DESIGNER:	
E.W. ETCHELLS	
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OLD GREENWICH, CT. 06870 USA.	

CONTROLLING AUTHORITIES:	
INTERNATIONAL E-22 CLASS ASSOCIATION	
BOX 572 F.D.R. POST OFFICE	
NEW YORK, N.Y. 10022	
INTERNATIONAL YACHT RACING UNION	
60 KNIGHTSBRIDGE	
LONDON SW1 7JX ENGLAND	

SPAR PLAN - MAST DETAILS	
SCALE: FULL SIZE	
DATE: JAN. 16, 1981 DRAWN/APPROVED: TSJ/CAO SHEET 2 OF 3	