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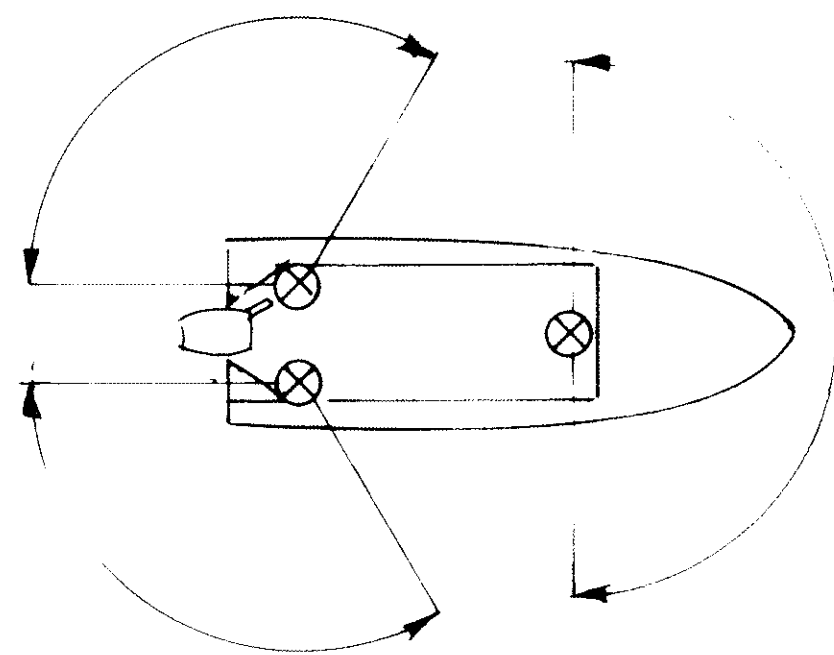
This information product is intended to be used by anyone who wants to build a boat to a particular and suitable FAO design, it being understood that it is the responsibility of the intended user regarding the selection of a vessel design on the basis of its suitability for the intended fishery, sea state and weather and the availability of suitable construction material and building capability. Furthermore, it is the responsibility of the intended user to comply with national legislation for authorization to construct a fishing vessel and obtain approval of technical specifications. It being noted that the application to build a vessel must be accompanied by the specifications of mandatory safety equipment and outfit. In the case there is no national legislation in place for the design, construction and equipment of vessels FAO recommends that the intended user applies appropriate international standards, such as the FAO/ILO/IMO Safety recommendations for decked fishing vessels of less than 12 metres in length and undecked fishing vessels.

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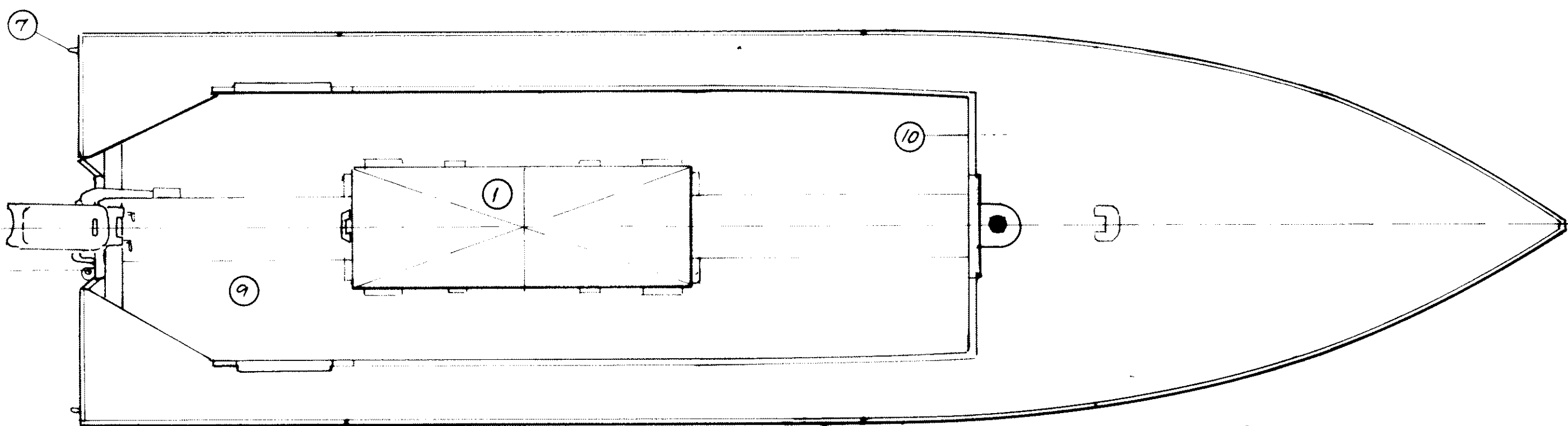
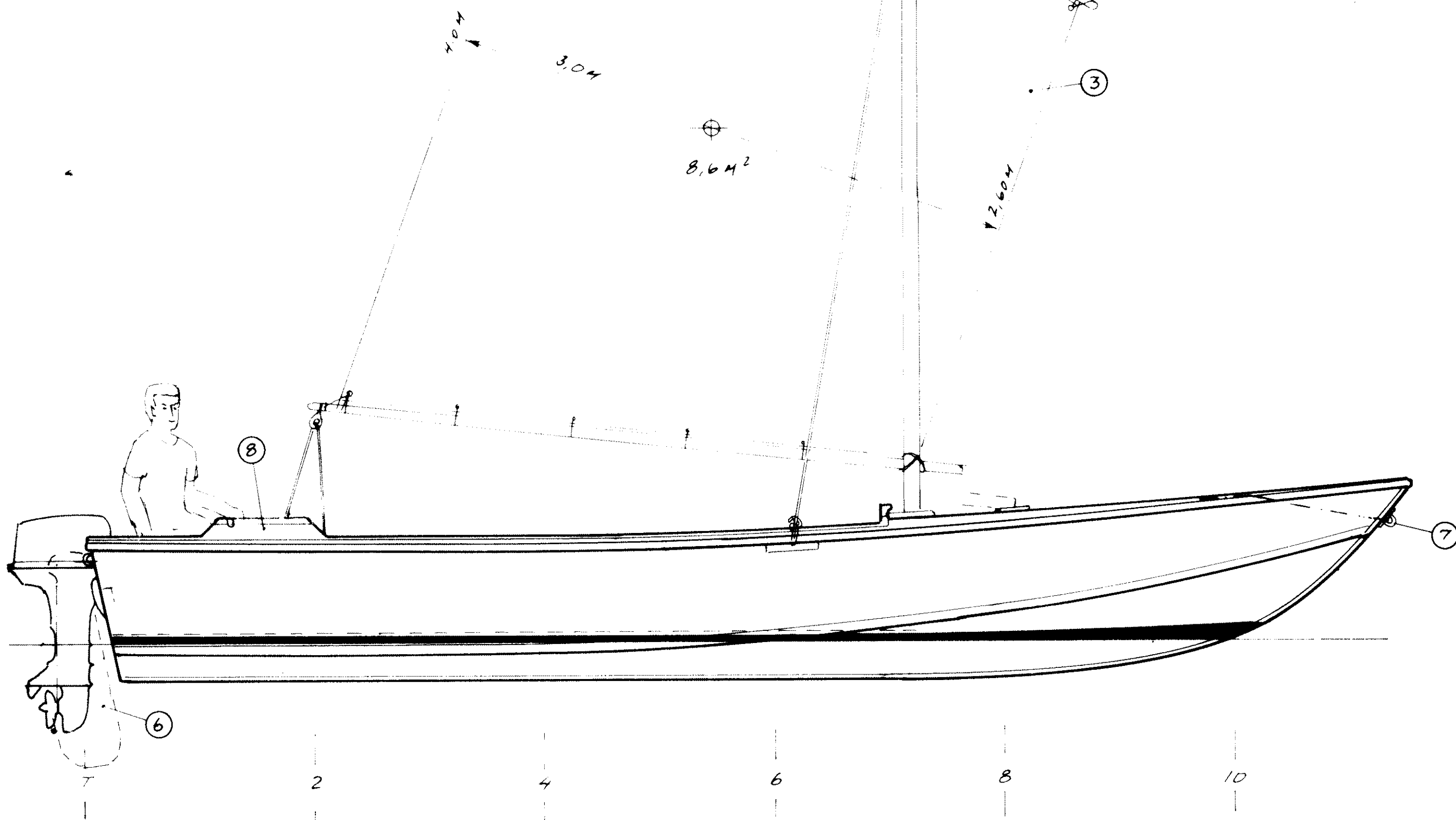
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EQUIPMENT

- 1 ICEBOX NET CAPACITY = 0,27 M³, LASHED TO FRAME (120 KG FISH + 60 KG ICE)
- 2 FLOTATION BLOCKS, TOTAL = 0,18 M³
- 3 EMERGENCY SAIL, 8,6 M², ALSO USED AS TARPULIN BY DOUBLING
- 4 MAST - 4,3 M WITH 10 MM HILYARD USED AS STAY
- 5 STOWAGE OF MAST AND SAIL
- 6 RUDDER FOR SAILING, ENGINE REMOVED
- 7 MOORING RINGS 10 MM
- 8 HANDGRIP AND FOOT BRAKE WHEN FISHING
- 9 PLYWOOD FLOOR 10 MM WITH LIFTABLE MIDSECTION FOR BAILING
- 10 BOX WITH EMERGENCY FLARES FIXED UNDER FOREDECK.

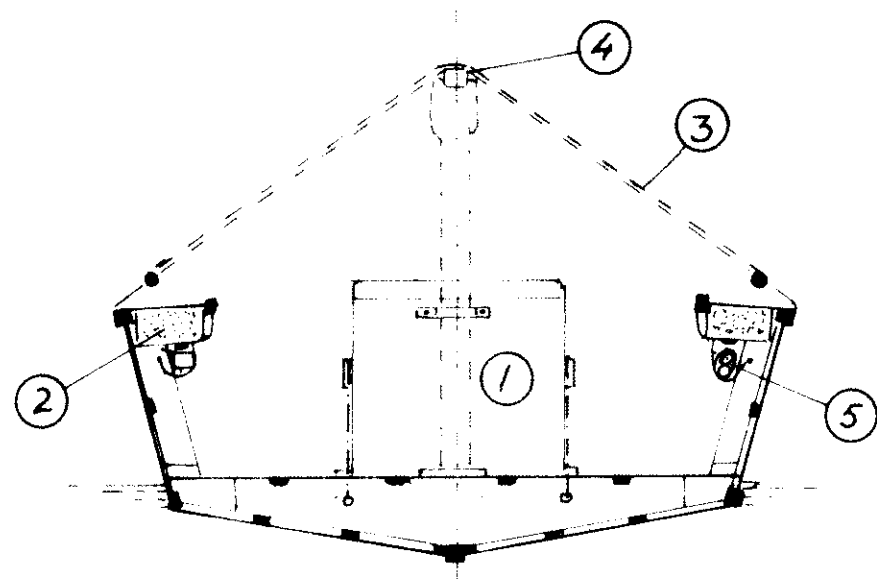


PEARL SHELL LURE
FISHING WITH 3 MEN



PARTICULARS

LENGTH OVER ALL LOA = 7.0 M (23 FT)
 BEAM MOULDED BMD = 1.80 M
 DEPTH MOULDED DMD = 0.70 M
 LBIL NUMBER = LOA x BMD x DMD = 8,8 M³
 DISPLACEMENT, NO LOAD = 400 KG
 SERVICE LOAD, 3 MEN + 200 KG = 400 KG
 DISPLACEMENT SERVICE = 800 KG
 ENGINE POWER: 25 HP OUTBOARD 20" SHAFT
 SERVICE SPEED = 15 KNOTS



1.0 0.5 0 1 2 M



7.0 M PLANING FISHING BOAT

GENERAL ARRANGEMENT

SCALE = 1:20	DESIGN NO	DRAW. NO.
DESIGN: Ø. LAM/BRANDT	KIR-10	1
NORWAY, OCT - 87		

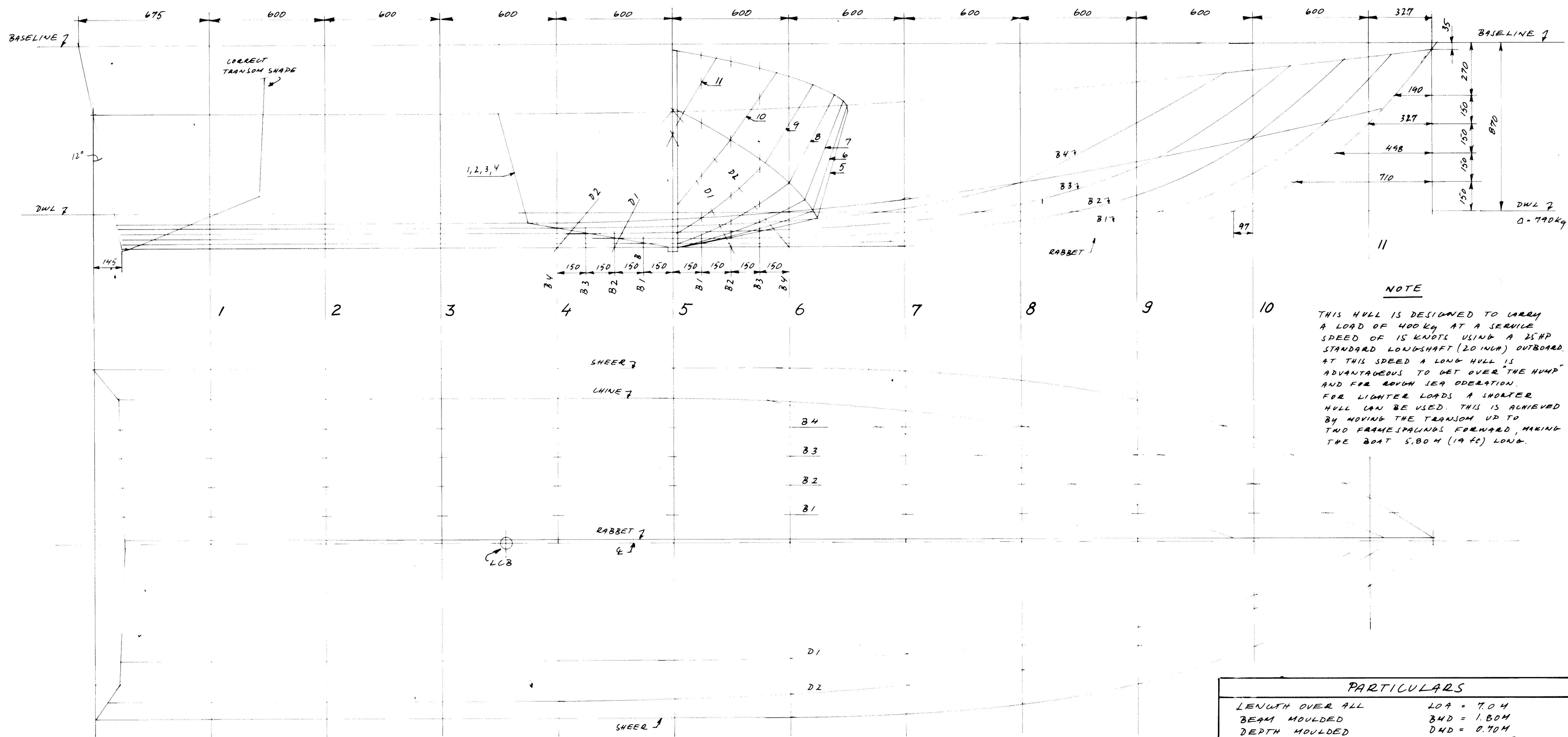
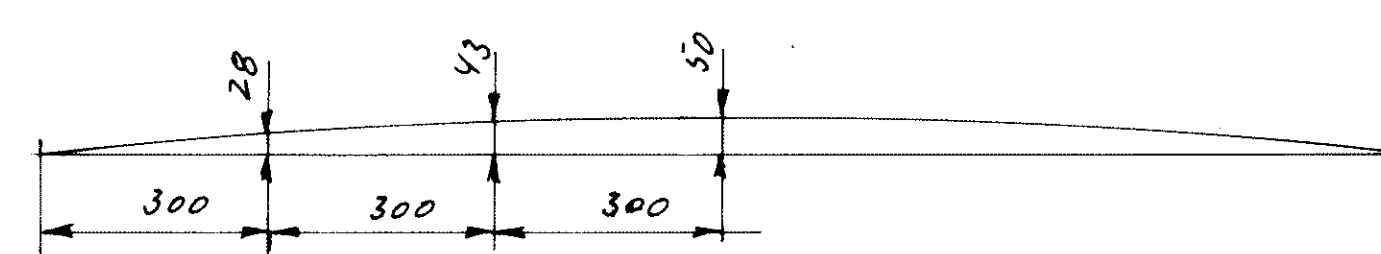


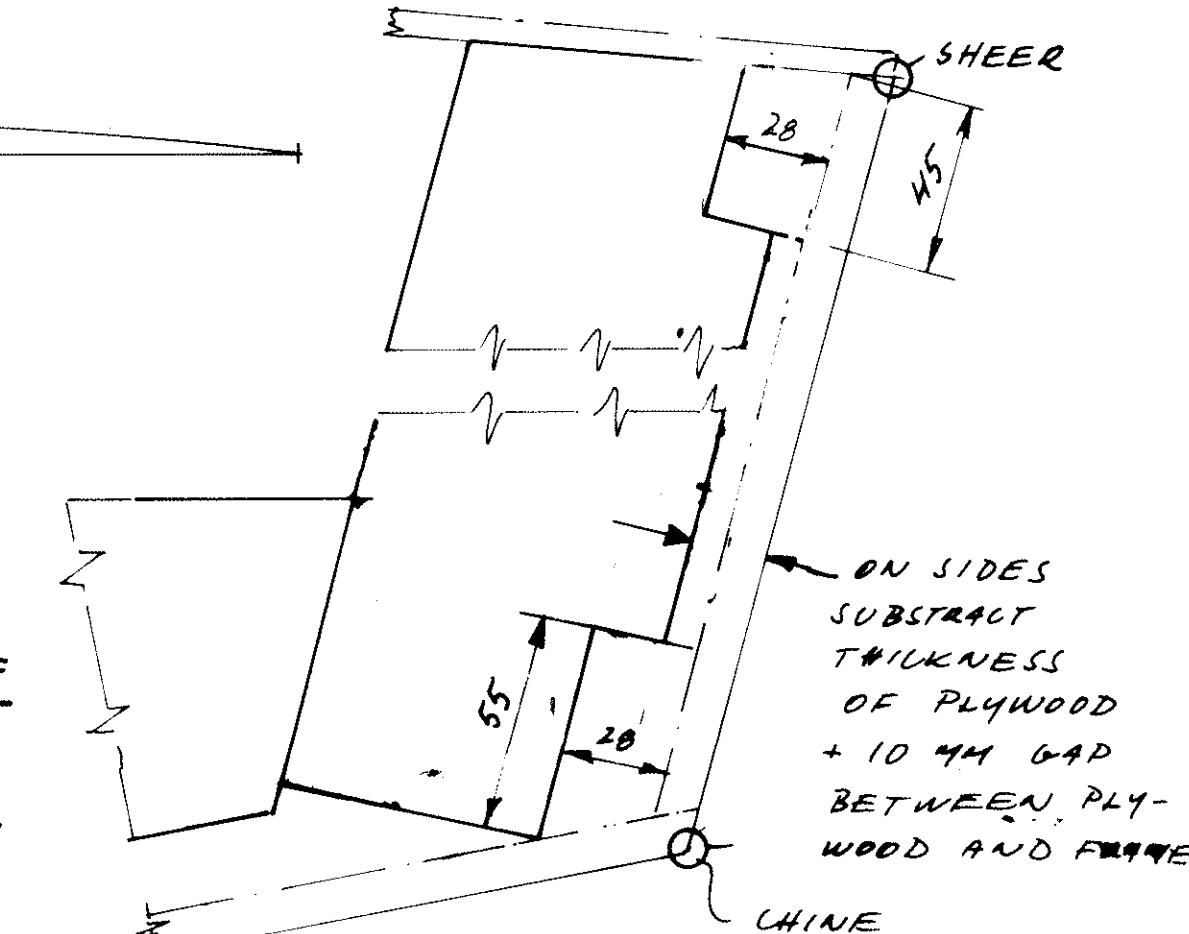
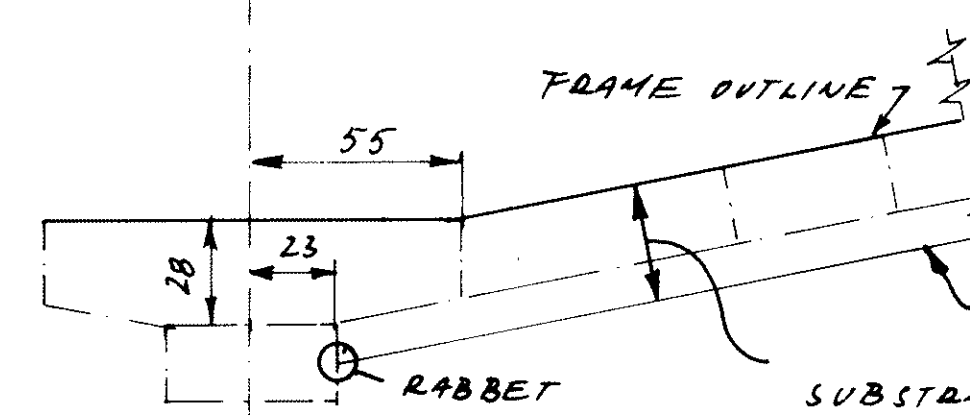
TABLE OF OFFSETS IN 44 TO OUTSIDE OF PLANKING													
		T*	1	2	3	4	5	6	7	8	9	10	11
HEIGHTS FROM BASELINE	SHEER	360	357	357	357	357	350	330	300	255	200	138	72
	CHINE	955	925	925	925	925	905	868	808	722	615	492	355
	B 1	-	STRAIGHT		FRAME		1030	1030	1022	986	904	STRAIGHT	
	B 2	-	-	-	-	-	1002	998	977	920	788	FRAME	
	B 3	-	-	-	-	-	972	958	922	832	645	-	-
	B 4	-	-	-	-	-	938	910	855	722	-	-	-
	RABBIT	1082	1050	1050	1050	1050	1050	1050	1050	1036	985	832	420
HALF BREADTHS	SHEER	905	905	905	905	905	905	902	885	835	733	537	220
	CHINE	750	750	750	750	750	747	728	680	600	479	300	45
	RABBIT	23	23	23	23	23	23	23	23	23	23	23	23

* INCLUDING 12° BEVEL ON BOTTOM



BEAM CAMBER

DRAWING FRAME SHAPE



SUBTRACT THICKNESS OF PLYWOOD + THICKNESS OF BATTEN

PARTICULARS

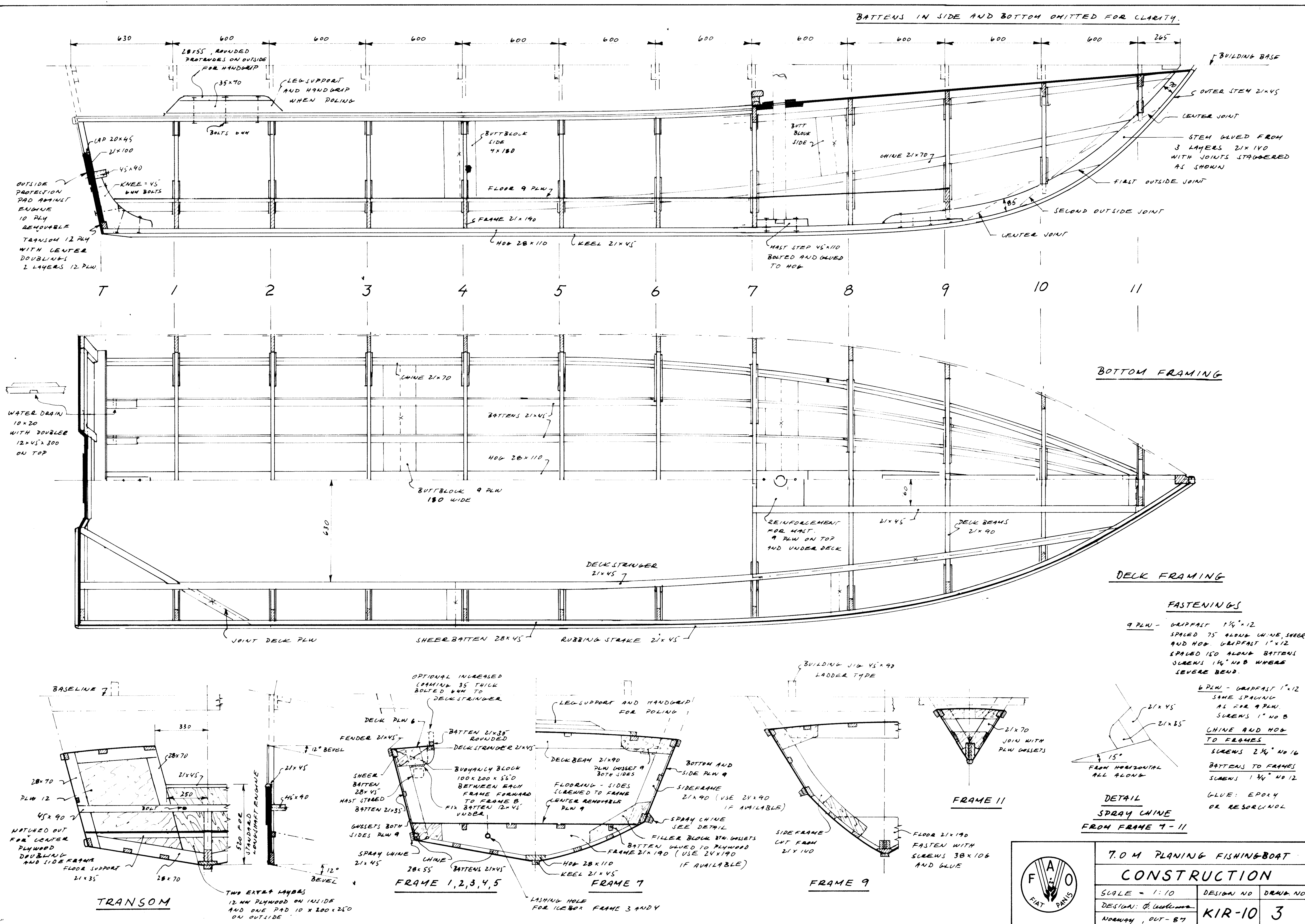
LENGTH OVER ALL	LOA = 7.0 M
BEAM MOULDED	BMD = 1.80 M
DEPTH MOULDED	DMD = 0.70 M
CUBIC NUMBER, LUND = LOA x BMD x DMD	= 8.8 M ³
LENGTH DESIGNED WATERLINE DWL, L	= 5.80 M
BEAM, DWL	B = 1.52 M
DRAUGHT DWL	T = 0.20 M
FREEBOARD, MINIMUM, DWL	F = 0.51 M
DISPLACEMENT, NO LOAD	= 400 kg
SERVICE LOAD, 3 MEN + 200 kg	= 400 kg
DISPLACEMENT, SERVICE, DWL Δ	= 800 kg
COEFFICIENTS, DWL:	L/B = 3.8
	$\sqrt[3]{(0.1 L)^3} = 4.1$
	PRISMATIC = 0.80
	1/2 ANGLE OF ENTRANCE = 19°
	$\sqrt{L}$ AT SERVICE SPEED = 15 KNOTS = 3.4
ENGINE POWER, OUTBOARD	25 HP

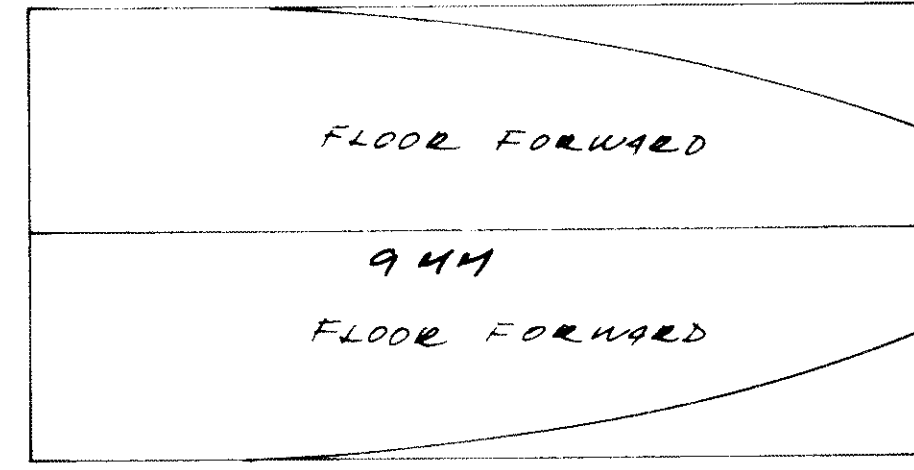
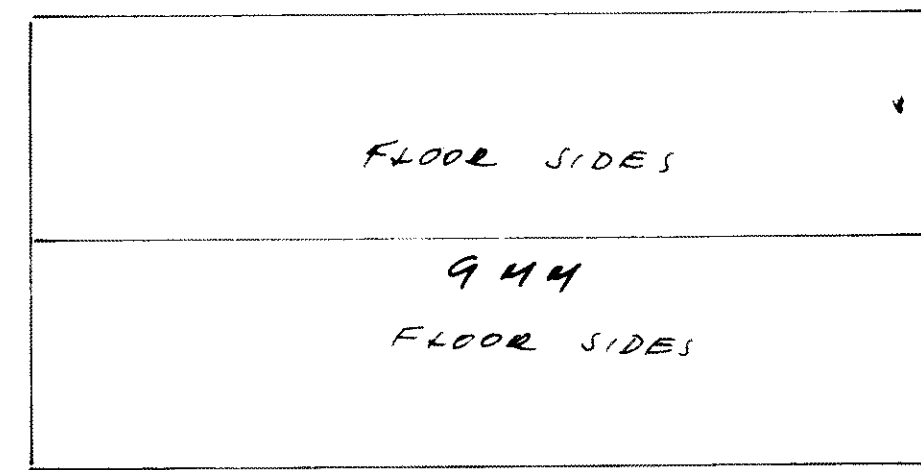
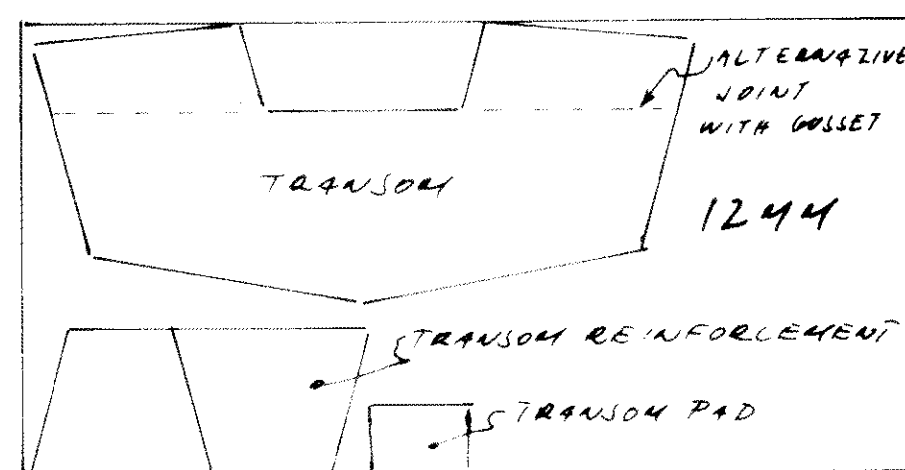
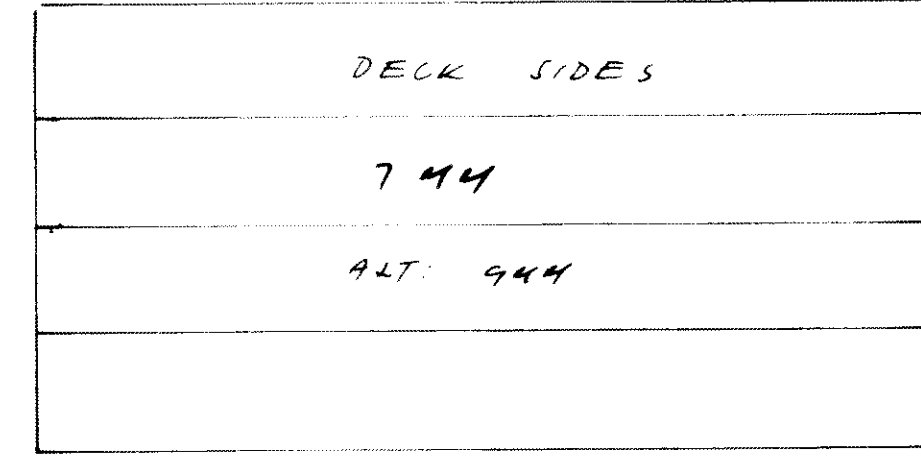
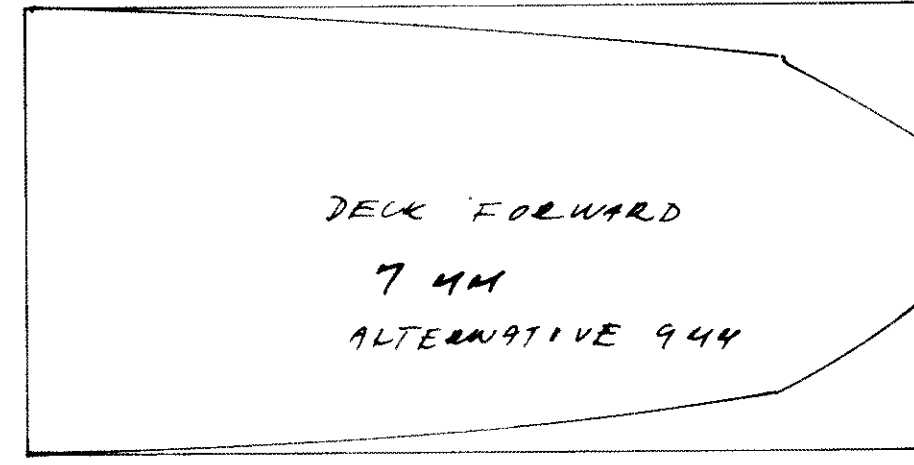
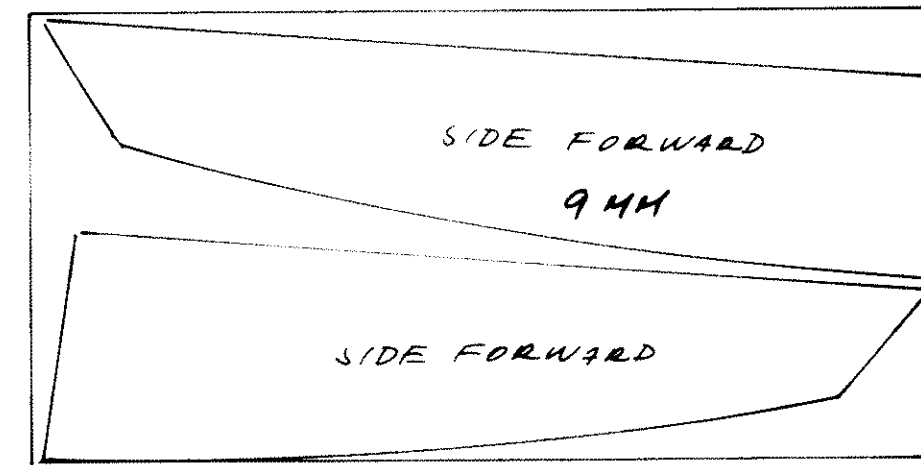
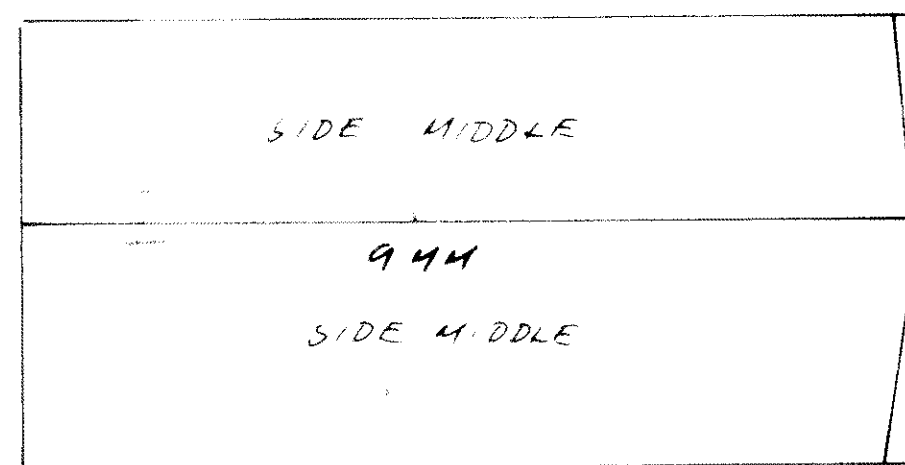
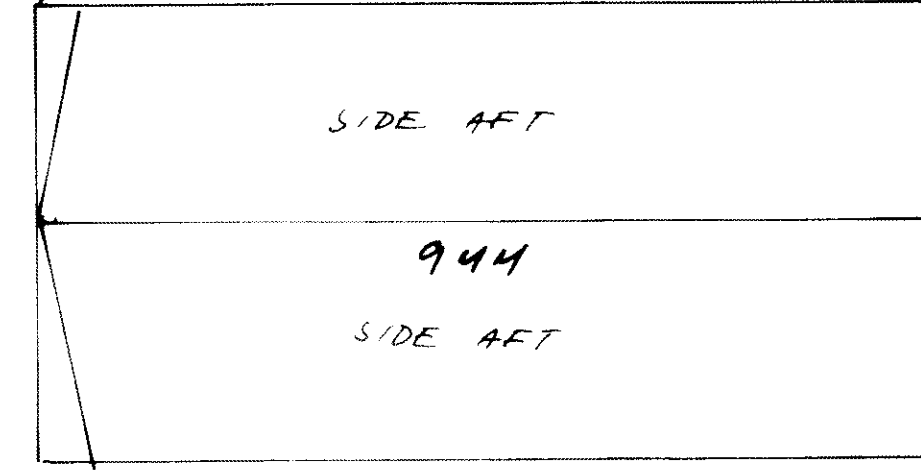
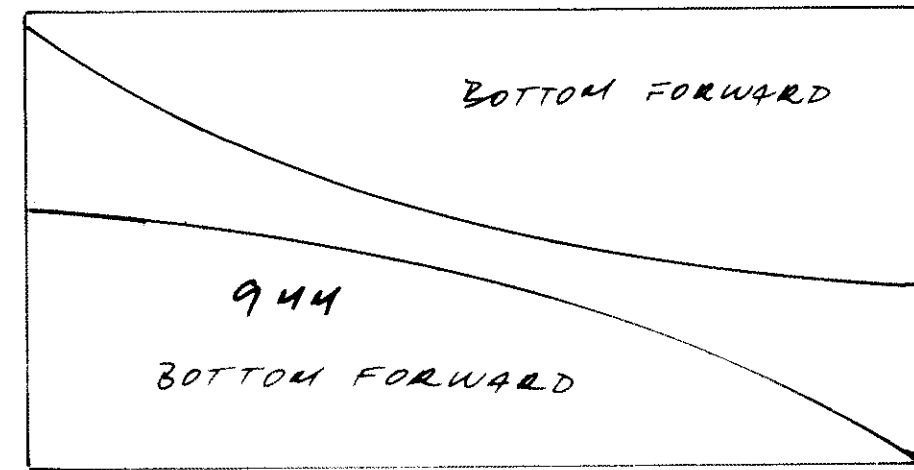
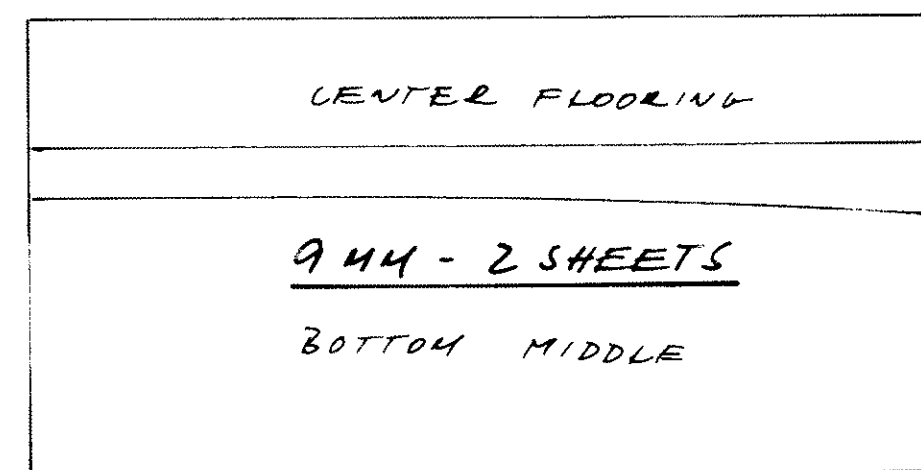
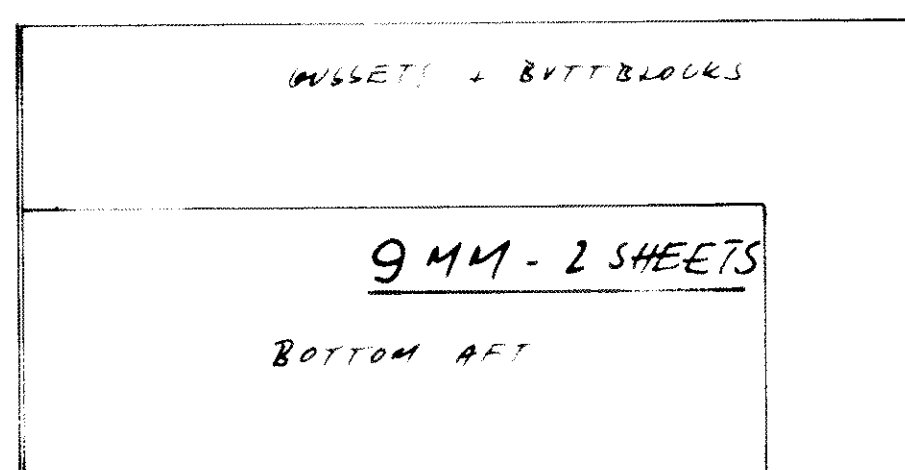


7.0 M PLANING FISHING BOAT

LINES

SCALE = 1:10	DESIGN NO.	DRWG. NO.
DESIGN: Ø. Lundmark	KIR-10	2
Norway, Oct - 87		

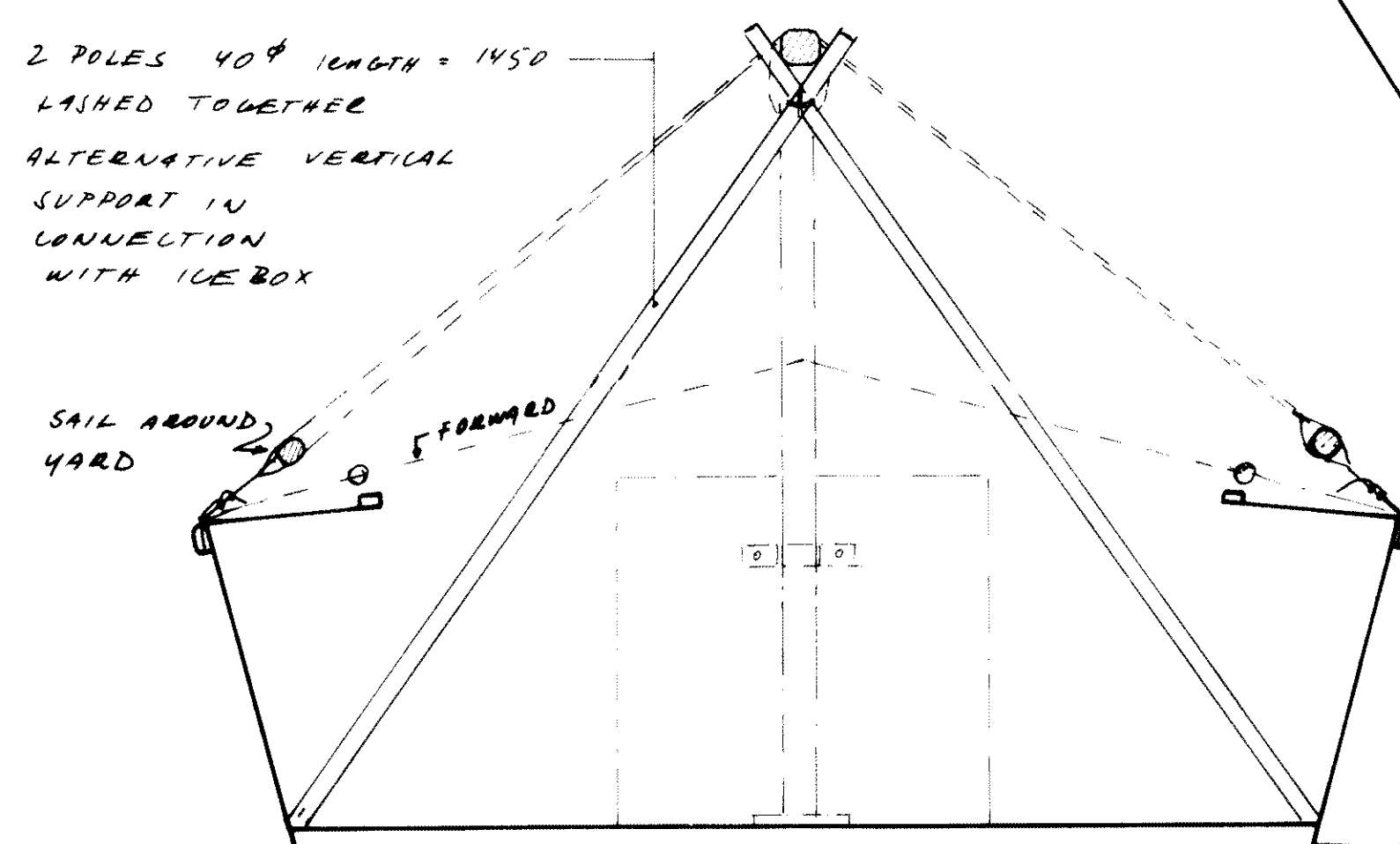
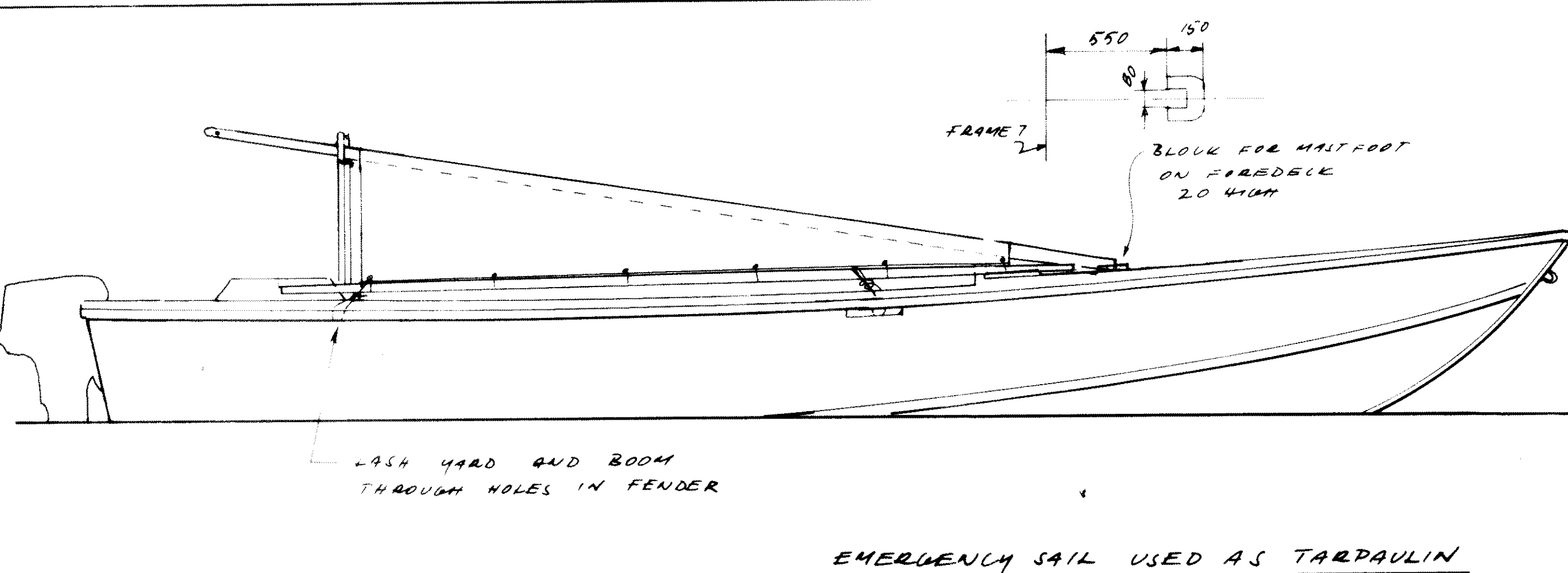
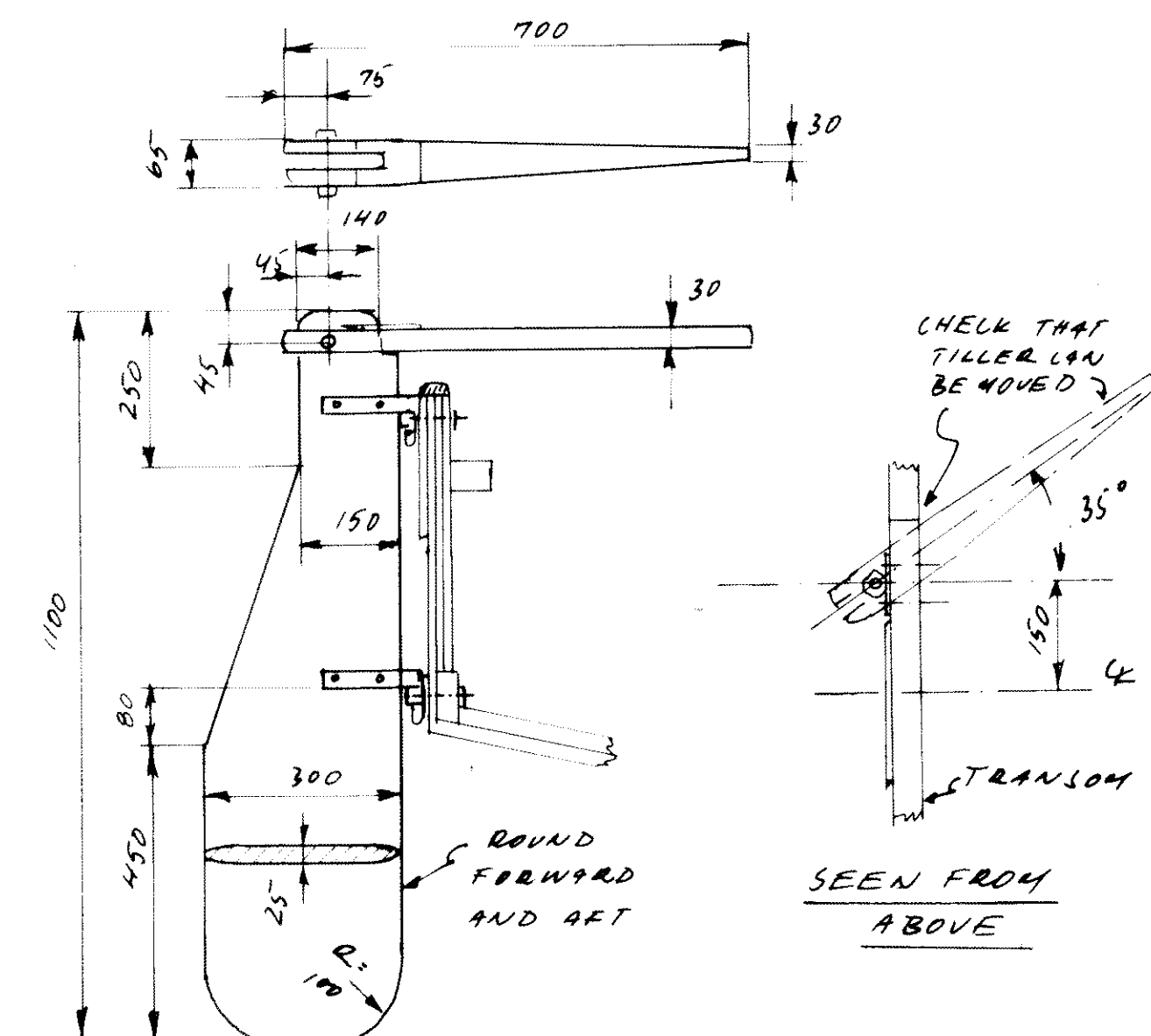
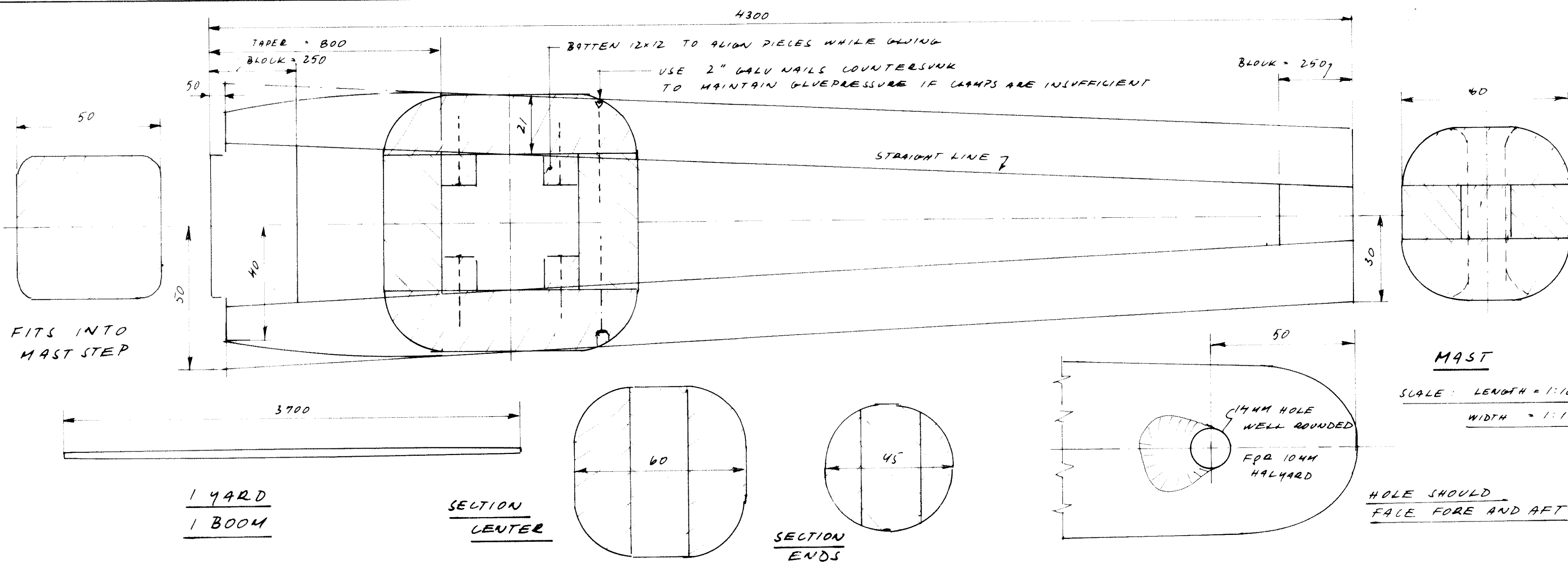
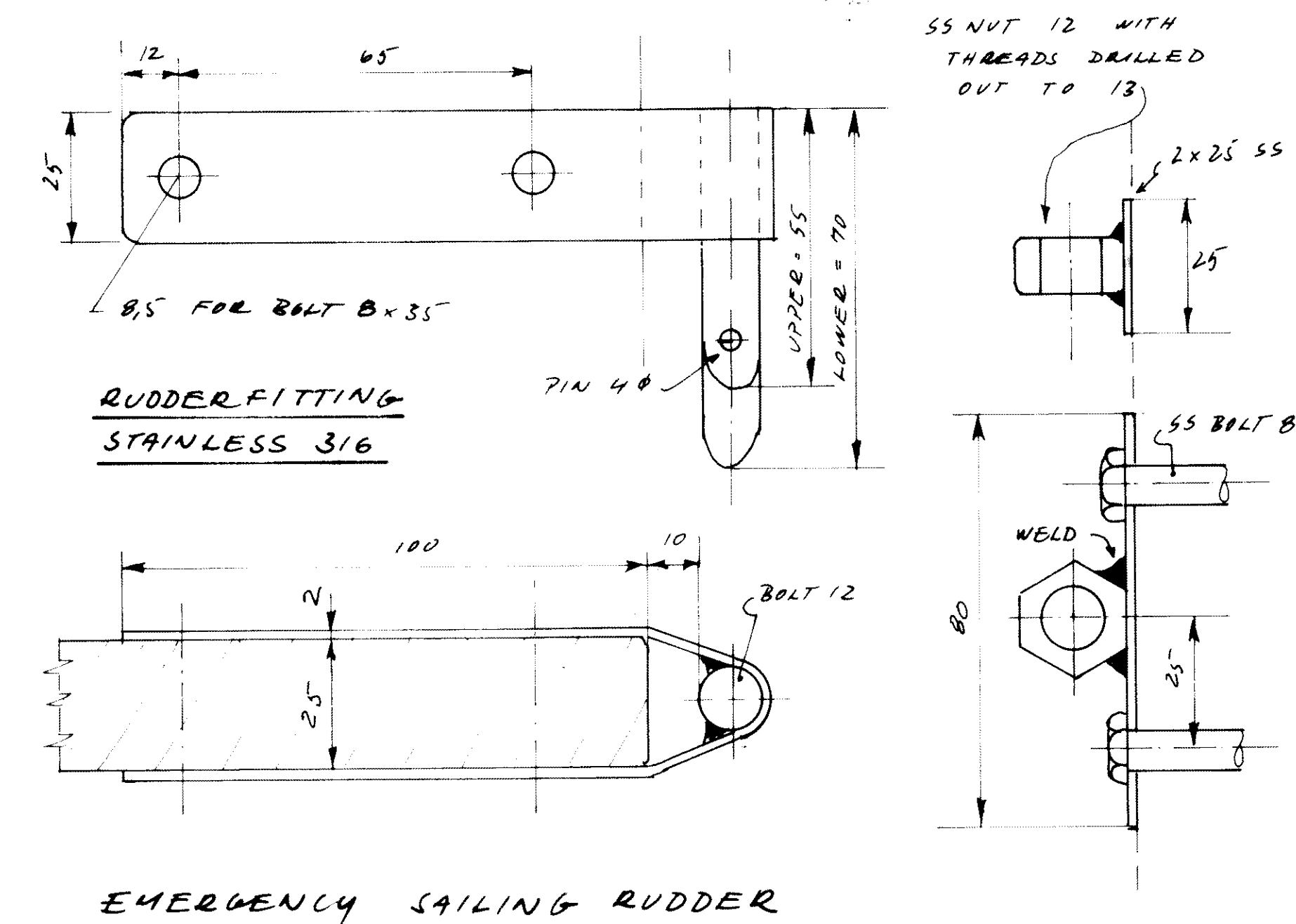




PLYWOOD UTILIZATION

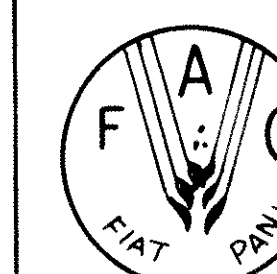
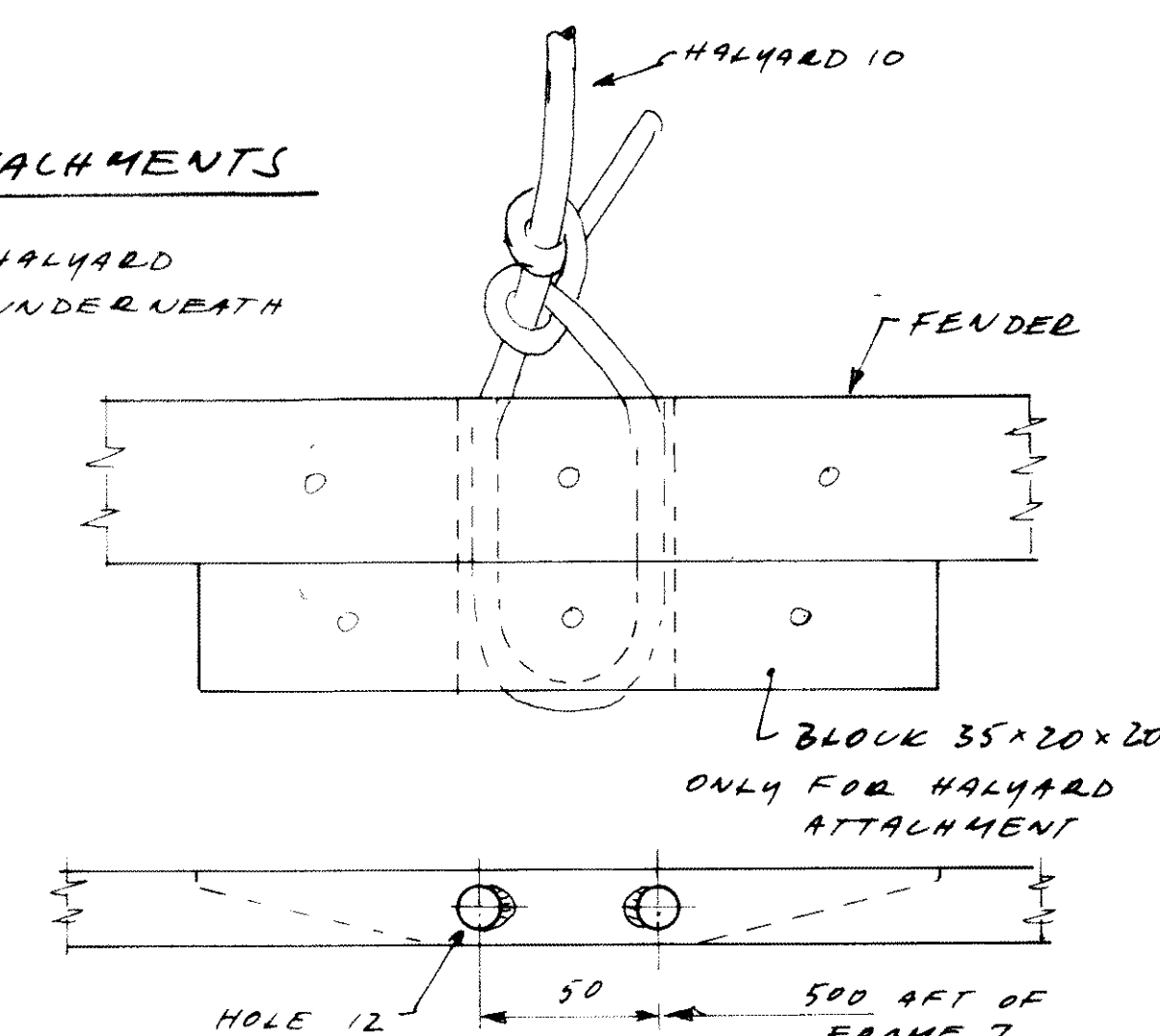
SHEETS OF 1200 x 2400 MM

TOTAL: 7MM - 2 SHEETS
ALTERNATIVE USE 9MM
9MM - 10 SHEETS
12MM - 1 SHEET

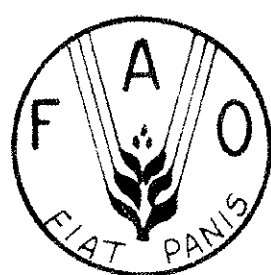
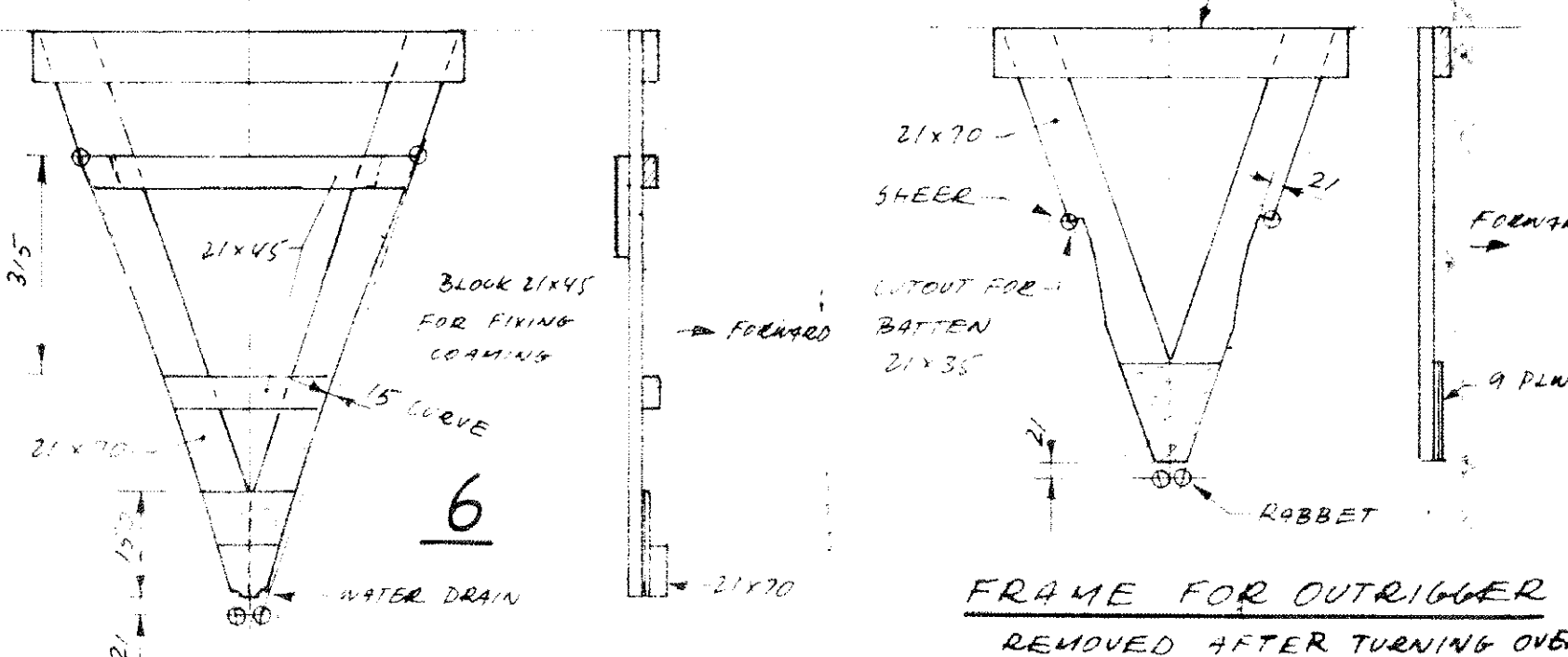
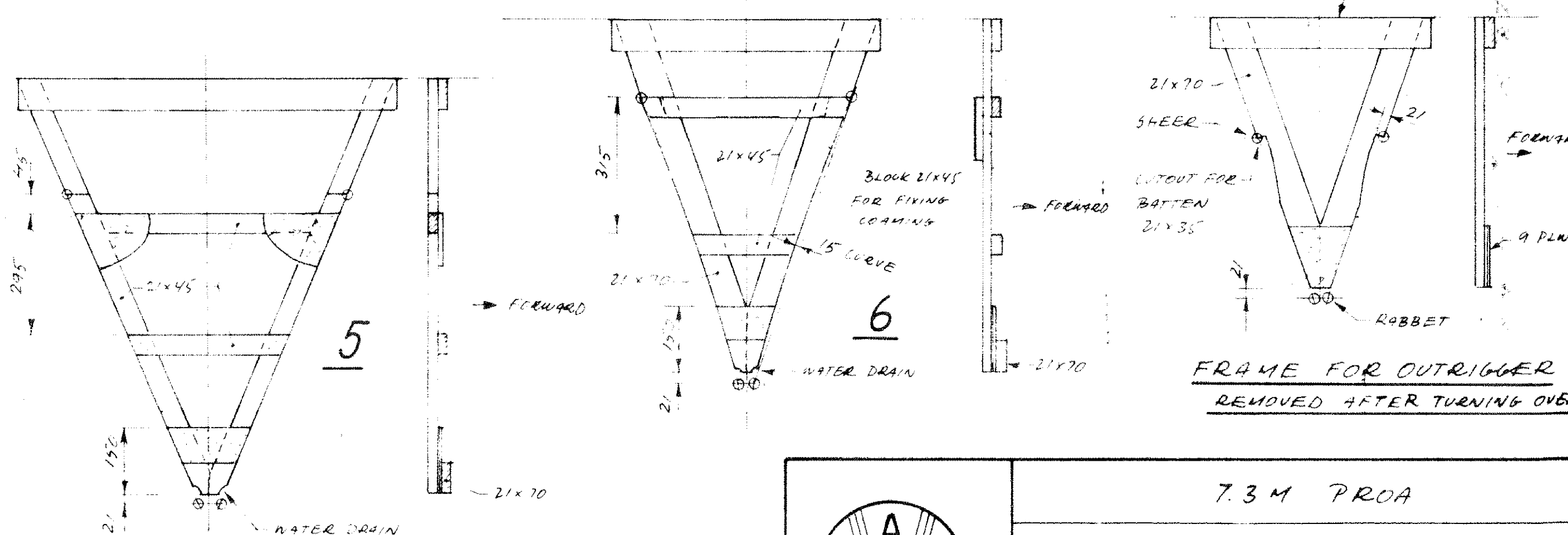
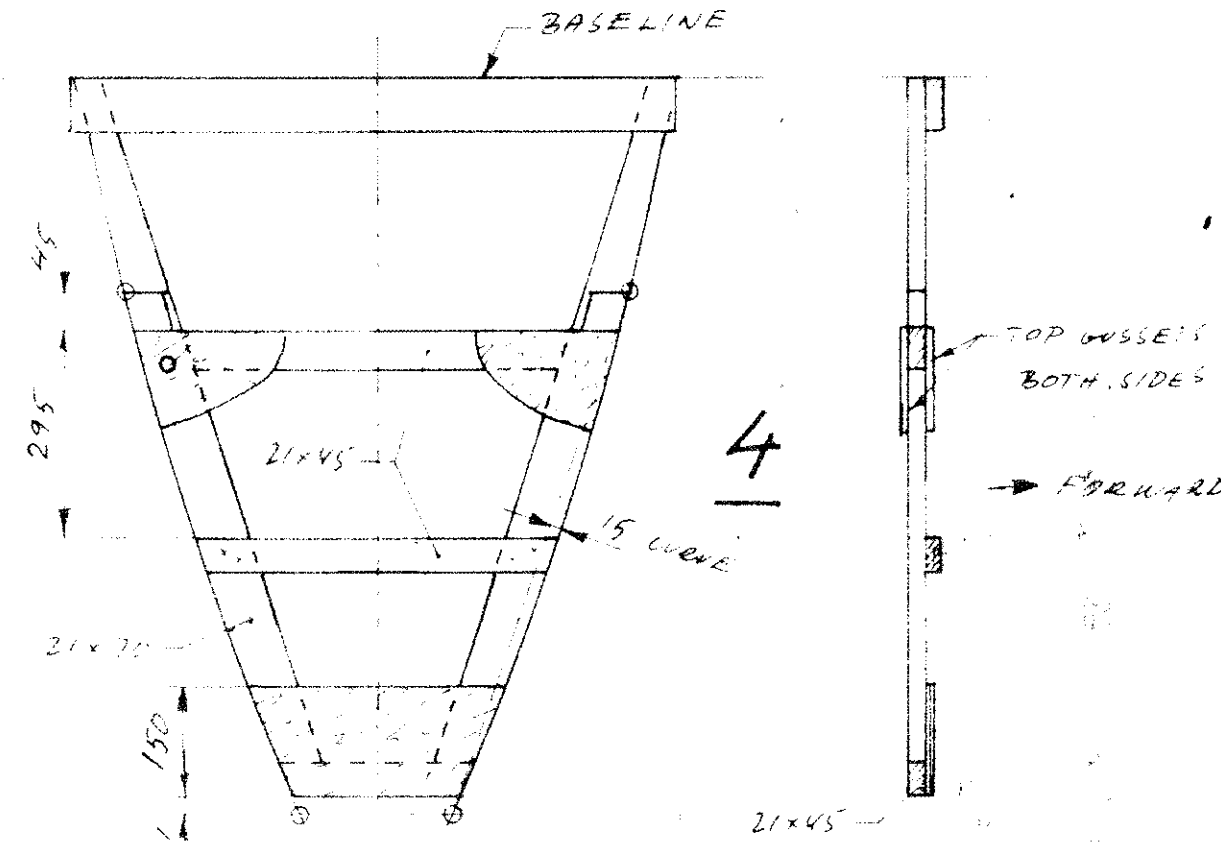
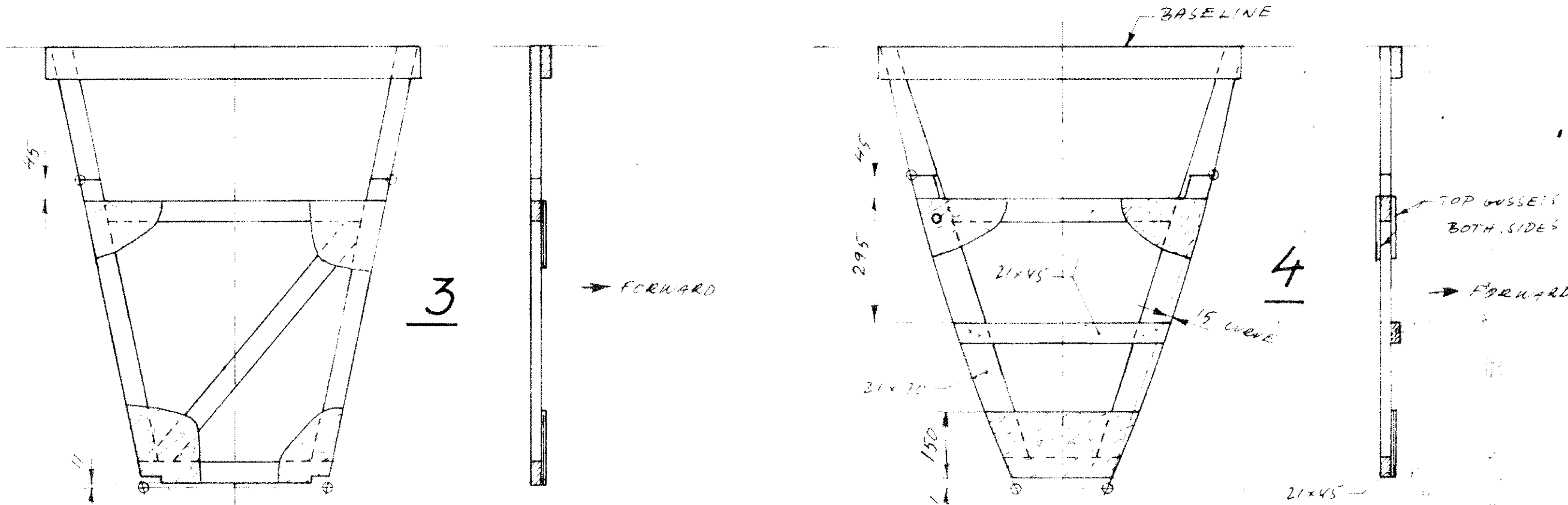
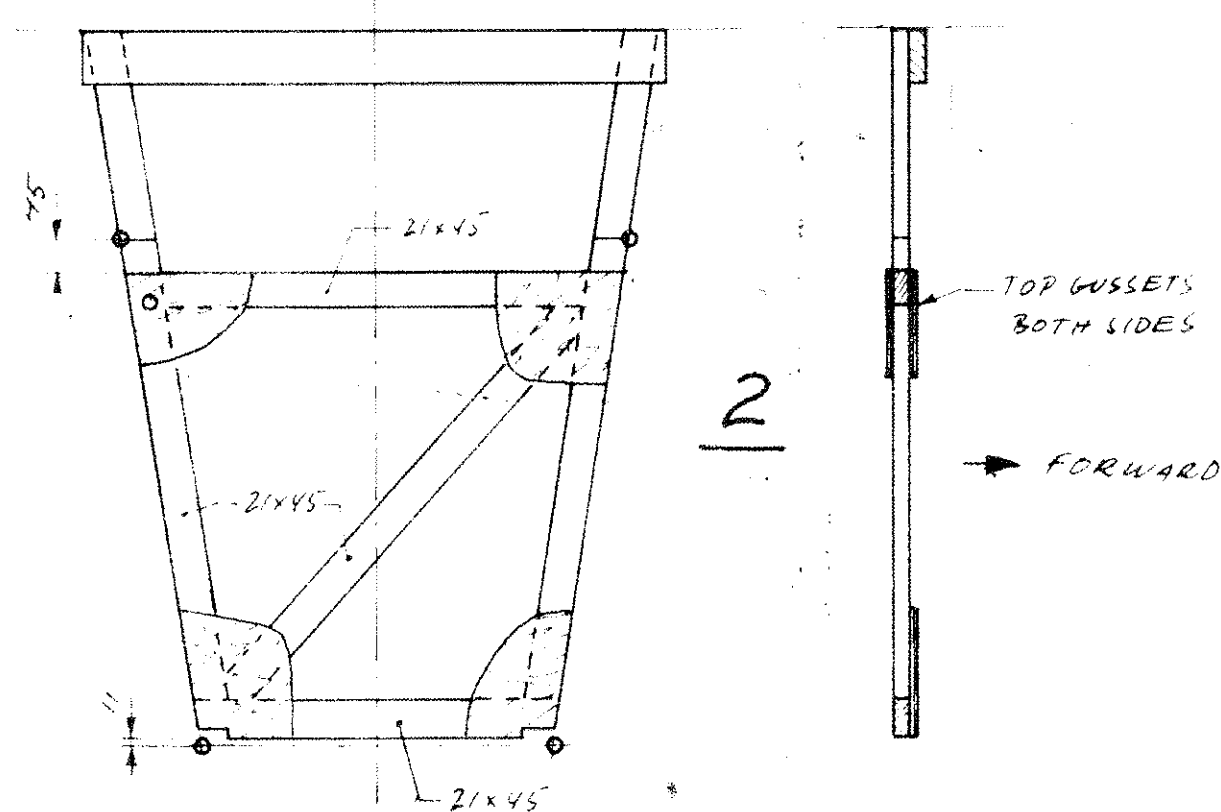
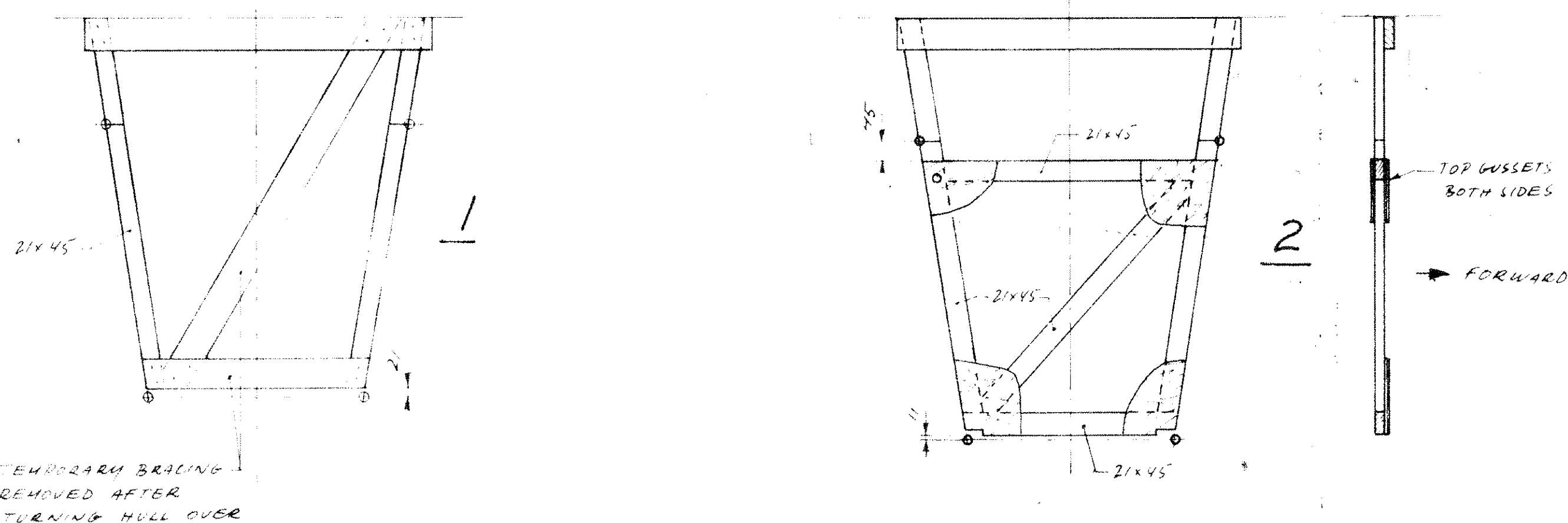
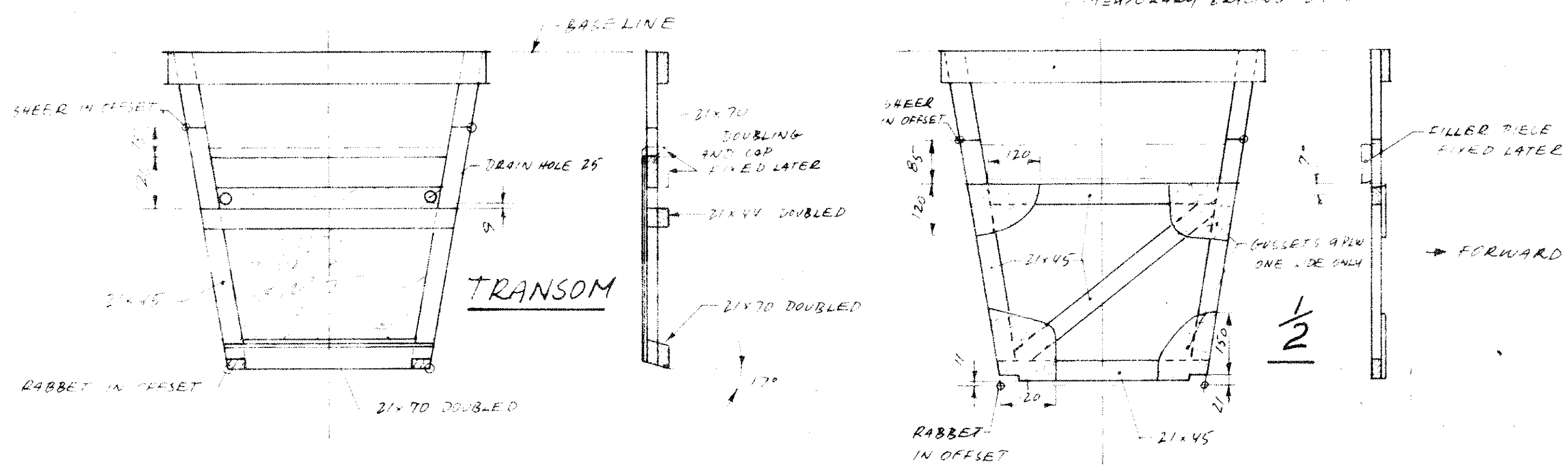


ROPE ATTACHMENTS

AS SHOWN FOR HALYARD WITHOUT BLOCK UNDERNEATH FOR OTHERS.



7.0M PLANING FISHING BOAT		
DETAILS		
SCALE: AS SHOWN	DESIGN NO	DRWG NO
DESIGN: P. GUNDRUM	KIR-10	4
NORWAY OUT - 87		



7.3 M PROA

FRAMES

SCALE = 1:10

DESIGN NO.

DRAW. NO.

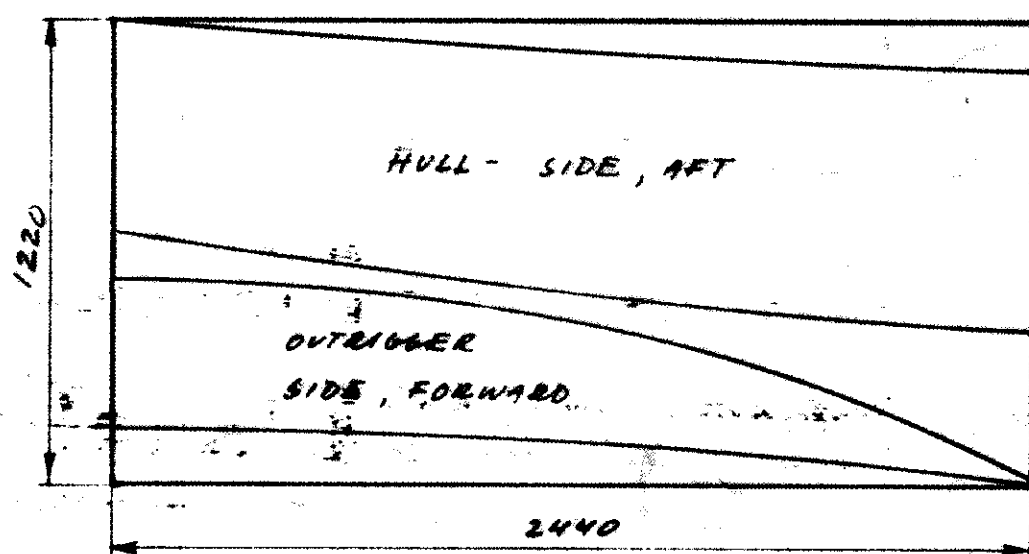
DESIGN: C. G. G. G. G. G.

KIR-1

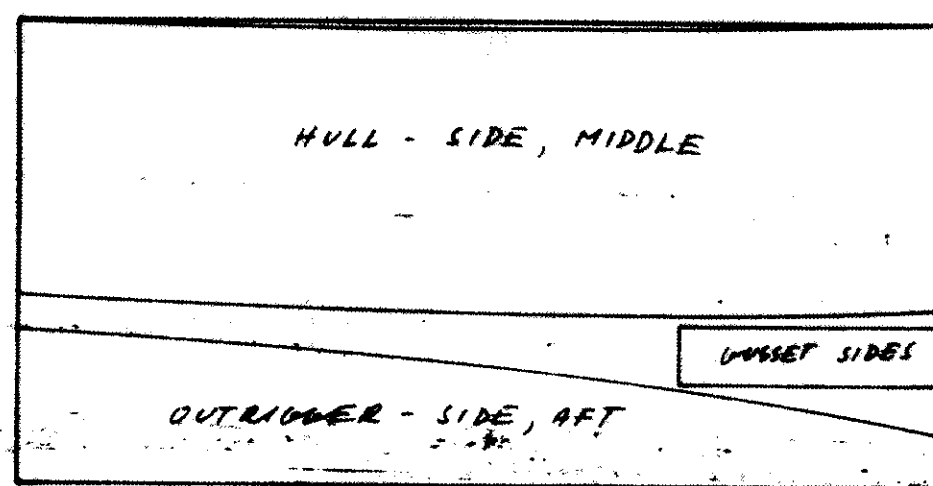
5

GRIMSHAW, SEPT-82

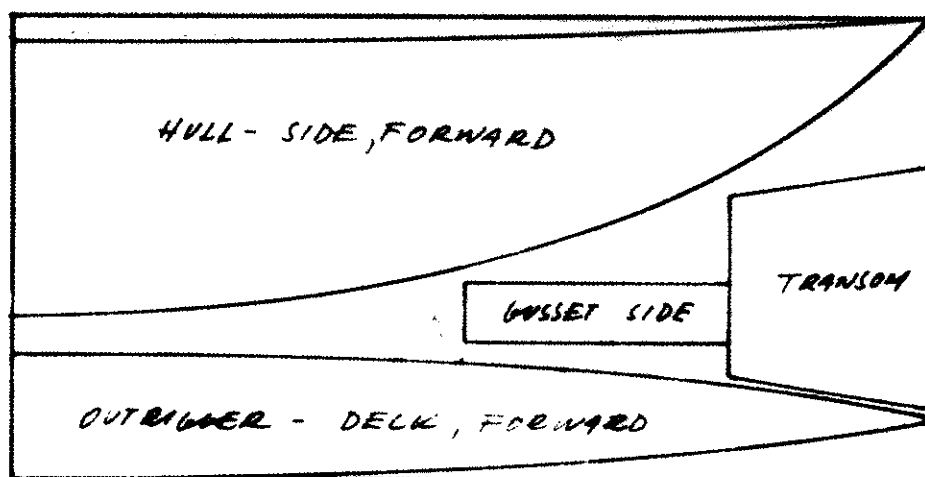
9 MM - 2 SHEET



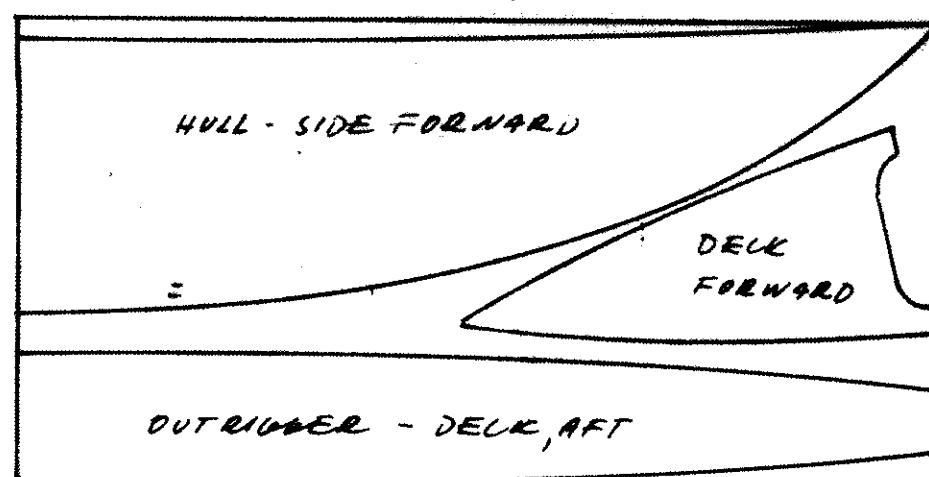
9 MM - 2 SHEET



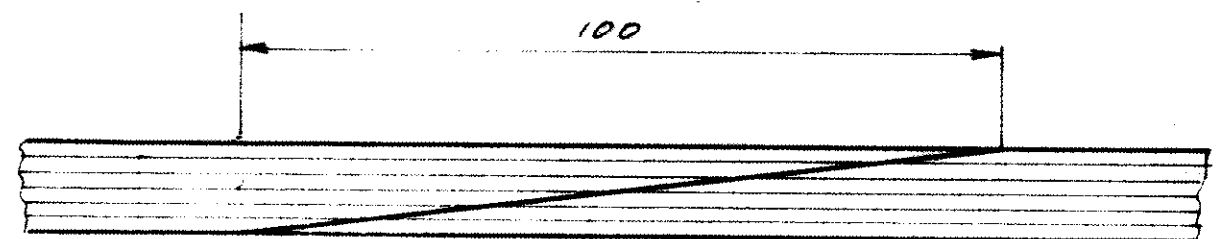
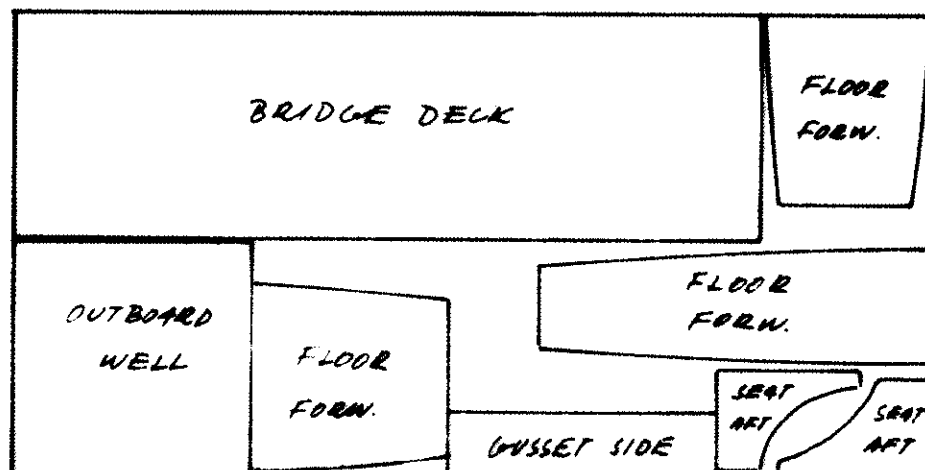
9 MM - 1 SHEET



9 MM - 1 SHEET

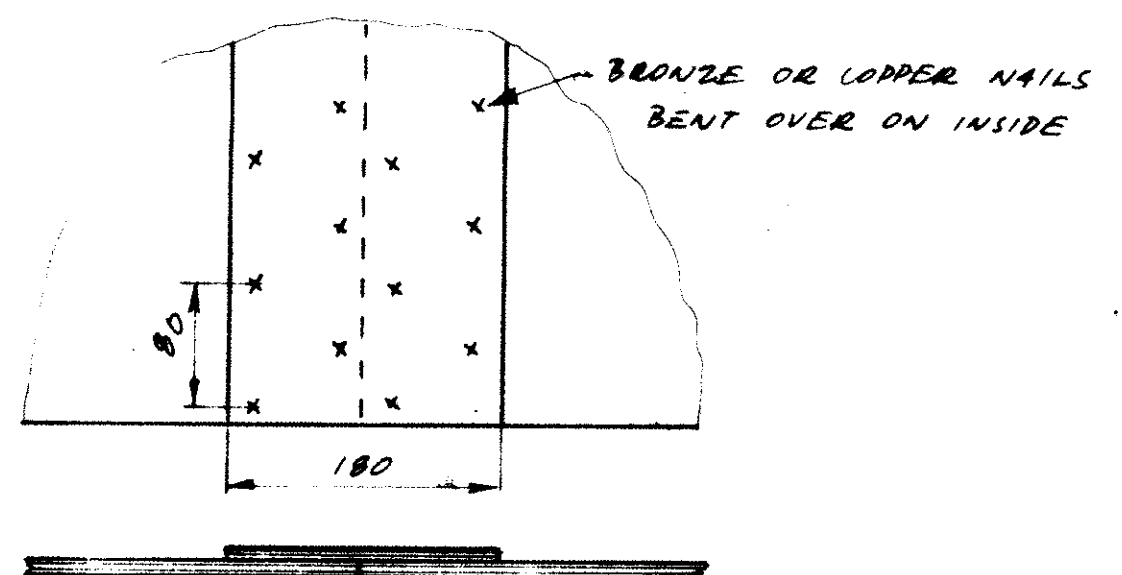
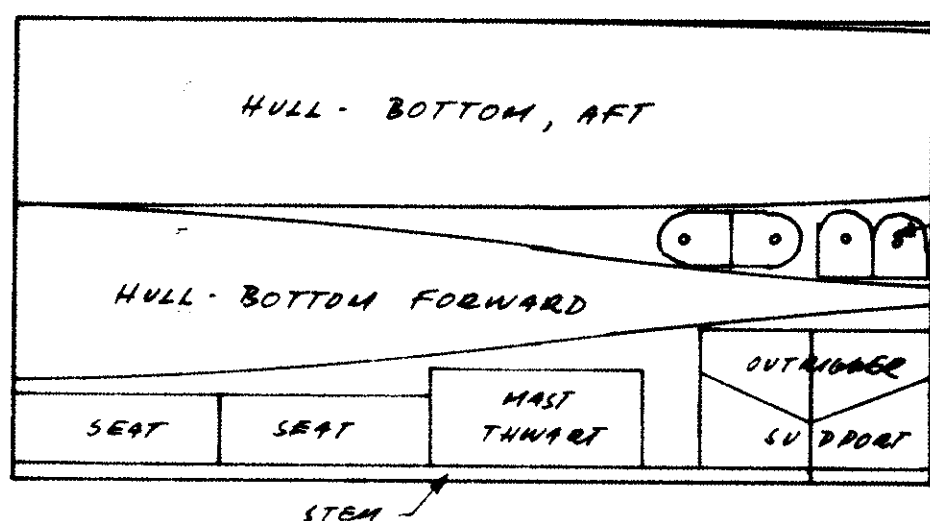


9 MM - 1 SHEET



12 MM PLYWOOD BOTTOM - SCARF

12 MM - 1 SHEET



9 MM PLYWOOD SIDES - BUTT JOINT

PLYWOOD REQUIREMENT

9 MM - 7 SHEET 1220 x 2440 (4' x 8')
12 MM - 1 SHEET 1220 x 2440 (4' x 8')



7.34 PROA

PLYWOOD UTILIZATION

SCALE = 1:20

DESIGN NO.

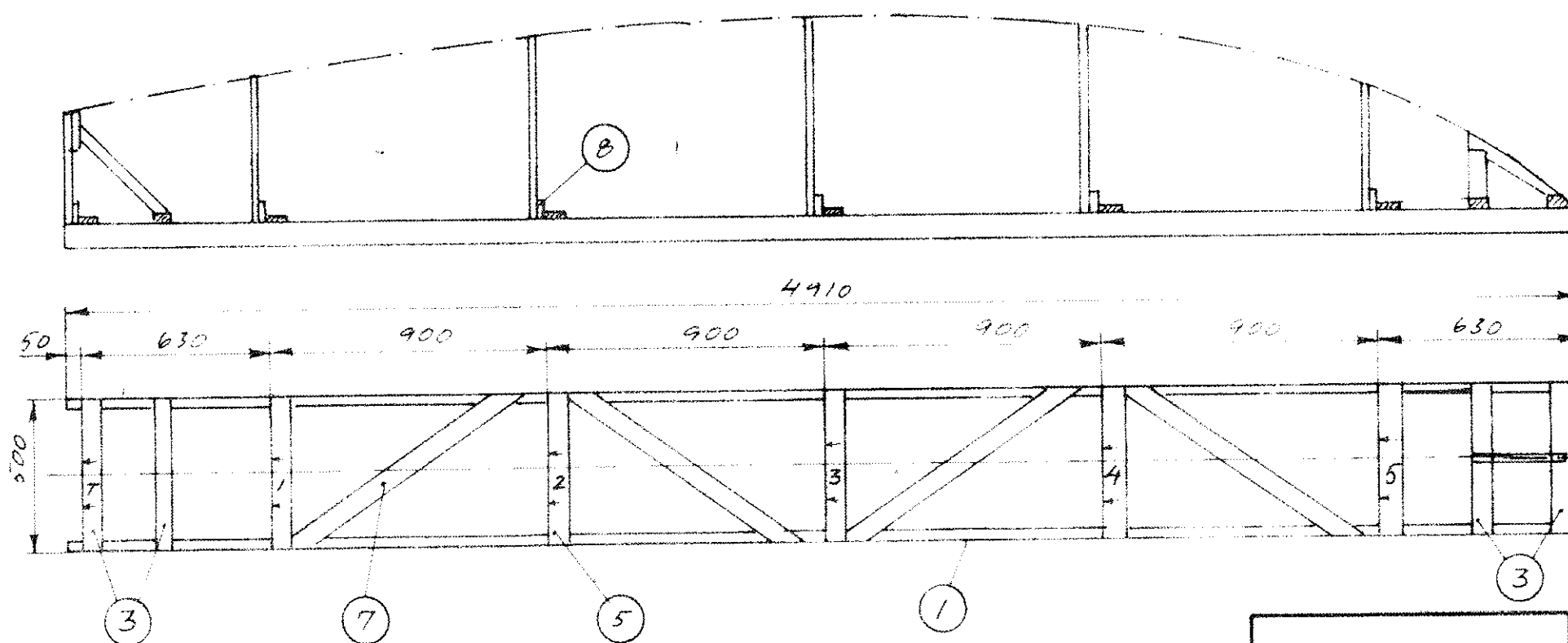
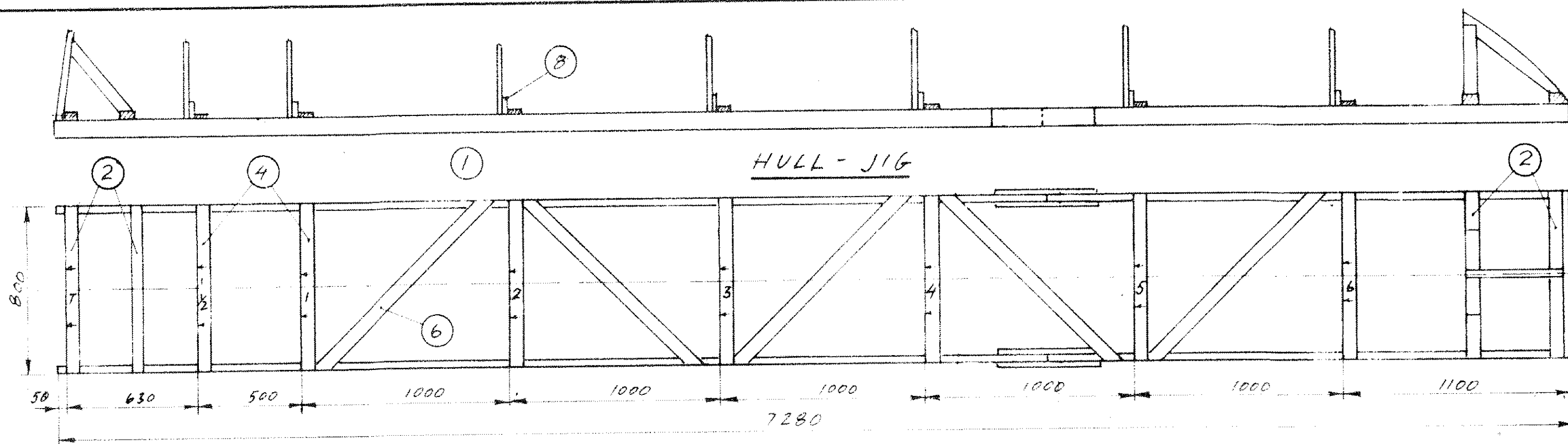
DRWG. NO.

DESIGN: Ø. Gu/Grandson

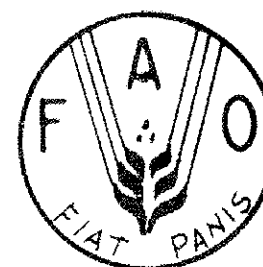
GRIMSTAD, SEPT -82

KIR-1

7



POS	ITEM	SIZE PLANNED	LENGTH m	NO OF PIECES	TOTAL m
1	LONGITUDINAL	35 x 95	5	5	25.0
2	CROSS PIECE	35 x 95	0.8	4	3.2
3	CROSS PIECE	35 x 95	0.5	4	2.0
4	CROSS PIECE	21 x 70	0.8	7	5.6
5	CROSS PIECE	21 x 70	0.5	5	2.5
6	DIAGONAL	21 x 70	1.2	5	6.0
7	DIAGONAL	21 x 70	1.0	4	4.0
8	FRAME SPALLS	21 x 70			10.0
SUMMARY					
35 x 95					30 m
21 x 70					35 m



7.3 M PROA

BUILDING JIGS

SCALE = 1:20

DESIGN NO.

DRAW. NO.

DESIGN: G. Coulbrandt

GRIMSTAD, SEPT-82

KIR-1

8

MATERIALS								DESIGN NO.	DRAWG. NO.
LENGTH IS GIVEN IN METER MATERIALS FOR BUILDING JIG, SEE DRAWING NO. 8								KIR-1	9
DIMENSION SAWN	IN	5/8x4	1x1 1/2	1x2	1x3	1x6	2x5	MARINE PLYWOOD	
	MM	16x100	25x38	25x50	25x76	25x150	50x125		
DIMENSION PLANED ALL ROUND	MM	12x95	21x35	21x45	21x70	21x145	45x120	9MM	12MM
1	FRAMES			19	8				
2	BATTENS HULL		21	28					
3	BATTENS OUTRIGGER		16						
4	PLANKING DECKING							X	X
5	RUBBING SHOE		6	12					
6	SPRAY RAIL		30						
7	RAILCAP	12							
8	FLOORING							X	
9	SEATS								X
10	BEAMS OUTRIGGER						6		
11	BRIDGE DECK	3		2	2	2		X	
LENGTH, NET (M)		15	73	61	10	2	6		
VOLUME, NET (M ³)		0.017	0.053	0.057	0.015	0.005	0.032		TOTAL 0.184 ³
LENGTH, GROSS (M) WITH 25% WASTE		20	97	81	13	3	8		
VOLUME GROSS (M ³) WITH 25% WASTE		0.032	0.092	0.101	0.019	0.011	0.050		TOTAL 0.31 M ³
SUMMARY		ALL TIMBER AND PLYWOOD TO BE PRESSURE- TREATED WITH COPPER-CHROME-ARSENIC							
DIMENSION PLANED (MM)	LENGTH TOTAL (M)	MINIMUM LENGTH/PIECE		MARINE PLYWOOD					
12x95	20	4.7		9x1220x2440 - 7 SHEETS					
21x35	100	5		12x1220x2440 - 1 SHEET					
21x45	80	4							
21x70	13	4							
21x145	3	2.1							
45x120	6	2.8							

FASTENINGS								DESIGN NO.	DRWG. NO
								KIR-1	10
		NAILS, BRONZE ANNULAR RINGED, FLAT HEAD			WOOD SCREW, BRONZE SLOTTED, COUNTERSUNK HEAD				
DIMENSION	MM	2,7 x 25	2,7 x 32	3,4 x 38	4,2 x 25	4,9 x 32	4,9 x 38	5,6 x 45	
	IN	1" x 12 G	1 1/4" x 12 G	1 1/2" x 10 G	8 G x 1"	10 G x 1 1/4"	10 G x 1 1/2"	12 G x 1 3/4"	
GUSSETS TO FRAME		250	20	10		-			
KEEL BATTENS TO FRAMES							20		
PLANKING TO BATTENS AND FRAMES		600	300		20				
INNER LOADING TO FRAMES								20	
TOP LOADING TO BATTENS			200						
SEATS TO LOADING						30	30		
SPRAY RAIL TO PLANKING		100		80					
OUTRIGGER BRACKETS TO OUTRIGGERS						20	40	20	
BRIDGE DECK TO FRAMING			60						
RUBBING SHOE TO HULL							70		
RUBBING SHOE TO OUTRIGGER						30			
RUDDER FITTINGS							20		
TOTAL NUMBER		950	580	90	20	80	170	40	
NO/ KG		158	127	60					
QUANTITY (KG)		6.0	4,6	1,5					

SUMMARY

ITEM	DIMENSION	QUANTITY	ITEM	QUANTITY
NAILS, BRONZE ANNULAR RINGED, FLAT HEAD	12 G x 25	6.0 kg	GLUE, PHENOL-RESORCINOL	3 kg
— " — " —	12 G x 32	4,6 kg		
— " — " —	10 G x 38	1,5 kg		
WOOD SCREWS, BRONZE COUNTERSUNK HEAD	8 G x 25	20		
— " — " —	10 G x 32	80		
— " — " —	10 G x 38	170		
— " — " —	12 G x 45	40		