

B		DRAWING UPDATED	02/09	F.C.
		REDRAWN ON CAD	07/98	S.M.
a.	eco. no.	revision	date	by
	eco. no.	revision	date	appro.
C.C.G.S. HENRY LARSEN				
MAIN DECK GENERAL ARRANGEMENT				
date - date	drawn - dessin	checked - vérifié	designed - dessiné par	approved - approuvé
scale - échelle	project no. - projet no.	A0	drawing no. - no du dessin 13-0077-01	ship file

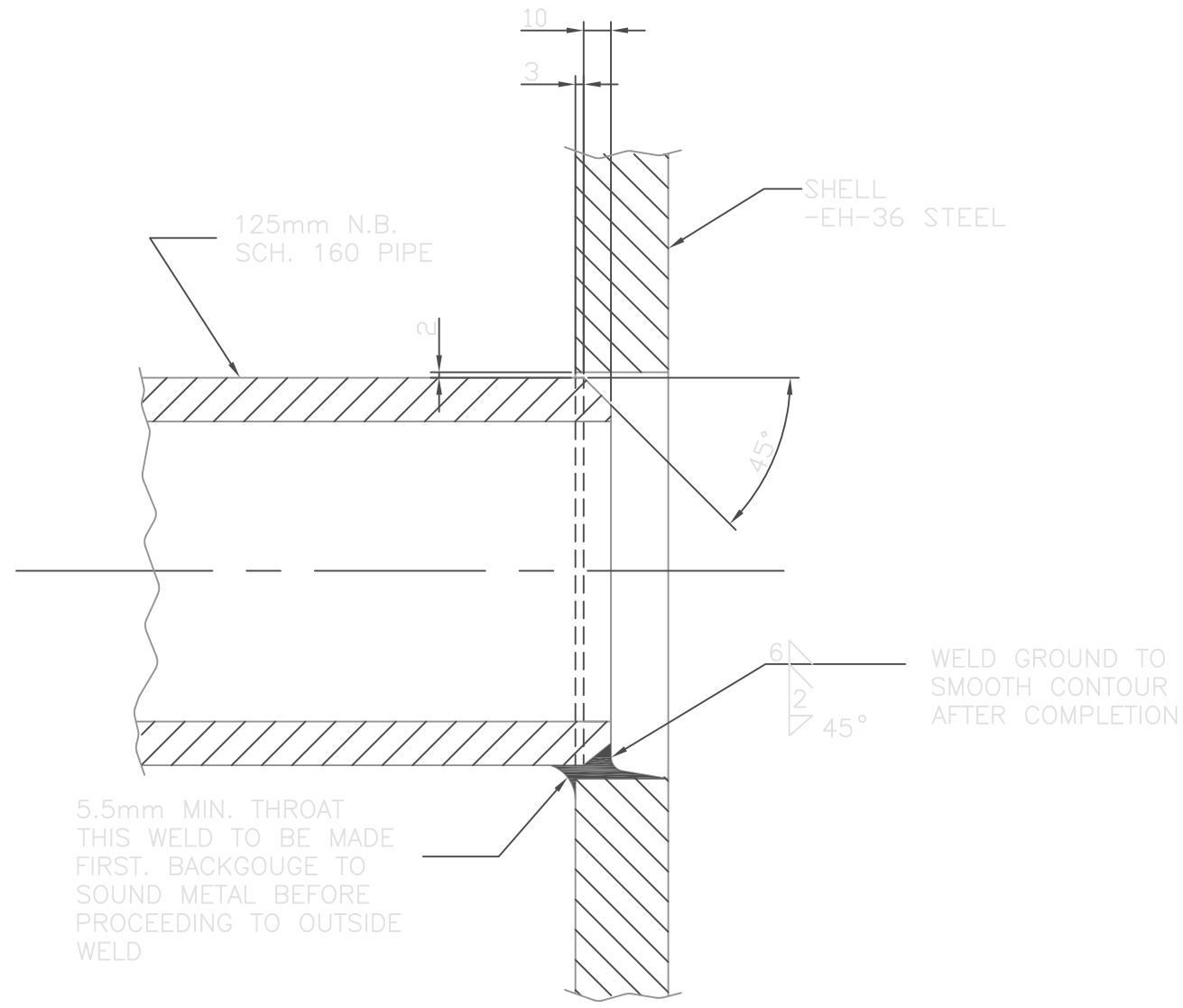


LENGEND

SYMBOL	DESCRIPTION	
	BUTTERFLY VALVE	*
	HYDRAULIC OPERATED BUTTERFLY VALVE	*
	CHECK VALVE	
	FLEXIBLE CONNECTION	*
	PRESSURE GAUGE	
	LINE NUMBER CHANGE	

MACHINERY DATA

ITEM	QTY	DESCRIPTION	COMP. CAP. HEAD	KW	RPM	MOTOR
①	2	SINGLE STAGE CENTRIFUGAL COMPRESSOR	6.94 M <sup>3</sup> /S	61 KPA	450	1750



DETAIL 'A' BUBBLER NOZZLE HULL PENETRATION  
(TYPICAL) SCALE 1:2.5

GENERAL NOTES

ALL PIPING TO BE ERW ASTM A 53 BLACK  
PIPING INSIDE TANKS, BELOW WATERLINE AND BETWEEN SHELL AND ISOLATING VALVE TO BE AS FOLLOWS:  
600mm - 24"-SCH X5 (0.5 WALL) 350mm 14" SCH.X5(0.5mm WALL)  
500mm - 20"-SCH 30 (0.5 WALL)  
125mm - 8" -SCH 160 (0.625 WALL)

PIPING OUTSIDE OF TANKS AND ABOVE WATERLINE TO BE AS FOLLOWS:  
600mm - 24"-SCH 20 (0.375 WALL)  
500mm - 20"-SCH 20 (0.375 WALL)

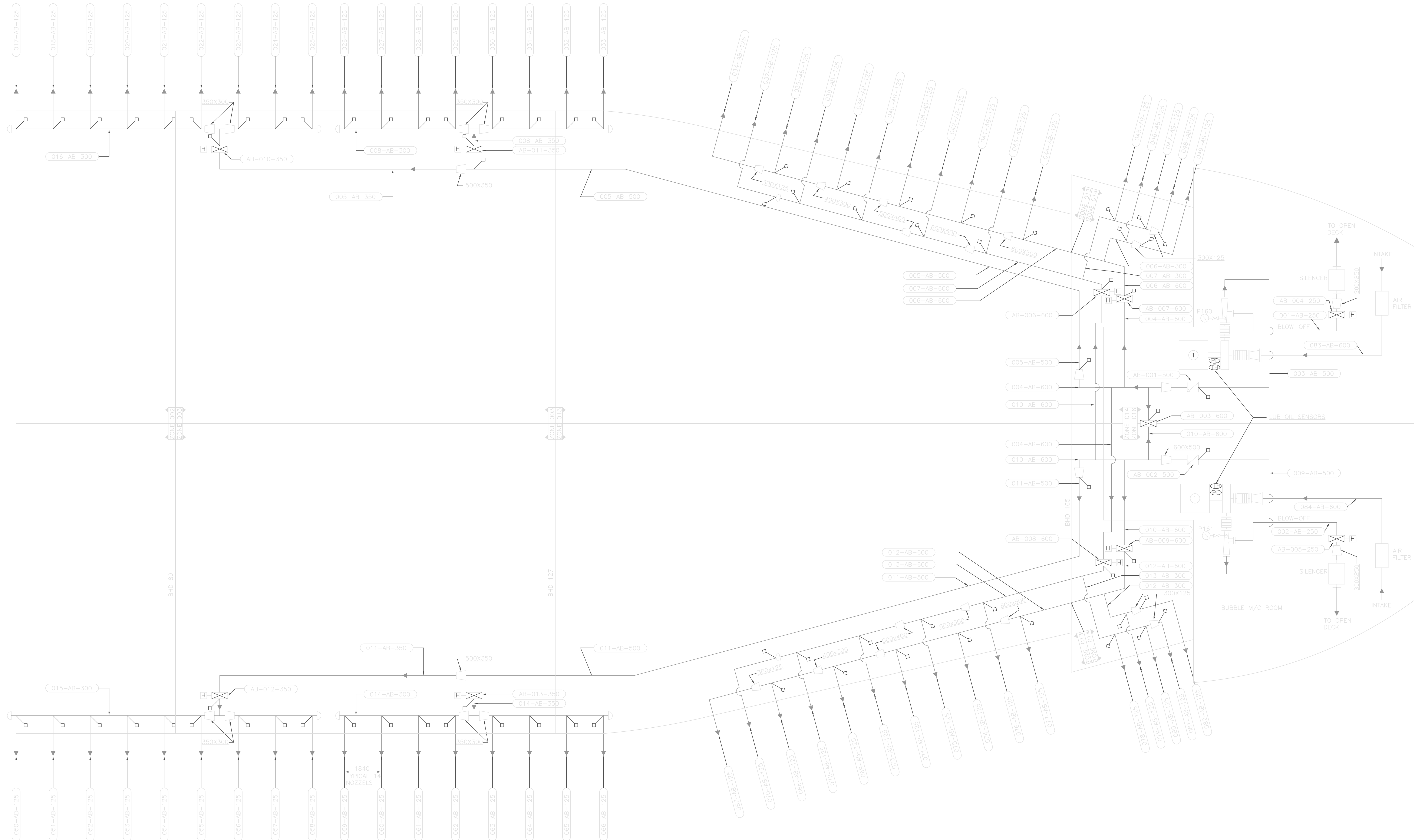
FITTINGS:

BUTT WELD - INSIDE TANKS AND BELOW WATERLINE  
GROOVED WELD - OUTSIDE TANKS AND ABOVE WATERLINE  
WELDING OF 5"-SCH 160 DISCHARGE PIPES TO THE HULL SHALL BE AS SHOWN IN DETAIL 'A'

VALVES:

SUPPLIED BY MANUFACTURER  
FOR WELDING OF NOZZELS TO HULL PLATE USE E-7018 ELECTRODES\*  
SYSTEM TO BE TESTED TO TWICE WORKING PRESSURE

\* - TO BE LLOYDS TYPE APPROVED



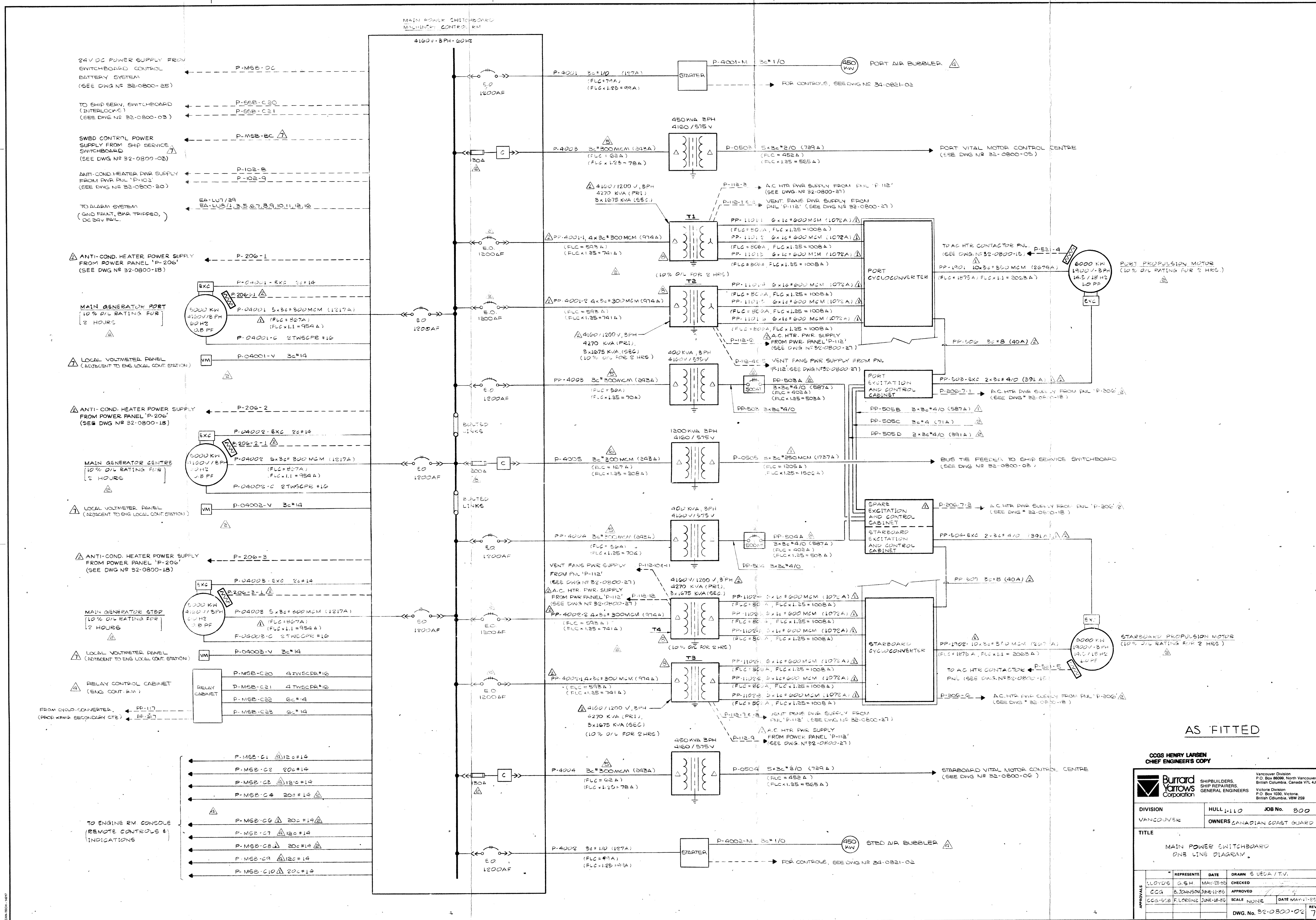












AS FITTED

CCGS HENRY LARSEN  
CHIEF ENGINEER'S COPY

**Burrard**  
**Yarrows**  
Corporation

SHIPBUILDERS  
SHIP REPAIRERS  
GENERAL ENGINEERS

Vancouver Division  
P.O. Box 86006, North Vancouver,  
British Columbia, Canada V7L 4J6

Victoria Division  
P.O. Box 1030, Victoria,  
British Columbia, V8W 2S8

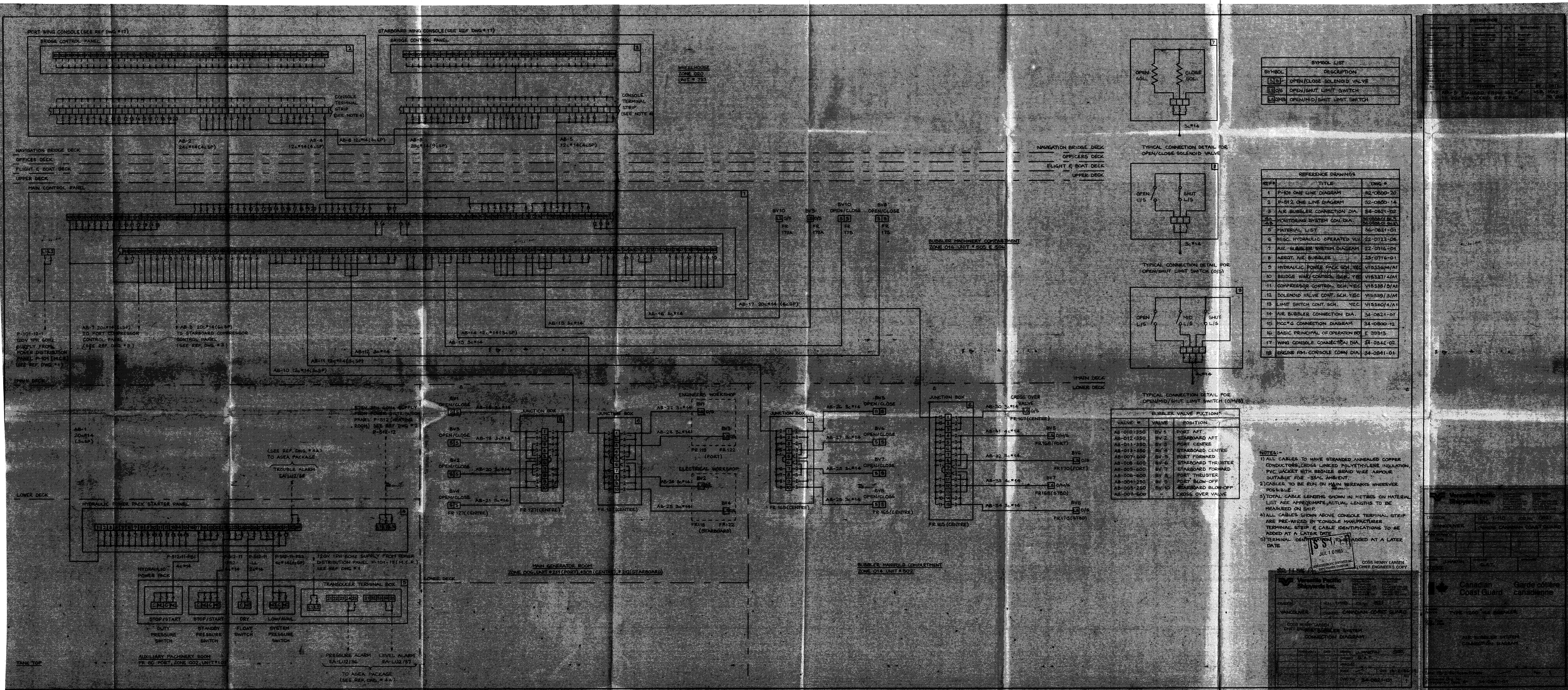
DIVISION VANCOUVER HULL #110 JOB No. 800  
OWNERS CANADIAN COAST GUARD

TITLE MAIN POWER SWITCHBOARD ONE LINE DIAGRAM

REPRESENTS	DATE	DRAWN	CHECKED	APPROVED	DATE	REV
LLOYDS G.S.H.	MAY-23-85					
CCG B. JOHNSON	JUN-11-85					
CCG B. FLORENZ	JUN-18-85					

DWG. No. 32-0800-02

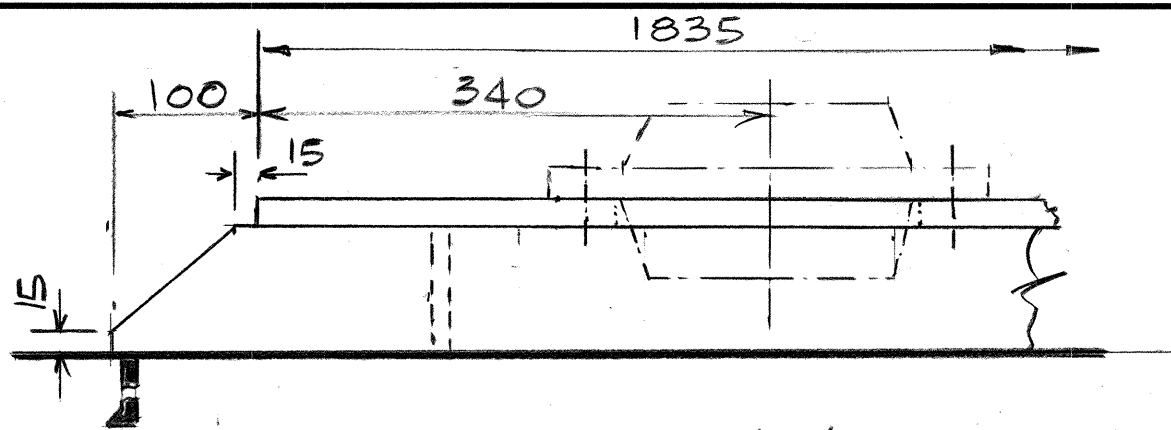




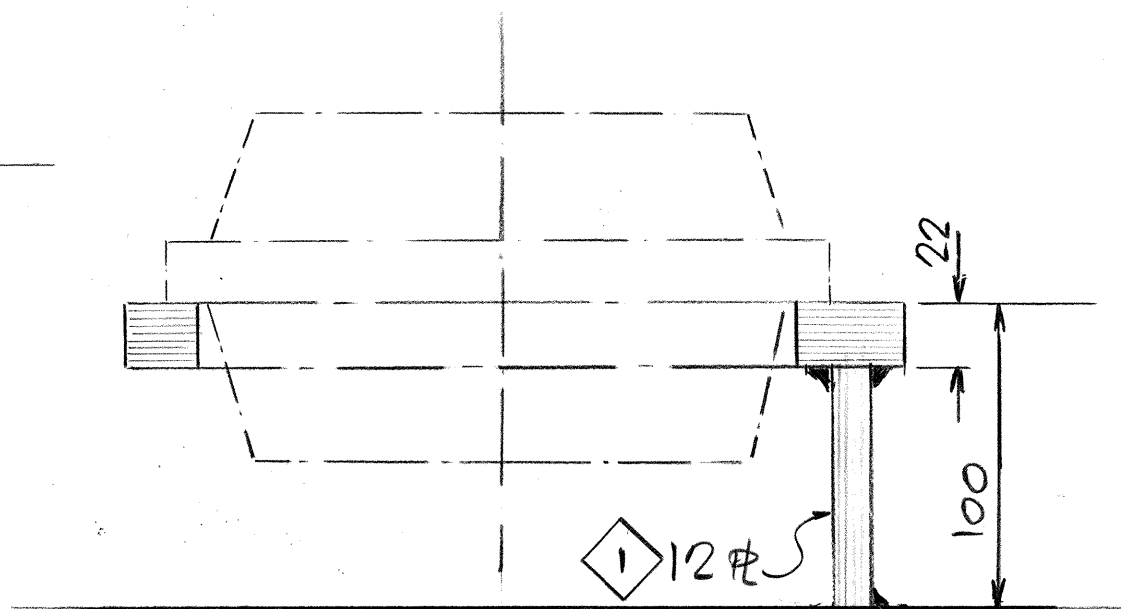




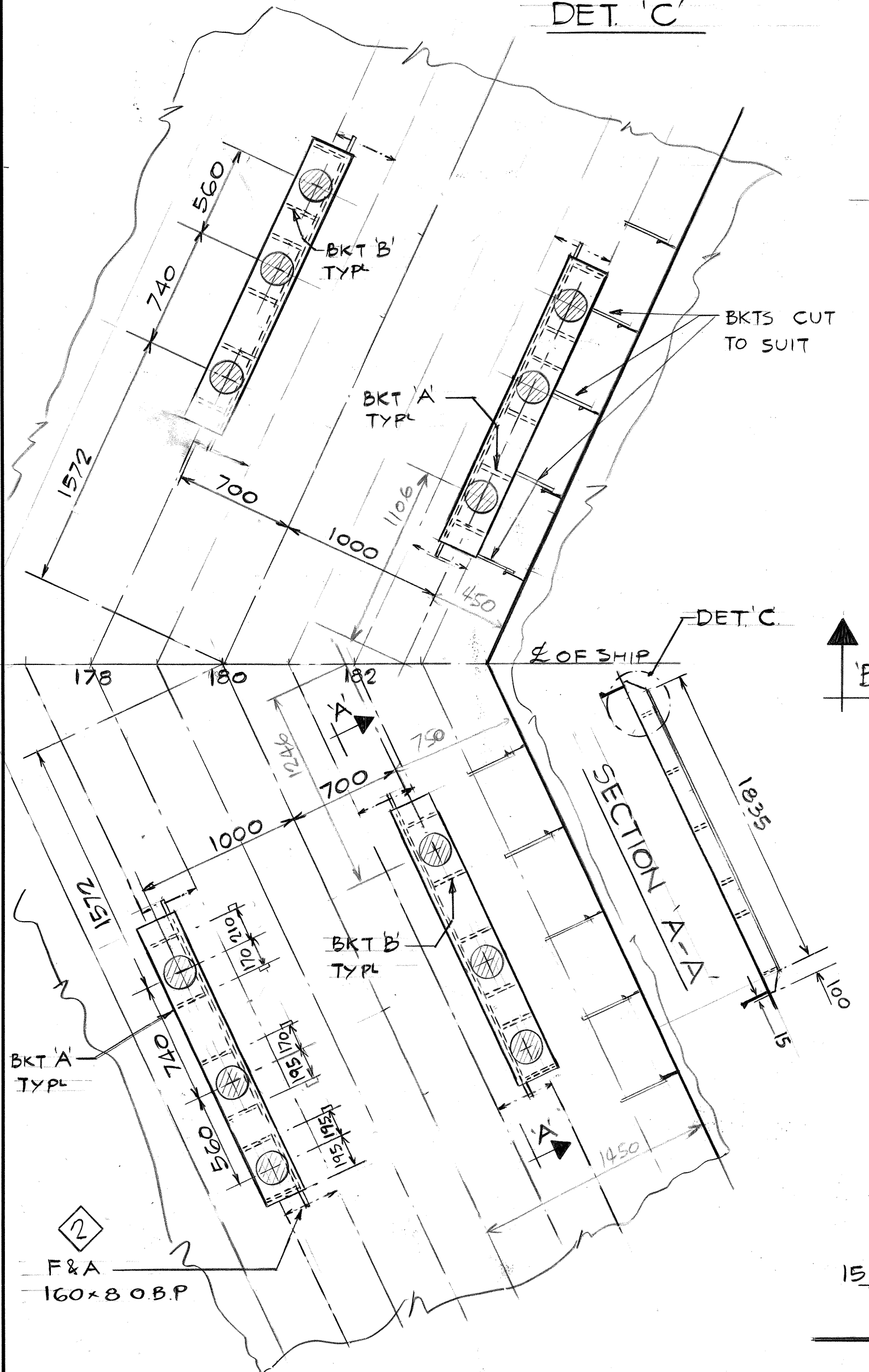




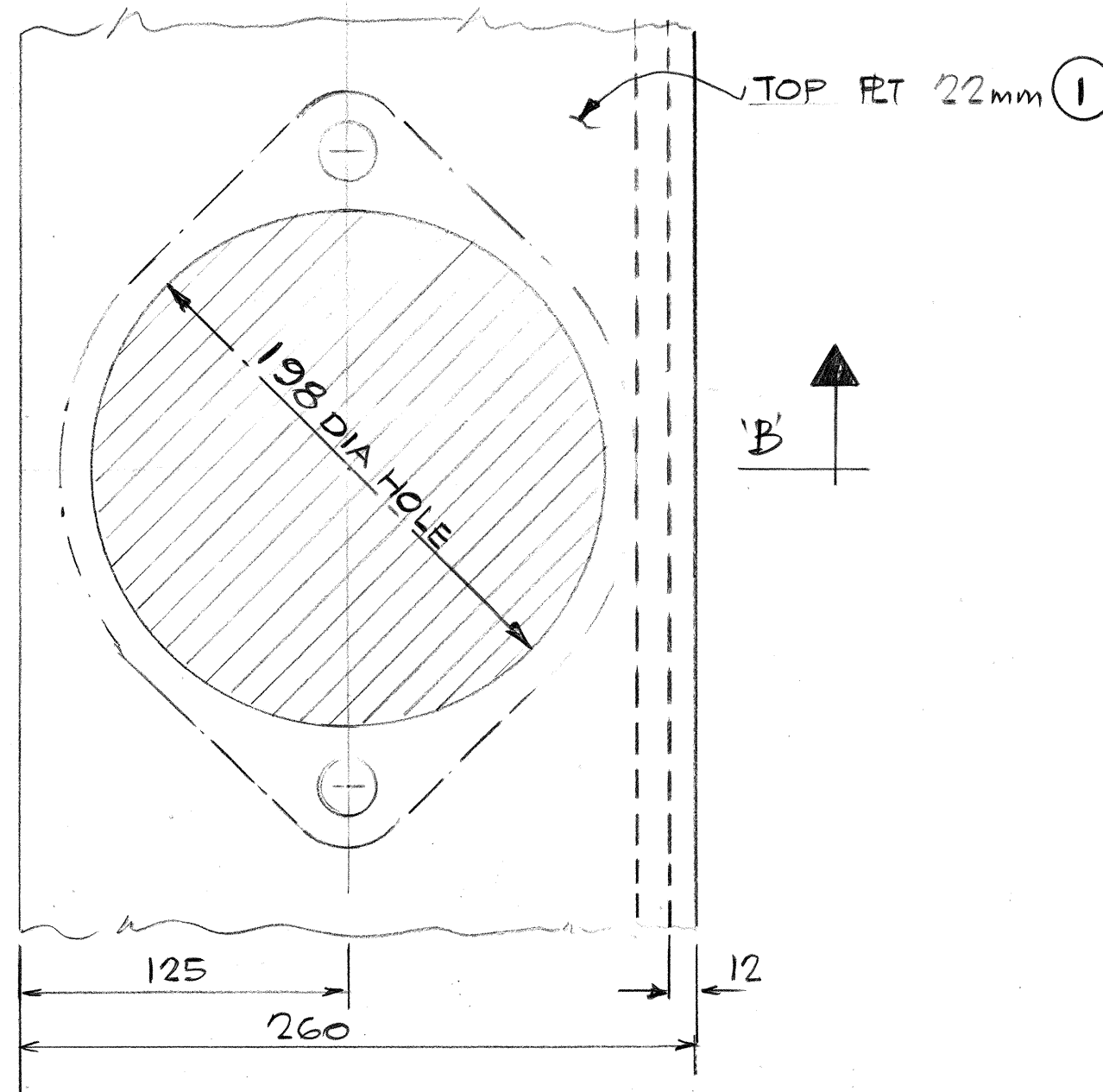
DET. 'C'



SECTION 'B-B'

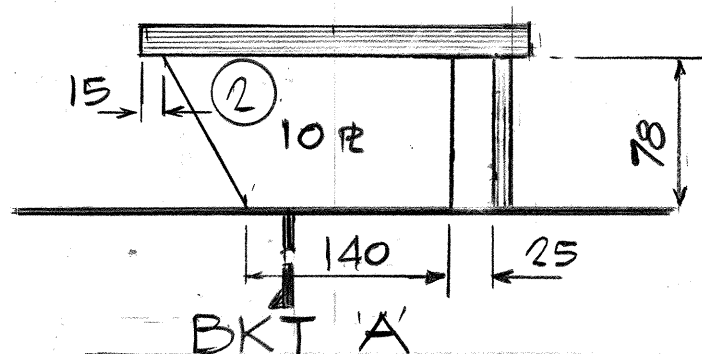


PLAN VIEW - MAIN DECK

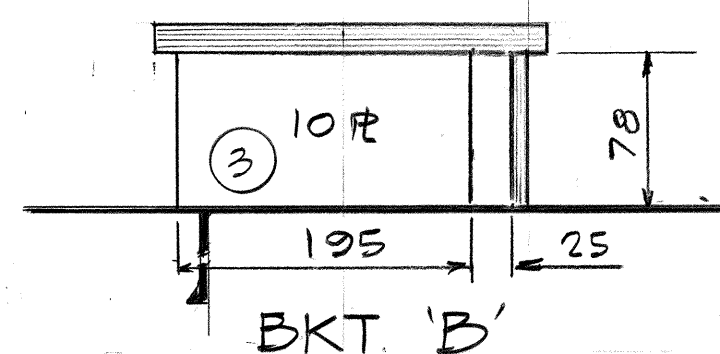


PLAN VIEW - TOP PLATE

1:2.5



BKT 'A'



BKT 'B'

## NOTES

1. WELDING  $35^\circ V$
2. REF. DWG. ARRGT-AIR BUBBLER 23-0716-02
3. POSITION OF HOLES TO BE CHECKED FROM MACHINE
4. WEIGHT OF UNIT 6120 KGS

## MATERIAL

PLATES SHT. N° A11

SHAPES SHT N° A8



SHIPBUILDERS,  
SHIP REPAIRERS,  
GENERAL ENGINEERS

Vancouver Division  
P.O. Box 86099, North Vancouver,  
British Columbia, Canada V7L 4J6  
Victoria Division  
P.O. Box 1030, Victoria,  
British Columbia, V8W 2S9

DIVISION  
VANCOUVER

HULL 110 JOB No.  
OWNERS CANADIAN COAST GUARD

App'd/App'n Date				

DRAWN R.S.	CHECKED	APPROVED 
---------------	---------	--------------



Canadian Coast Guard  
Garde côtière canadienne

Vessel  
Navire TYPE 1200 ICEBREAKER

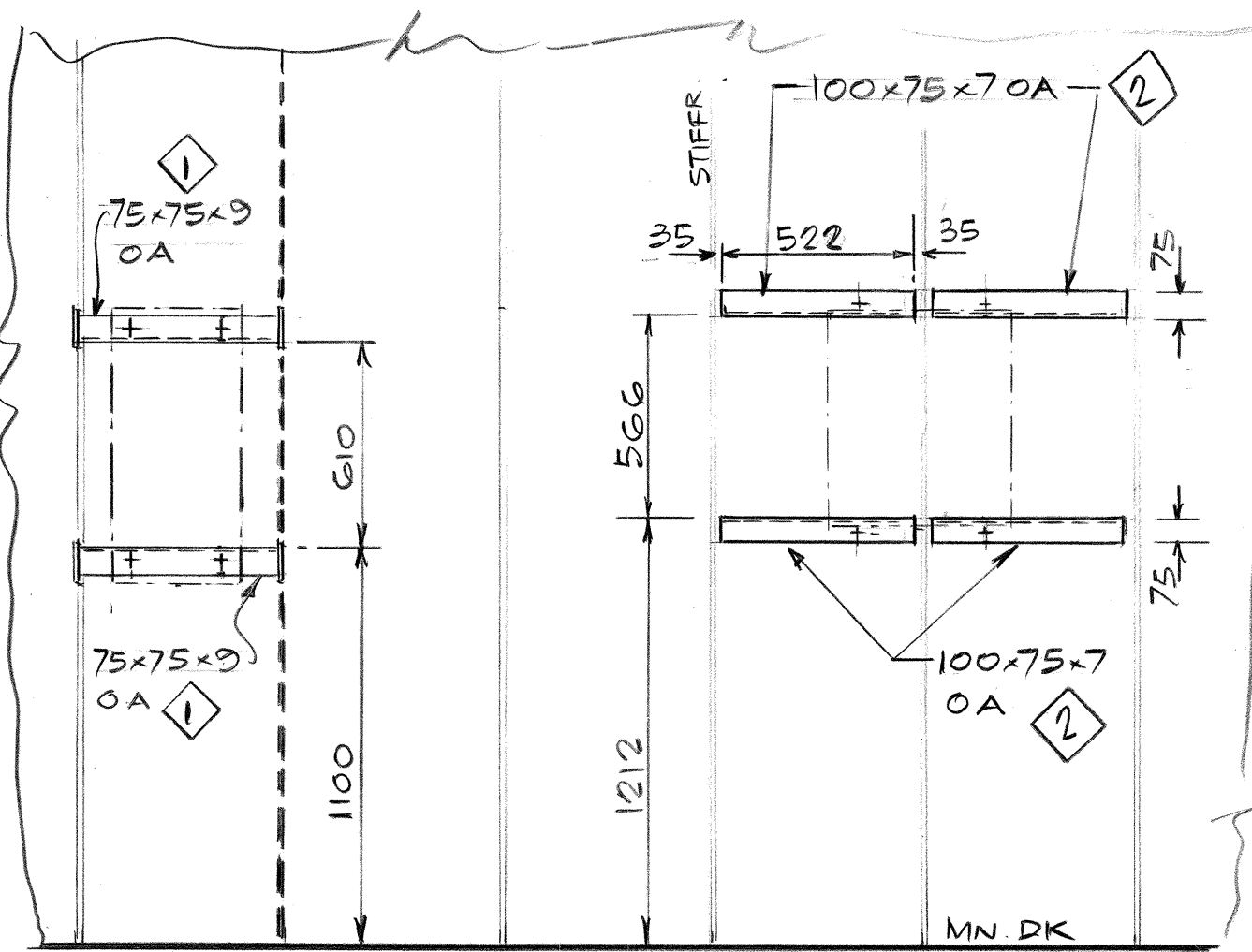
Drg. Title  
Dess. titre  
SEAT FOR UNIT \*503 ZONE 016

AIR BUBBLER COMPRESSOR  
SEAT

Date: 16 JULY 82 Scale/Echelle: 1:25 & AS SHOWN Rev.

Contractor Drg. No.  
Entrepreneur dess. N° 1110 - 16 - 0016 - 01

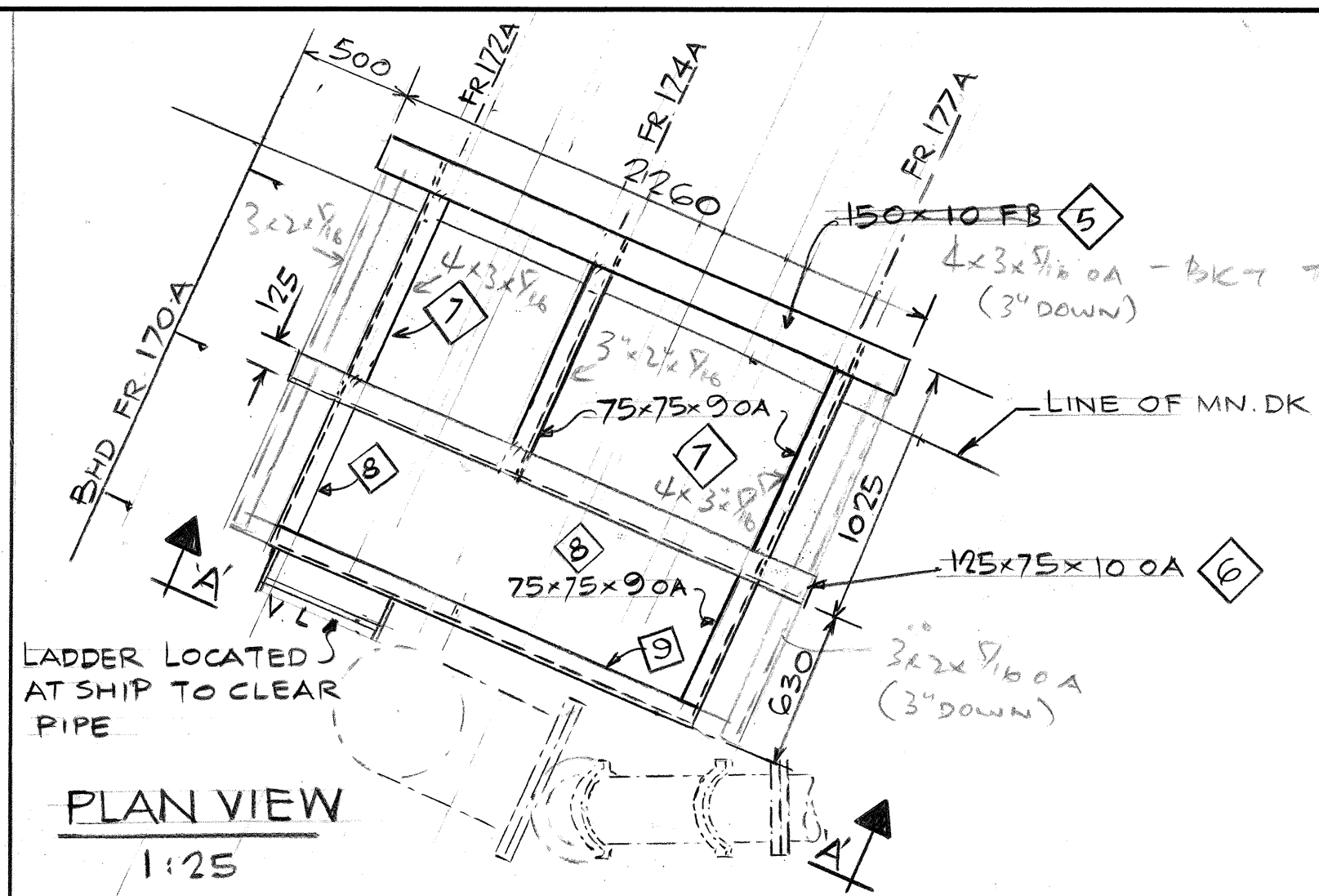
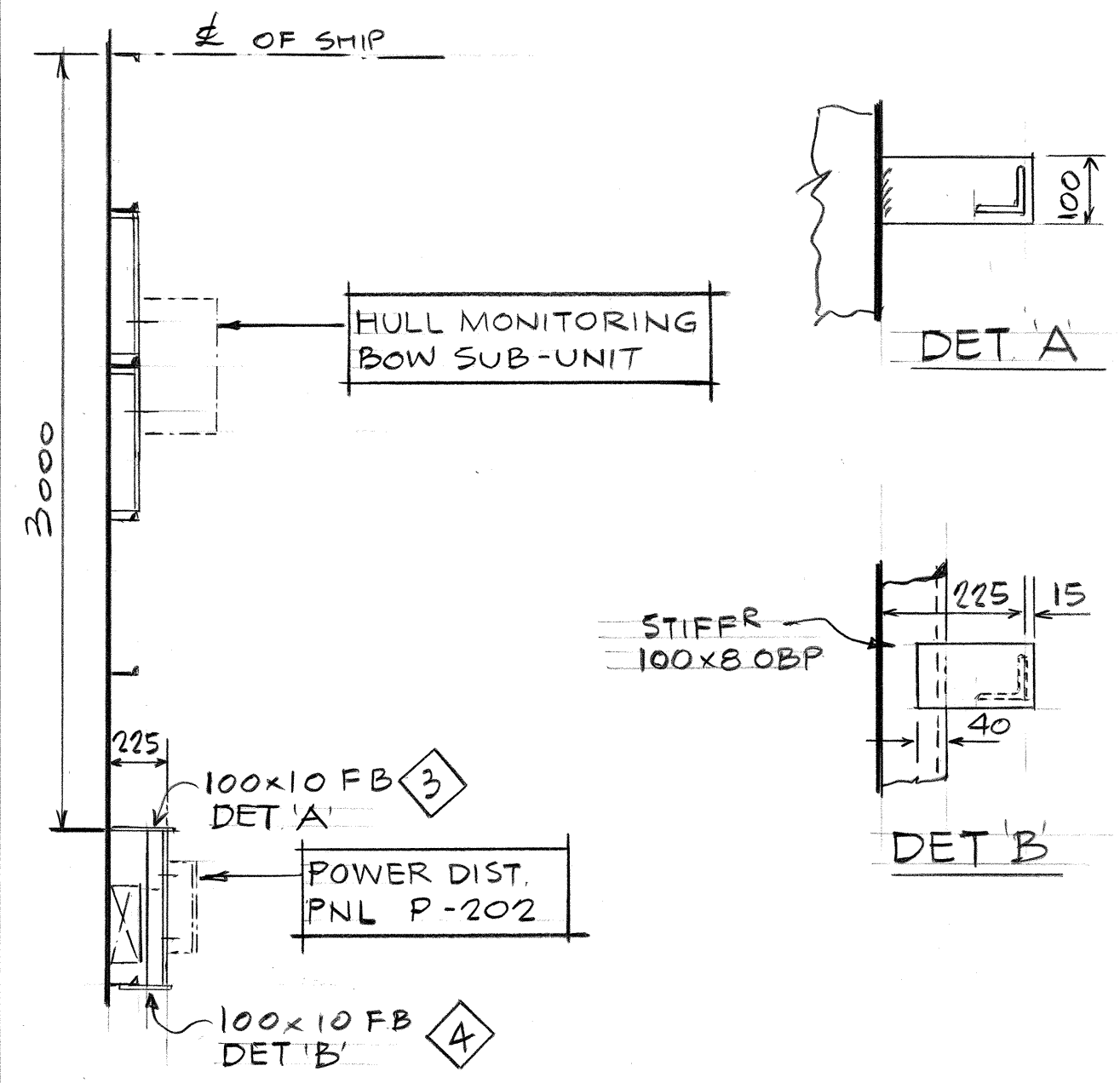




BULKHEAD FR 175

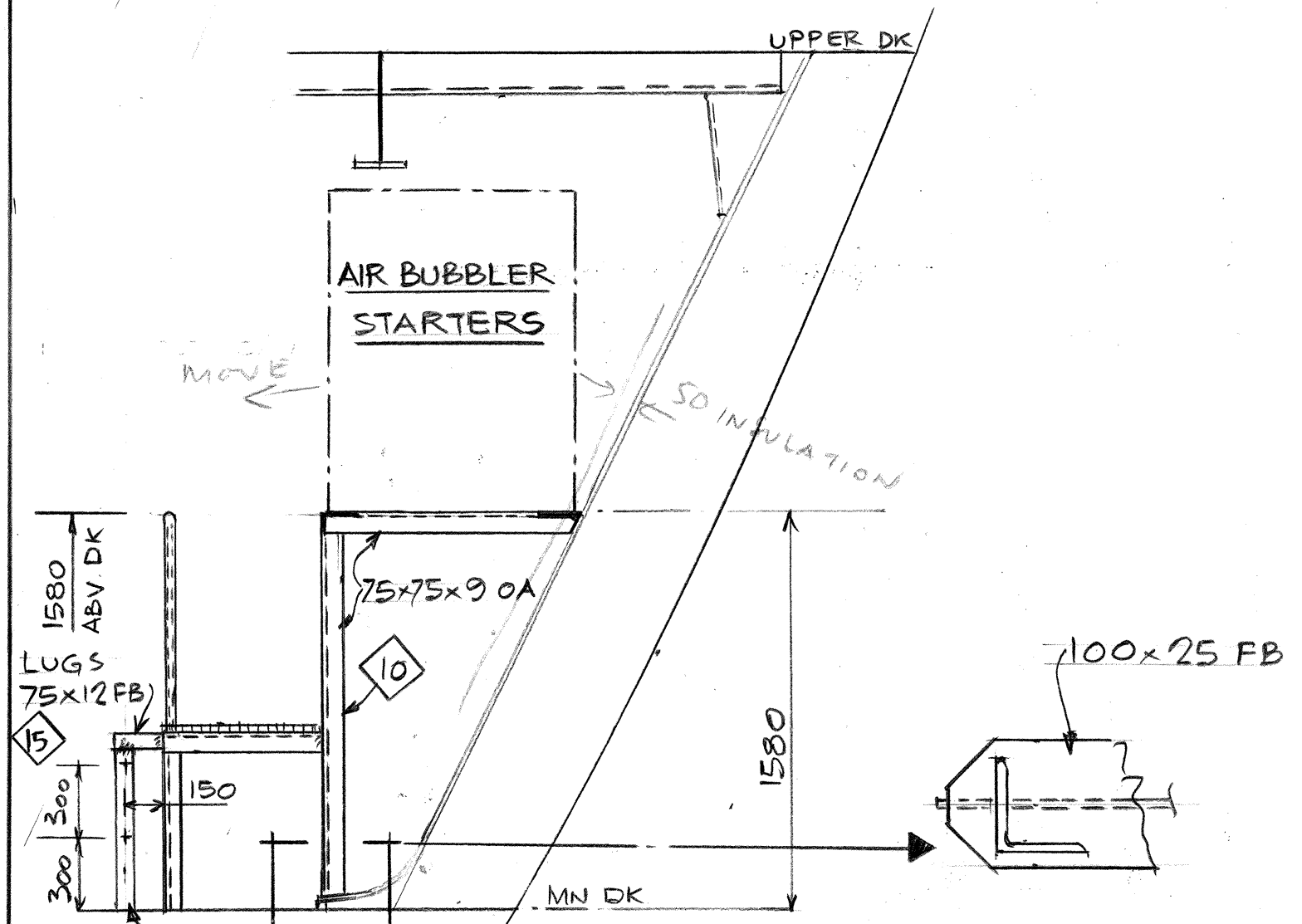
LOOKING AFT

1:20



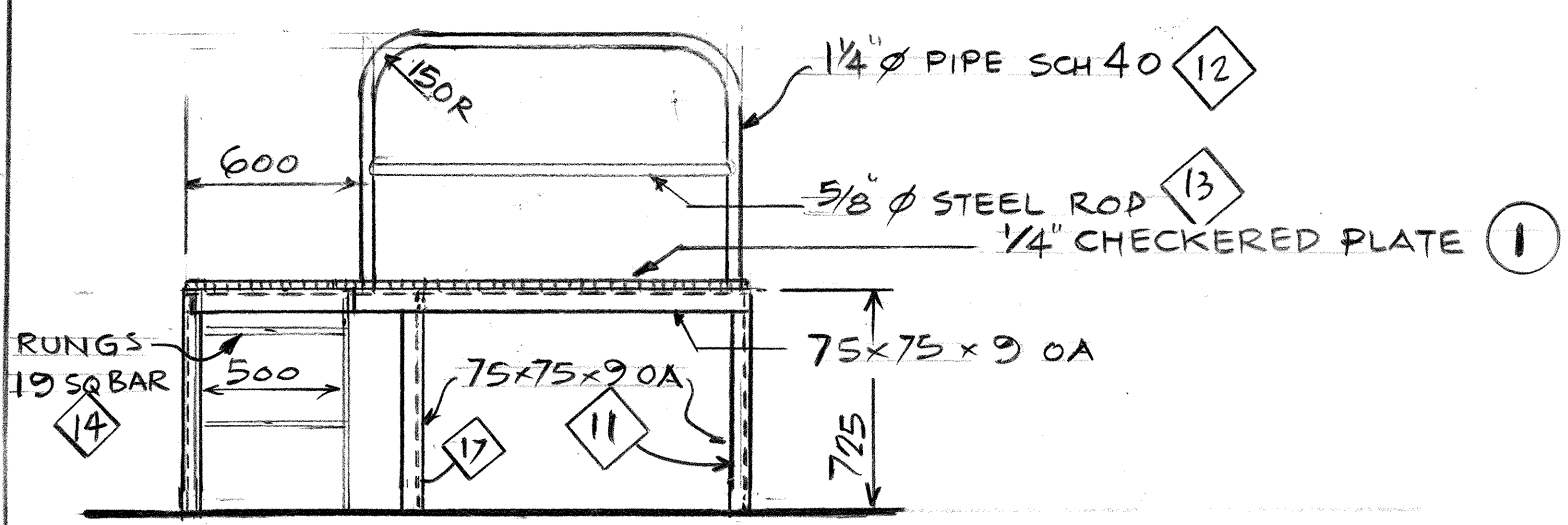
PLAN VIEW

1:25



FRAME 177 A

LOOKING AFT  
(FRS 172A & 174A SIMILAR)



SECTION A-A

NOTES

1 WELDING 35

MATERIAL

SHAPES SHT N° A9

PLATES SHT N° A12



Burrard  
Yarrows  
Corporation

SHIPBUILDERS,  
SHIP REPAIRERS,  
GENERAL ENGINEERS

Vancouver Division  
P.O. Box 86099, North Vancouver,  
British Columbia, Canada V7L 4J6  
Victoria Division  
P.O. Box 1030, Victoria,  
British Columbia, V8W 2S9

DIVISION		HULL 110		JOB No.	
VANCOUVER		OWNERS CANADIAN COAST GUARD			
App'd/App'n					
Date					
DRAWN		CHECKED		APPROVED	
RS					

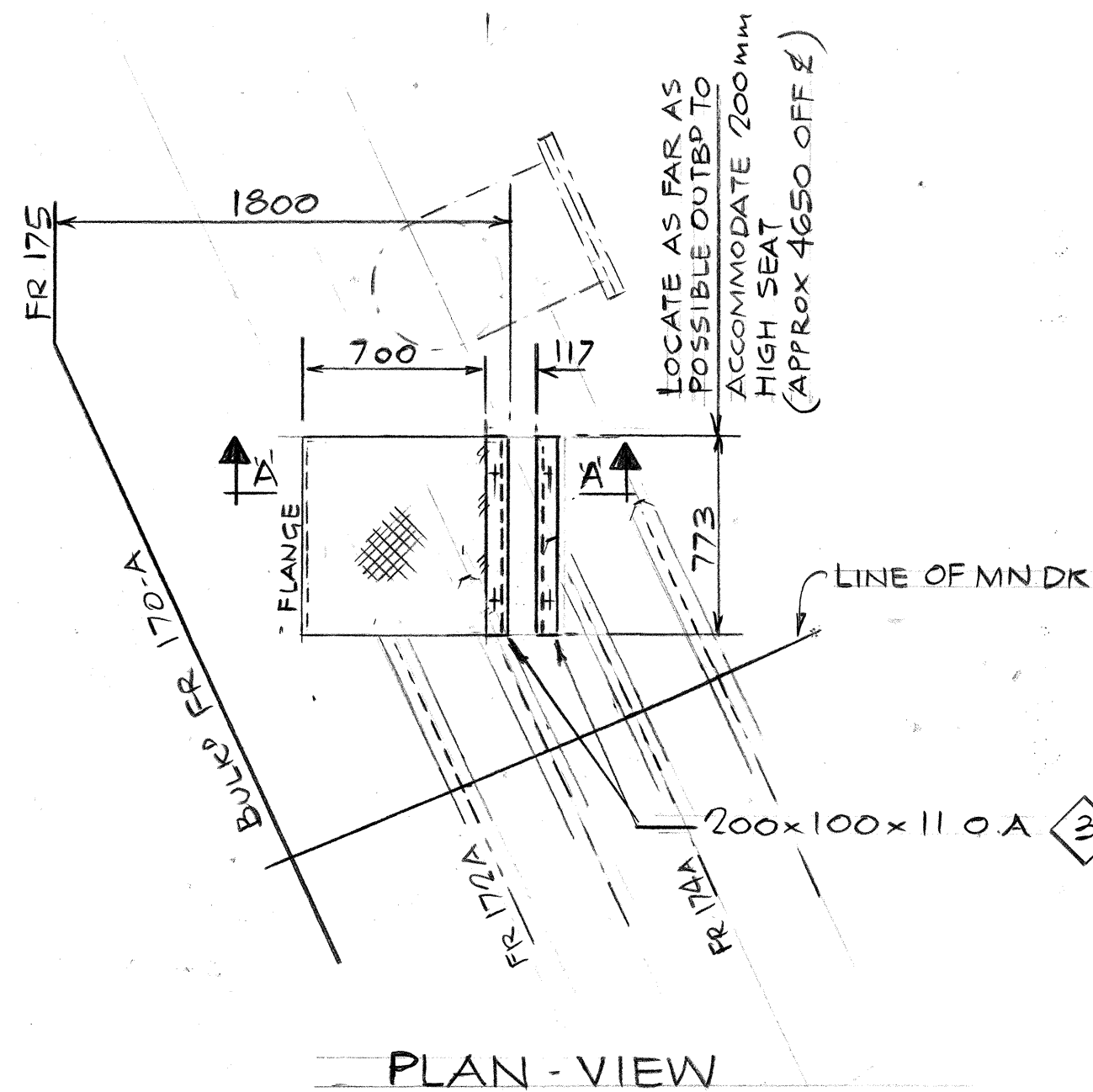
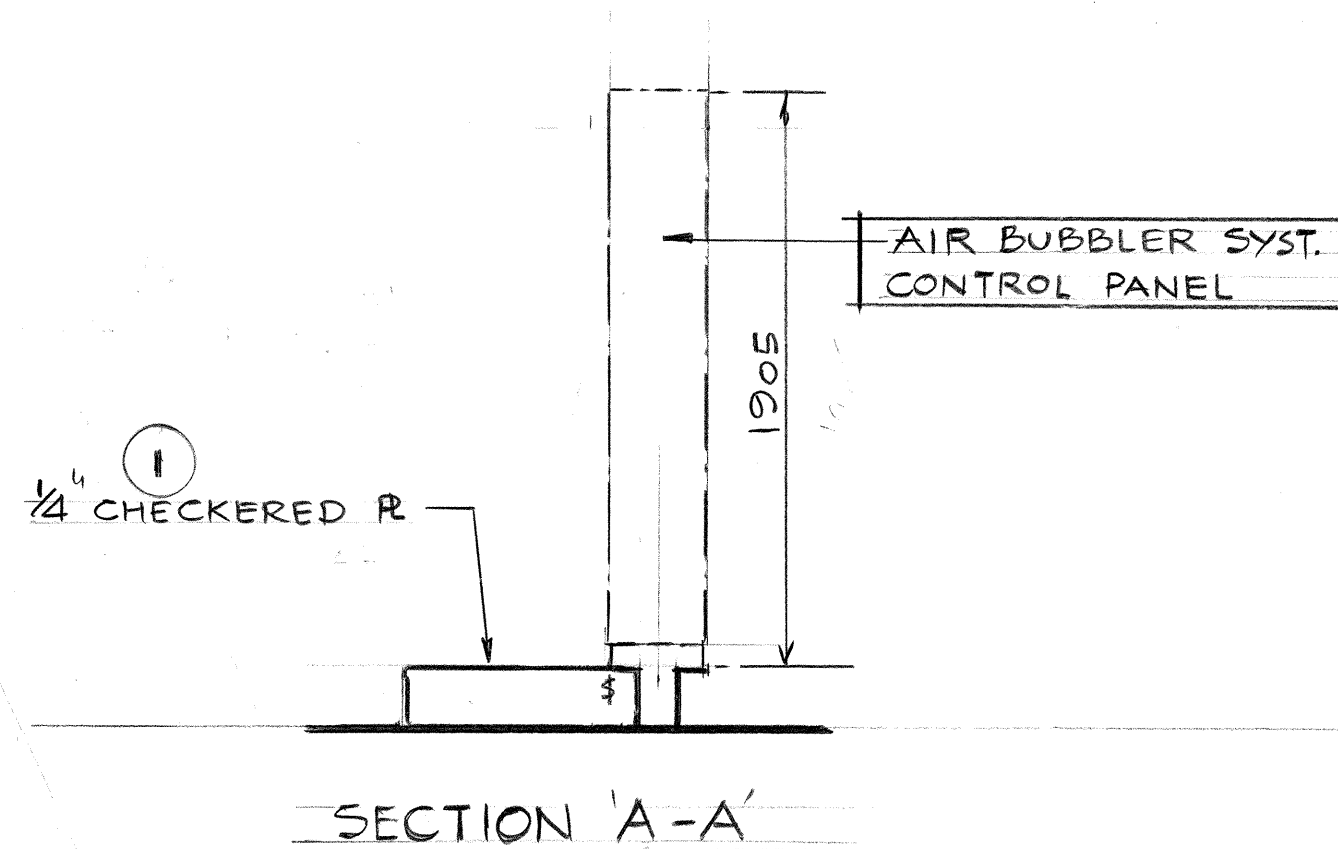
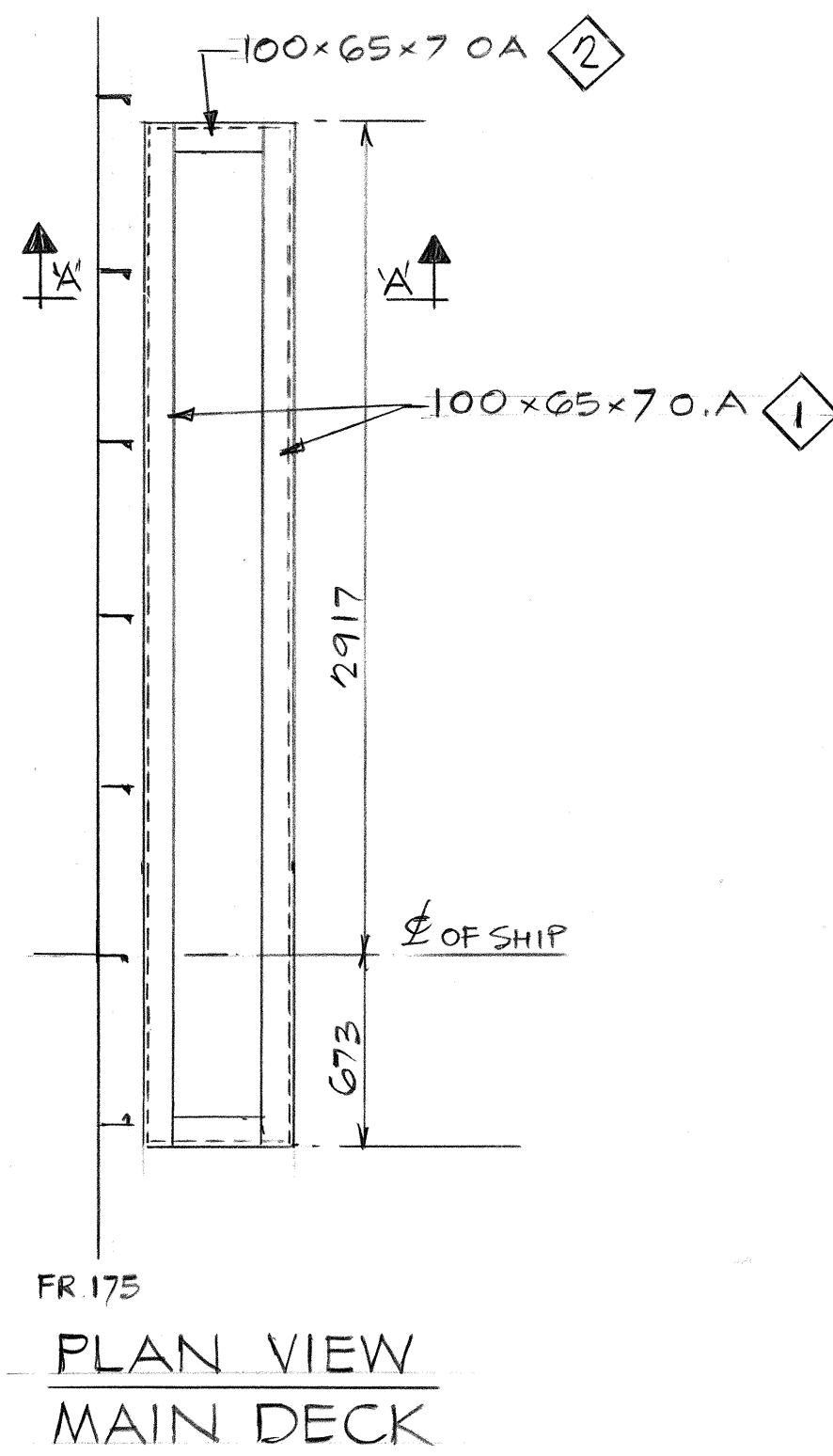
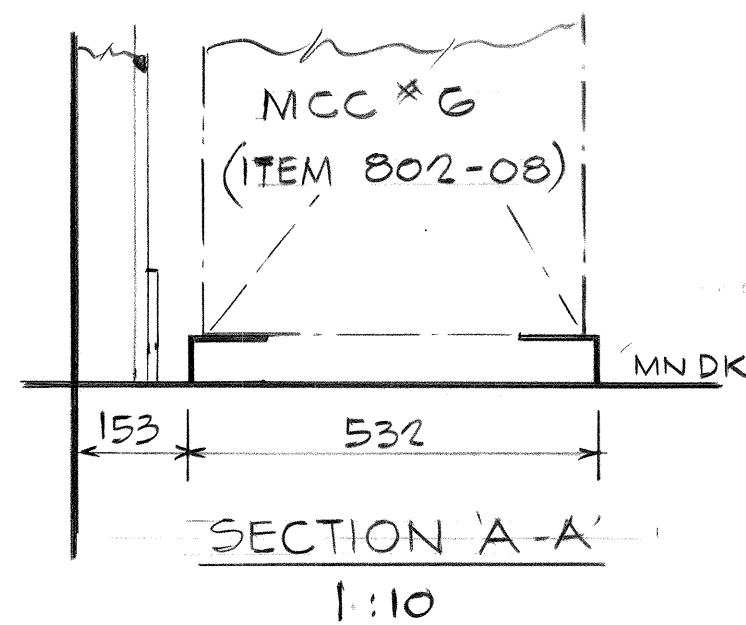


Canadian  
Coast Guard

Garde côtière  
canadienne

Vessel Navire	TYPE 1200 ICEBREAKER		
Drg. Title Dess. titre	<u>SEATS FOR UNIT #505</u> <u>ZONE 016</u>		
<u>AIR BUBBLER MACHY COMPT</u>			
EL DO ITEM # 821-01 AIR BUBBLER STARTERS			
*848-01 HULL MONITORING SYST. BOW SUB-UNIT			
*807-06 POWER DIST. PNL P-202			
Date: 24 JUL 86	Scale/Échelle: AS SHOWN		Rev.
Contractor Drg. No. Entrepreneur dess. N° 1110 - 16 - 0016 - 02			





## NOTES

1. CONSTRUCTION WELDING OF SEAT 35V
2. WELDING OF SEAT TO DK 35V 50-200

## MATERIAL

PLATE SHT N° A12

SHAPES SHT N° A9



**Burrard  
Yarrow's  
Corporation**

SHIPBUILDERS,  
SHIP REPAIRERS,  
GENERAL ENGINEERS

Vancouver Division  
P.O. Box 86099, North Vancouver,  
British Columbia, Canada V7L 4J6  
Victoria Division  
P.O. Box 1030, Victoria,  
British Columbia, V8W 2S9

DIVISION VANCOUVER		HULL 110		JOB No.	
		OWNERS CANADIAN COAST GUARD			
App'd/App'n Date					
DRAWN R.S.		CHECKED		APPROVED 	



**Canadian  
Coast Guard**

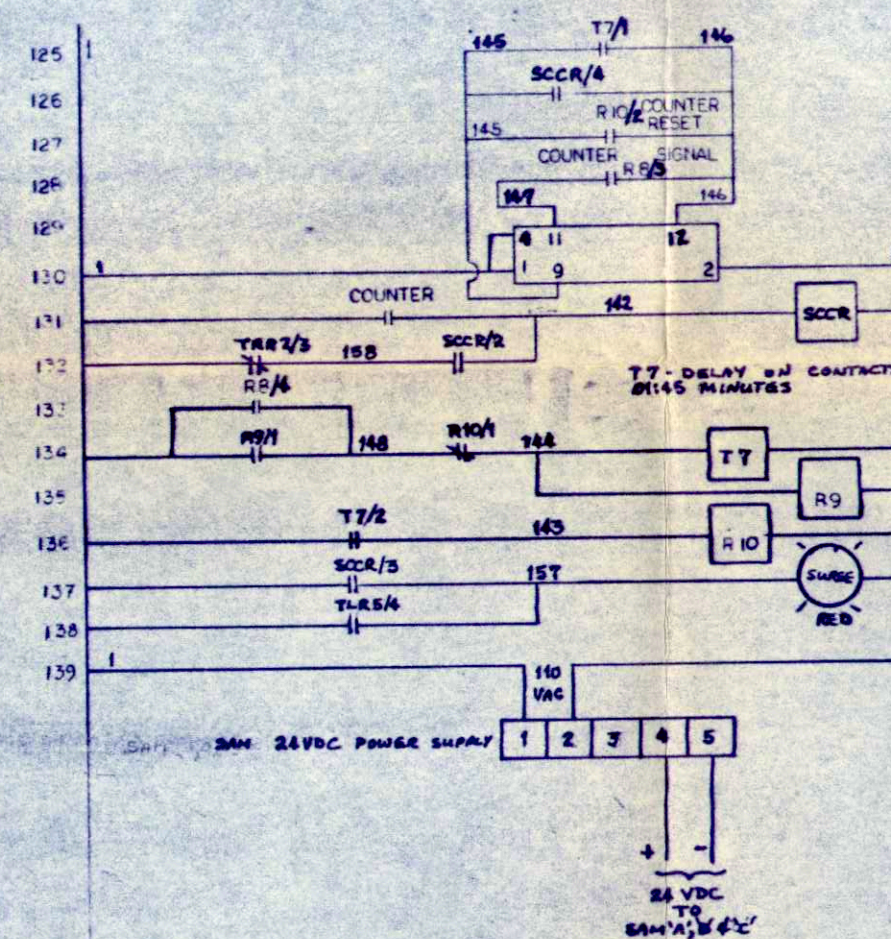
**Garde côtière  
canadienne**

Vessel Navire TYPE 1200 ICEBREAKER		
Drg. Title Dess. titre SEATS FOR UNIT *503 ZONE OIG		
AIR BUBBLER MACHY COMPT		
EL DO ITEM * 802-08 M.C.C. * 6		
* 821-02 AIR BUBBLER SYST CONTROL PNL		
Date:	Scale/Échelle: 1:25	Rev.
Contractor Drg. No. Entrepreneur dess. N° 1110 - 16-0016 - 03		







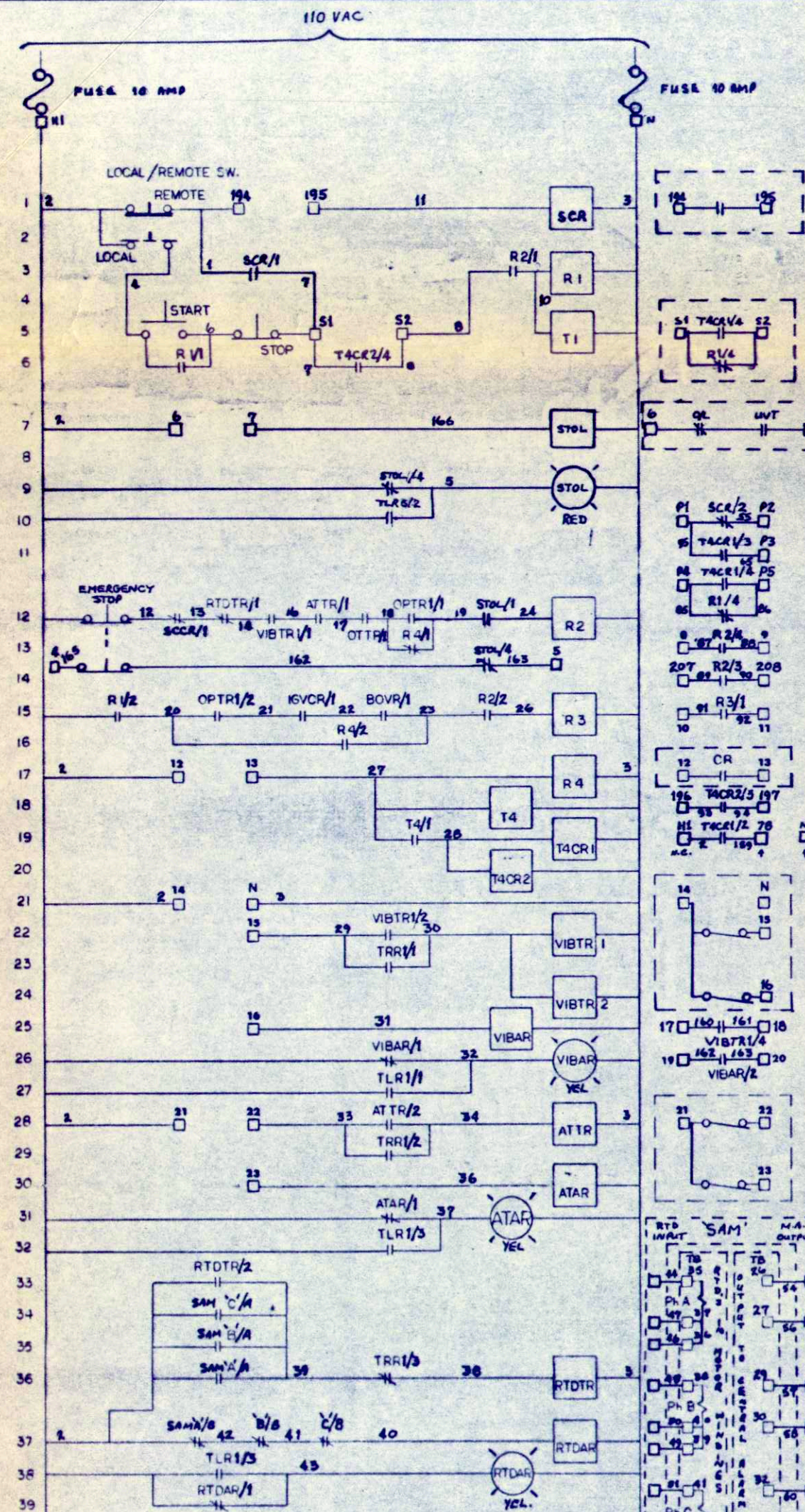


**SURGE COUNTER RESET**  
NOTE 1- WHEN A SURGE IS  
SENSED T7 COUNTS FOR  
ONE MIN. FORTY-FIVE SEC.  
IF DURING THIS PERIOD  
THE COUNTER REGISTERS  
SURGES THE COMP. IS SHUT  
DOWN OTHERWISE T7-RID  
RESET COUNTER TO ZERO

JOB No.		DATE		CUSTOMER	
TITLE				<b>AMPOWER CANADA</b> <b>(1982) LTD.</b> <b>S.T. CATHARINES, ONTARIO, L2M 6S9</b>	
KEY - DIAGRAM BASIC PRINCIPAL OF OPERATION COMPRESSOR CONTROL PANEL					
SCALE	DATE	DRAWN BY	APPROVED BY	Dwg. No. E 39313 SHEET 2 OF 4	
	FEB 4, 86	E C		REV 1	

	I	APR '87	EDITORIAL CHANGES	G	APR '86	LINE 120, TRR WAS NO NOW NC.
	I	APR '87	NINE 109 REMOVE HOLD CONTACT NE/1 ON ALARM NA	G	APR '86	LINE 110, ADDED TRR NC BTWN SILENCE NC AND HORN RELAY.
	I	APR '87	LINE 137 & 138 ADD SURGE TRIP INDICATION.			
	I	APR '87	LINE 132 ADD HOLD CONTACT @ RESET SCRR/L & TRR/Y	G	APR '86	LINE 106, SURGE SIGNAL SW BTWN 78 AND 79 WAS NC NOW NO.
	H	APR '87	LINE 134 ADD POWSW SUPPLY MGR SAM (SAVDC)			
	M	APR '87	LINE 100/105 ADD CONTACT TCCR V <sub>L</sub> TO BOVS/C	G	APR '86	LINE 96, WAS 2/1 TO 72 NOW 2/2 TO 72 TB 73 WAS "CLOSE" SOLENOID NOW "OPEN".
	M	APR '87	LINE 110 & 111 ALARM CONTACTS ADDED TO CENTRAL ALARM			
	G	APR '86	LINE 113 ATAR WAS NO NOW NC.	G	APR '86	LINE 74, TB 70 WAS "OPEN" SOLENOID NOW "CLOSE" SOLENOID
	G	APR '86	LINE 117, OTA WAS NO NOW NC.			





FROM MAIN CONTROL PANEL  
SENSE START CONTACTS

FROM PORT COMP. CONTROL  
PANEL  
START SEQUENCING CONTACTS

FROM 4160V STARTER  
OVERLOAD & UNDERVOLTAGE  
TRIP SIGNAL

TO PORT COMP. CONTROL  
PANEL  
START SEQUENCING CONTACTS

TO CENTRAL ALARM SYSTEM  
SENSE SHUT & LINE 110/113

TO MAIN CONTROL PANEL  
TRIP INDICATION

TO 4160V STARTER  
START/STOP CONTACTS

AUX CONTACTS FROM 4160V STARTER  
INDICATE STARTER CLOSED

REMOTE OUTPUT COMP. RUNNING

REMOTE OUTPUT 110VAC WHEN  
COMP. RUNNING

VIBRATION SWITCH  
WIRED BY VENDOR

TRIP CONTACTS OPEN AT  
MM/SEC. DELAY SEC.

ALARM CONTACTS OPEN AT  
MM/SEC. DELAY SEC.

REMOTE OUTPUT VIBRATION TRIP

REMOTE OUTPUT VIBRATION ALARM

TO 33- DISCHARGE AIR TEMP.  
TRIP CONTACTS OPEN AT 120°C

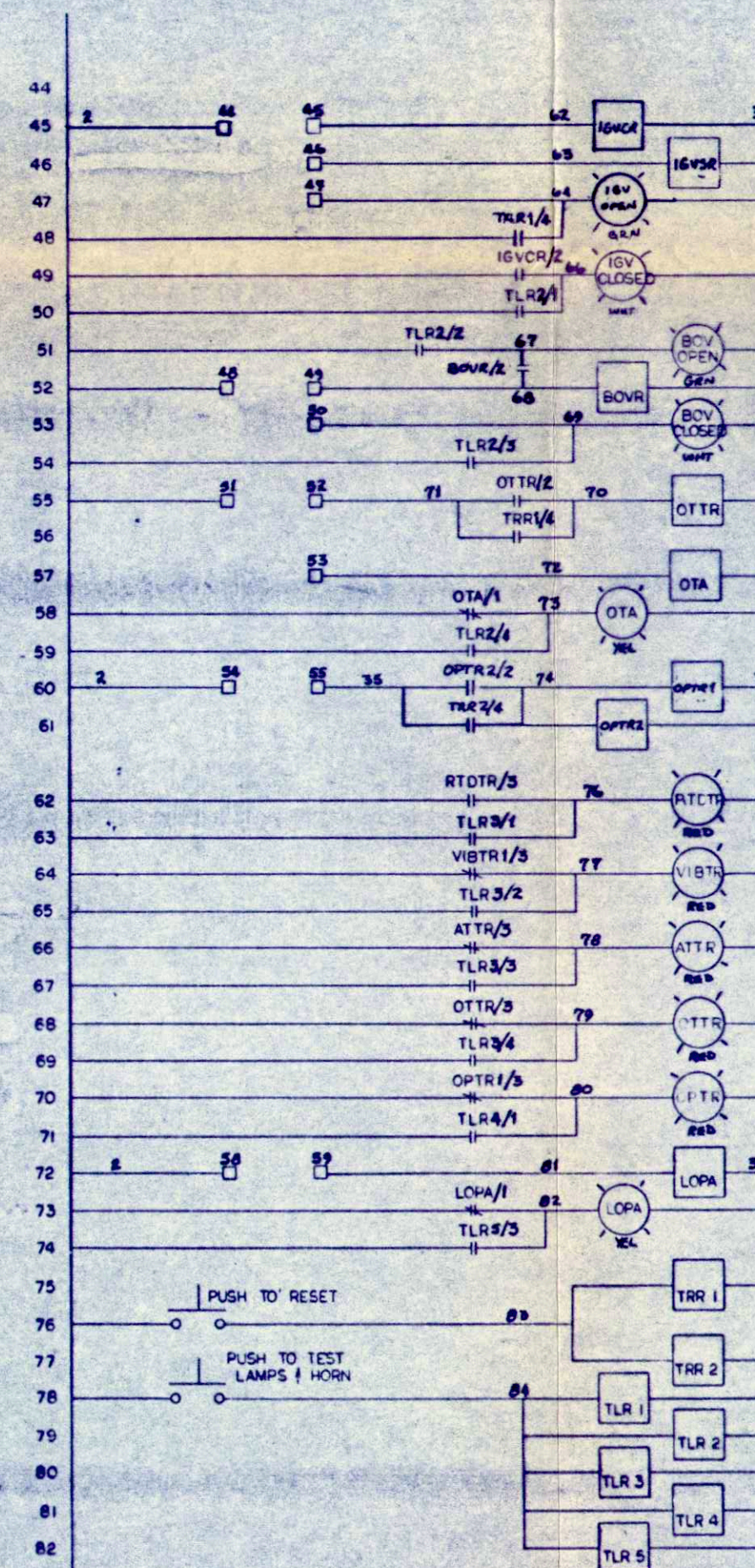
ALARM CONTACTS OPERATING  
TP-36 DISCHARGE AIR TEMP.

FOR CENTRAL ALARM SYSTEM  
SEPARATE ANALOGUE SENSOR  
SUPPLIED FOR DISCH. AIR  
TEMP. AUTONICA PT-100  
100 OHMS ± 0.1°C - RTD -

RTD RESISTANCE INPUT TO  
"SAM"

ANALOGUE OUTPUT TO CENTRAL  
ALARM SYSTEM  
OUTPUT IS 4 TO 20 MA. FOR  
0 TO 120°C

RES.	OHMS	TEMP °C
120	4.0	0
160	8.0	50
200	12.0	100
224	16.6	130
241	19.8	160
291	25.0	200



NOTE:- THIS DRAWING RELATES TO THE ORIGINAL DRAWING NO. 239818 COMPASS REPAIR U.K.  
PORT COMPRESSOR SHTS 162 OF 4  
STBD COMPRESSOR SHTS 364 OF 4

IGV LIMIT SWITCHES  
(WIRED BY VENDOR)

IGV CLOSED LSW 10  
MAKE WHEN IGV CLOSED

IGV OPEN LSW 11  
BREAK WHEN IGV 30° TO -10°

IGV OPEN LSW 12  
BREAK WHEN IGV -10°

BOV POSITION INDICATION  
SIGNAL FROM MAIN CONTROL  
PANEL

TS36 LUBE OIL TEMP. SW.  
TRIP CONTACTS OPEN AT 70°C

ALARM CONTACTS OPEN AT 65°C  
PS-38 LUBE OIL TEMP.  
FOR CENTRAL ALARM SYSTEM  
SEPARATE ANALOGUE SENSOR  
SUPPLIED - AUTONICA PT-100  
100 OHMS ± 0.1°C - RTD -

PS-38 LUBE OIL PRESS. SW.  
CONTACTS CLOSE 140 KPA RISING  
OPEN AT 80 KPA FALLING

TO MAIN CONTROL PANEL  
1400 OIL PRESS. TRIP SIGNAL

LOW OIL ALARM PS 12  
(WIRED BY VENDORS)

CLOSES AT 140 KPA RISING  
OPENS AT 110 KPA FALLING

REMOTE OUTPUT LOW OIL PRESS.  
ALARM

PS-38 FOR CENTRAL ALARM  
SEPARATE ANALOGUE SENSOR  
SUPPLIED FOR OIL PRESS.  
AUTONICA PT-100. SENSOR  
677/20 24V - 45 MA. APPROX.  
OUTPUT 4-20 MA. 0-250 KPA

1	APR 87	LINE 12 TEE 6-7 REMOVED STOL/1 ADDED	N	APR 87	LINE 48 ADD TLR1/4 LAMP TEST TO 10V OPEN	G	APR 86	LINE 12, EMERGENCY STOP TITLE ON SW.
2	APR 87	LINE 14 ADD CONTACTS TO EMERGENCY STOP/1/2	G	APR 86	LINE CO. BTWN 52 AND 53 PRESSURE SW WAS NC	G	APR 86	LINE 11, PRI BTWN S1 AND S2 WAS NO NOW NC.
3	APR 87	EDITORIAL NOTES REVISED				G	APR 86	LINE 9, DELETED CIRCUIT BTWN SSCR AND
4	APR 87	LINE 249 ADD RELAY STOL & STOL LAMP/1/2	G	APR 86	LINE 52, MAIN CONTROL PANEL CCT BTWN			SR2. CONNECT SSCR TO S1 AND SR2 TO S2
5	APR 87	TERMINAL & WIRE NO'S TO PRODUCTION AS IS.						RESP. LINE 10.
6	APR 87	ADD AC LINE FUSES 110VAC @ 10 AMPS	G	APR 86	LINES 44 AND 45 DELETED, WAS DUPLICATE OF	G	APR 86	ALL LOCAL/REMOTE AND MANUAL/AUTO SW'S
7	APR 86	LINES: 62-RTDTR: 64-VIBTR: 66-ATTR: 68-OTTR:						(BEING ONLY 2 POS'N) ARE SHOWN IN REMOTE OR
8		70-OPTR: TITLES ON LIGHTS.	G	APR 86	ATAR TITLE ON LIGHT, LINE 37.			AUTO POS'N.

1	APR 87	PORT & STBD PANEL DRAWINGS REPRODUCED	N	APR 87	PORT & STBD PANEL DRAWINGS REPRODUCED	G	APR 86	PORT & STBD CIRCUITS IDENTIFICATION
2	APR 87	PORT & STBD CIRCUITS IDENTIFICATION	G	APR 86	PORT & STBD CIRCUITS IDENTIFICATION	G	APR 86	BY BREAKS BTWN LINES 6-7 AND 11-12.
3	APR 87	NOTE: REPORT AND STBD PANEL CCTS 4-CPN	G	APR 86	NOTE: REPORT AND STBD PANEL CCTS 4-CPN	G	APR 86	LINE 33 TO 39, 40 TO 43 DELETED.
4	APR 87	LINE 33 TO 39, 40 TO 43 DELETED.	F	APR 86	LINE 33 TO 39, 40 TO 43 DELETED.	F	APR 86	REVISIONS

THIS DRAWING AND THE DESIGN  
ARE EXHIBITED TO OTHERS WITH  
THE UNDERSTANDING THAT IT  
WILL BE CONSIDERED CONFIDENTIAL  
AND NOT USED FOR  
MANUFACTURING WITHOUT  
FORMAL CONSENT FROM THE  
COMPANY

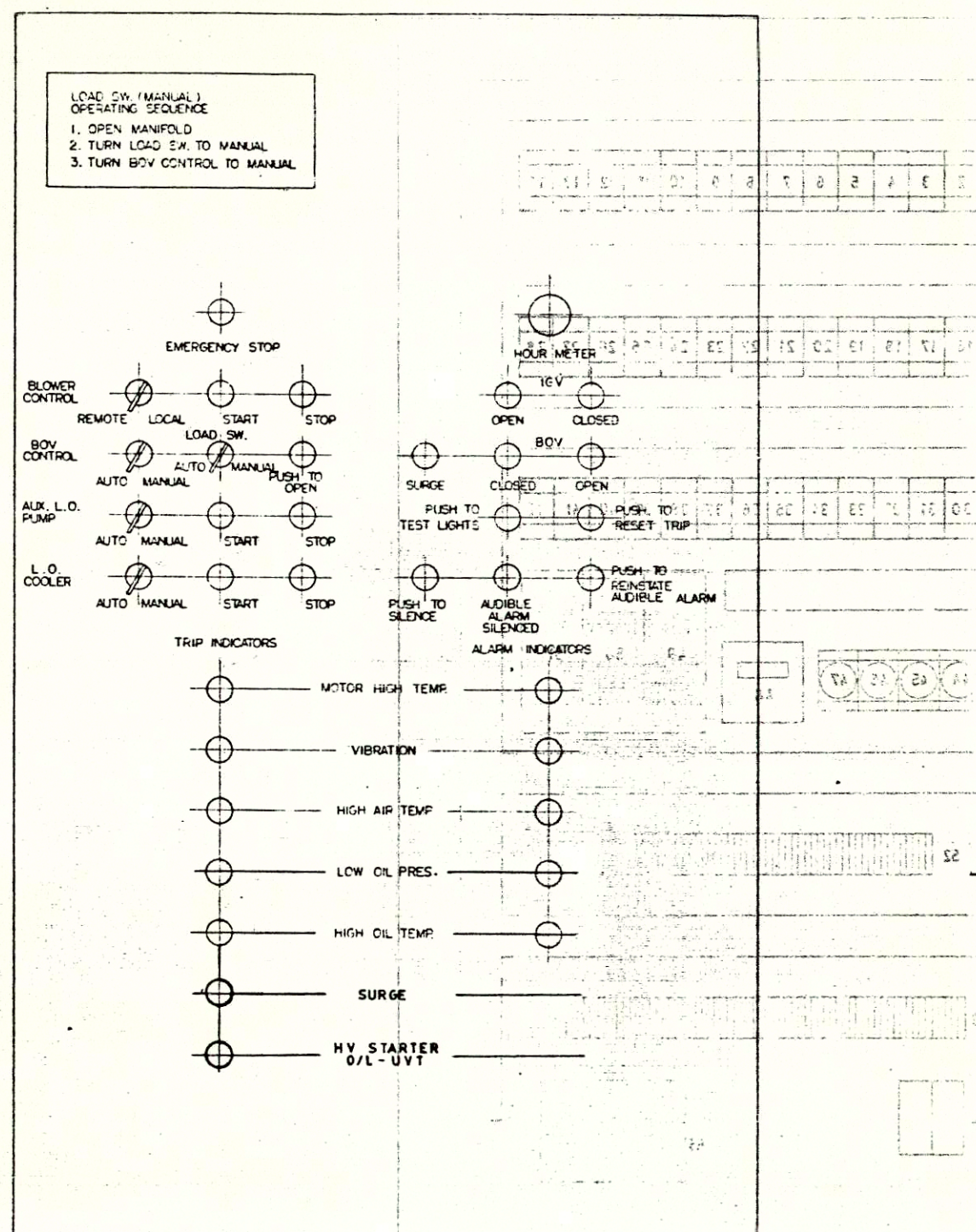
JOB No.	DATE	CUSTOMER
		AMPOWER CANADA (1982) LTD.
		ST. CATHARINES, ONTARIO L2M 6S9
TITLE	KEY DIAGRAM BASIC PRINCIPAL OF OPERATION COMPRESSOR CONTROL PANEL	
SCALE	DATE FEB. 4, 86	DRAWN BY E. C.
		APPROVED BY
Dwg. No.	E 39313	REV. 1
SHEET	3 OF 4	

DO NOT SCALE THIS DRAWING

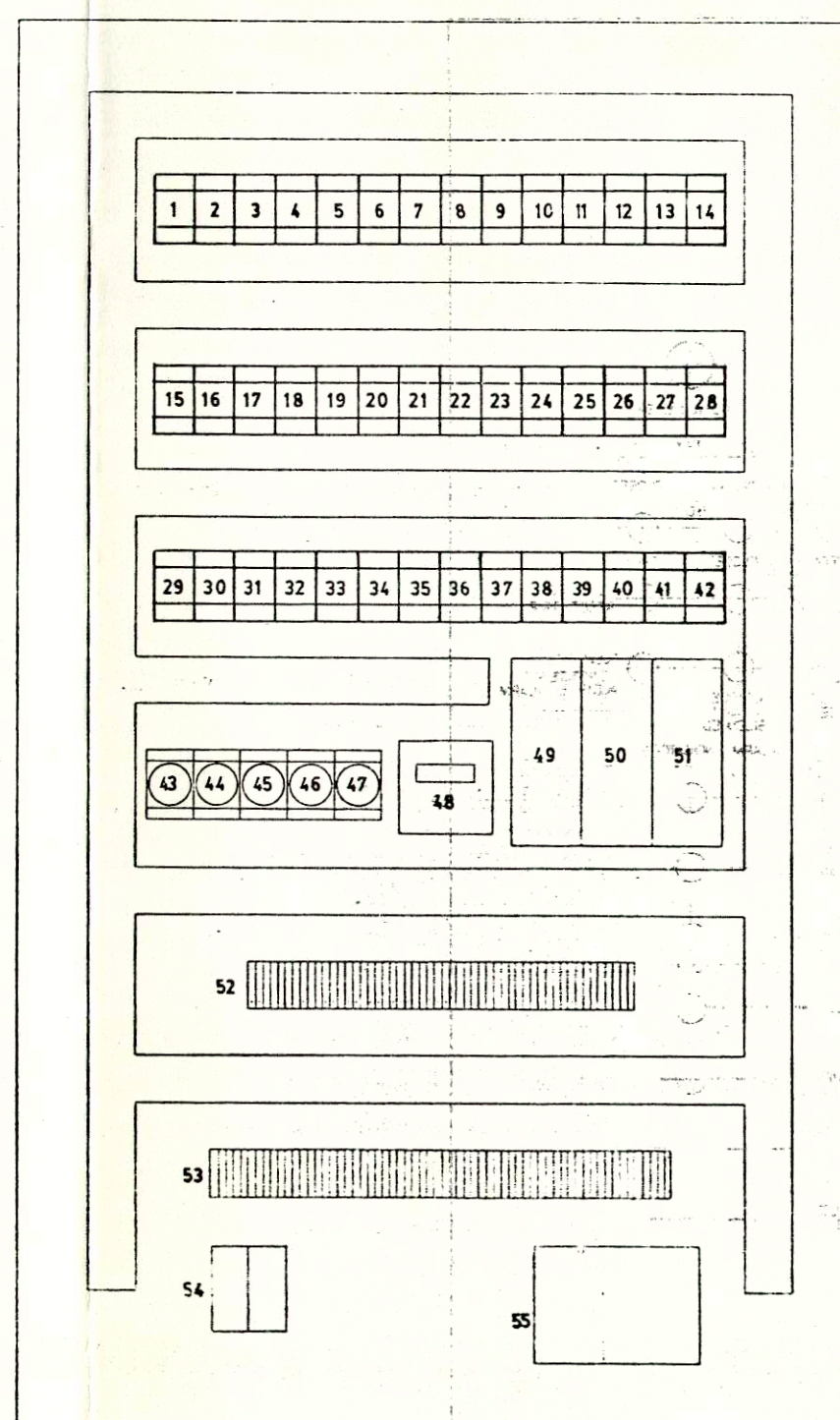








DOOR



PAN

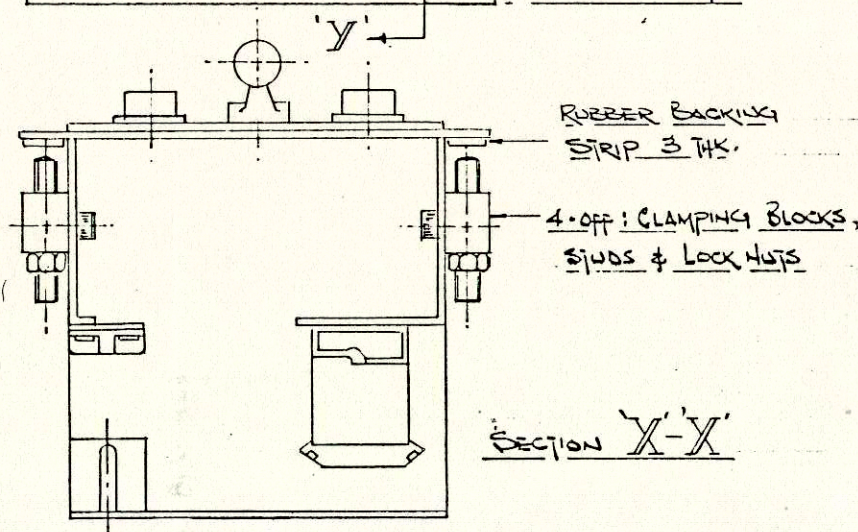
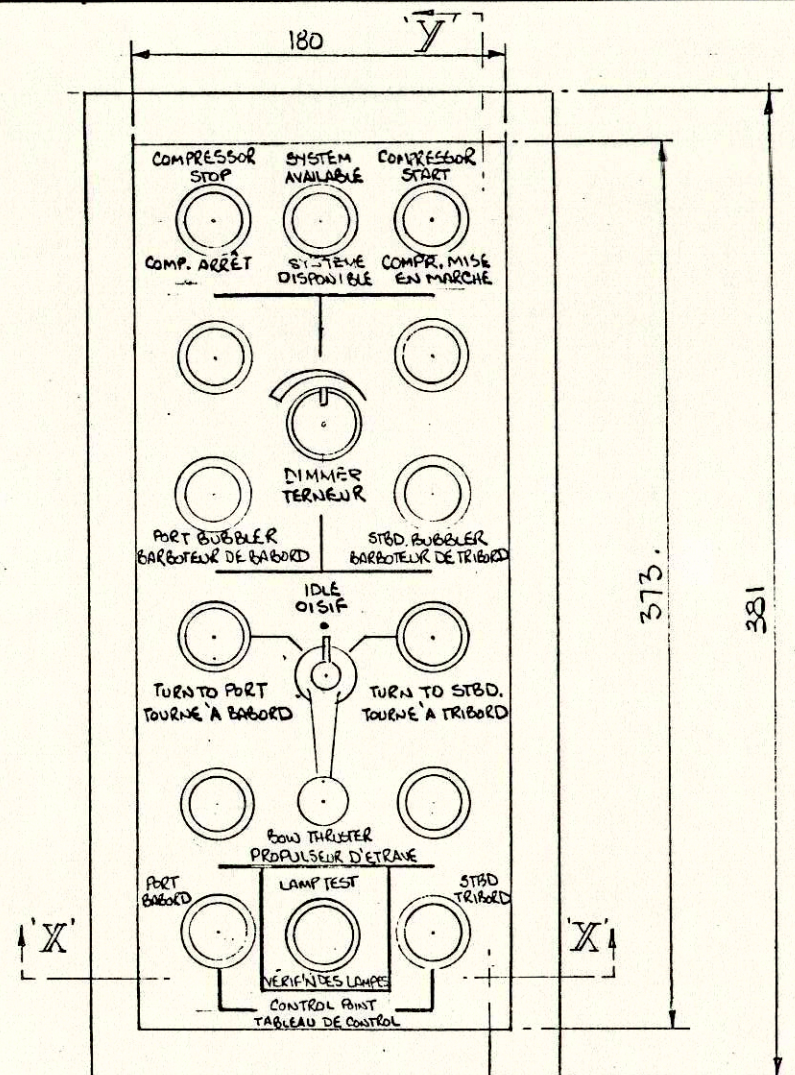
# LEGEND

1. SCR START CONTROL RELAY
2. R1 RELAY ONE
3. R2 RELAY TWO
4. R3 RELAY THREE
5. T4CR1 TIMER FOUR CONTROL RELAY ONE
6. R4 RELAY FOUR
7. VICTR1 VIBRATION TRIP RELAY ONE
8. VICTR2 VIBRATION TRIP RELAY TWO
9. VIGAR VIBRATION ALARM RELAY
10. ATTP AIR TEMPERATURE TRIP RELAY
11. ATAP AIR TEMPERATURE ALARM RELAY
12. PTOTP MAIN MOTOR RTD TRIP RELAY
13. STAKE SPARE RELAY
14. PTODAR MAIN MOTOR ALARM RELAY
15. IGWCF INLET GUIDE VANE CONTROL RELAY
16. INWSP INLET GUIDE VANE SURGE RELAY
17. DUVR BLOW OFF VALVE RELAY
18. OTTR OIL TEMPERATURE TRIP RELAY
19. CTA OIL TEMPERATURE ALARM RELAY
20. OPTP1 OIL PRESSURE TRIP RELAY ONE
21. OPTP2 OIL PRESSURE TRIP RELAY TWO
22. LOPR LOW OIL PRESSURE ALARM RELAY
23. TRP1 TRIP RESET RELAY ONE
24. TRP2 TRIP RESET RELAY TWO
25. TLR1 LAMP TEST RELAY ONE
26. TLR2 LAMP TEST RELAY TWO
27. TLR3 LAMP TEST RELAY THREE
28. STOL STARTER OVERLOAD AND UNDERVOLTAGE RELAY
29. TLR4 LAMP TEST RELAY FOUR
30. TLR5 LAMP TEST RELAY FIVE
31. R5 RELAY FIVE
32. R6 RELAY SIX
33. IR COMPRESSOR FULL LOAD RELAY
34. R7 RELAY SEVEN
35. BOVO BLOW OFF VALVE OPEN RELAY
36. R8 RELAY EIGHT
37. HR HORN RELAY
38. SIL HORN SILENCE RELAY
39. SCCR SURGE COUNT CONTROL RELAY
40. R9 RELAY NINE
41. R10 RELAY TEN
42. T4CR2 TIMER FOUR CONTROL RELAY TWO
43. T1 TIMER ONE - LUBE OIL COOLER STARTER - DELAY OFF 10 MIN.
44. T4 TIMER FOUR - MAIN MOTOR CONTACTOR MAKE - DELAY ON 15 SEC.
45. T5 TIMER FIVE - AUX. LUBE OIL PUMP STARTER - DELAY OFF 60 SEC.
46. T6 TIMER SIX - BLOW OFF V/V DELAY CLOSE ON SURGE - DELAY OFF 15 SEC.
47. T7 TIMER SEVEN - SURGE COUNTER RESET - DELAY ON 1 MIN 45 SEC
48. COUNTER DIGITAL COUNTER FOR SURGE
49. SAM'A MAIN MOTOR WINDING RTD AMPLIFIER PHASE 'A'
50. SAM'B MAIN MOTOR WINDING RTD AMPLIFIER PHASE 'B'
51. SAM'C MAIN MOTOR WINDING RTD AMPLIFIER PHASE 'C'
52. (52)PORT TERMINAL BLOCKS - LEFT TO RIGHT - PORT PANEL  
A.C.H1.N.H1.N.190.191.192.193.200.205.206.151.152.80.81.186.187.84.85.H1.N.H1.N.H1.N.P1.P2.P3.P4.P5.51.52.62.63.64.65.66.67.68.69.N.14.15.16.21.22.23.44.45.46.47.276.277.278
53. (53)PORT TERMINAL BLOCKS - LEFT TO RIGHT - PORT PANEL  
48.51.52.53.54.55.26.27.28.29.30.31.32.33.34.58.59.60.61.70.71.72.73.74.75.76.78.79.82.83.67.10.11.12.13.56.57.90.91.8.9.17.18.19.20.88.89.86.87.35.36.37.38.39.40.41.42.43.44.45.46.47.48
52. (52)STBD TERMINAL BLOCKS - LEFT TO RIGHT - STBD PANEL  
A.C.H1.N.H1.N.H1.N.194.195.196.197.203.204.207.208.156.157.80.81.186.187.84.85.90.91.N.H1.N.P1.P2.P3.P4.P5.51.52.62.63.64.65.66.67.14.15.16.21.22.23.44.45.46.47.48.55.56.51.52.53.54.55.60.61.58.59
53. (53)STBD TERMINAL BLOCKS - LEFT TO RIGHT - STBD PANEL  
35.36.37.38.39.40.41.42.43.26.27.28.29.30.31.32.33.34.68.69.70.71.72.73.74.75.76.77.78.79.82.83.67.10.11.12.13.56.57.8.9.17.18.19.20.86.87.88.89.4.5.6.7
54. F1 & F2 AC PANEL SUPPLY FUSES
55. 24VDC POWER SUPPLY FOR SAM'S 'A', 'B', & 'C'

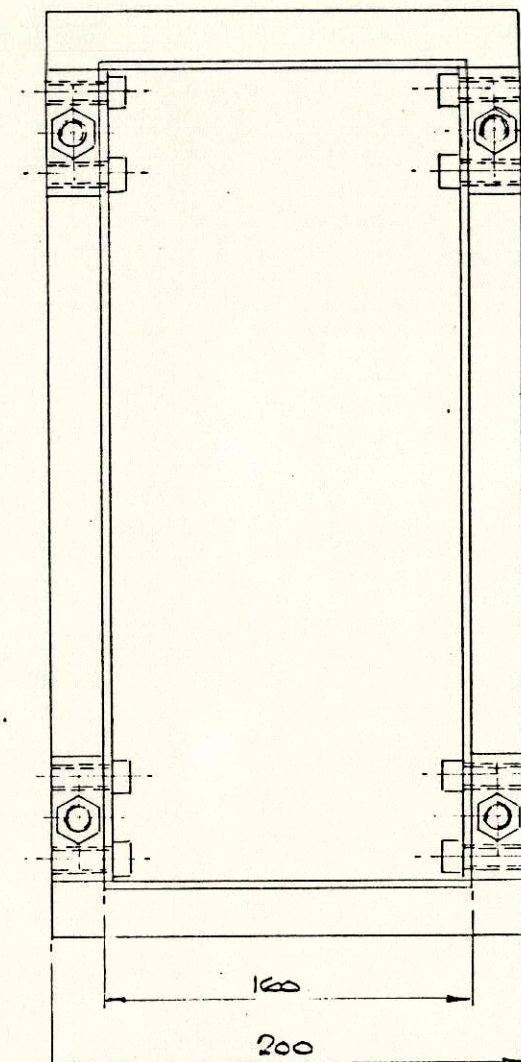
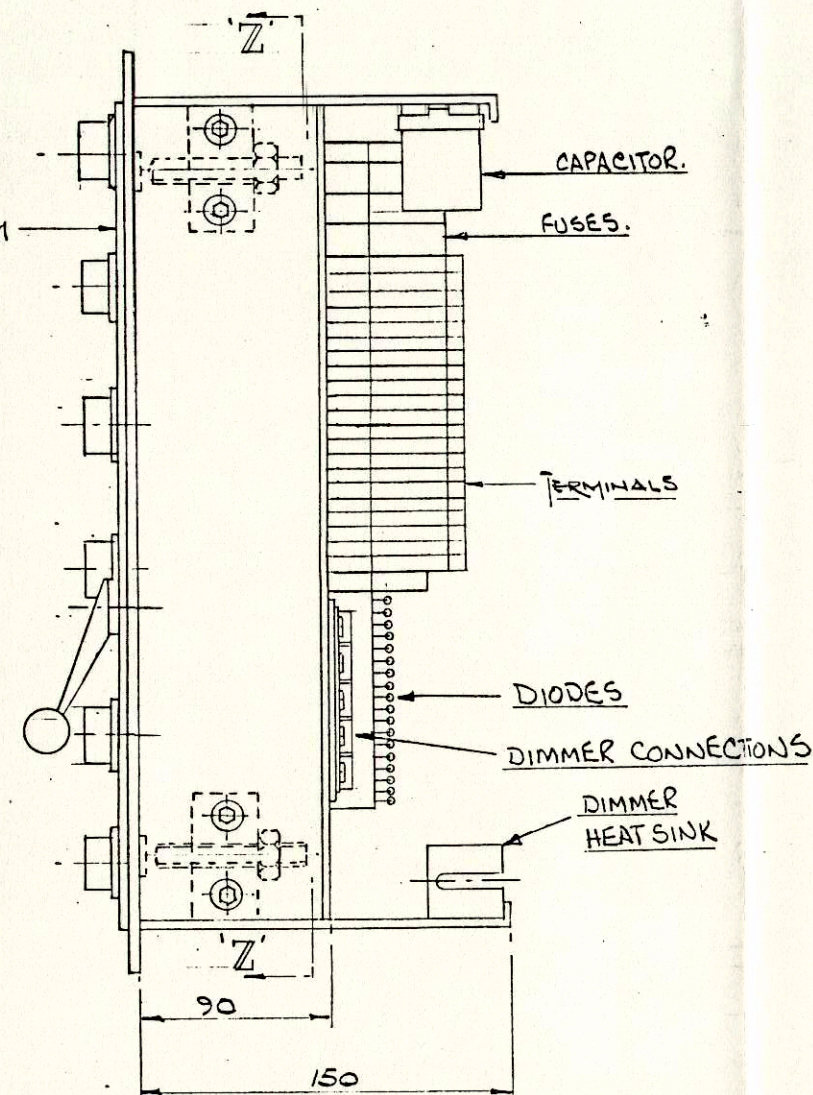
4491 AB	1986	VERSATILE PACIFIC SHIPYARDS INC.	MILL 110
JOB NO.	DATE	CUSTOMER	
TITLE		AMPOWER CANADA (1982) LTD.	
LOCAL CONTROL PANEL LAYOUT		ST. CATHARINES, ONTARIO, L2M 6S9	
DOOR / PAN		Dwg. No. ACS-001-29 D	
SCALE		DATE	REV. 2
2 APR 87		DRAWN BY	ARMONA
2 APR 87		APPROVED BY	
1 MAR 86		REVISIONS	
NO.		DATE	
2 APR 87		TERMINAL IN CHANGES	
2 APR 87		RED RELAYS STOL & SPARE	
1 MAR 86		WARNING LABEL	

DO NOT SCALE THIS DRAWING





MIMIC DIAGRAM

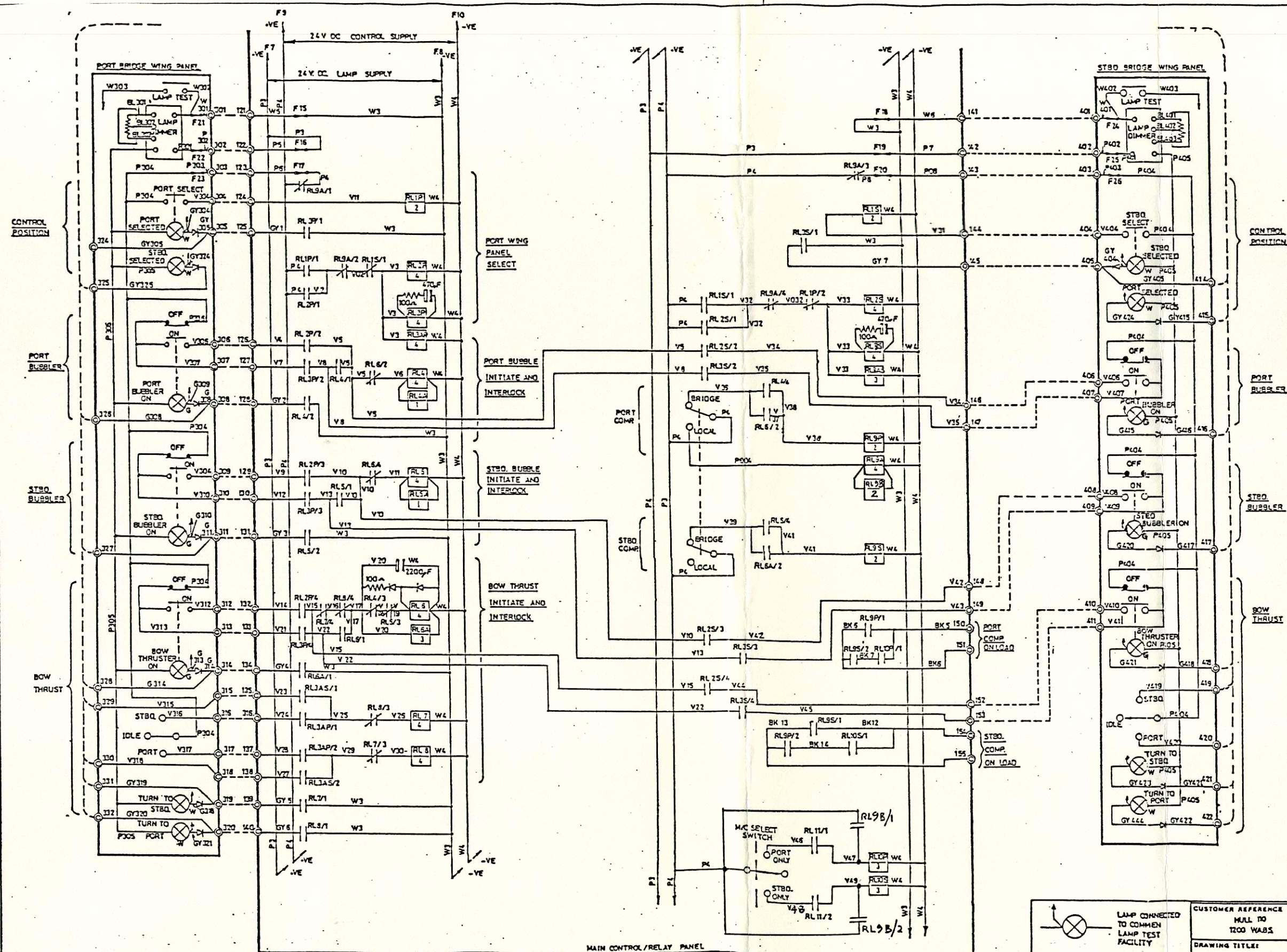


REVISIONS
1 ORIGINAL ISSUE
ISSUE 2: MOD. P. 501, CUSTOMER REQ. (MIMIC LAYOUT) 29.4.85
ISSUE 3: MOD. BOW THRUST ON/OFF PUSH BUTTONS ADDED 21.29.4.85
ISSUE 4: MOD. TO BE 'AS FITTED'. CLR 12-2-86.



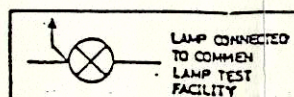
CUSTOMER REFERENCE <u>BURRARD-YARROW CORPN.</u> <u>1200-NAVAIDS.</u>		YCC REFERENCE <u>5128YCC/-</u> <u>-/C85-04-0256</u>		THIS DRAWING IS THE PROPERTY OF YCC INC AND IS CONFIDENTIAL AND IS NOT TO BE COPIED OR DISCLOSED TO THIRD PARTIES WITHOUT THE CONSEN OF THE PROPRIETORS.	
DRAWING TITLE: <u>GEN. ARRGT. OF MIMIC DIAGRAM &amp;</u> <u>DROP IN PANEL ASSEMBLY.</u>					
SCALE: <u>N.T.S.</u>					
YOUNG & CUNNINGHAM CANADA INC. ST. CATHRINES, ONTARIO.			BY	DATE	DRAWING No.  <u>V15215/4 /A2</u>
		DRAWN	<u>D.S.</u>		
		TRACED			
		CHECKED			





WIRING COLOUR CODE  
 P=PINK  
 W=WHITE  
 V=VIOLET  
 G=GREEN  
 GT=GREY

CONNECTIONS BETWEEN PORT & STBD WING PANELS		
PORT TERMINAL NUMBER		STBD TERMINAL NUMBER
324	FROM	415
325	"	414
326	"	418
327	"	417
328	"	418
329	"	419
330	"	420
331	"	421
332	"	422

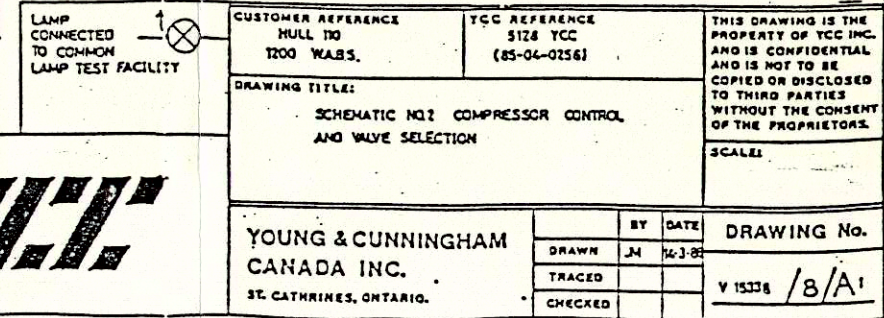


REVISIONS  
 1 ORIGINAL ISSUE  
 ISSUE 6- WIRING COLOUR CODE ADDED IN W388  
 ISSUE 7- RELAY RL9B ADDED PLUS CIRCUIT CHANGE ATTACHED TO M/C SELECT SW & RL10P & RL10S JES. 2.6.87.



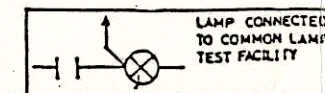
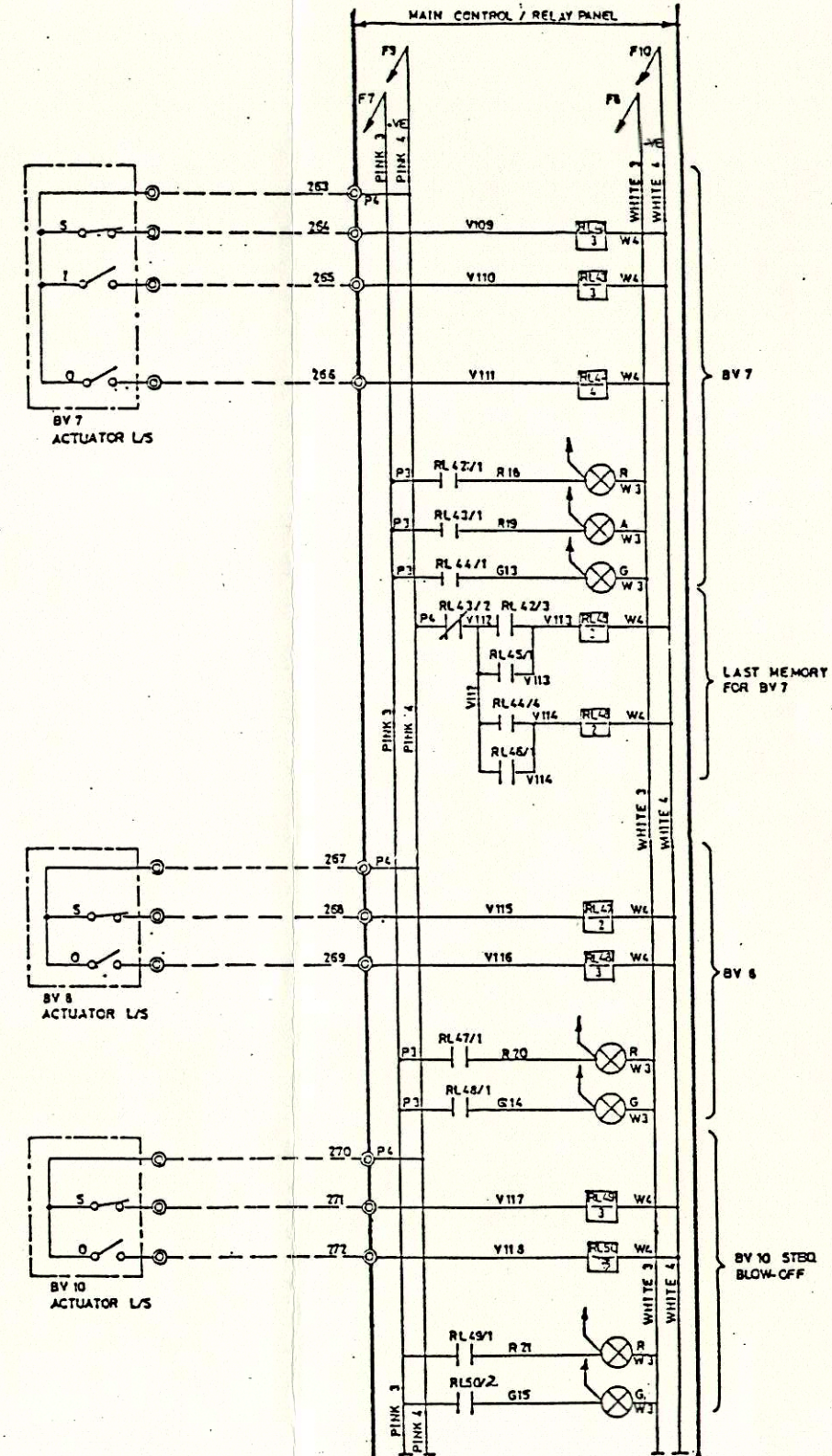
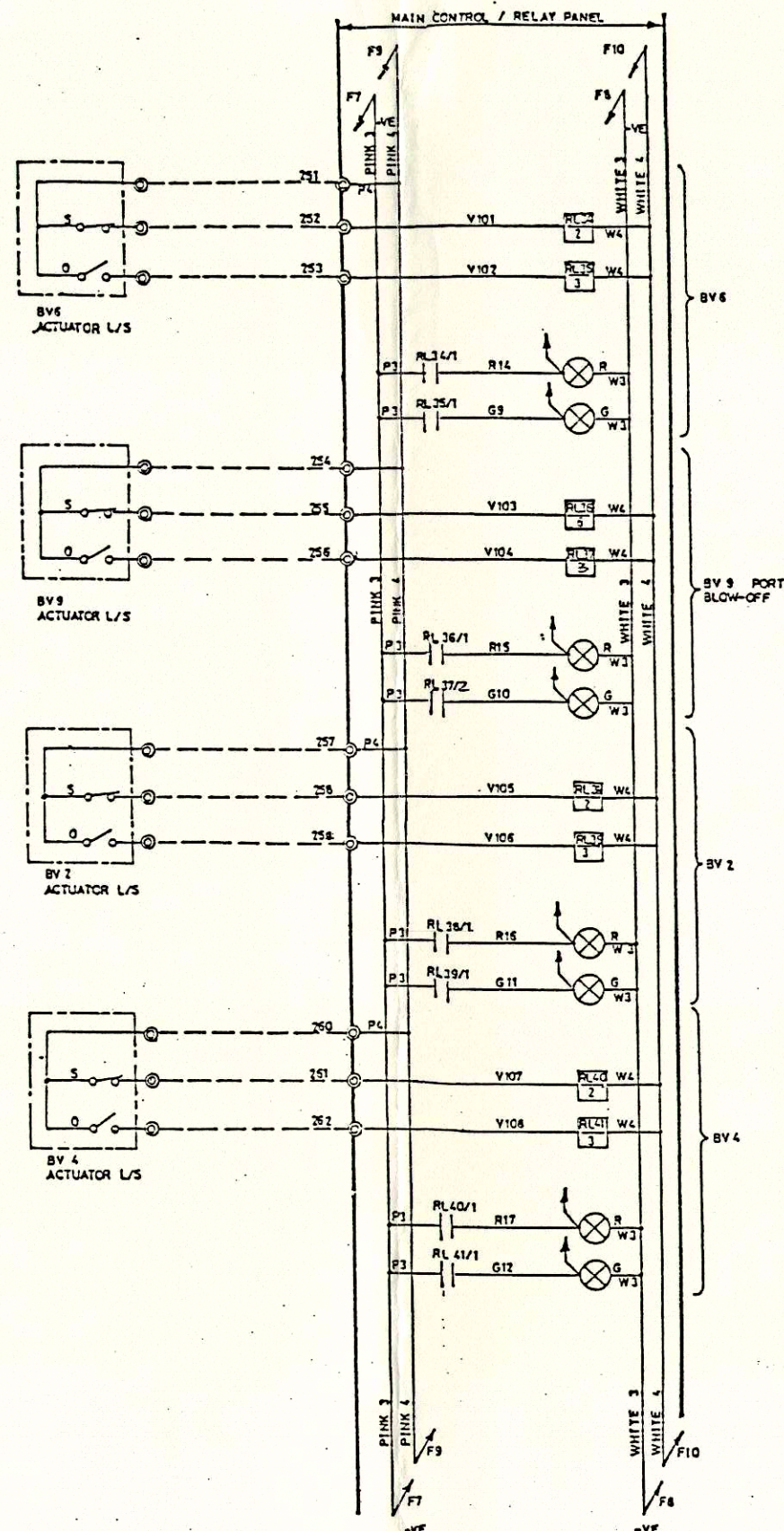
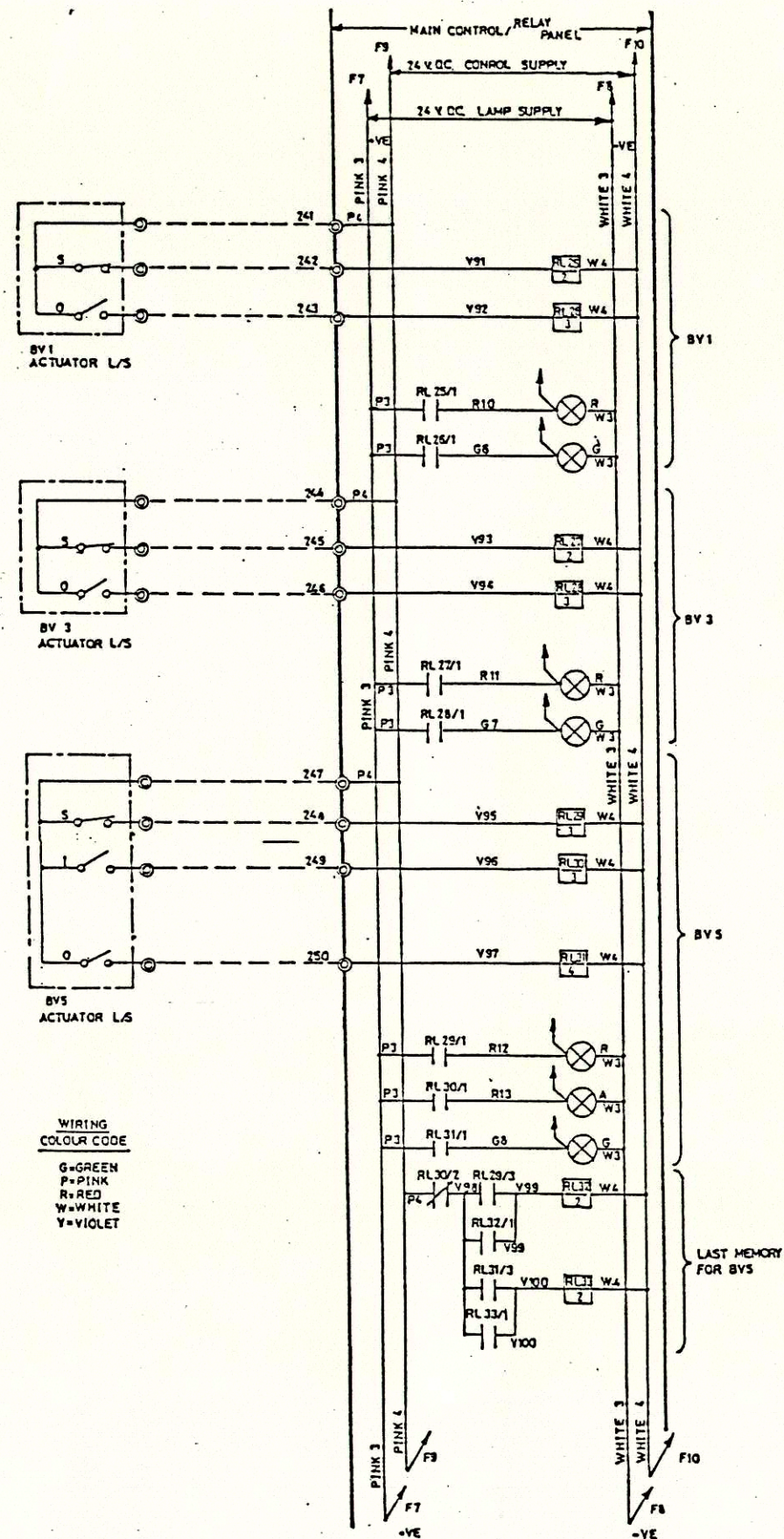
CUSTOMER REFERENCE MALL RD 1200 WABS	Y&C REFERENCE S128 YCC (85-06-0756)	THIS DRAWING IS THE PROPERTY OF Y&C INC. AND IS CONFIDENTIAL AND IS NOT TO BE COPIED OR DISCLOSED TO THIRD PARTIES WITHOUT THE CONSENT OF THE PROPRIETORS.
DRAWING TITLE: SCHEMATIC N°1 BRIDGE WING PANEL CONTROL BUBBLE & BOW THRUST INITIATE		
YOUNG & CUNNINGHAM CANADA INC. ST. CATHERINES, ONTARIO.		DRAWING NO. V 15337 / 7 / A1





REVISIONS	1 ORIGINAL ISSUE	ISSUE 6-- WIRING CODE ADDED. JM 4386	ISSUE 7-- RJ374 & HJ 50A CHANGED TO MC TO COMPLY WITH REV 6 EXCEPT 39313 RJV 511.10F 1 JM 0526	1 ISSUE 8. EMERGED, STOP P/B ADDED TO P/S COMP. CONTROL PANELS # ASS 2 CIRCUIT CHANGED JCB 4-5-87
-----------	------------------	--------------------------------------	--	---



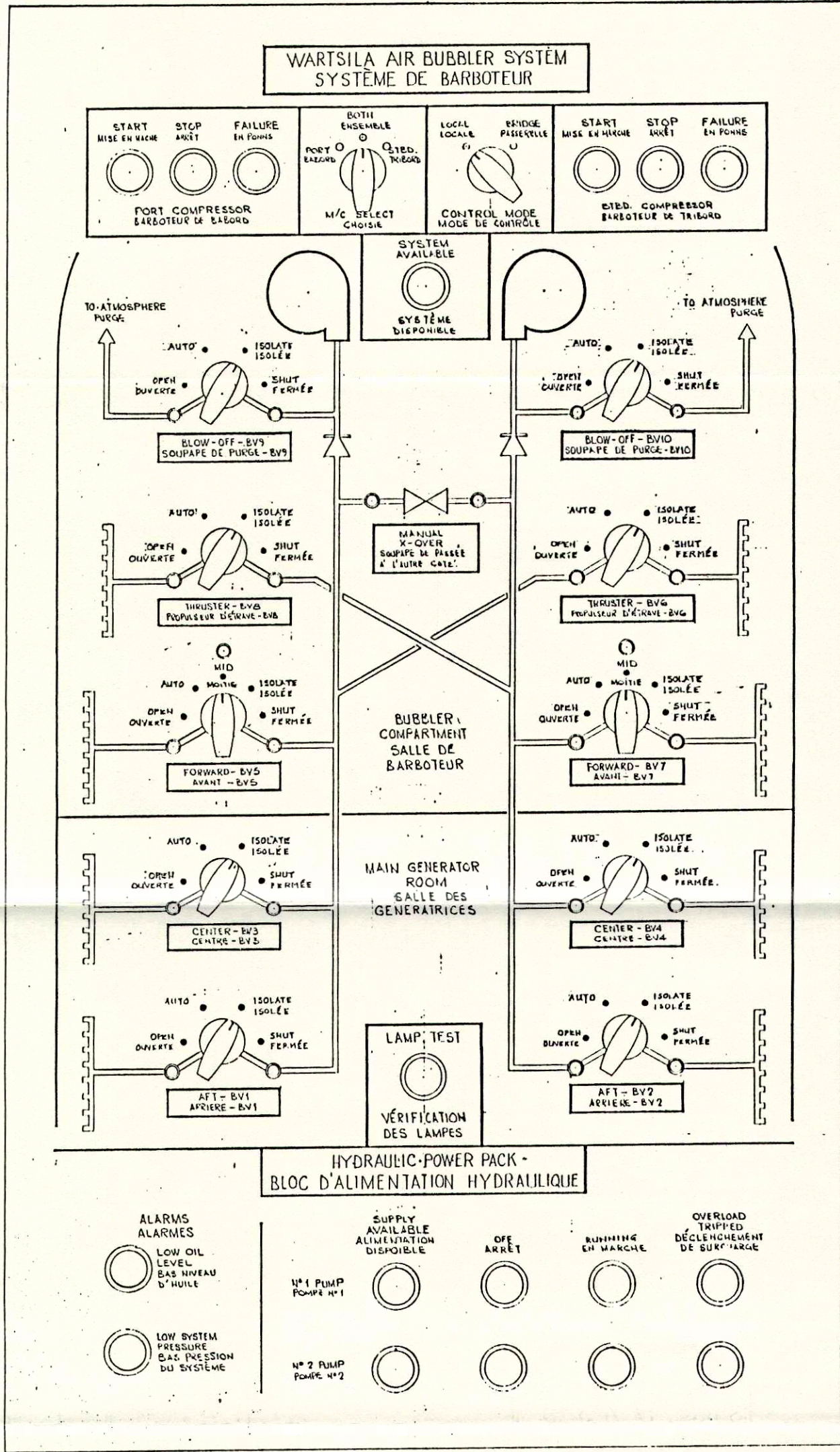


CUSTOMER REFERENCE HULL NO 1200 W.A.B.S.	YCC REFERENCE 5128 YCC (C55-04-0256)	THIS DRAWING IS THE PROPERTY OF YCC INC. AND IS CONFIDENTIAL AND IS NOT TO BE COPIED OR DISCLOSED TO THIRD PARTIES WITHOUT THE CONSENT OF THE PROPRIETORS.
DRAWING TITLE: SCHEMATIC NO.4, VALVE INDICATION & INTERLOCK.	SCALE:	
YOUNG & CUNNINGHAM CANADA INC. ST. CATHARINES, ONTARIO.	BY DATE	DRAWING No. Y15340/6/A1

REVISIONS	1 ORIGINAL ISSUE
ISSUE 1: WIRING CODE ADDED	JN 17/2/86
ISSUE 2: RL37 & RL38 CONTACT PREFIX CHANGED	183 45.97



REVISIONS	
1	ORIGINAL ISSUE
2	Change 11 Lamp
3	Change 11 Lamp
4	Change 11 Lamp
5	Change 11 Lamp
6	Change 11 Lamp
7	Change 11 Lamp
8	Change 11 Lamp
9	Change 11 Lamp
10	Change 11 Lamp
11	Change 11 Lamp
12	Change 11 Lamp
13	Change 11 Lamp
14	Change 11 Lamp
15	Change 11 Lamp
16	Change 11 Lamp
17	Change 11 Lamp
18	Change 11 Lamp
19	Change 11 Lamp
20	Change 11 Lamp



1/2" Scale - 1/2" = 1' - 1/2" = 1' - 1/2" = 1'



SEE DET. ON: WARTSILA MIMIC ELECTRICAL PANEL.	
CUSTOMER REFERENCE	WARTSILA
DRAWING TITLE	WARTSILA
DATE	1985-04-02
BY	WARTSILA
CHECKED	WARTSILA
APPROVED	WARTSILA
SCALE	N.T.S.
DRAWING NO.	WARTSILA/3/A0
YOUNG & CUNNINGHAM	
CANADA INC.	
1000 SHEPPARD AV. E.	
SCARBOROUGH, ONTARIO	



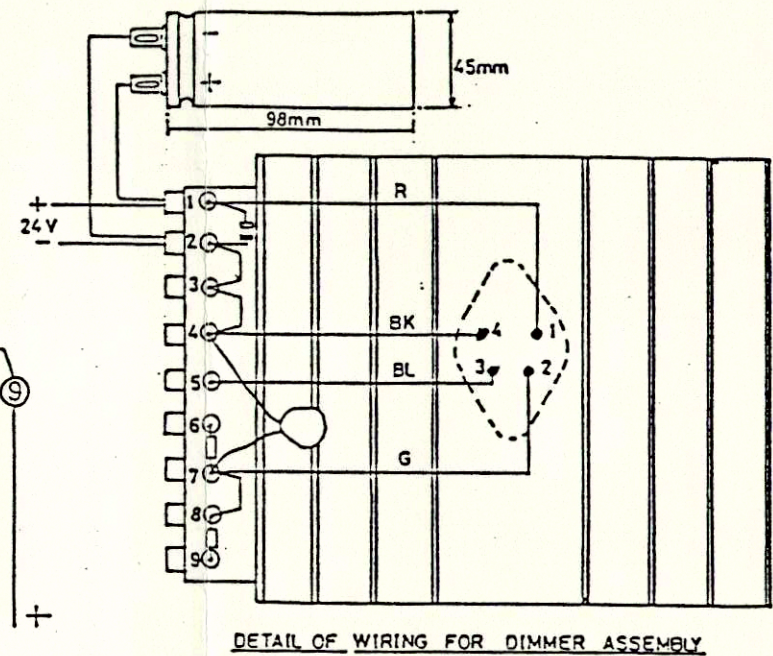
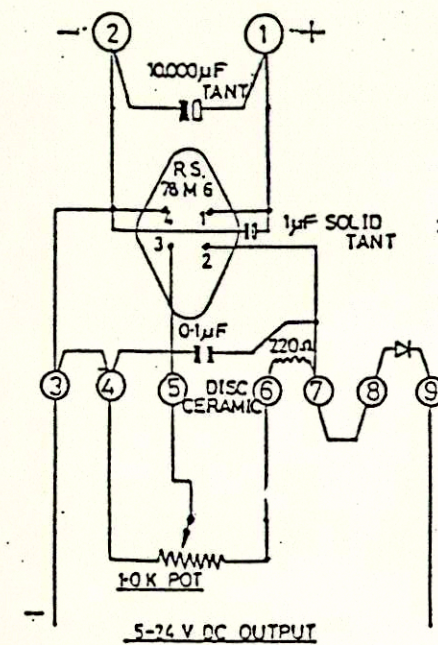
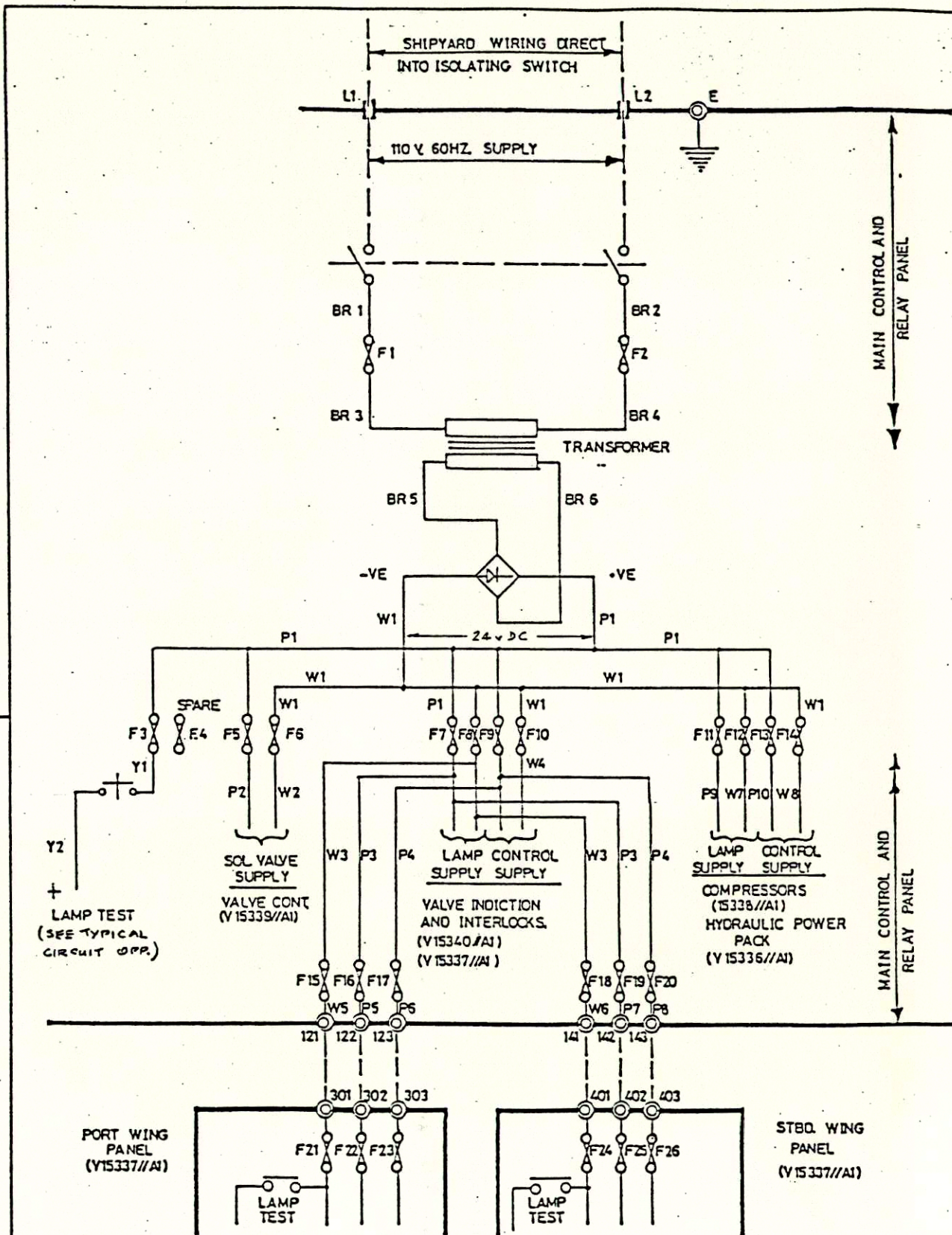
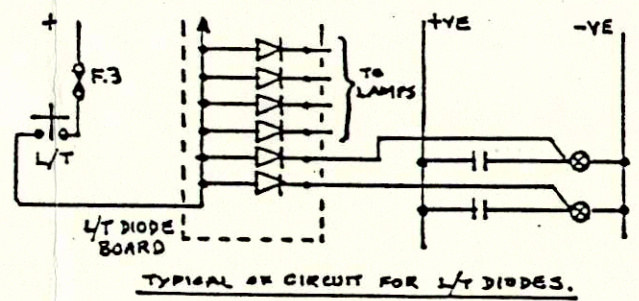


TABLE OF FUSES			
REF.	CONTINUOUS RATING.	TYPE	
F1	10.0A	NIT	GEC R520
F2	10.0A	"	"
F3	4.0A	KLIPPON	SAKSI
F4	SPARE	"	"
F5	6.3A	"	"
F6	6.3A	"	"
F7	4.0A	"	"
F8	4.0A	"	"
F9	4.0A	"	"
F10	4.0A	"	"
F11	4.0A	"	"
F12	4.0A	"	"
F13	4.0A	"	"
F14	4.0A	"	"
F15	4.0A	"	"
F16	4.0A	"	"
F17	4.0A	"	"
F18	4.0A	"	"
F19	4.0A	"	"
F20	4.0A	"	"
F21	4.0A	"	"
F22	4.0A	"	"
F23	4.0A	"	"
F24	4.0A	"	"
F25	4.0A	"	"

WIRING COLOUR CODE	
BR	BROWN
W	WHITE
P	PINK
Y	YELLOW
R	RED
BK	BLACK
BL	BLUE
G	GREEN

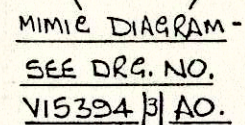


REVISIONS	
1	ORIGINAL ISSUE
2	ISSUE 2 10000µF CAPACITOR ADDED. ALSO 1µF MOVED DOWN JM 10-4-86
3	ISSUE 3 LAMP TEST DIODE DETAIL ADDED J.M. 21.5.87



CUSTOMER REFERENCE HULL 110 1200 W.A.B.S.		YCC REFERENCE 5128 YCC (C85-04-0256)		THIS DRAWING IS THE PROPERTY OF YCC INC. AND IS CONFIDENTIAL AND IS NOT TO BE COPIED OR DISCLOSED TO THIRD PARTIES WITHOUT THE CONSENT OF THE PROPRIETORS.  SCALE:  —
DRAWING TITLE: <u>SCHEMATIC WIRING DIAGRAM —</u> <u>POWER SUPPLY IN MAIN CONTROL/_</u> <u>RELAY PANEL.</u>				
YOUNG & CUNNINGHAM CANADA INC. ST. CATHRINES, ONTARIO.				
		BY	DATE	DRAWING No.  V15494 / 3 / A2
	DRAWN	GLR	20/7/86	
	TRACED	JM	8/4/86	
	CHECKED			





1829.

76.  $\uparrow$   
2. INTH.

[illegible]

VIEW SHOWING ARRGT.  
OF COMPONENTS ON  
PANEL MOUNTING PCT.

COMPONENT MTG. PLATE.

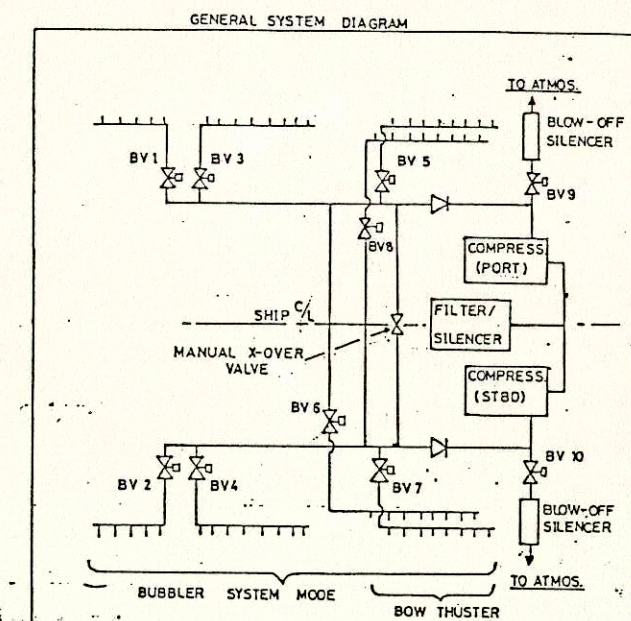
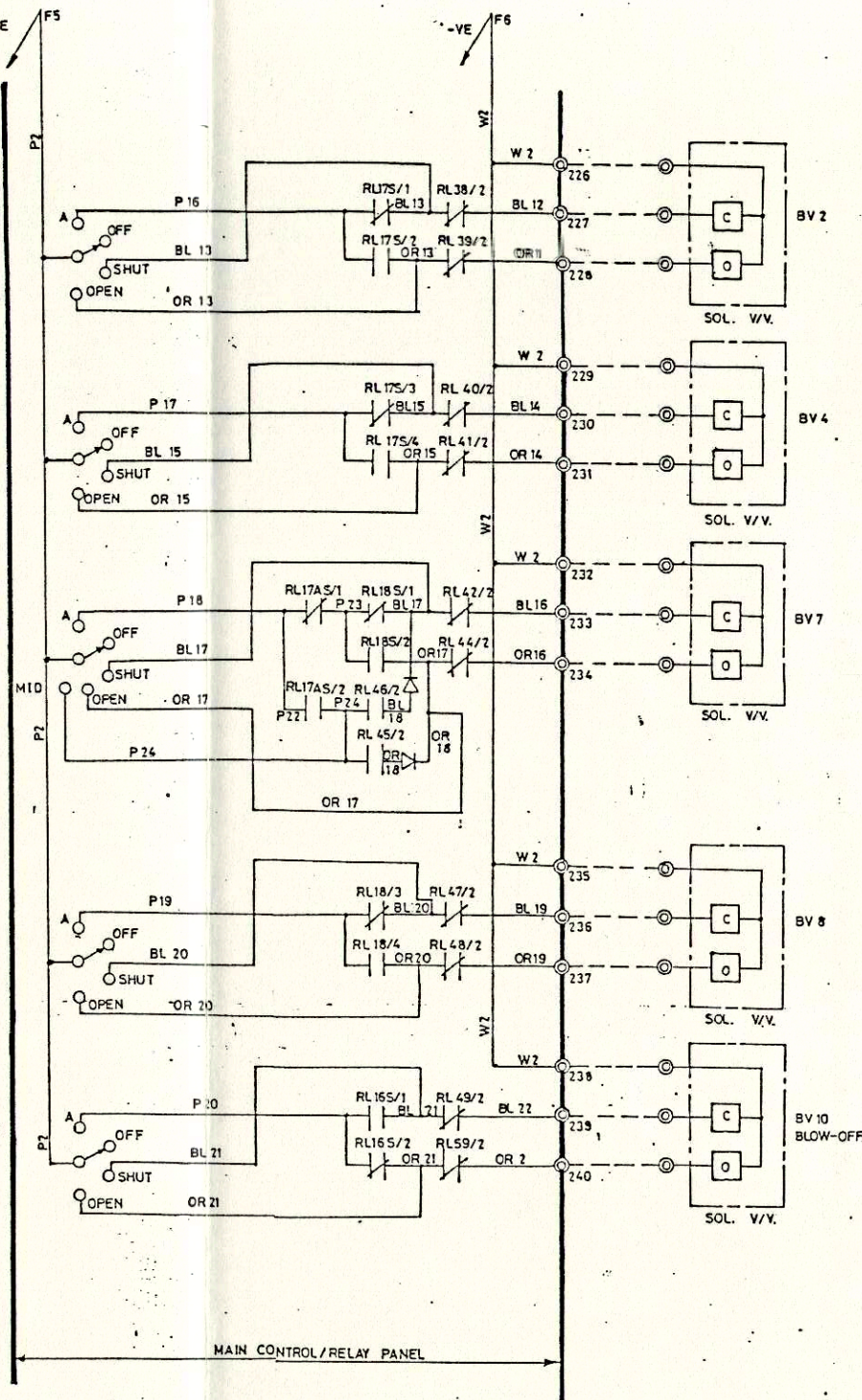
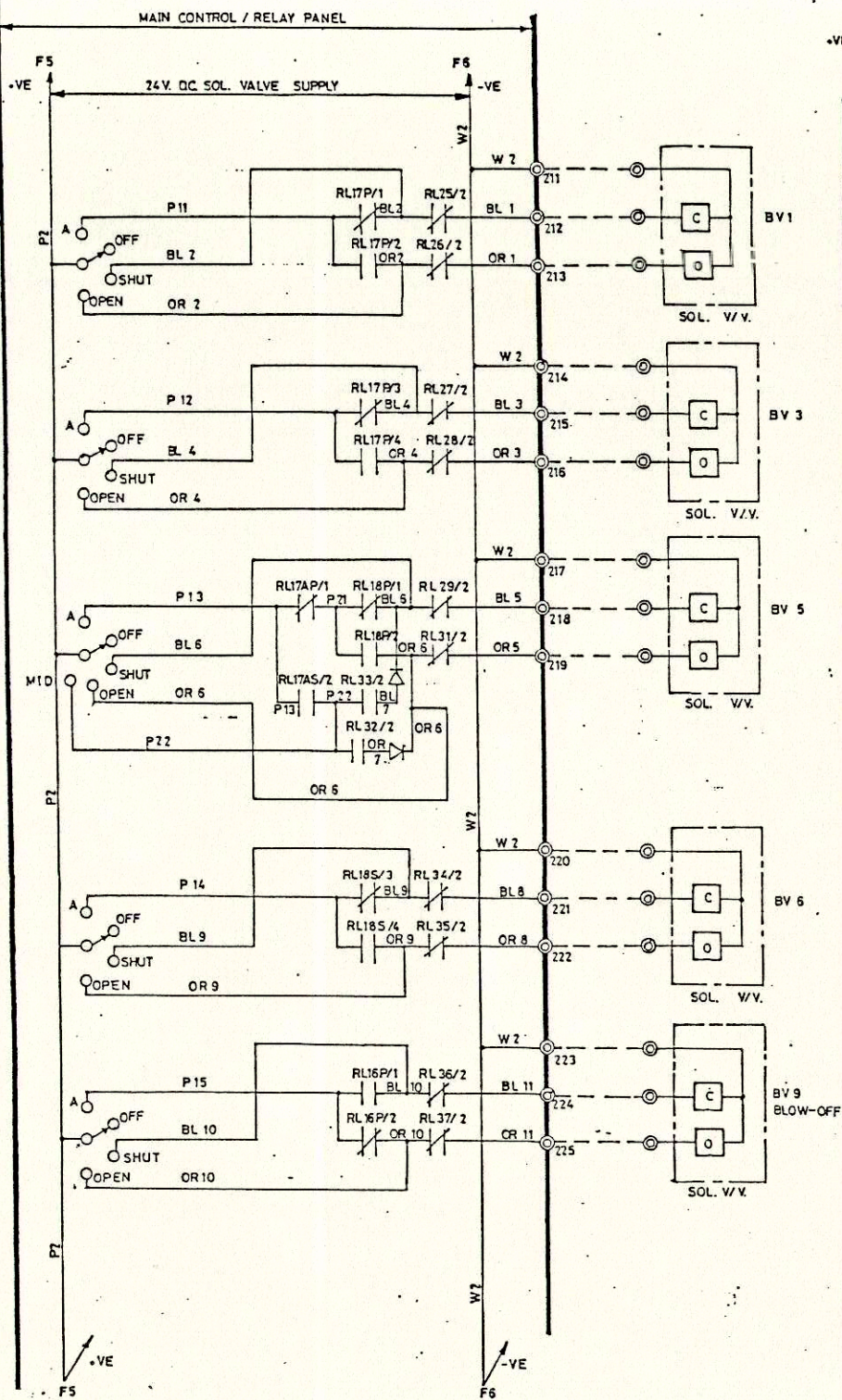
CUSTOMER REFERENCE <u>BURRARD-YARROW CORPN.</u> <u>1200-NAVAIDS.</u>		YCC REFERENCE <u>5128YCC/-</u> <u>-/C85-04-0256.</u>		THIS DRAWING IS THE PROPERTY OF YCC INC. AND IS CONFIDENTIAL AND IS NOT TO BE COPIED OR DISCLOSED TO THIRD PARTIES WITHOUT THE CONSENT OF THE PROPRIETORS.	
DRAWING TITLE: <u>GEN. ARRCT. OF AIR BUBBLER</u> <u>SYSTEM CONTROL PANEL.</u>				SCALE: <u>N.T.S.</u>	
YOUNG & CUNNINGHAM CANADA INC. ST. CATHRINES, ONTARIO.			BY	DATE	DRAWING No. <u>V15504/1/A2</u>
		DRAWN	G.L.R. A.185		
		TRACED			
		CHECKED			

REVISIONS  
ORIGINAL ISSUE

9181JT







REVISIONS  
1 ORIGINAL ISSUE  
ISSUE 5: WIRING  
CODE ADDED  
J.M. 20386



CUSTOMER REFERENCE HULL 110 1200 W.A.S.	YCC REFERENCE 5128 YCC (C85-04-0256)	THIS DRAWING IS THE PROPERTY OF YCC INC. AND IS CONFIDENTIAL AND IS NOT TO BE COPIED OR DISCLOSED TO THIRD PARTIES WITHOUT THE CONSENT OF THE PROPRIETORS.
DRAWING TITLE: SCHEMATIC NO. 1 VALVE CONTROL & INTERLOCK		
YOUNG & CUNNINGHAM CANADA INC. ST. CATHRINES, ONTARIO.	BY DATE DRAWN TRACED CHECKED	DRAWING No. V 15339 / 5 / A1



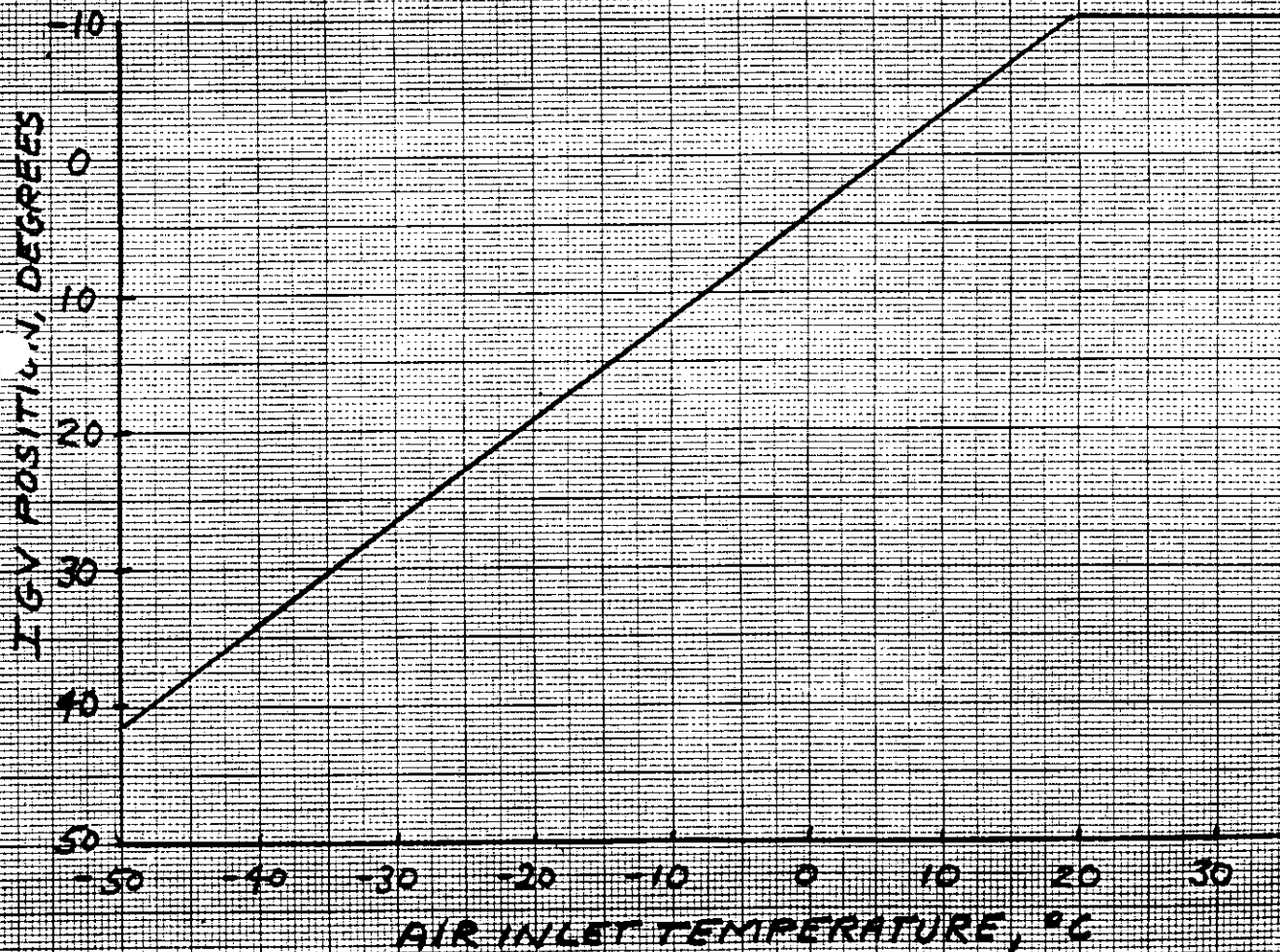
JOB NO. 90615

C7/194

INLET TEMPERATURE TRANSMITTER SETTINGS (FOLLOWING WORKS TEST)

INLET TEMP °C	SIGNAL		MAX IGV POSITION, DEGREES
	VOLTS	%	
18.93	5	100	-10
0	4.31	84.3	4.13
-20	3.71	67.7	19.07
-40	3.04	51.1	34.00
-101.58	1	0	(80)

MAX IGV = -10° (MECH STOP)  
MIN " = 75° ( " " )



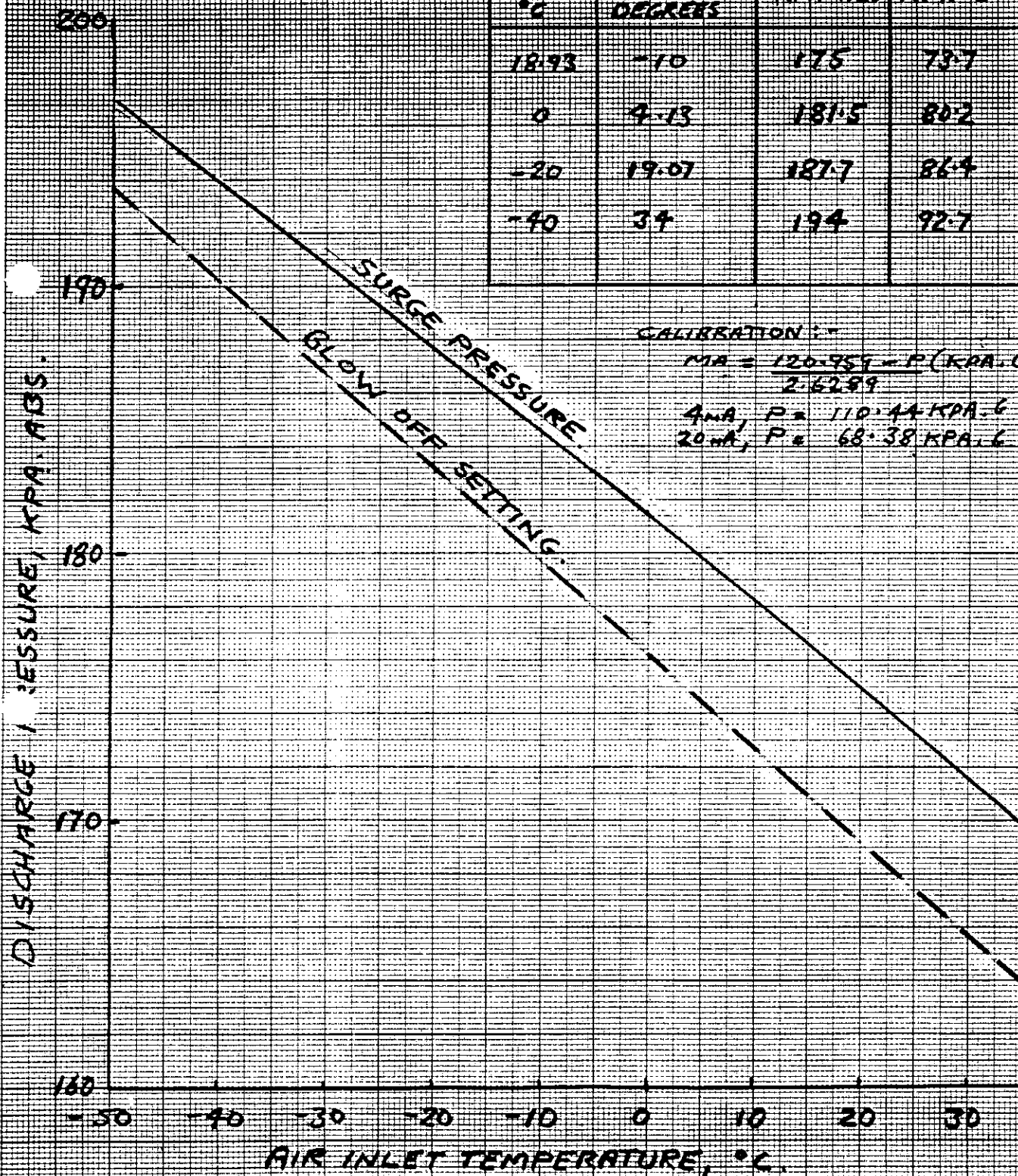


JOB No. 90615

C7/195

PRESSURE TRANSMITTER CALIBRATION - SURGE  
PROTECTION (FOLLOWING WORKS TEST)

INLET TEMP °C	MAX TGV POSITION DEGREES	SURGE PRESS	
		KPA-ABS	KPA-G
18.93	-10	175	73.7
0	4.13	181.5	80.2
-20	19.01	187.7	86.4
-40	34	194	92.7





TC7/196

TEST PERFORMANCE OF COMPRESSOR No. 9006CH-101

RESULTS CORRECTED TO:  
 BAROMETER = 1.013 BAR ABS.  
 INLET PRESSURE = 1.010 BAR ABS.  
 INLET TEMPERATURE = 0°C  
 MOTOR SPEED = 1780 RPM

