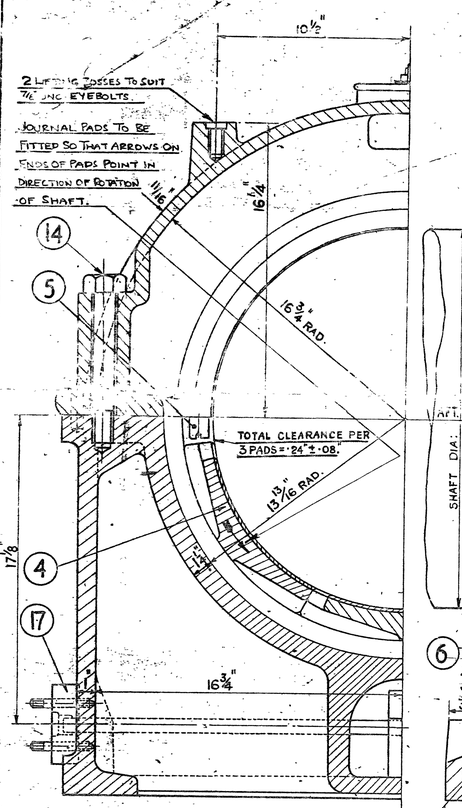
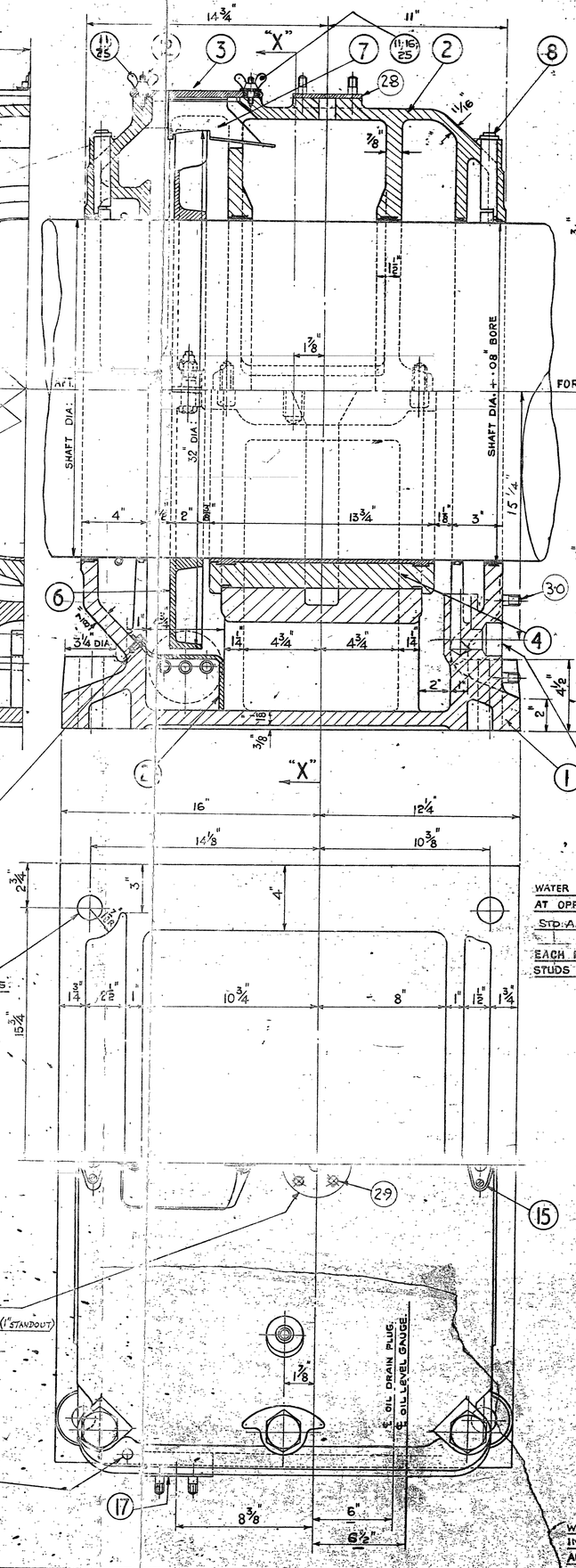


SECTION AT "XX" LOOKING AFT.



TAPPED HOLE TO BE MARKED OFF & DRILLED FROM TUBE GUARD.

4-1 9/16" DIA: HOLES FOR 1½" DIA: HOLDING DOWN BOLTS.

HALF BOLTING PLAN.

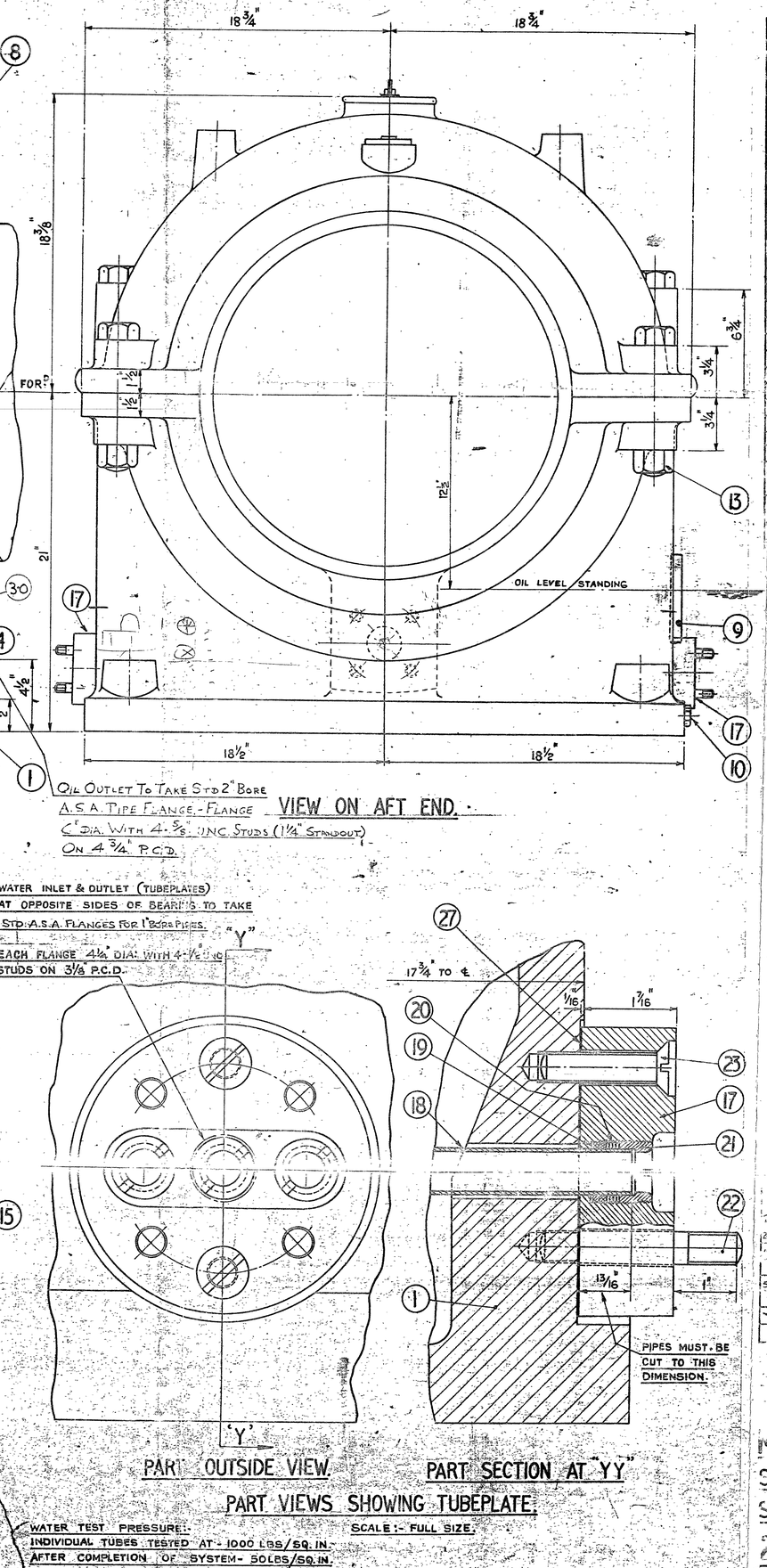
HALF PLAN VIEW.

OIL INLET TO TAKE STD. 1" BORE A.S.A. FLANGE - FLANGE 4¼" DIA WITH 4-½" UNC. STUDS (1" STANDOUT) ON 3⅛" P.C. DIA. FITTED WITH 5/32" BORE RESTRICTION PLATE.

2 HOLES REAMED ⅝ DIA FOR DOWELS DIAGONALLY OPPOSITE EACH OTHER IN THIS POSITION FOR ALL BEARINGS.

Also 2T THG 1427

22MT/44767/2



OIL OUTLET TO TAKE STD 2" BORE A.S.A. PIPE FLANGE - FLANGE 6" DIA. WITH 4-⅝" UNC. STUDS (1¼" STANDOUT) ON 4¾" P.C.D.

VIEW ON AFT END.

WATER INLET & OUTLET (TUBEPLATES) AT OPPOSITE SIDES OF BEARING TO TAKE STD: A.S.A. FLANGES FOR 1" BORE PIPES.

EACH FLANGE 4¼" DIA: WITH 4-⅞" UNC STUDS ON 3⅛ P.C.D.

PART OUTSIDE VIEW.

PART SECTION AT "YY"

PART VIEWS SHOWING TUBEPLATE.

WATER TEST PRESSURE:- INDIVIDUAL TUBES TESTED AT - 1000 LBS/SQ. IN. AFTER COMPLETION OF SYSTEM - 50LBS/SQ. IN.

SCALE:- FULL SIZE.

12. OIL INLET & OUTLET CONNECTIONS MODIFIED. 28TH JUNE 65.

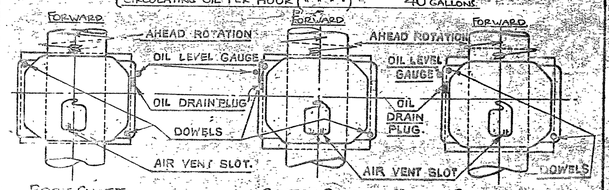
LIST OF PARTS PER BEARING:-

REF	PART Nº	PART NAME	Nº OFF.	MATERIAL	REMARKS.
	D522/504T	CASING BOTTOM. AS DRAWN	1	CAST STEEL	WHITEMETAL LINED.
	D522/504TH	CASING BOTTOM. OPP. HAND			
2	D722/452	CASING TOP.	1	CAST STEEL	WHITEMETAL LINED.
3	F807/57	INSPECTION DOOR.	1	PERSPEX.	
4	218M/22000	JOURNAL PAD	3	GUNMETAL	WHITEMETAL LINED
5	F166/329	JOURNAL PAD STOP	4	MILD STEEL	
6	FB50/1676	OIL THROWER RING	1	ALUM: ALLOY	JOINT BOLTS & NUTS MAY BE UNITED IF MACHINING DONE BY CUSTOMER
7	F57/22	OIL SCRAPER	1	GUNMETAL	
8	FA201/336	OIL DEFLECTOR	2	ALUM: ALLOY	STD. Nº 3/4½
9	FB206/227	OIL LEVEL GAUGE	1	PERSPEX	STD. 4" (UNºP)
10	F235/294	OIL DRAIN PLUG	1	MILD STEEL	STD. ½ N.P.T.
11		WING NUTS	2	MANG. BRONZE	STD. ⅜" UNC
12		STUDS	2	MILD STEEL	STD. ⅜" UNC x 1¾" LONG.
13		JOINT BOLT & NUTS	4	" "	STD. ¼" UNC x 7⅞ LONG.
14		JOINT TAPBOLTS	2	" "	STD. ¼" UNC x 8" LONG.
15		RD. HD. SCREWS	4	" "	STD. 5/16" UNC x ¾" LONG.
16	F290/27	SPRING	1	SPRING STEEL	10 TURNS (TOTAL) x 4·44 MEAN DIA x 21 S.W.G. x 1½ FREE
17	F87/197	TUBEPLATE	2	R.N. BRASS	
18		TUBES	3	CUPRO-NICKEL	EACH ¾" º/DIA. x 18 S.W.G. x 3-1⅞ LONG
19		METALLIC PACKING RING	12		CRANE Nº 801 CN. - ·895 º/º x ¾ º/º - ¼ TH
20		FIBRE PACKING RING	6		CRANE Nº 602 - ·895 º/º x ¾ º/º x 1/8 TH.
21		FERRULES	6	CUPRO-NICKEL	CRANE PACKING LTD. DRG. Nº Z 1938
22		STUDS & NUTS	8	MILD STEEL	STD. ½" UNC. x 3" LONG.
23		CSK. SCREWS.	4	" " "	STD. ½" UNC x 1⅞" LONG.
24	F218/161	TUBE GUARD.	1	" "	SECURED BY (1-⅜ UNC GUNMETAL ⅜" LONG 1-5/16 UNC 5/16" SCREWS WITH PLAIN WASHERS)
25		WASHER	2	MILD STEEL	STD. ⅜" DIA.
26		DOWELS	2	CASEHARDENED MILD STEEL	STD. - 5/8 DIA. x 1⅛" LONG - DRIVING FIT IN CASING BOTTOM, SLIDING IN CASING TOP.
27	F275/372	JOINT.	2	INVINCIBLE JOINTING	
28	F252/258	RESTRICTION PLATE	1	MILD STEEL	
29		OIL INLET STUDS & NUTS	4	" "	½" U.N.C. x 1½" LONG
30		OIL OUTLET " " "	4	" "	⅝" U.N.C. x 1⅞" "

BEARINGS ARE OF THE SELF LUBRICATING, SELF CONTAINED TYPE PROVIDED WITH COOLING TUBES CIRCULATING SEA OR RIVER WATER, & WILL BE OPERATED ON THIS PRINCIPLE FOR NORMAL DUTY. THE GRAVITY CIRCULATING OIL SYSTEM IS FITTED IN ORDER TO ASSIST LUBRICATION & TO MAKE SURE THAT THE BEARINGS ARE PROPERLY LUBRICATED AT BREAKAWAY SPEED AFTER & WHEN THE SHAFTS HAVE BEEN STALLED DUE TO HEAVY ICE CONDITIONS.

OIL CAPACITY OF CASING (APPROX.) 7·5 GALLONS.

SHAFT DIA.		22·0 INS
REVS. PER MIN.		194 MAX.
JOURNAL LOAD	WING SHAFTS / CENTRE SHAFT	14100 / 19660 LBS.
JOURNAL SURFACE (PROJECTED)		276 SQ. INS
JOURNAL PRESSURE.	WING SHAFTS / CENTRE SHAFT	51 / 71 LBS/SQ. IN
DIAMETRAL OIL CLEARANCE		·028 IN.
ALTERNATIVES: HEAT GENERATED (BASED ON CENTRE SHAFT AT MAX R.P.M.)		70 B.T.U/MIN.
ALTERNATIVES: COOLING WATER PER HOUR (" " " ")		90 GALLONS.
ALTERNATIVES: CIRCULATING OIL PER HOUR (" " " ")		40 GALLONS.



FOR 1 SHAFT. ONE BEARING AS DRAWN.

CENTRE SHAFT. ONE BEARING OPPOSITE HAND TO DRAWING.

STAR SHAFT. ONE BEARING OPPOSITE HAND TO DRAWING.

KEY PLAN — TRIPLE SCREW SHIP.

	ORDERS	OR MESS. AS	ENG. OF SHIPS	PER OIL	DATE	REMARKS.
ORDER	6696?	CANADIAN VICKERS LTD.	HULL No.	—	CANADIAN LLOYD	THIS OR ANY OTHER ITEM
24 JUNE 65	67765	" "	-	UNMACHINED CASTINGS OF BEARINGS	OF 3 BEARINGS	OF BEARINGS
19-7-65	7341-3	" "	"	3 BRGS RETURNED FOR CHANGING THE		
"	73441	" "	"	3 BRGS NEEDED TO STOP OIL LEAKS		
5-9-83		" "	"	FOR CCGS LOUIS S ST LAURENT		

MICHELL TUNNEL BEARING.

SELF-LUBRICATING TYPE MT. WATER COOLED BY TUBES.

SCALE:- ¼ SIZE & AS MARKED.

22MT/44767/2

PROTECTED UNDER COPYRIGHT LAWS

MICHELL BEARINGS LTD. NEWCASTLE-UPON-TYNE

DR. TM CH. MC

1/- 1 JUNE 65 — DRAWING FINISHED OFF.

E.O. SEP 1983