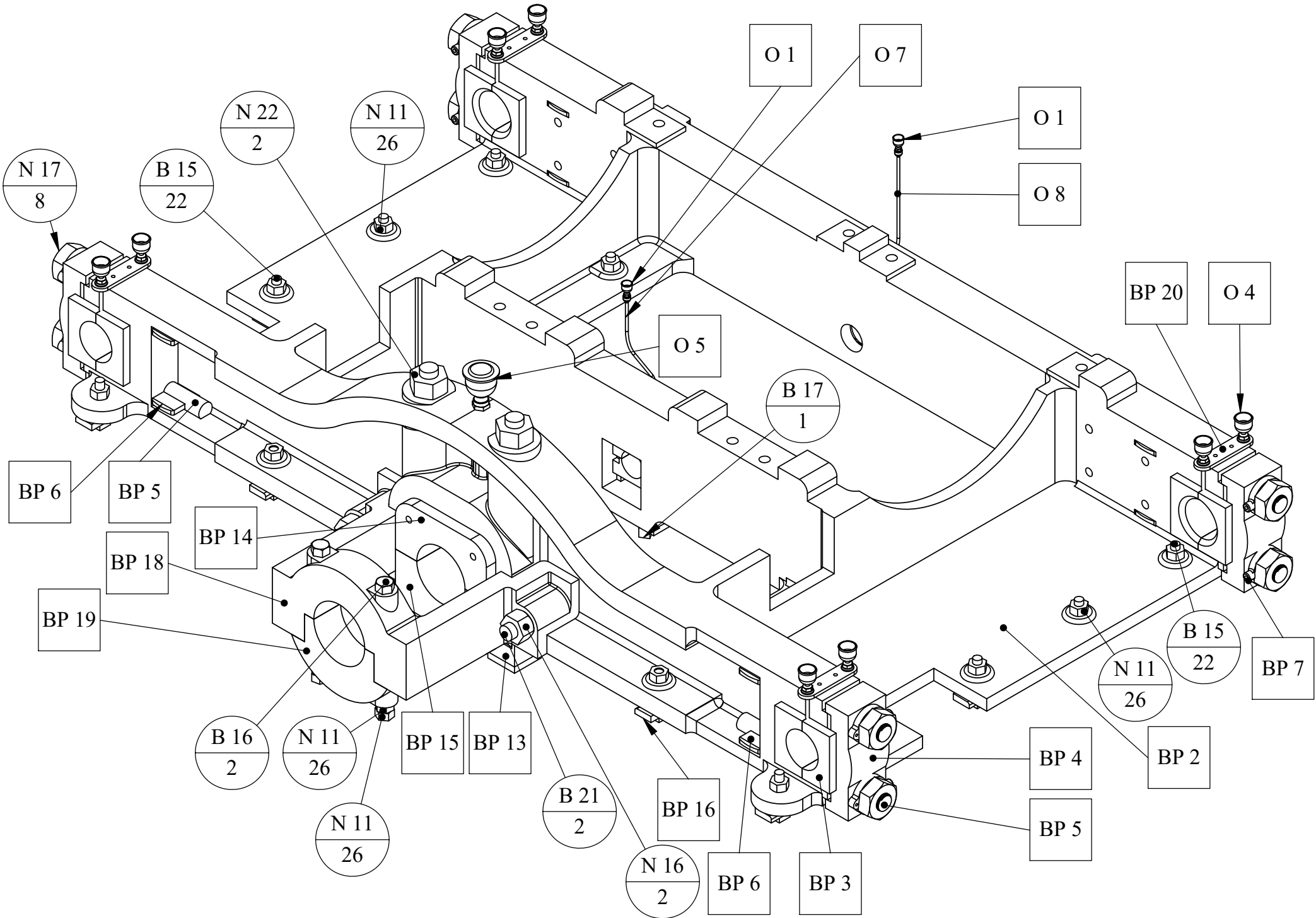


THESE VIEWS SHOW THE BEDPLATE WITH ALL  
FASTENERS FOR MOUNTING TO THE BULKHEADS

U.S.S. Monitor Steam Engine

Material	Drawn By - Date RWC 12-2018	Sub-Assembly BEDPLATE
Weight (Lbs) 12896.31	Description <b>Bedplate Assembly</b>	
Scale 1:20		
Part # <b>BP 1</b>		

PART	DESCRIPTION	QTY.
BP 2	Bedplate	1
BP 3	Rock Shaft Bearing	8
BP 4	Rock Shaft Bearing Cap	4
BP 5	Rock Shaft Bearing Cap Stud	8
BP 6	Rock Shaft Bearing Cap Stud Key	8
BP 7	Bearing Cap-Nut Lock	8
BP 9	Shaft Bearing-Fore A	1
BP 10	Shaft Bearing-Fore B	1
BP 11	Shaft Bearing-Aft-A	1
BP 12	Shaft Bearing Aft-B	1
BP 13	Main Bearing Cap	1
BP 14	Main Bearing-Top	1
BP 15	Main Bearing- Bottom	1
BP 16	Bedplate Bulkhead Washer	22
BP 18	Thrust Bearing Extension Bracket	1
BP 19	Thrust Bearing Extension Bracket Cap	1
BP 20	Bearing Bracket-Oil Cups	4
O 1	Oil Cup- Small	2
O 4	Oil Cup- Large	8
O 5	Oil Cup- Large	1
O 7	Middle Bearing Oil line	1
O 8	Oil Line-Forward Bearing- Reverse Shaft	1
S 16	2-1/2" Stud x 39"	2
N 6	1-1/4" Hex Nut-Special	1
N 11	1-1/4" Hex Nut-Common 2-1/4" Flats	26
N 16	2-1/4" Hex Nut 3-3/4" Flats	2
N 17	2-1/2" Nut W 4-1/2" Flats BY 2" THK	8
N 22	2-1/2" Nut W 4-1/2" Flats BY 2-1/2" THK	2
N 23	2-1/2" SQ Nut W 5" Flats BY 2-1/2" THK	2
B 15	1-1/4" Bolt x 6"	22
B 16	1-1/4" Bolt x 20-5/8"	2
B 17	1-1/4" Bolt x 8"	1
B 21	2-1/4" Bolt x 12"	2
B 23	1-1/4" Bolt x 6-1/2"	2



BILL OF MATERIALS

SOME PARTS ARE IDENTIFIED ON SHEET 3

U.S.S. Monitor Steam Engine

Material	Drawn By - Date	Sub-Assembly
Weight (Lbs)	RWC 10-2018	BEDPLATE
Scale	Description	
1:32		
Part #	<b>Bedplate Assembly</b>	
<b>BP 1</b>		
		SHEET 2 OF 5

DETAIL SHOWING THE  
INSTALLATION OF THE  
MIDDLE BEARING OF THE  
REVERSING SHAFT :

- 1. UPPER BEARING BP 11  
INSERTED AND RAISED
- 2. LOWER BEARING BP 12  
INSERTED AND RAISED
- 3 THEN 1-1/4 " NUT N 11 IS  
STARTED ON BOLT B 17
- 4. BOLT B 17 THREADED  
INTO BEDPLATE TO  
ADJUST BEARING
- 5. NUT LOCKS THE  
ADJUSTMENT

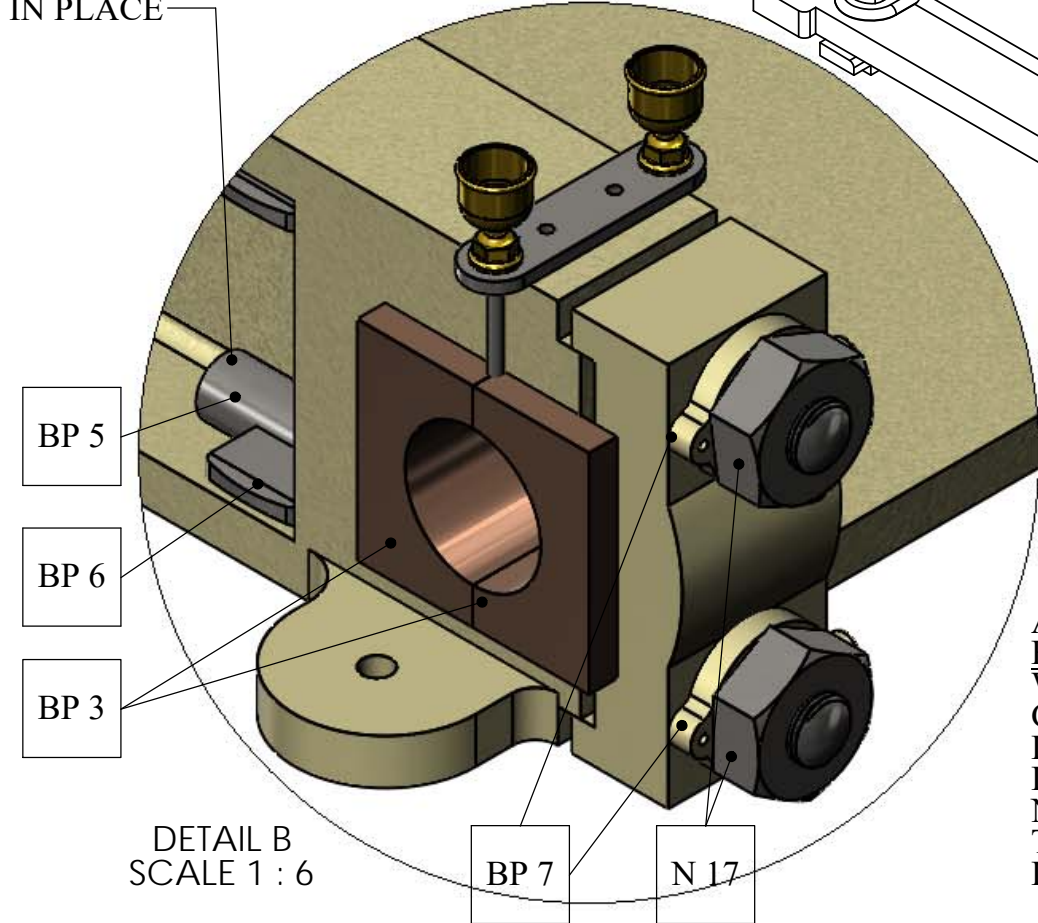
**DETAILS  
OF MIDDLE  
BEARING**

**GENERAL NOTES OF  
CONSTRUCTION**

BP 11

BP 12

ROCK SHAFT BEARING  
STUD BP 5 INSERTED  
AND STUD KEY BP 6 IS  
PLACED IN BEDPLATE  
SLOT TO LOCK ASSEMBLY  
IN PLACE



DETAIL B  
SCALE 1 : 6

ADJUSTMENT OF THE ROCK SHAFT  
BEARINGS IS VERY IMPORTANT.  
WHEN THE NUTS - N 17- HAD THE  
CORRECT SETTINGS, THEY WERE  
LOCKED IN PLACE BY THE PINNED  
LOCK APPLIANCE -BP 7.  
NO DETAILS ARE PRESENT ON HOW  
THIS LOCK FUNCTIONED. IT MOST  
LIKELY ENGAGED A FLAT ON THE NUT

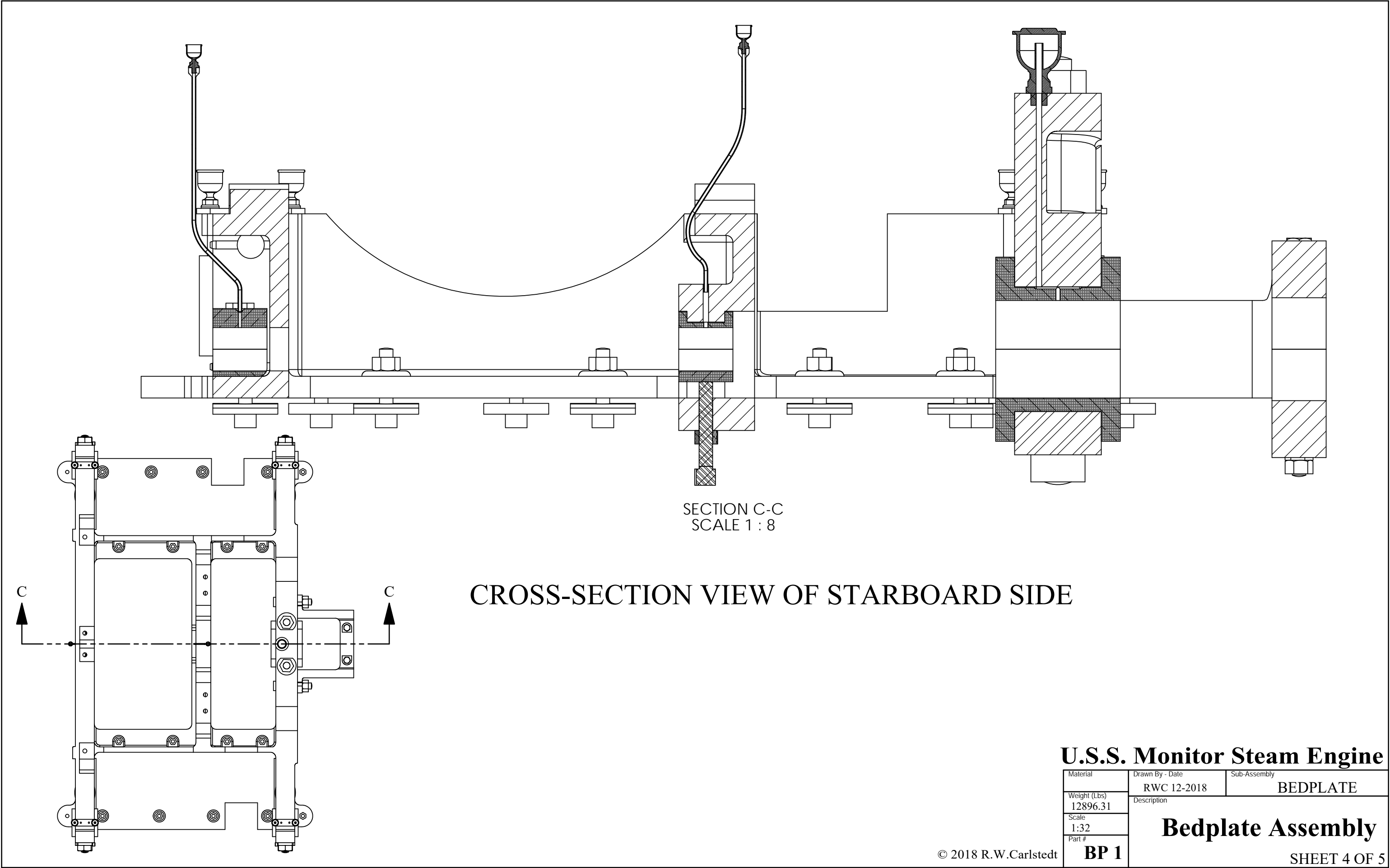
PLEASE NOTE  
CHAMFERED SIDE OF ALL  
ROCK SHAFT BEARINGS  
FACE CYLINDER CENTER LINE

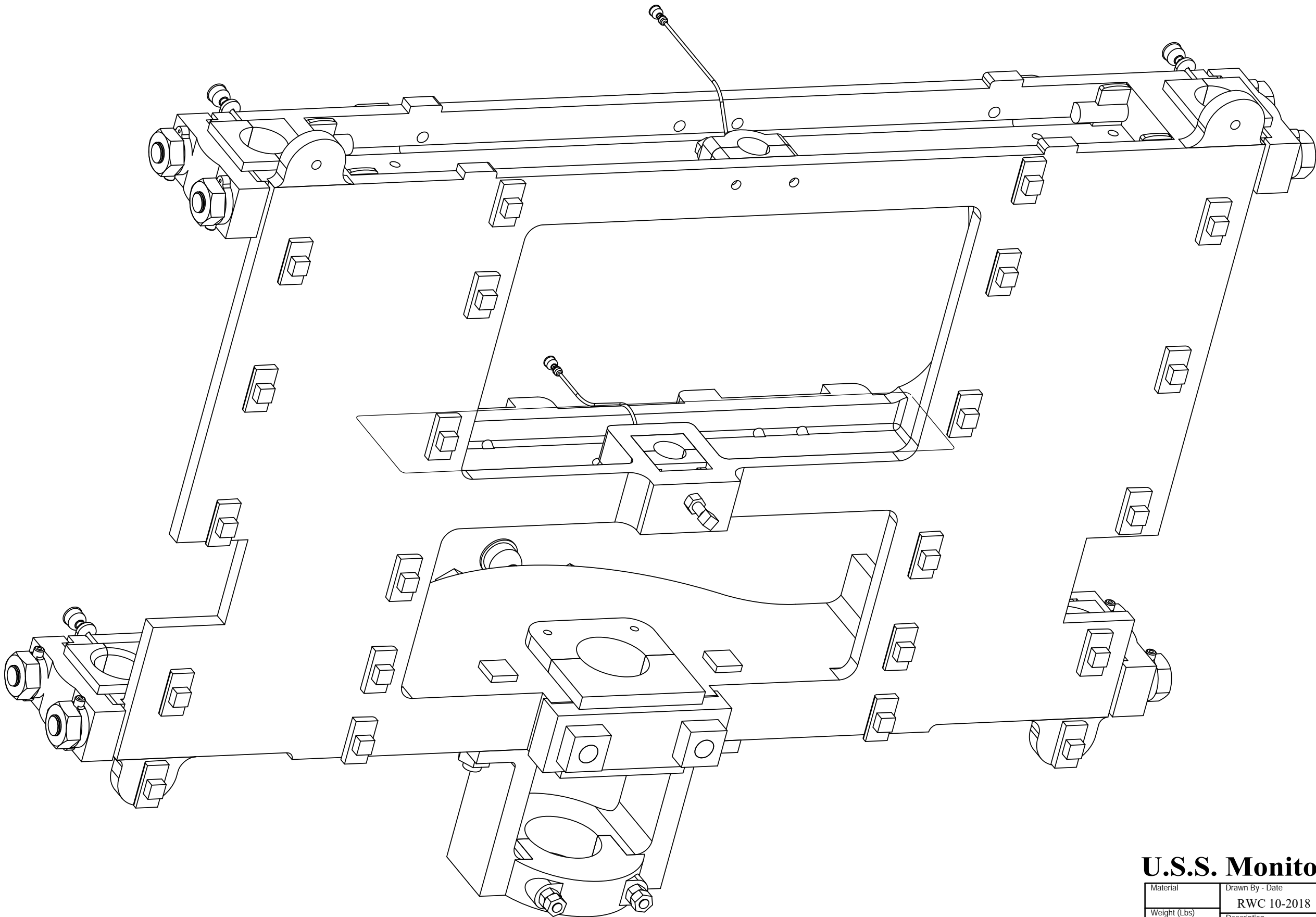
**U.S.S. Monitor Steam Engine**

Material	Drawn By - Date	Sub-Assembly
Weight (Lbs)	RWC 12-2018	BEDPLATE
Scale	Description	
1:32		
Part #		
<b>BP 1</b>		

**Bedplate Assembly**

SHEET 3 OF 5



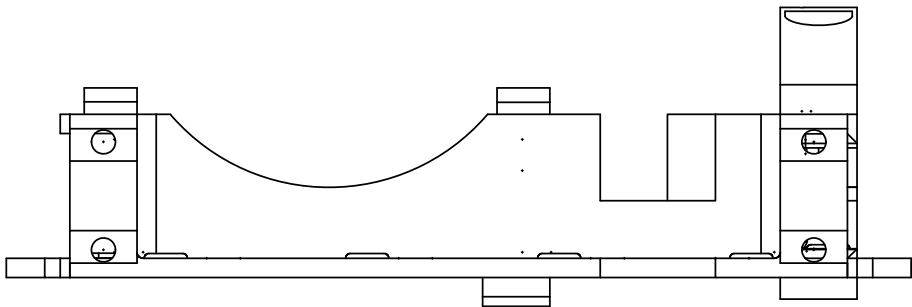
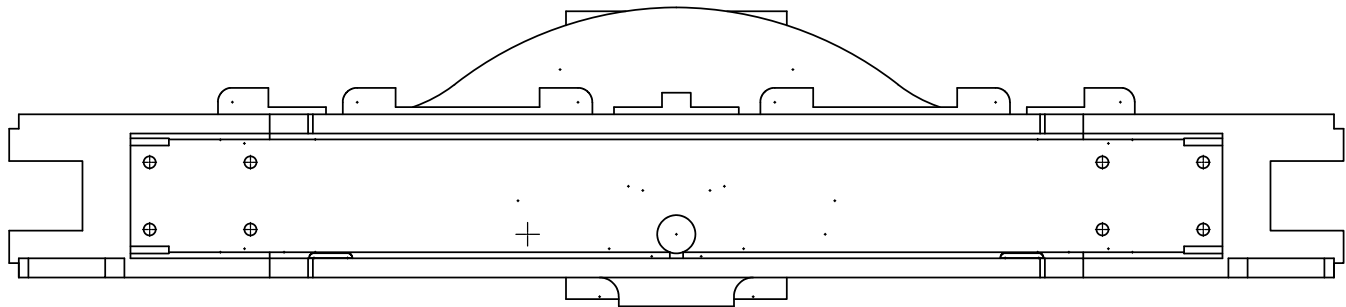
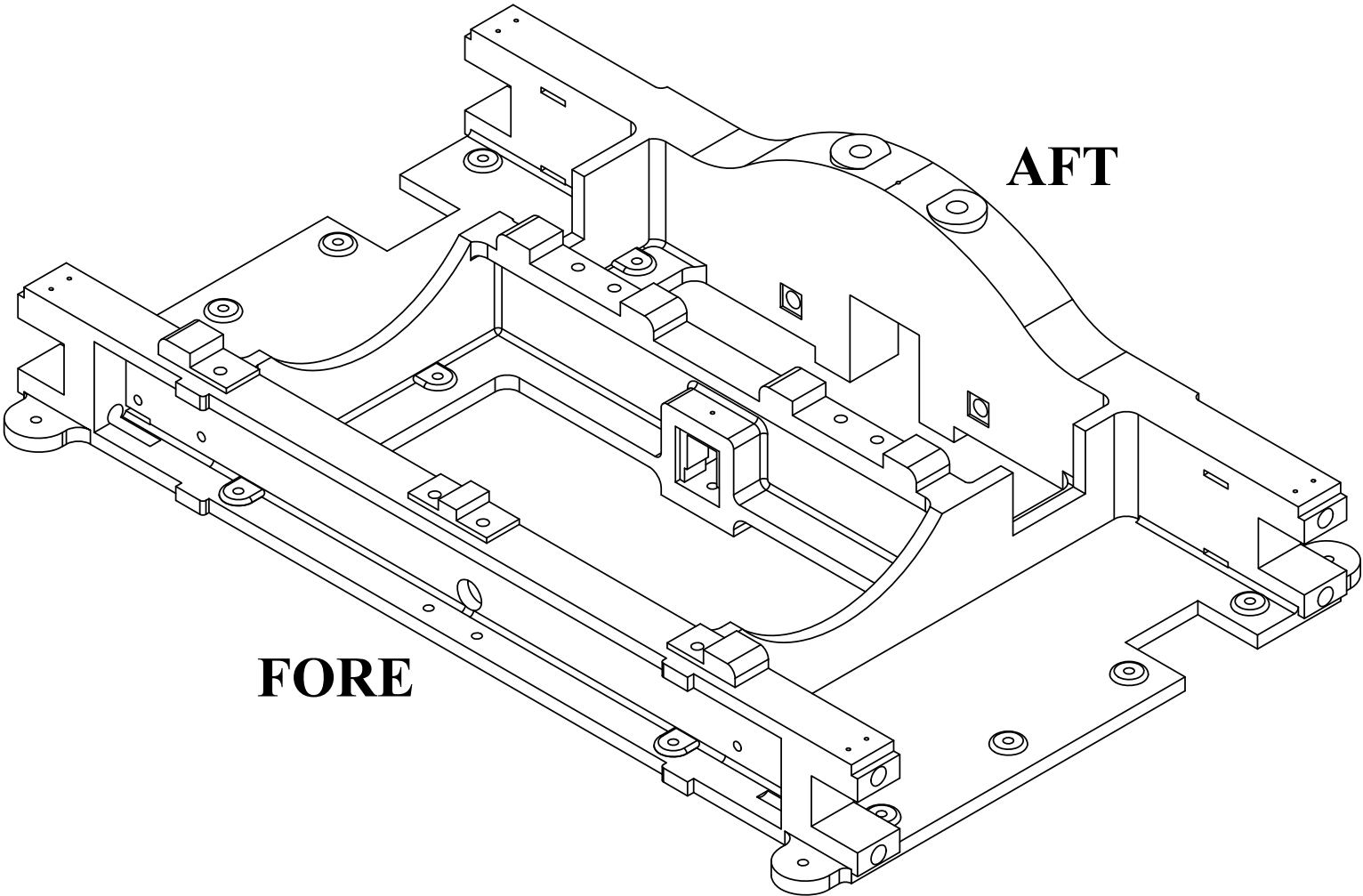
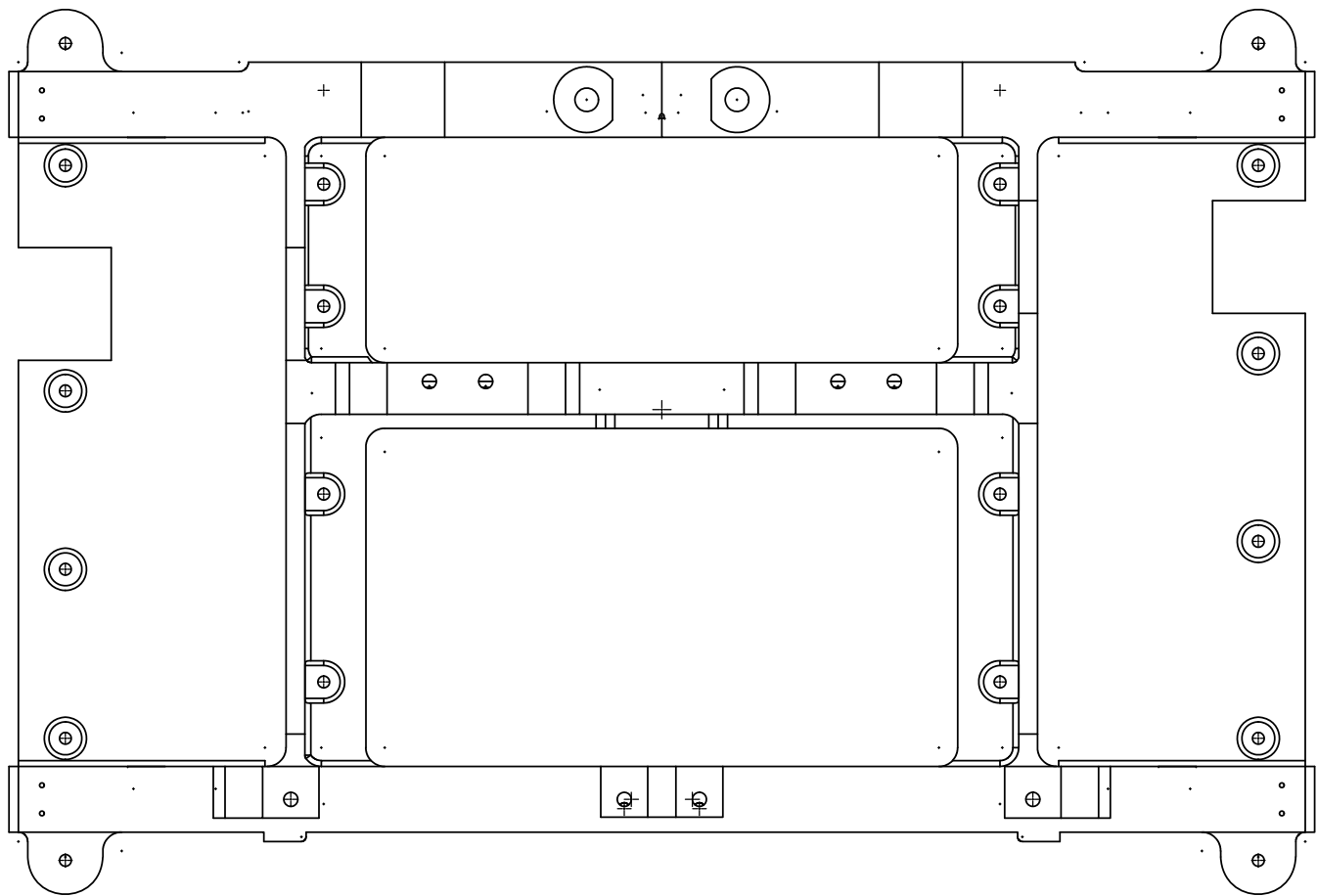


**UNDERSIDE VIEW OF THE BEDPLATE AND FASTENERS WITHOUT BULKHEADS**

© 2018 R.W.Carlstedt

**U.S.S. Monitor Steam Engine**

Material	Drawn By - Date	Sub-Assembly
Weight (Lbs)	RWC 10-2018	Bedplate
Scale	Description	
1:16		
Part #	Bedplate Assembly	
<b>BP 1</b>		
		SHEET 5 OF 5

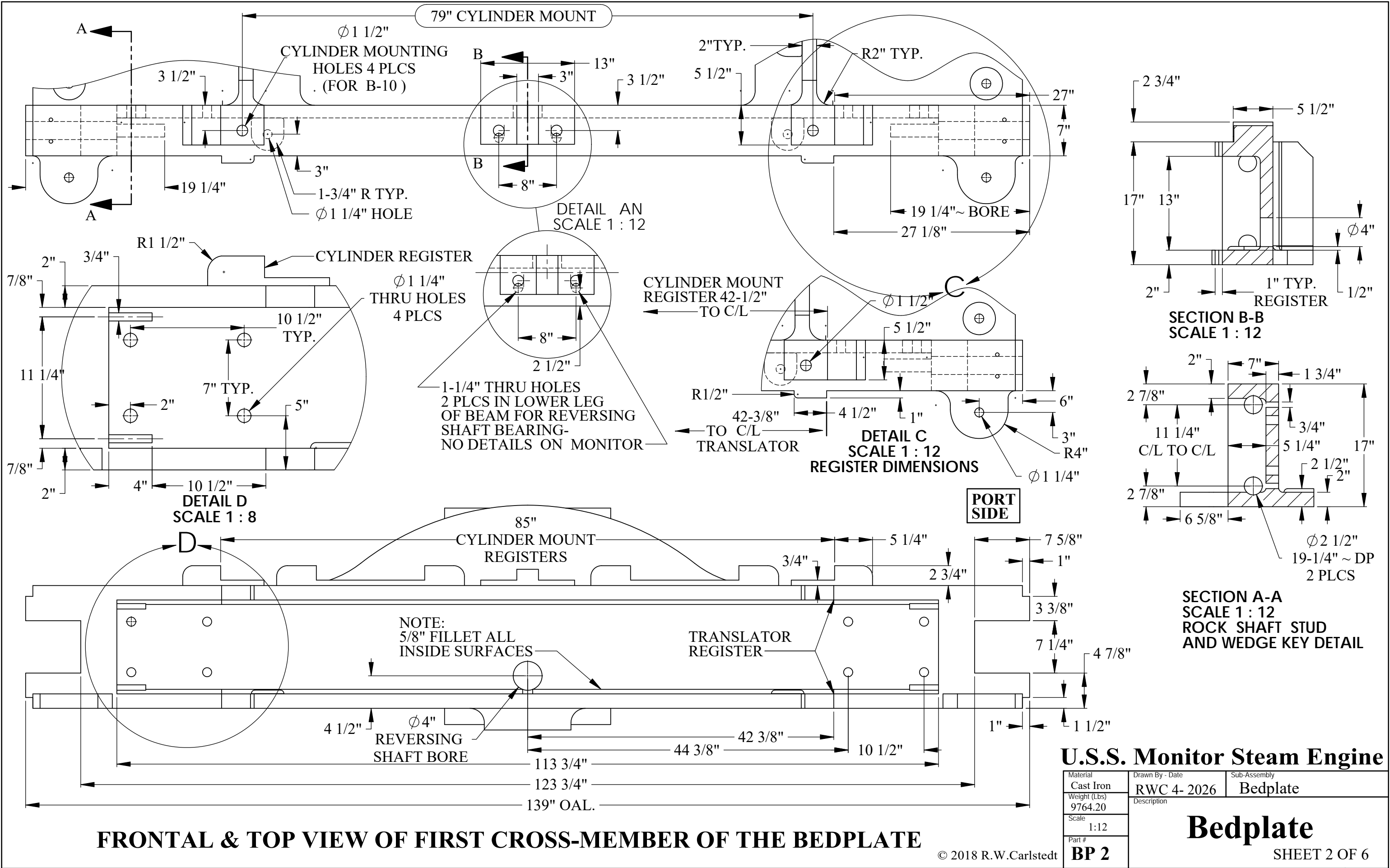


**GENERAL VIEW OF THE ENGINE BEDPLATE-  
CONTINUE TO OTHER SHEETS FOR  
DETAILED DIMENSIONS AND VIEWS**

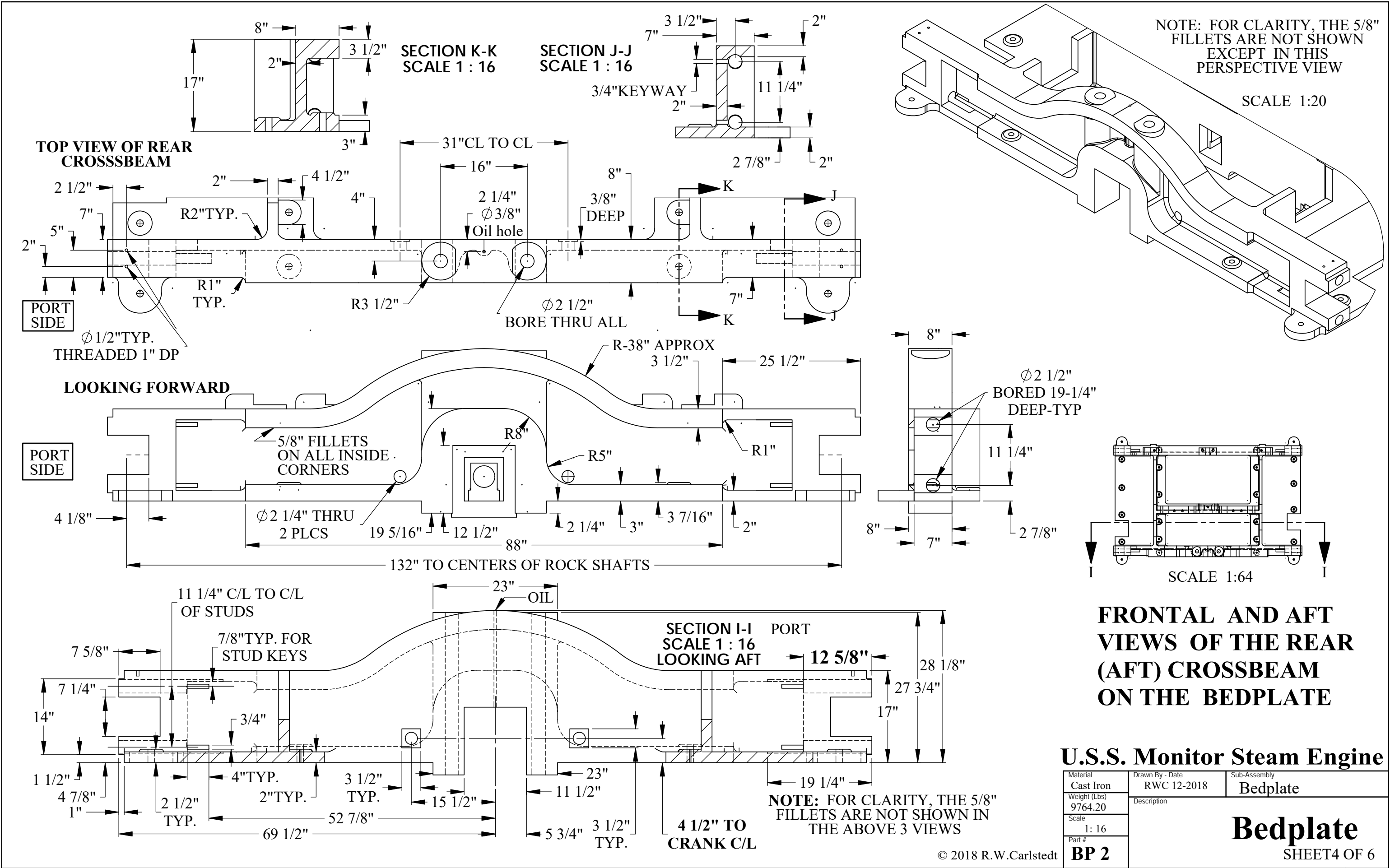
**U.S.S. Monitor Steam Engine**

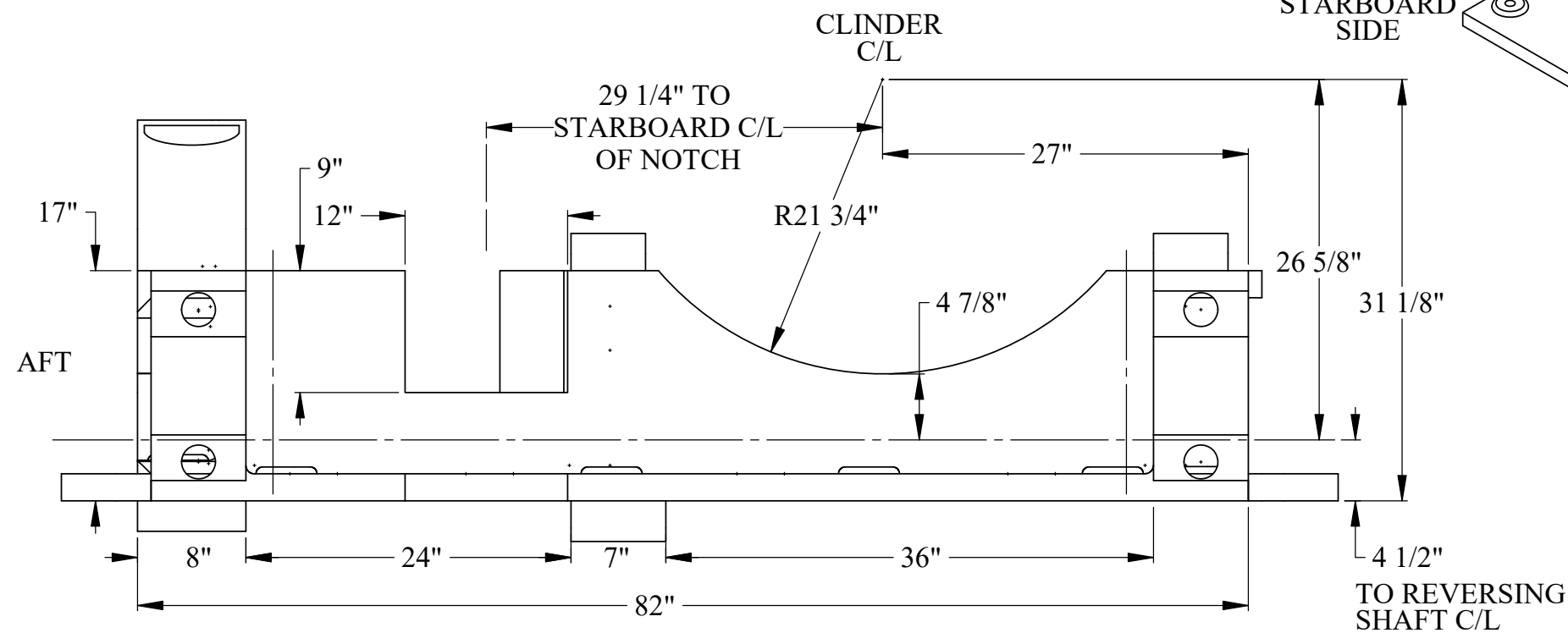
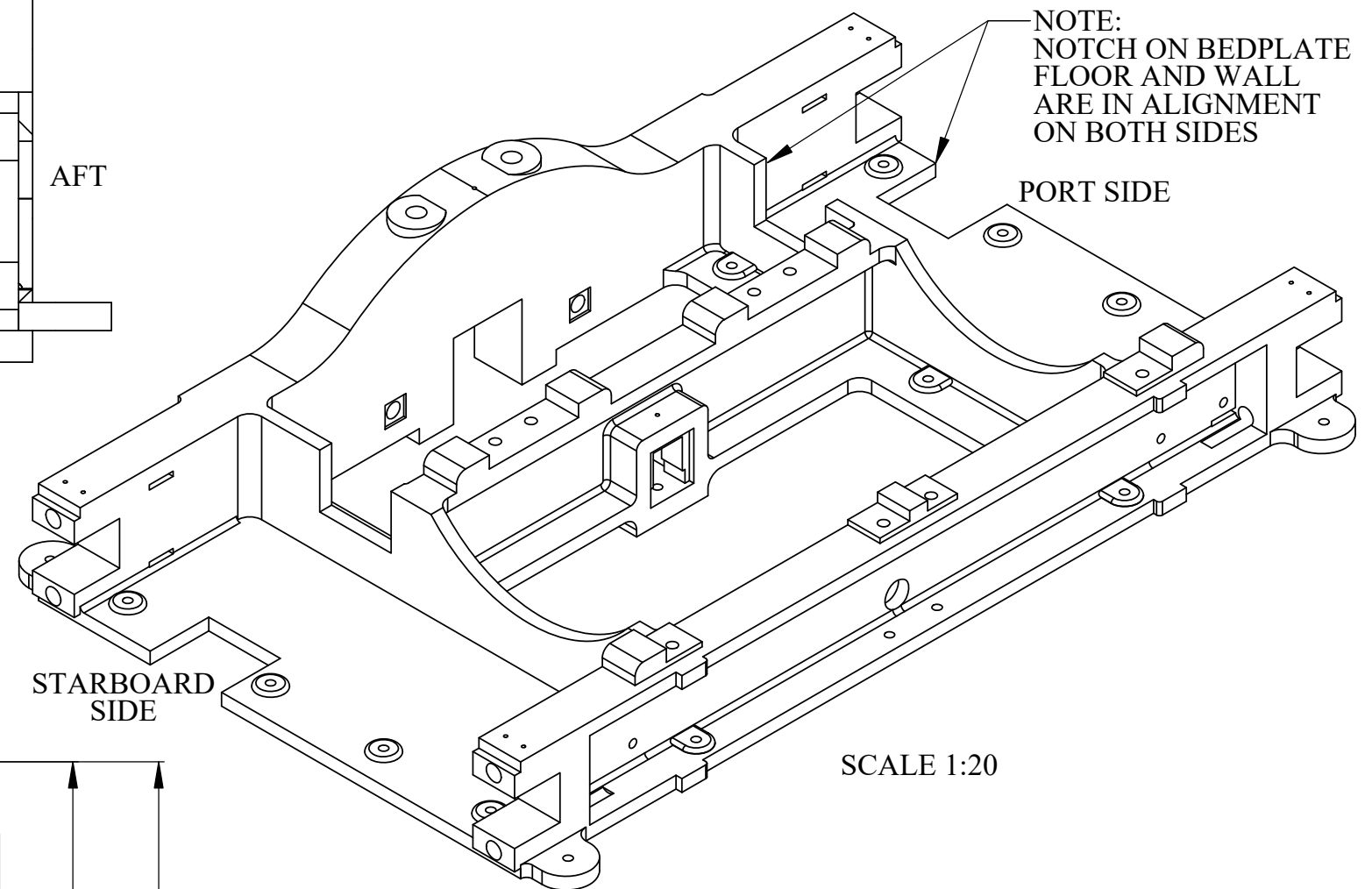
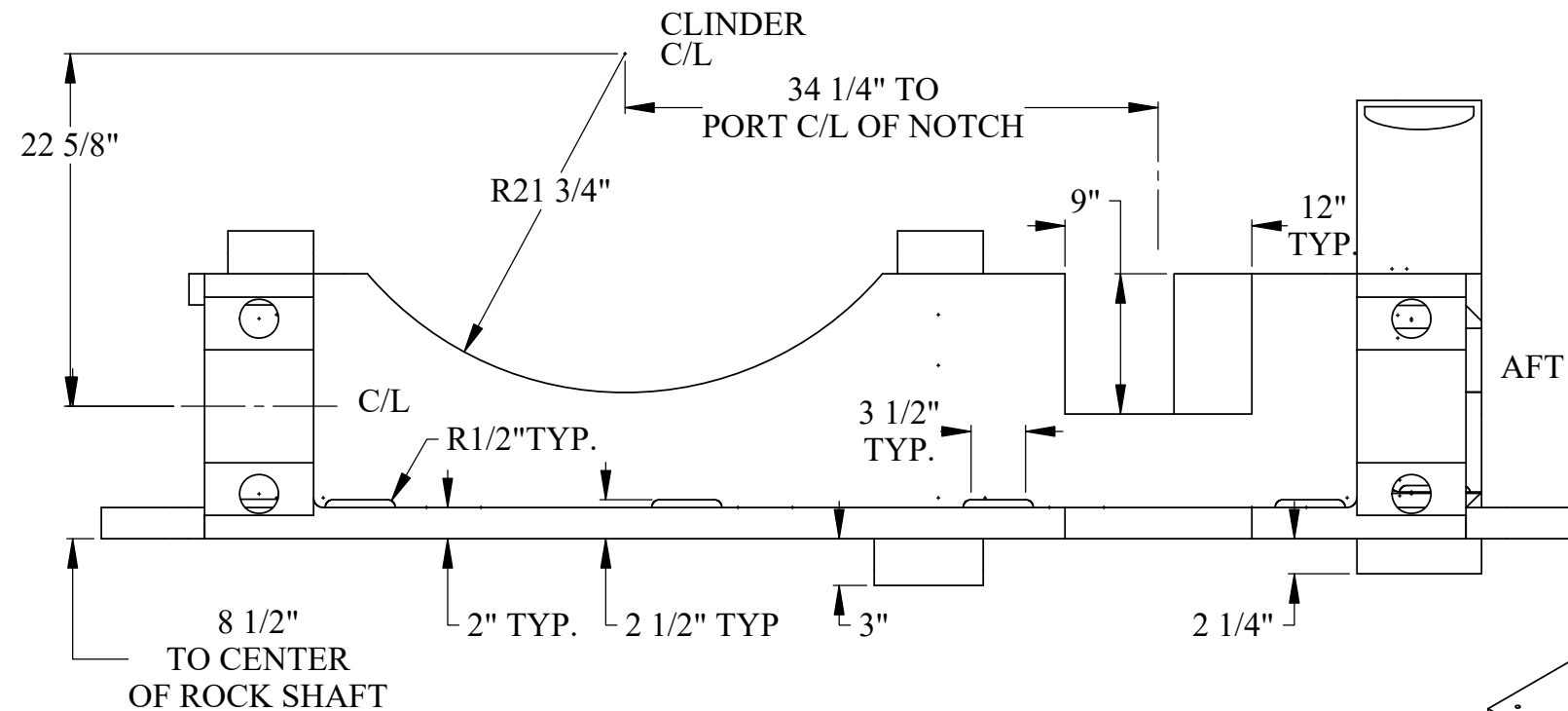
Material Cast Iron	Drawn By - Date RWC 12-2018	Sub-Assembly Bedplate
Weight (Lbs) 9764.20	<b>Bedplate</b>	
Scale 1:20		
Part # <b>BP 2</b>		

SHEET 1 OF 6







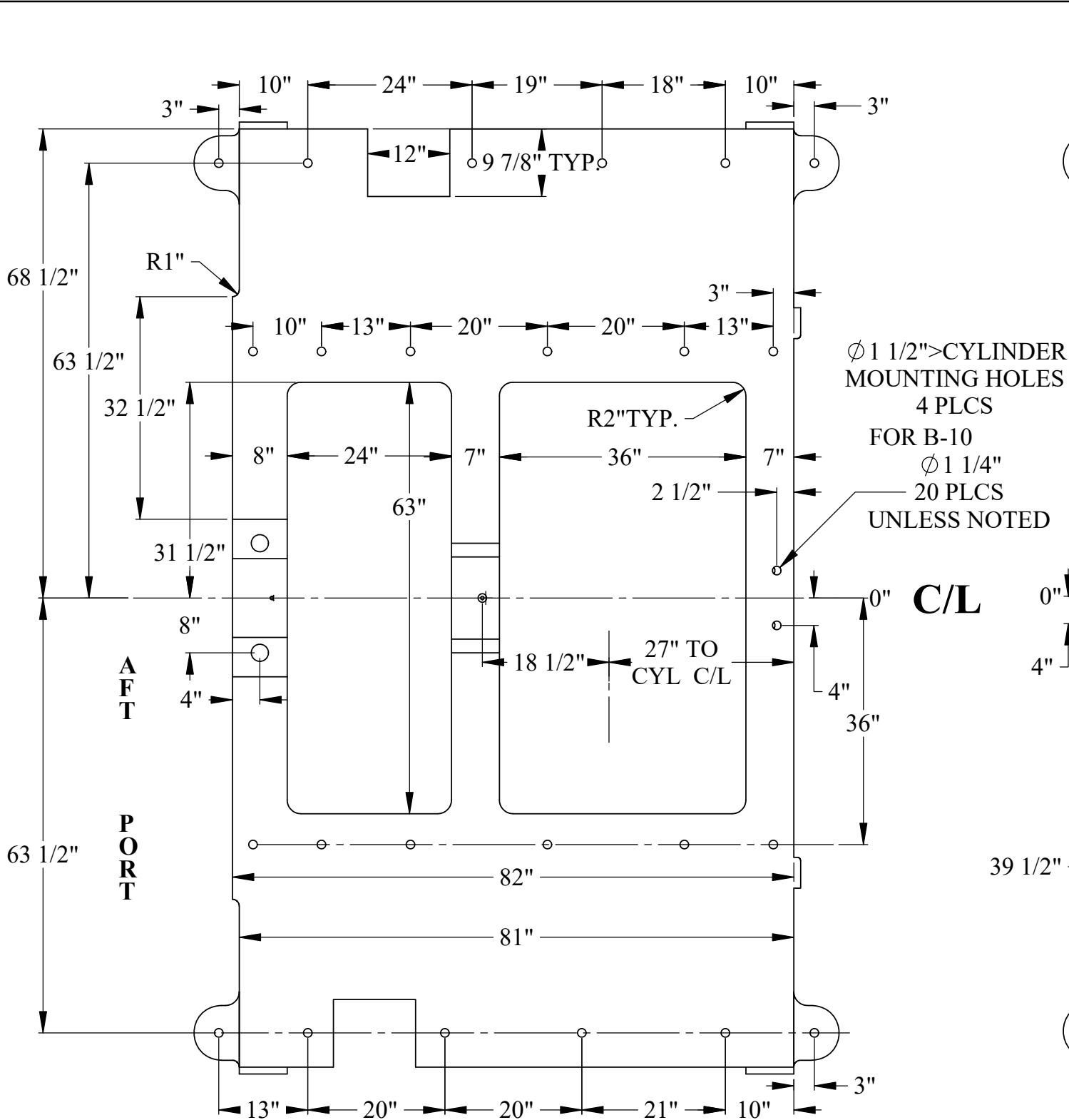


SIDE WALLS OF BEDPLATE DETAILS

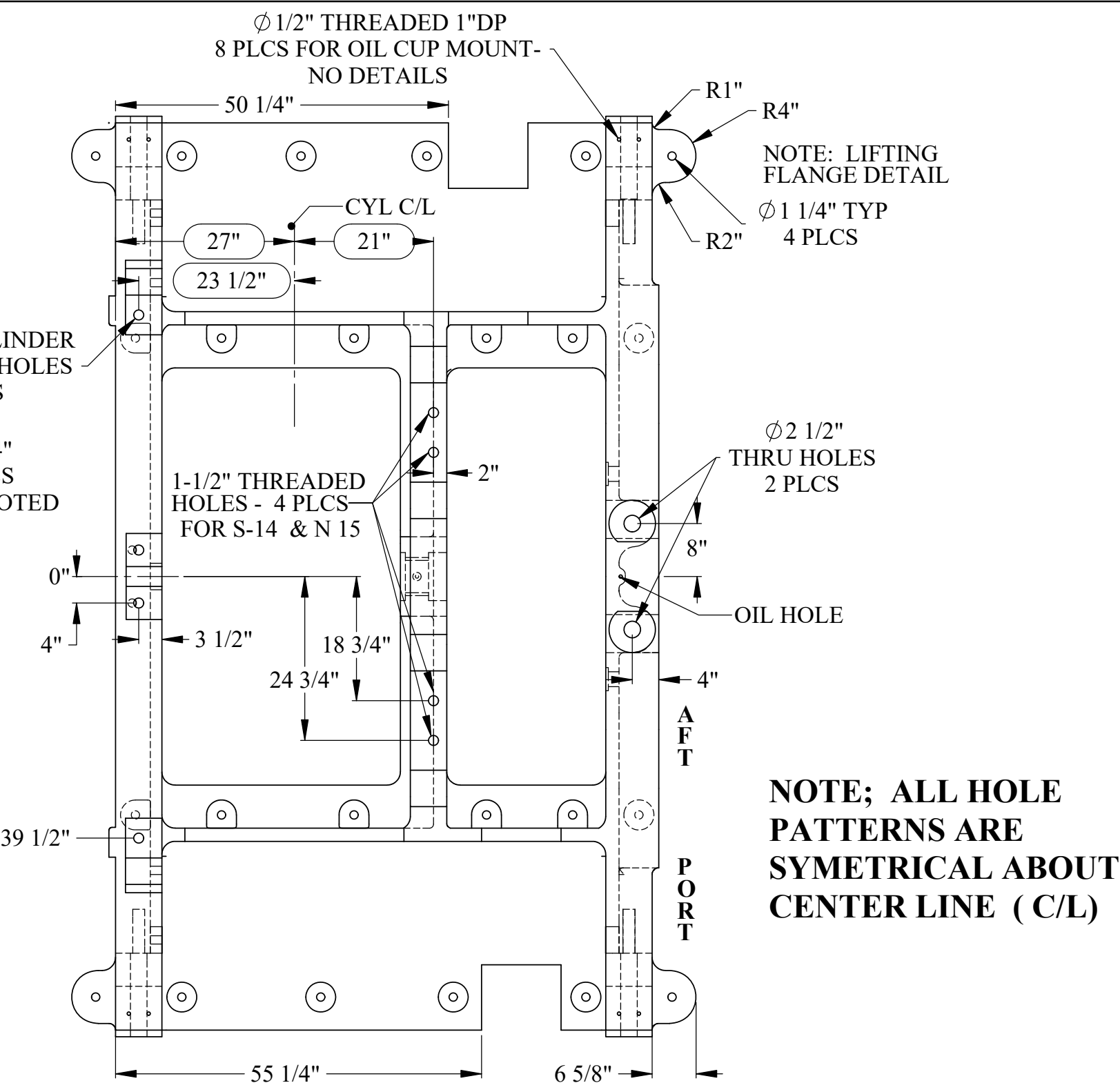
U.S.S. Monitor Steam Engine

Material Cast Iron	Drawn By - Date RWC 12-2018	Sub-Assembly Bedplate
Weight (Lbs) 9764.20	Description <b>Bedplate</b>	
Scale 1: 12		
Part # <b>BP 2</b>		

SHEET 5 OF 6



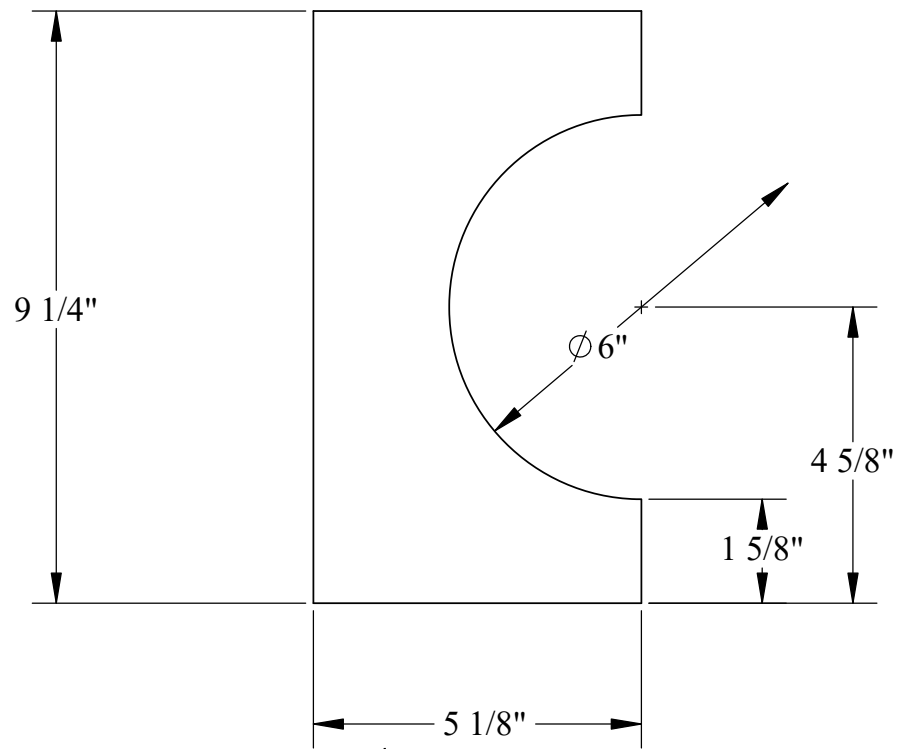
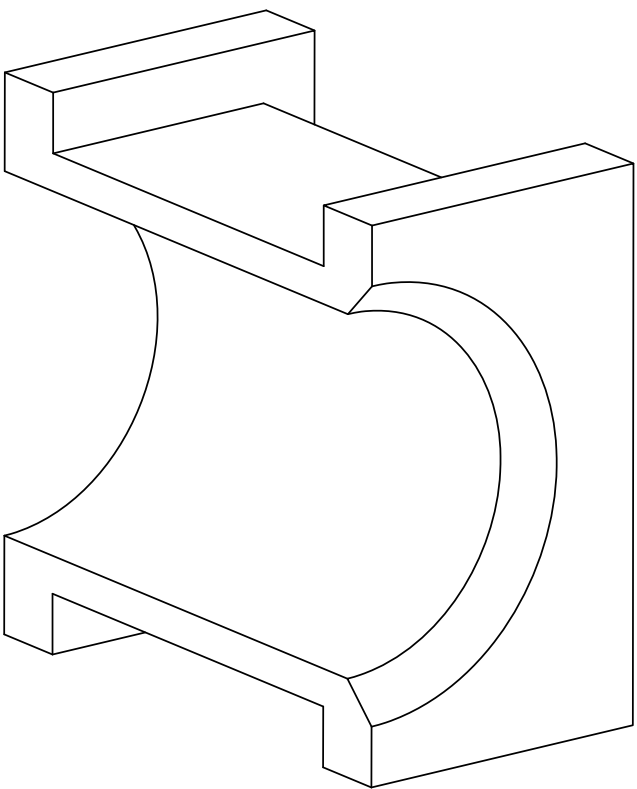
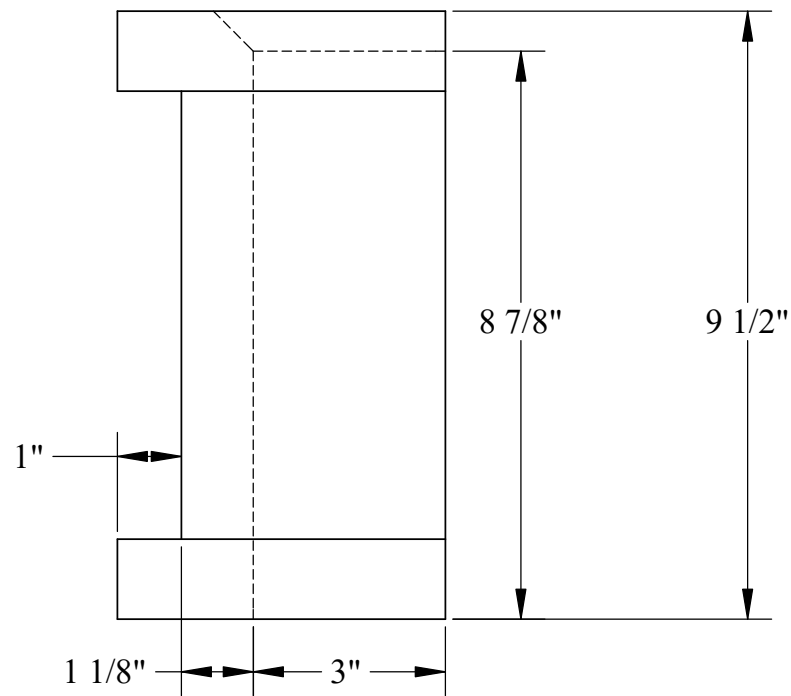
**NOTE:**  
**HOLE LOCATIONS IN BOTTOM VIEW OF BEDPLATE**  
**ALSO PLATE VOID LOCATIONS DIMENSIONED**



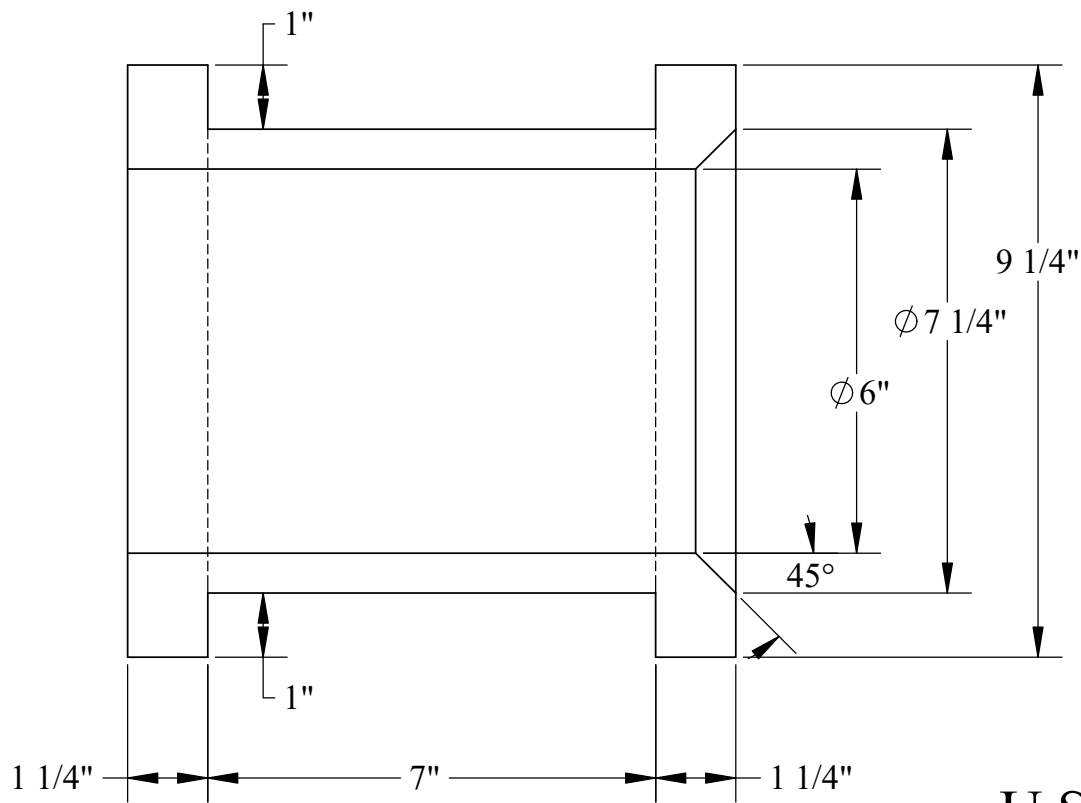
**NOTE:**  
**HOLE LOCATIONS IN TOP VIEW**  
**NOT SHOWN IN BOTTOM VIEW**

**U.S.S. Monitor Steam Engine**

Material Cast Iron	Drawn By - Date RWC 4 2026	Sub-Assembly Bedplate
Weight (Lbs) 9764.20	<b>Bedplate</b>	
Scale 1 : 20		
Part # <b>BP 2</b>		



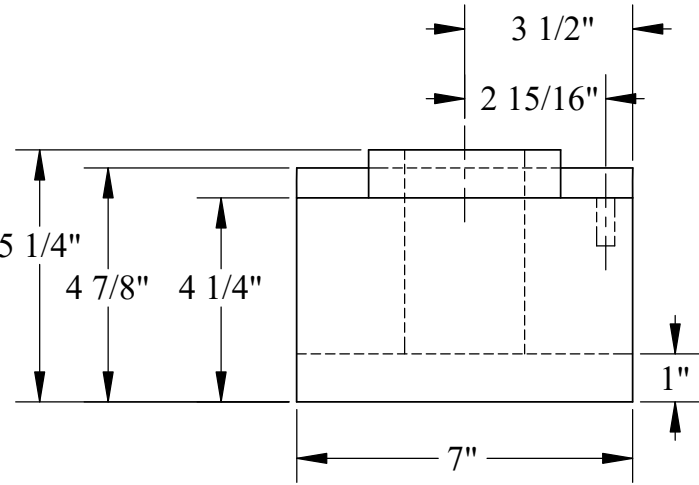
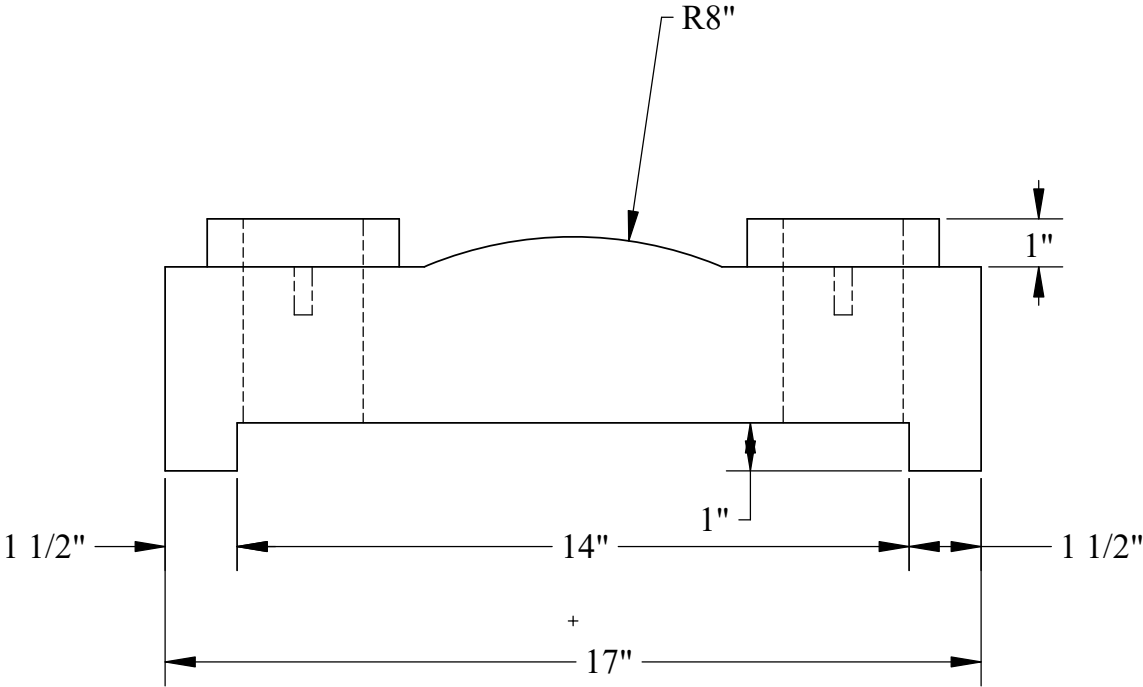
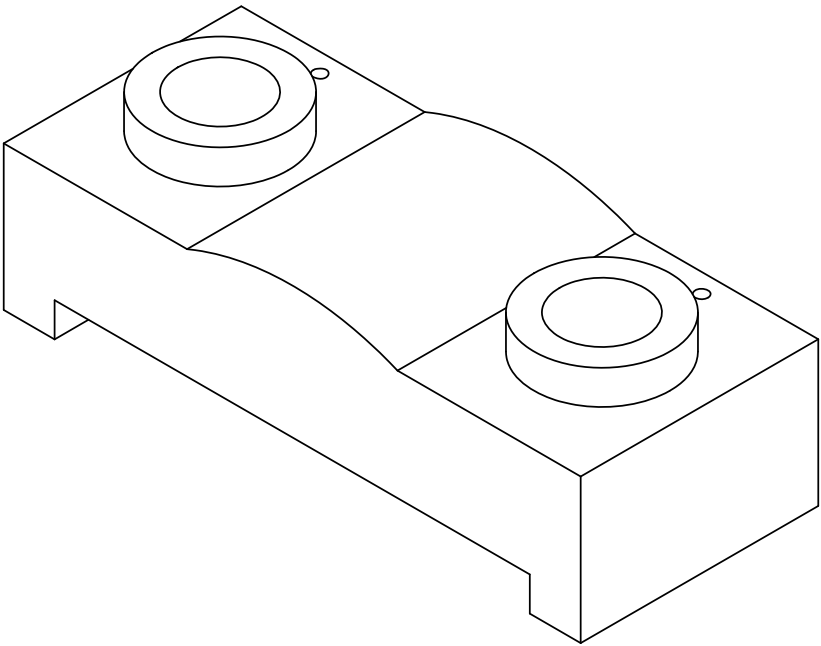
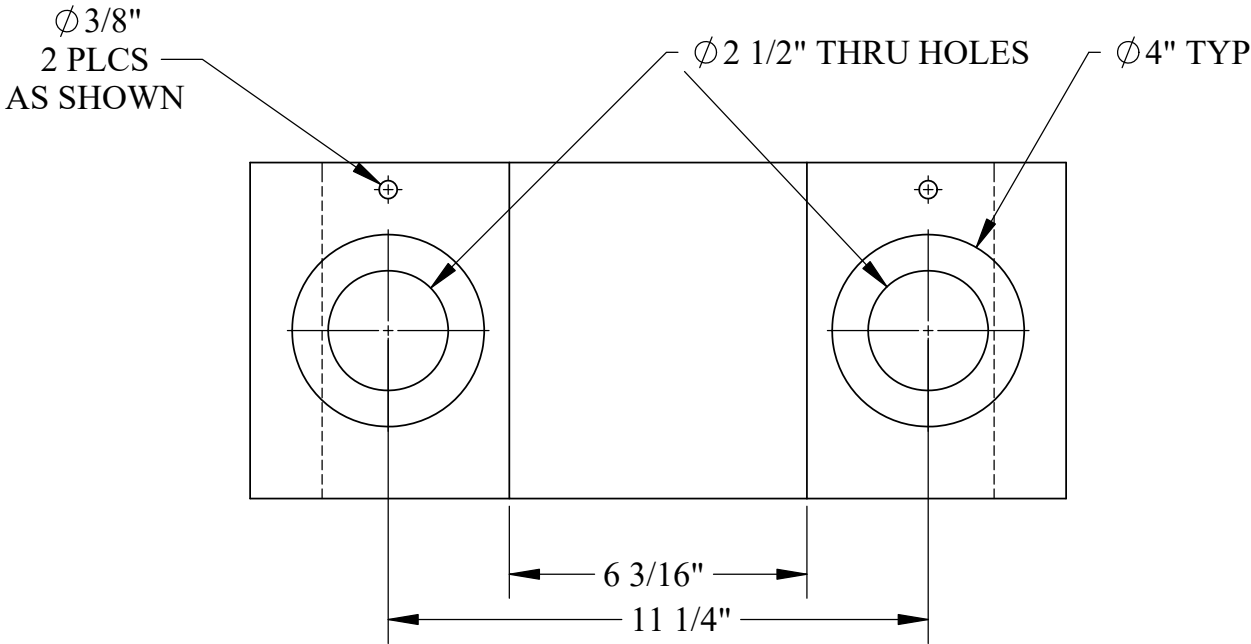
IT IS ASSUMED THAT THIS DIMENSION, AND THE 3" DIMENSION ABOVE WOULD BE LESS ON THE REAL ENGINE TO ALLOW OIL LUBRICATION TO DRIP BETWEEN THE BEARING HALFS



NOTE:  
TWO OF THESE PARTS  
MAKE A FULL BEARING  
FOR THE ROCK SHAFTS

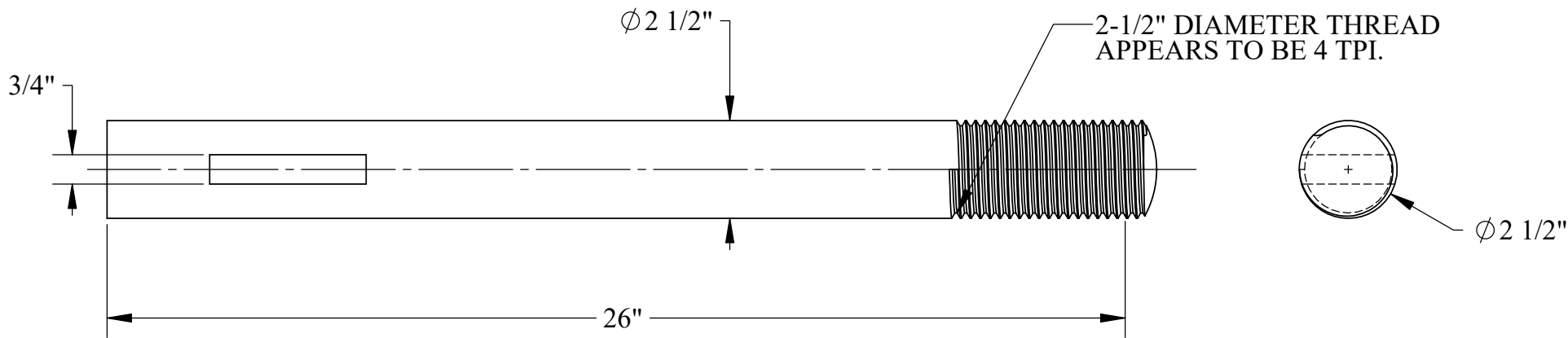
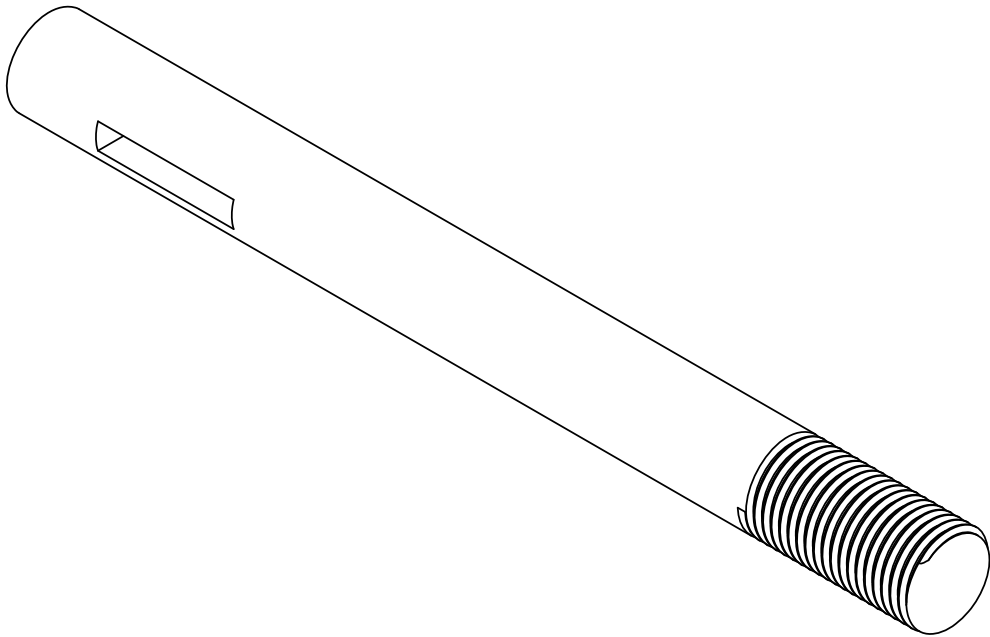
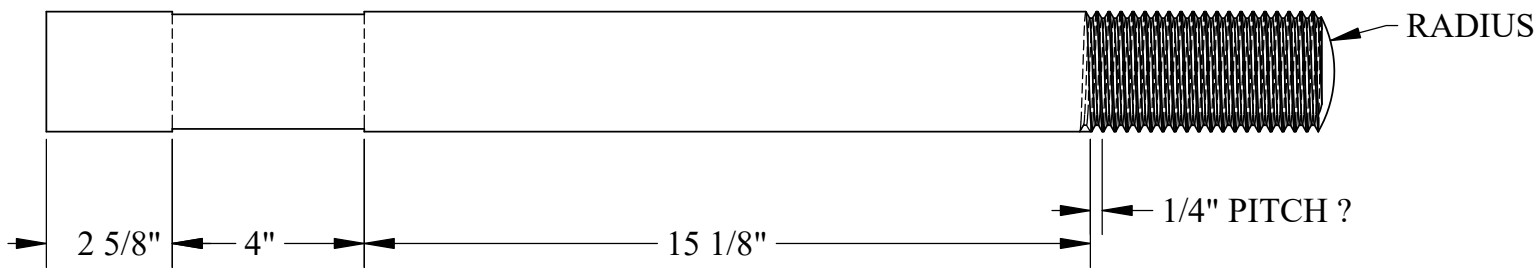
### U.S.S. Monitor Steam Engine

Material Bronze	Drawn By - Date RWC 10-2018	Sub-Assembly Bedplate
Weight (Lbs) 57.45	Rock Shaft Bearing	
Scale 1:3		
Part # BP 3		



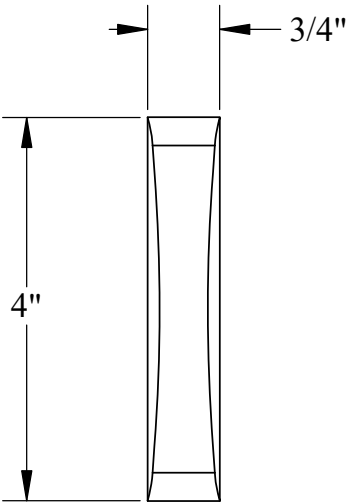
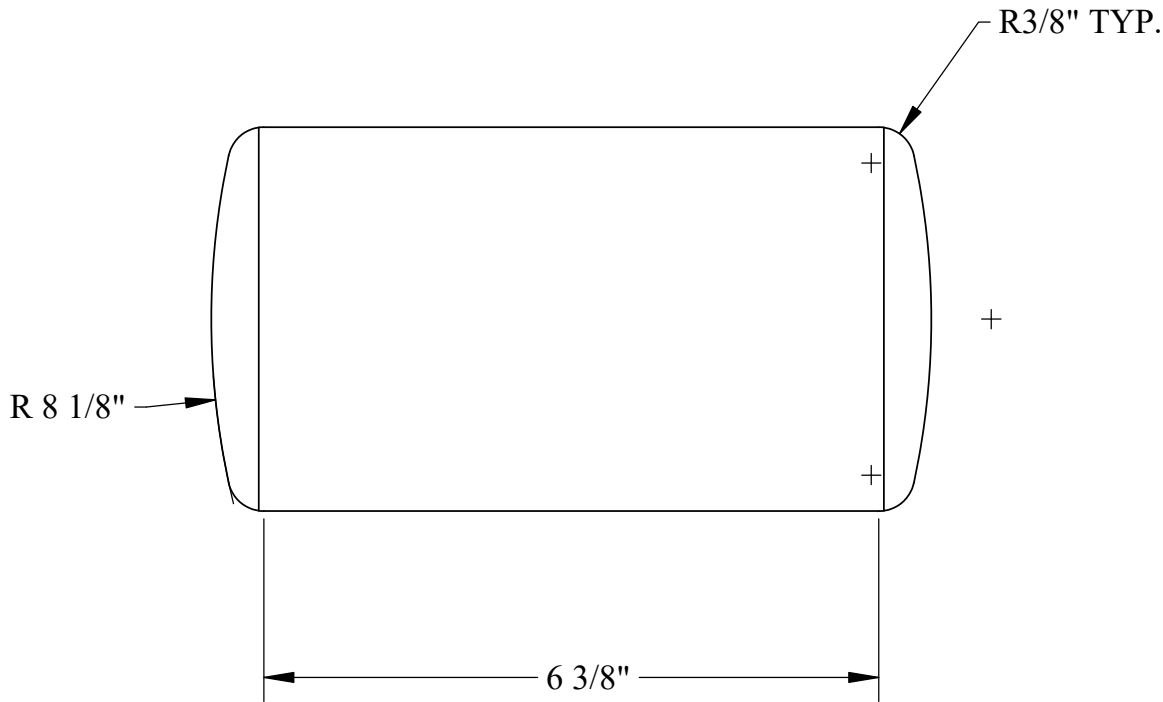
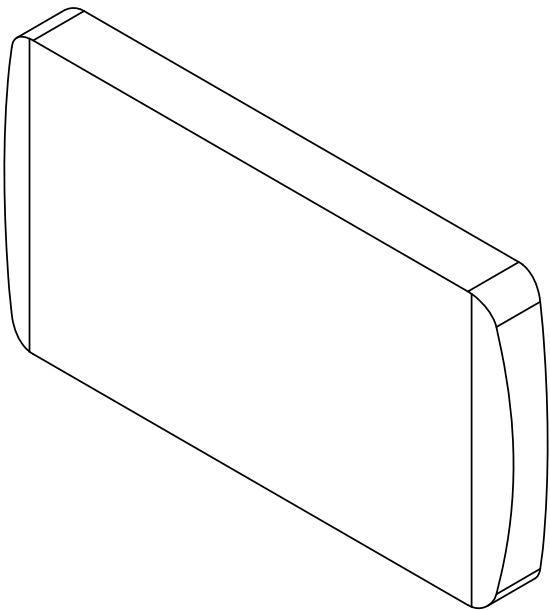
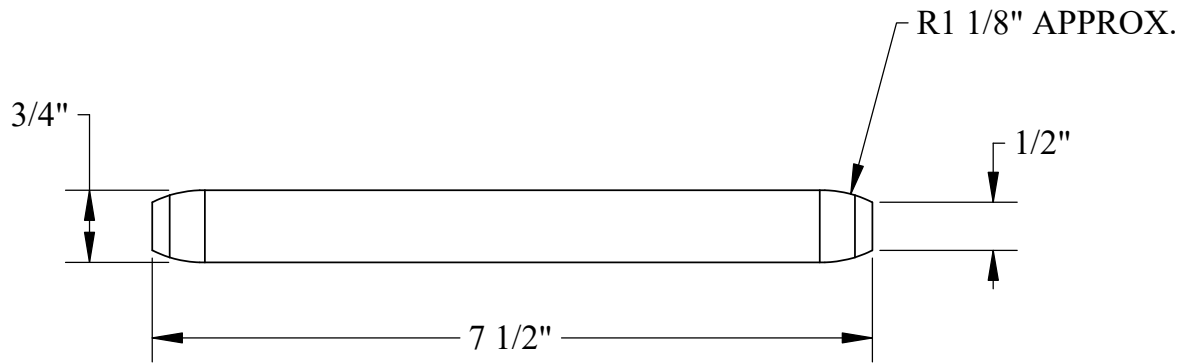
U.S.S. Monitor Steam Engine

Material Cast Iron	Drawn By - Date RWC 10-2018	Sub-Assembly Bedplate
Weight (Lbs) 106.43	Rock Shaft Bearing Cap	
Scale 1:4		
Part # BP 4		



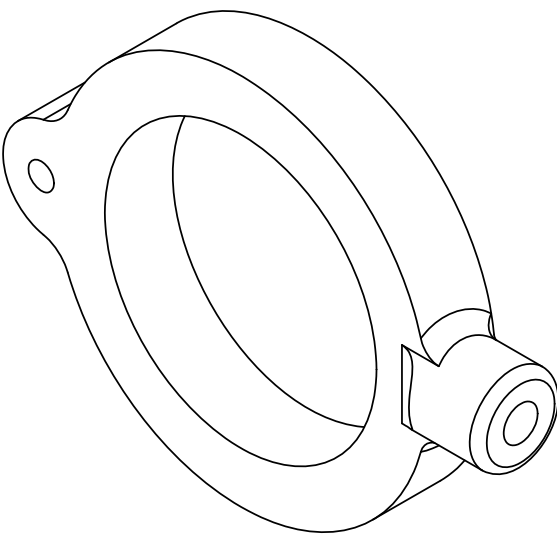
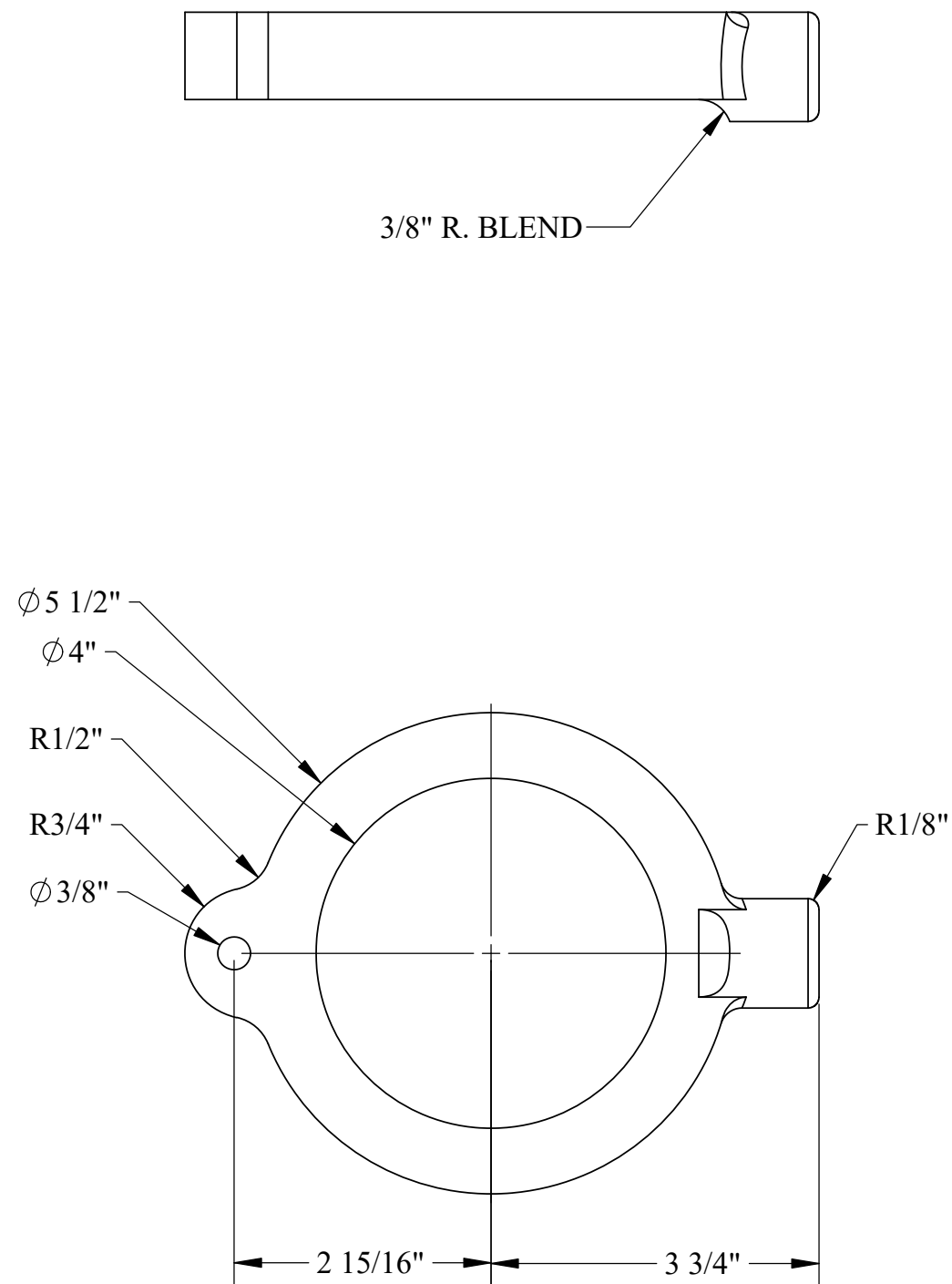
U.S.S. Monitor Steam Engine

Material STEEL	Drawn By - Date RWC 12-2018	Sub-Assembly Bedplate
Weight (Lbs) 34.46	Description Rock Shaft Bearing Cap Stud	
Scale 1:4		
Part # BP 5		



U.S.S. Monitor Steam Engine

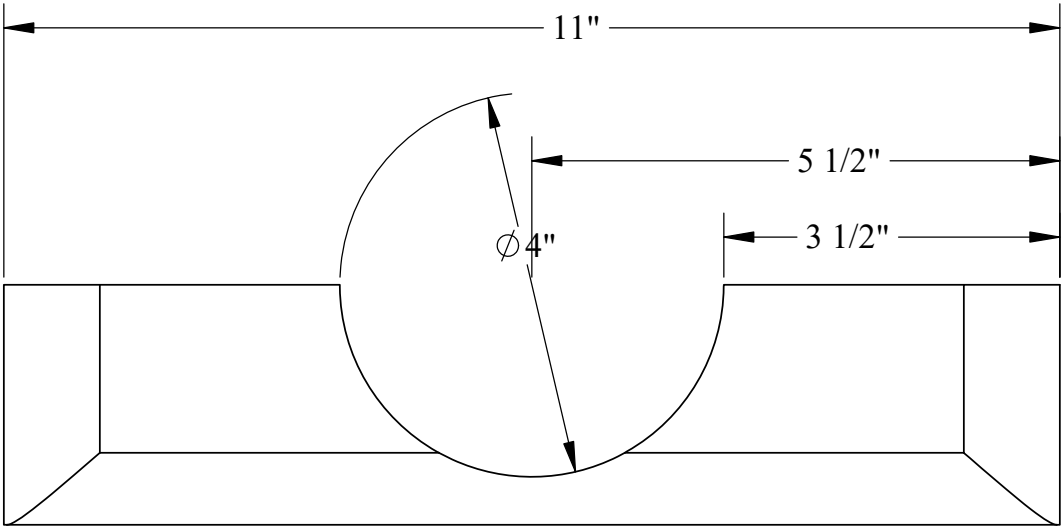
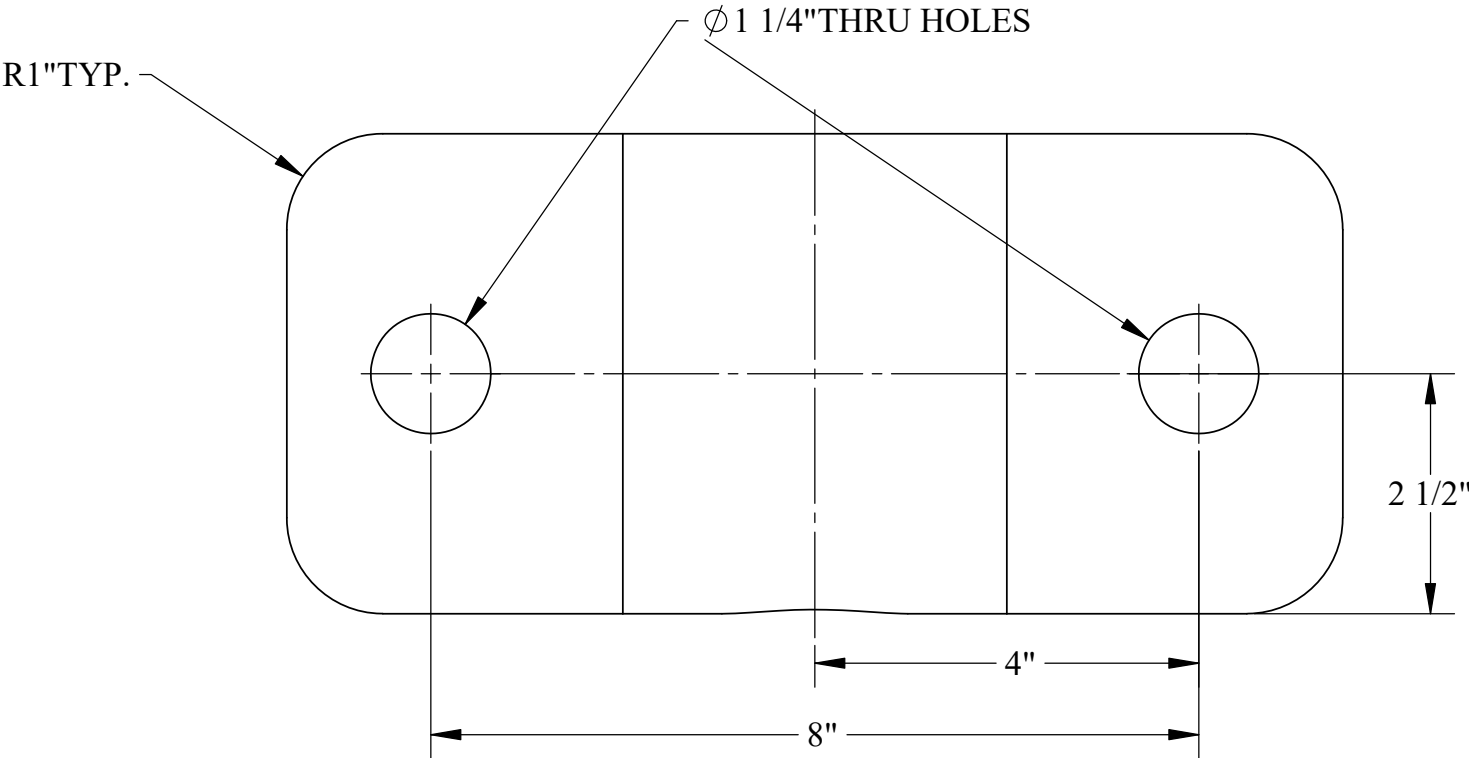
Material STEEL	Drawn By - Date RWC 12-2018	Sub-Assembly Bedplate
Weight (Lbs) 6.20	Rock Shaft Bearing Cap Stud Key	
Scale 1:2		
Part # BP 6		



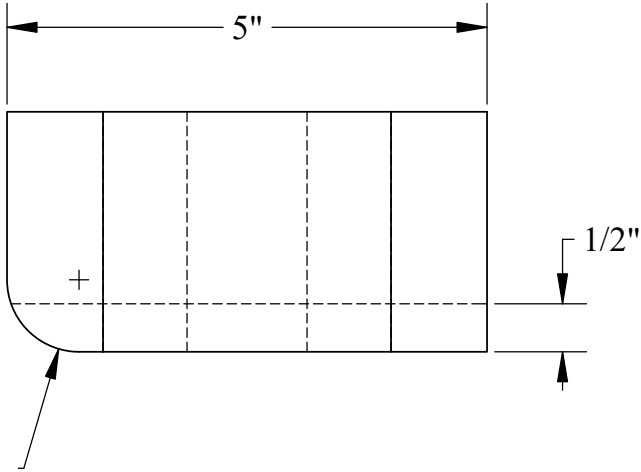
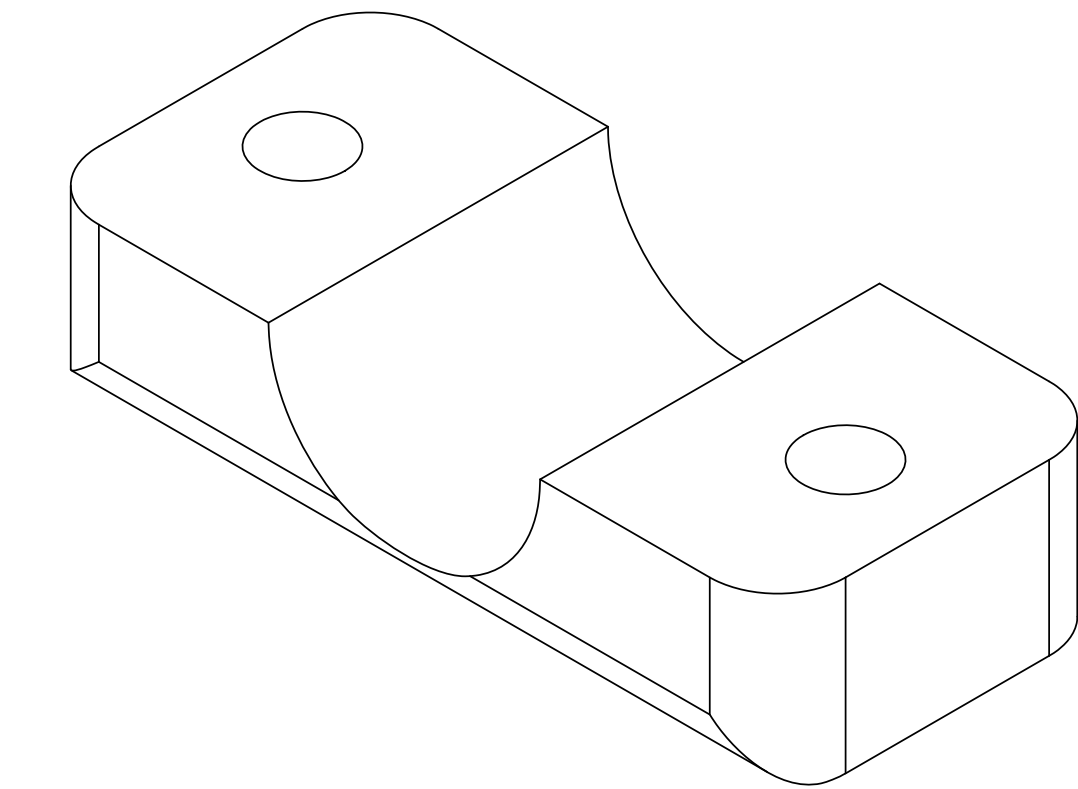
NOTE:  
THIS APPLIANCE IS USED TO LOCK THE ROCK  
SHAFT BEARING CAP ADJUSTING NUTS IN A  
FIXED POSITION - THE EXACT METHOD USED IS  
NOT KNOWN AT THIS TIME.  
THE 3/8" HOLE MOST LIKELY USED A 3/8" PIN  
HOLDING IT IN HORIZONTAL ALIGNMENT WITH  
THE BEARING CAP

U.S.S. Monitor Steam Engine

Material Cast Iron	Drawn By - Date RWC 10-2018	Sub-Assembly Bedplate
Weight (Lbs) 3.38	Description <b>Bearing Cap-Nut Lock</b>	
Scale 1:2		
Part # <b>BP 7</b>		

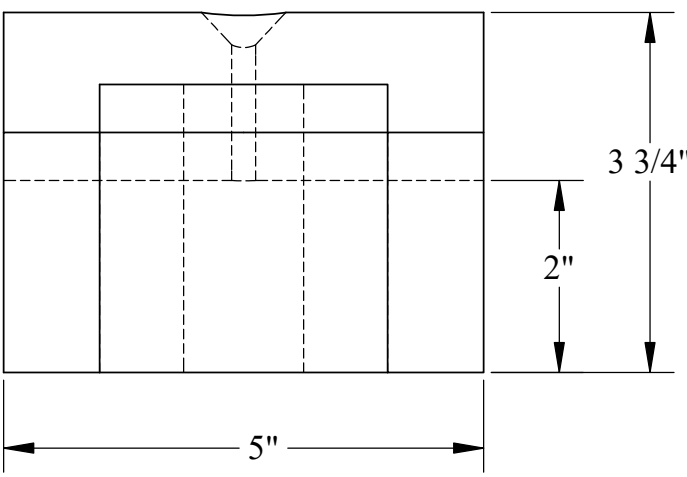
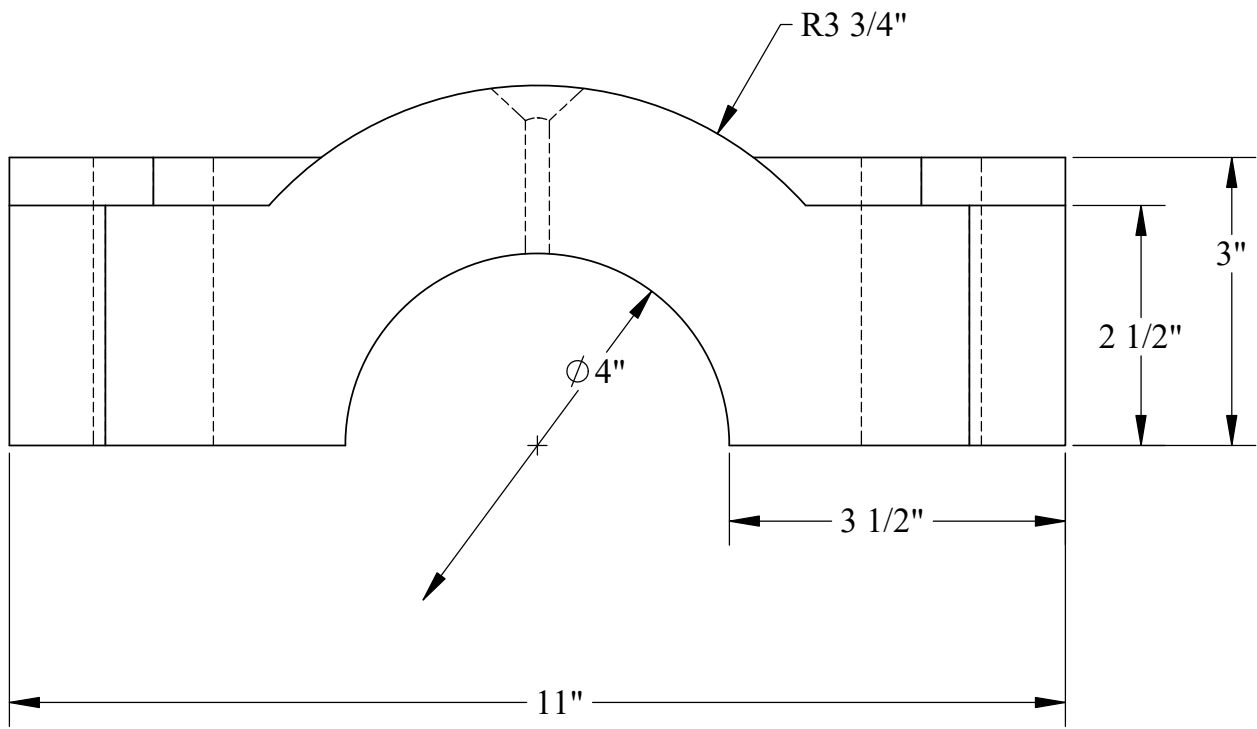
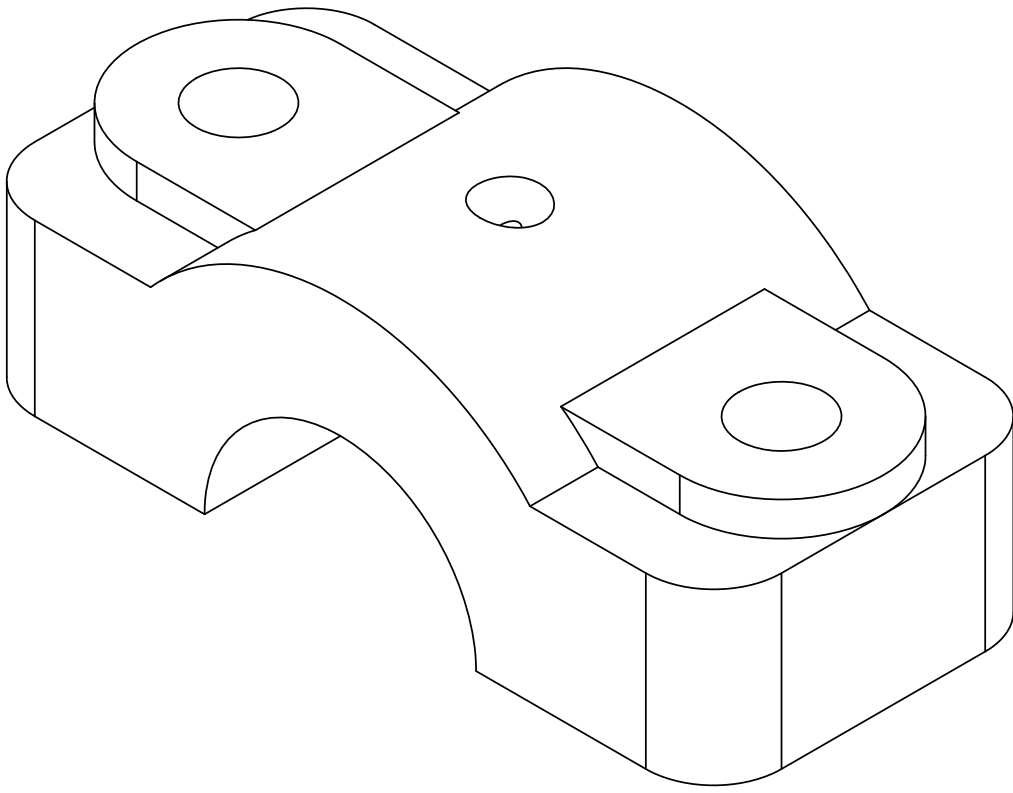
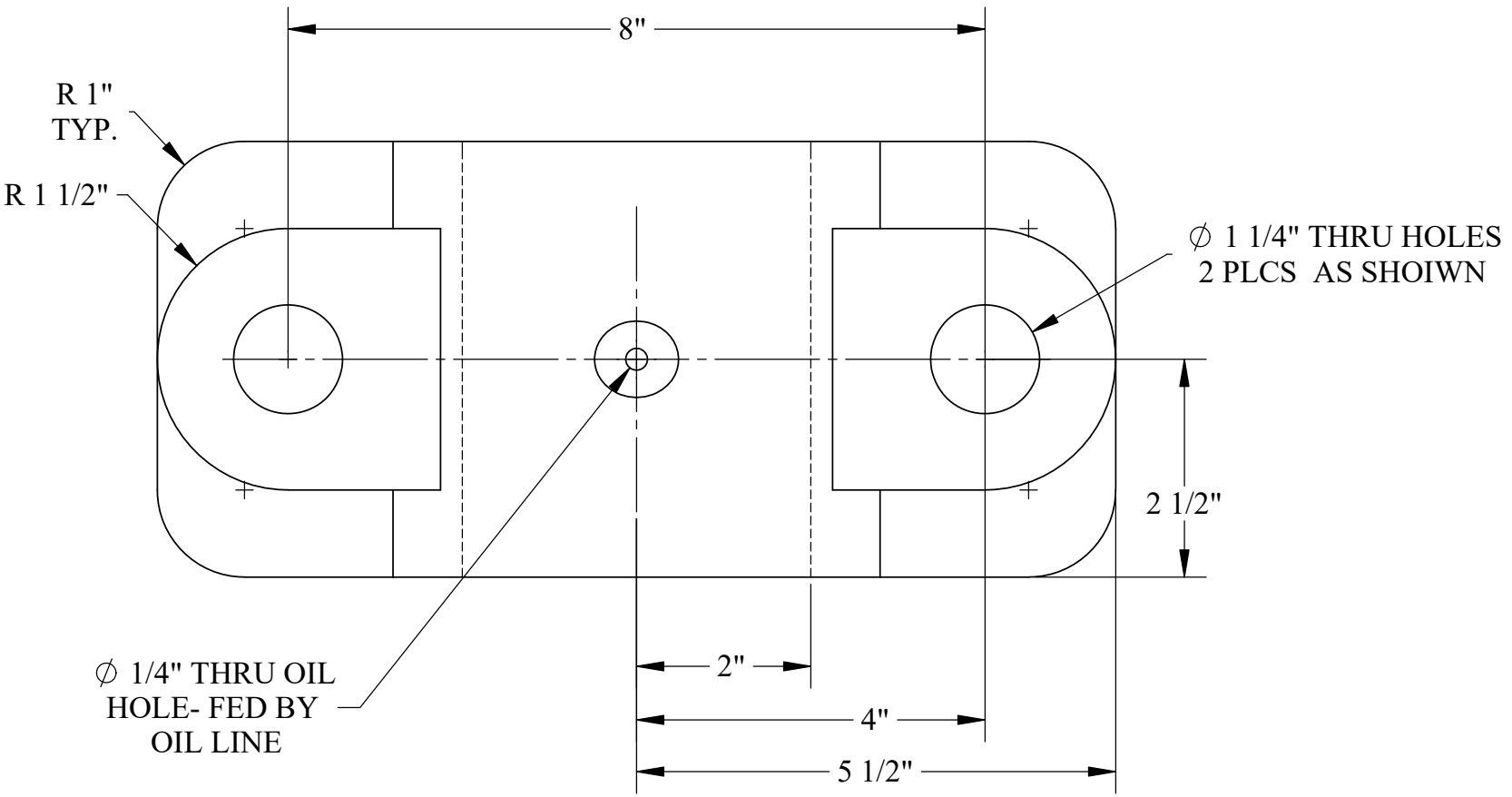


R3/4" CLEARANCE  
FOR BEDPLATE FILLET



U.S.S. Monitor Steam Engine

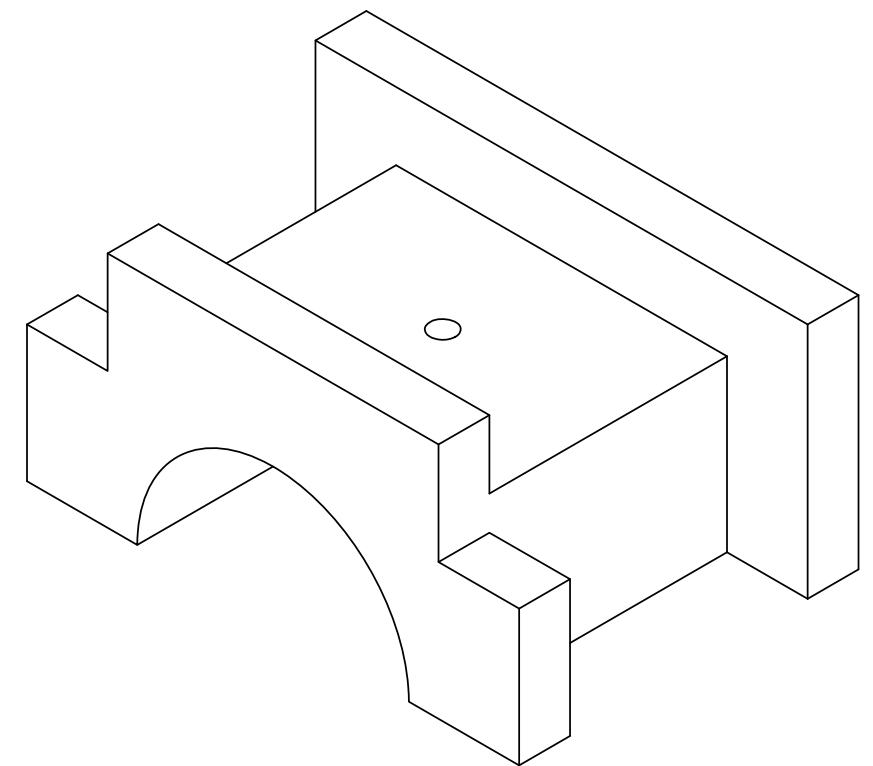
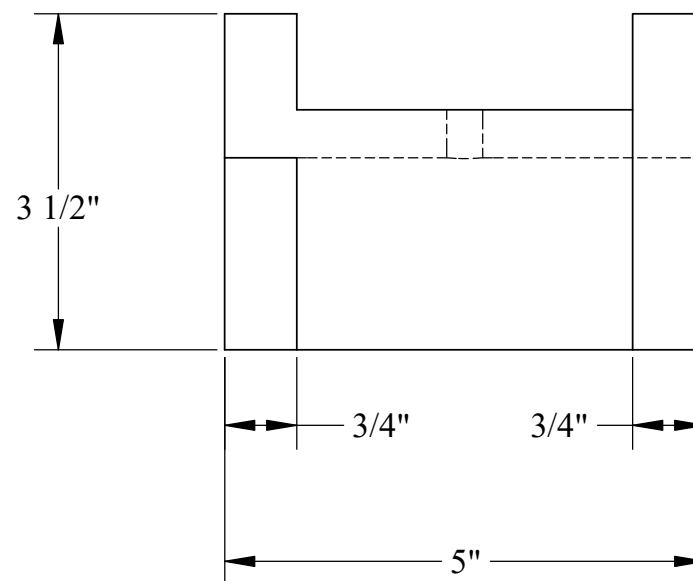
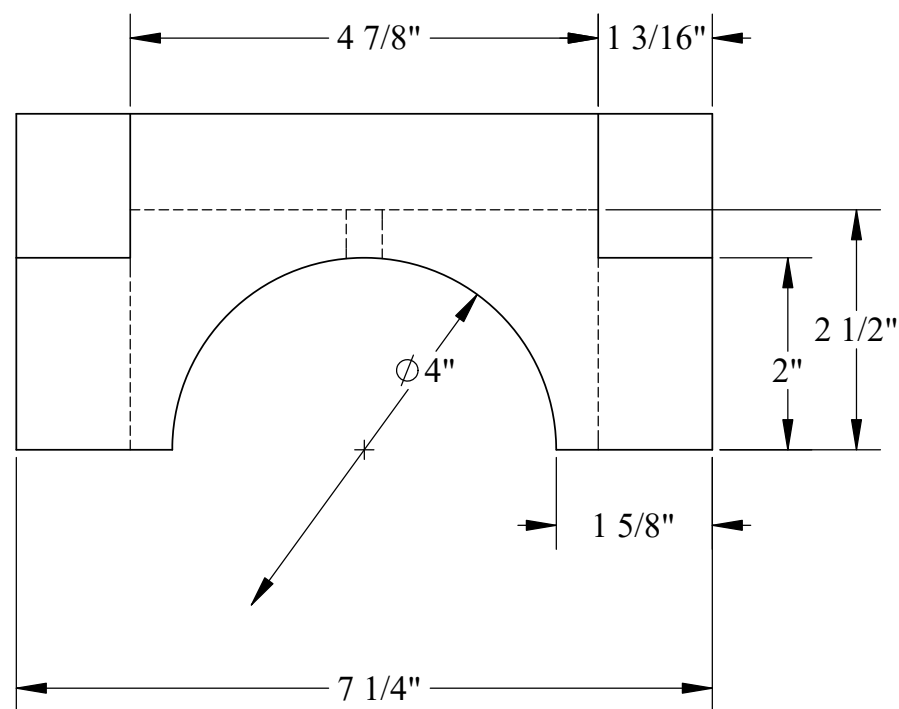
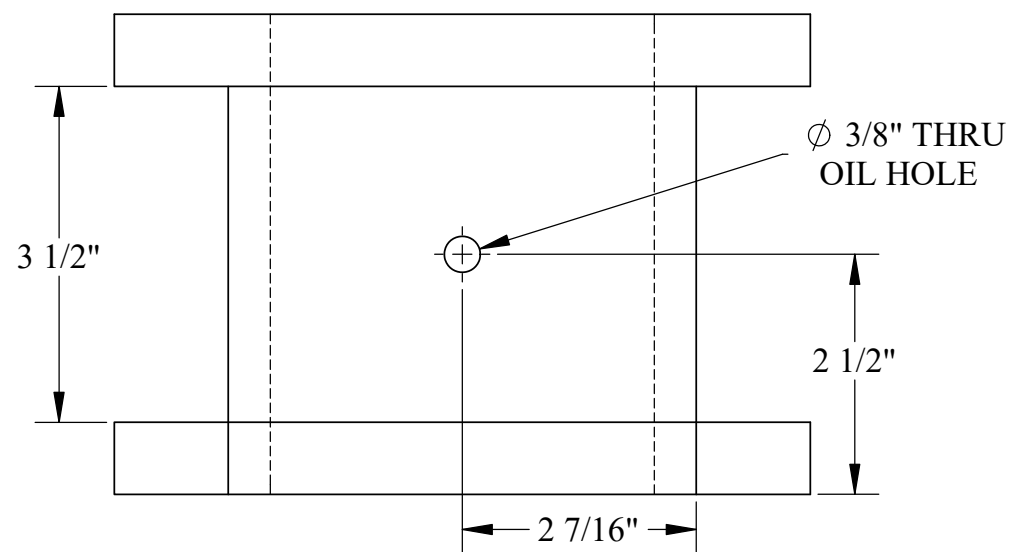
Material Bronze	Drawn By - Date RWC 10-2018	Sub-Assembly Bedplate
Weight (Lbs) 28.97	Shaft Bearing-Fore A	
Scale 1:2		
Part # BP 9		



NOTE:  
POSSIBLE BEARING  
NO DATA AVAILABLE

U.S.S. Monitor Steam Engine

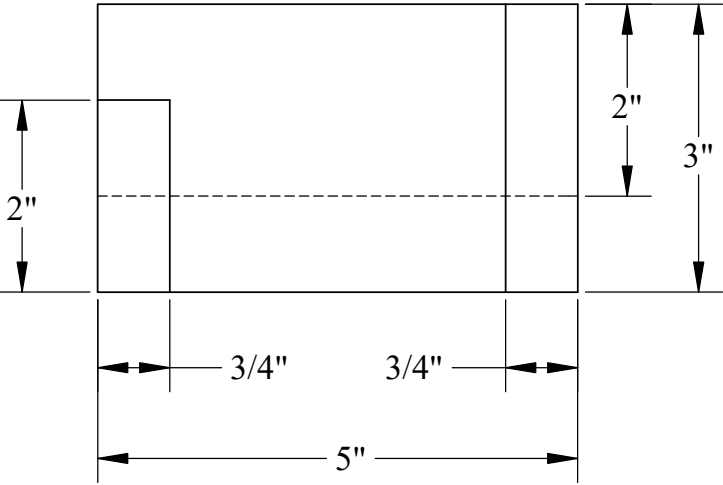
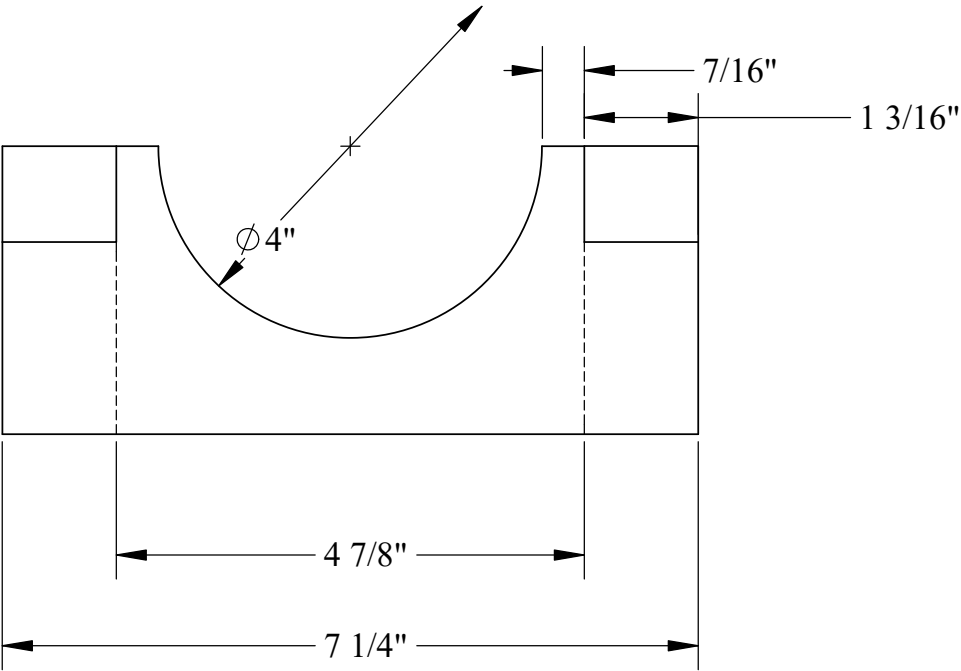
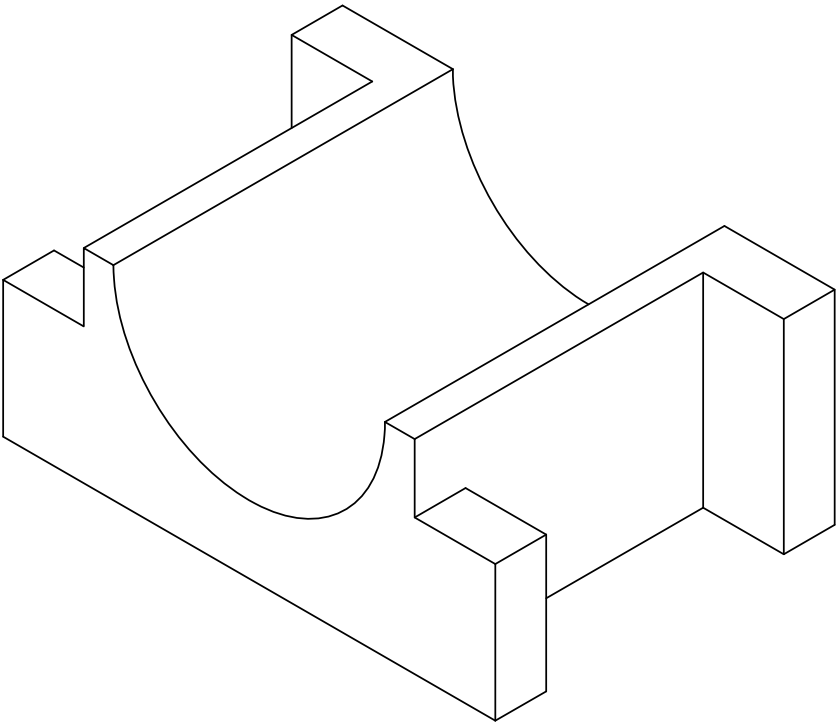
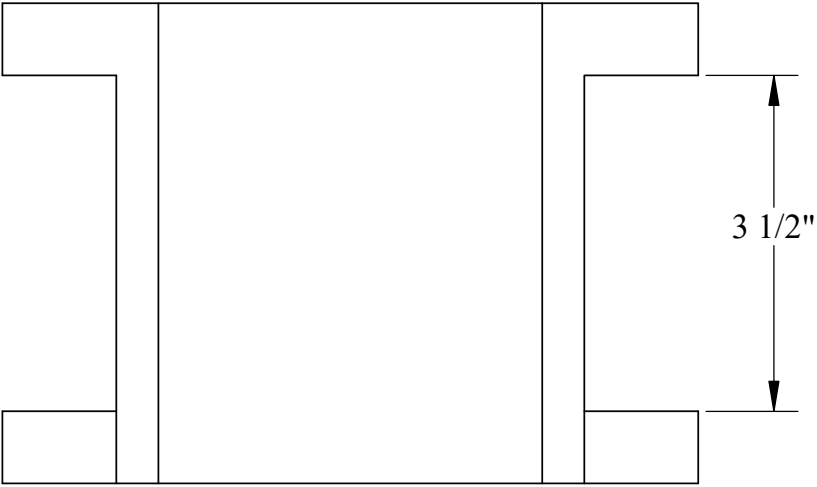
Material Bronze	Drawn By - Date RWC 10-2018	Sub-Assembly Bedplate
Weight (Lbs) 38.54	Description Shaft Bearing-Fore B	
Scale 1:2		
Part # BP 10		



NOTE:  
THE UNUSUAL CONFIGURATION OF THE BEARING IS  
DUE TO THE KEYED POCKET IN THE BEDPLATE  
THAT REQUIRES THE BEARING TO SLIP IN ON ONE  
SIDE ONLY AND THEN BE RAISED INTO POSITION  
BEFORE THE REVESING SHAFT IS INSTALLED.

## U.S.S. Monitor Steam Engine

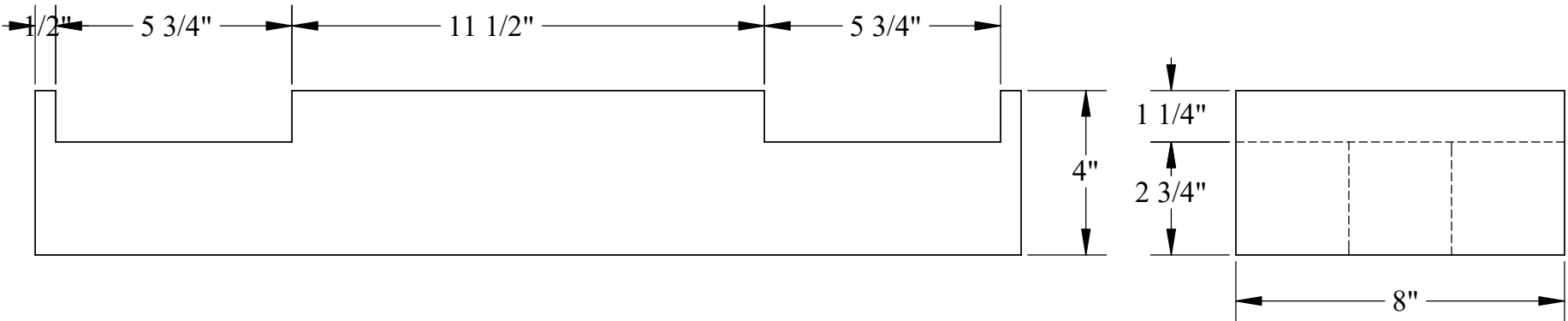
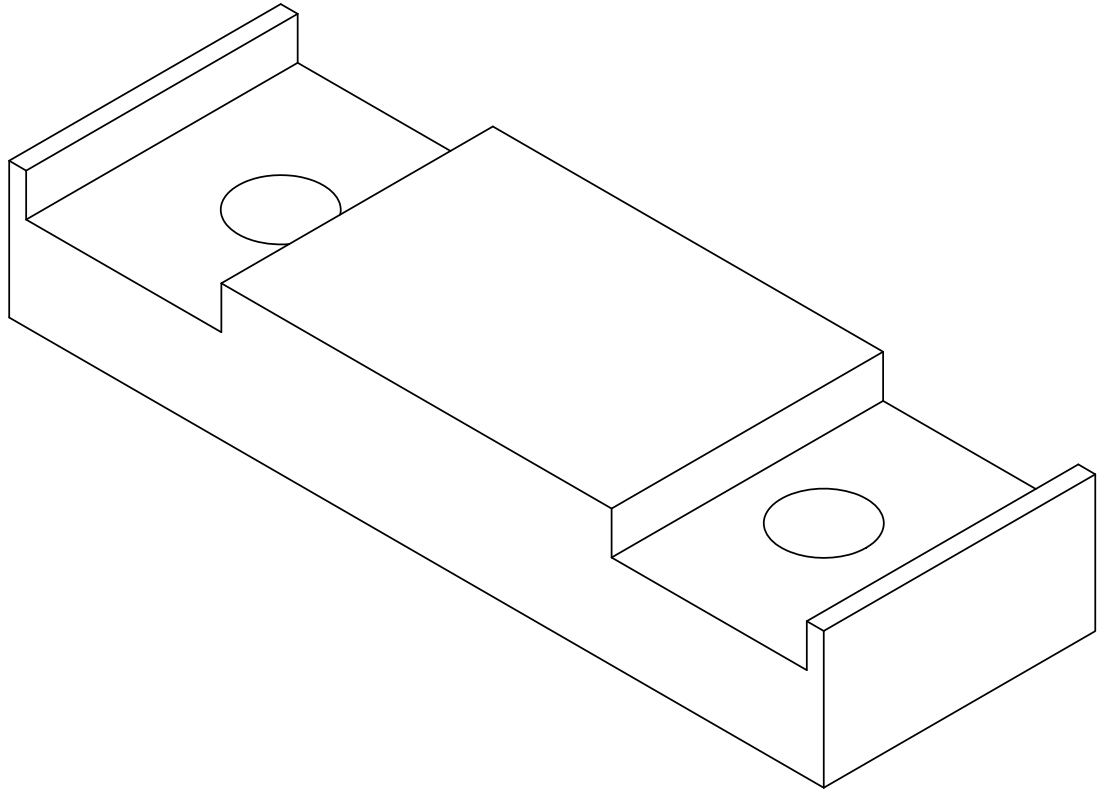
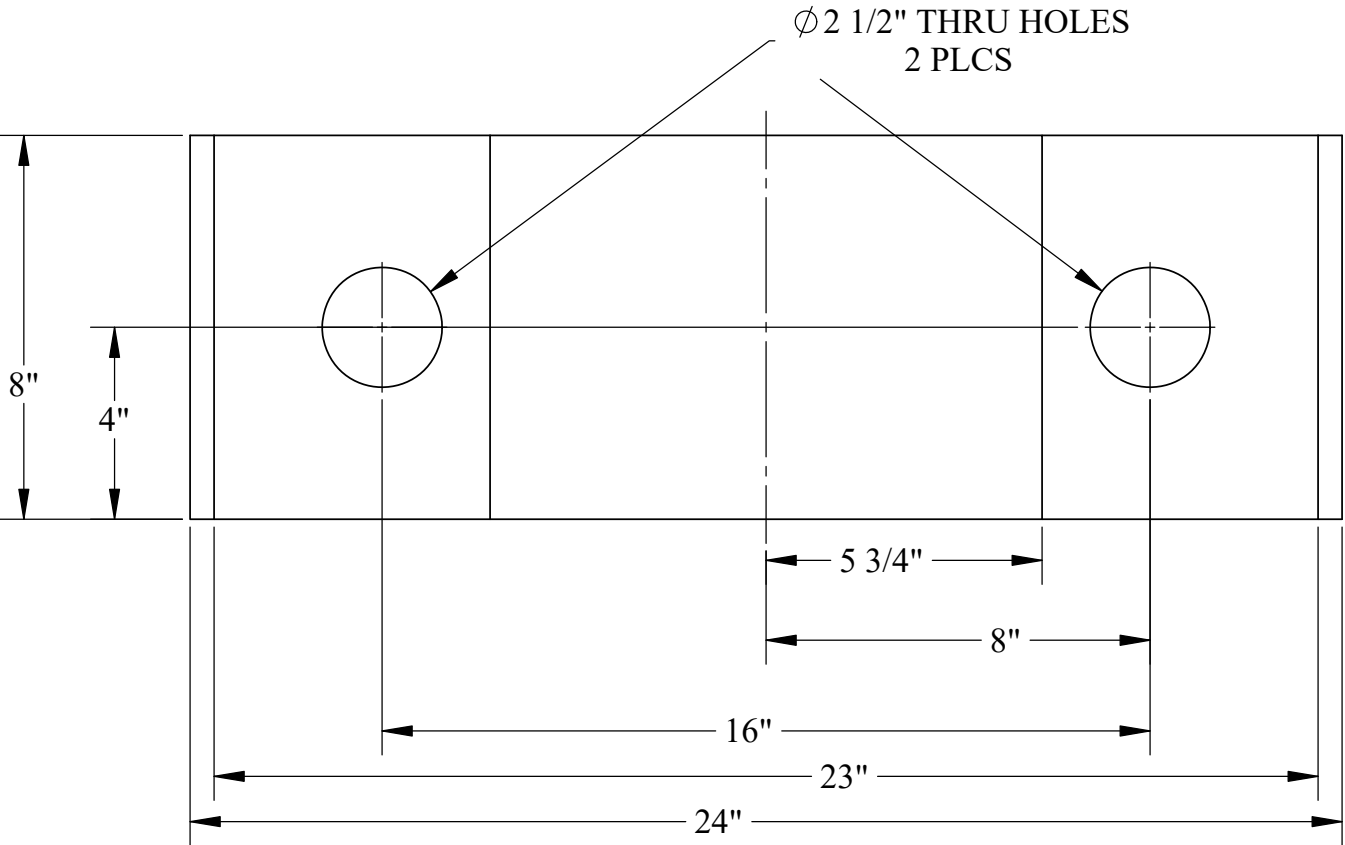
Material Bronze	Drawn By - Date RWC 10-2018	Sub-Assembly Bedplate
Weight (Lbs) 13.97	Shaft Bearing-Aft-A (Top)	
Scale 1:2		
Part # BP 11		



NOTE:  
THE UNUSUAL CONFIGURATION OF THE BEARING  
IS DUE TO THE KEYED POCKET IN THE BEDPLATE  
THAT REQUIRES THE BEARING TO SLIP IN ON ONE  
SIDE ONLY AND THEN BE RAISED INTO POSITION

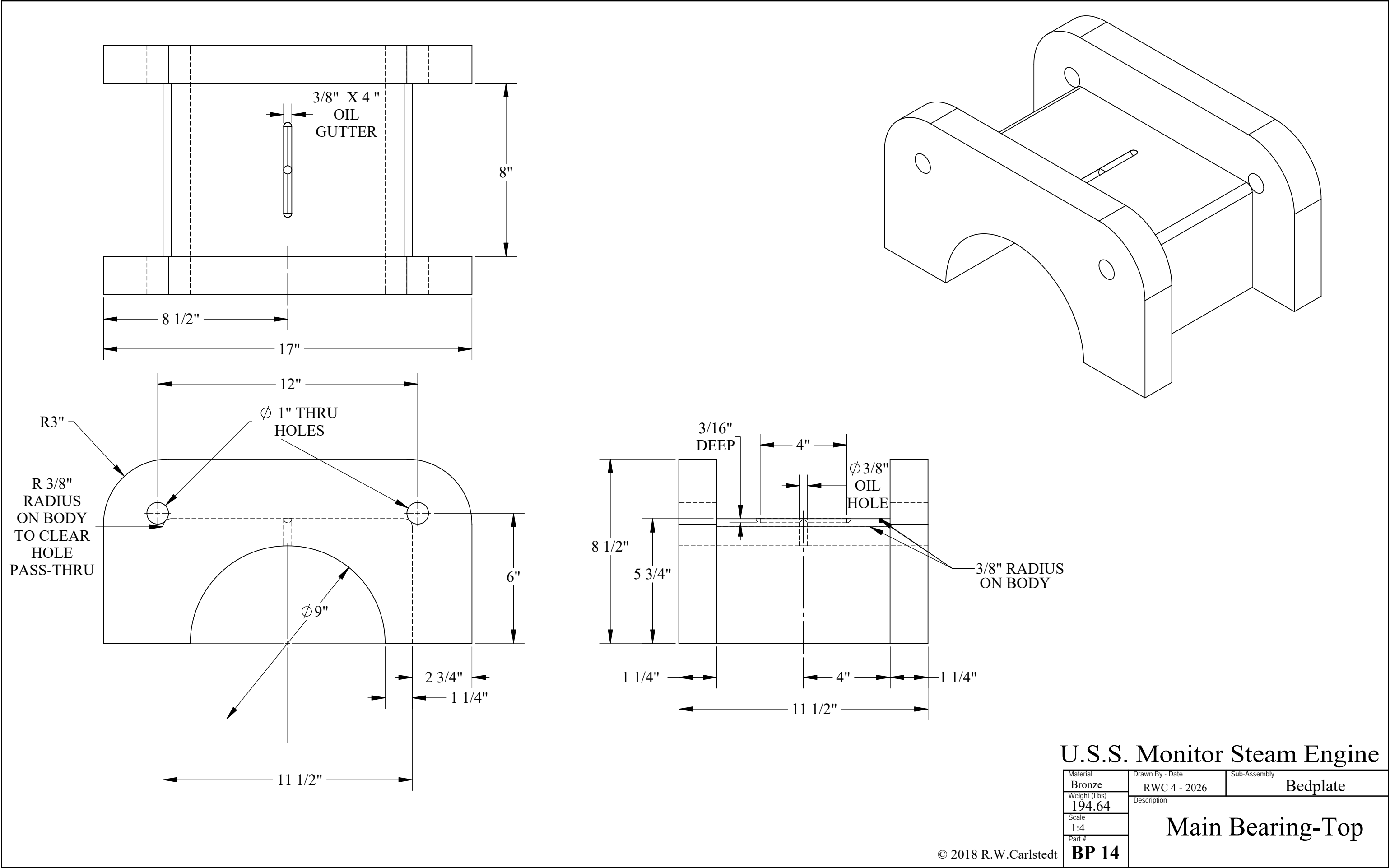
U.S.S. Monitor Steam Engine

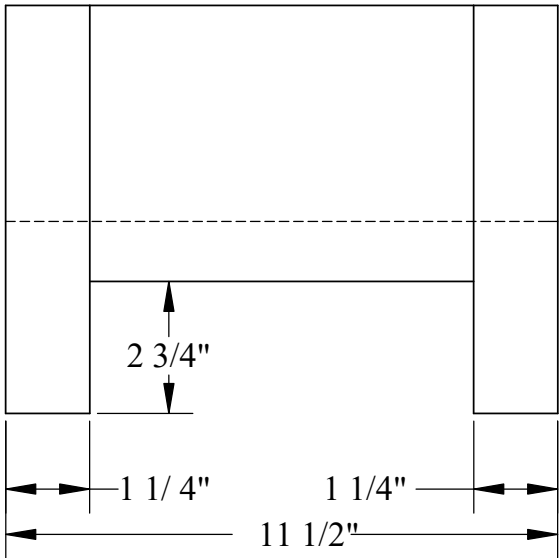
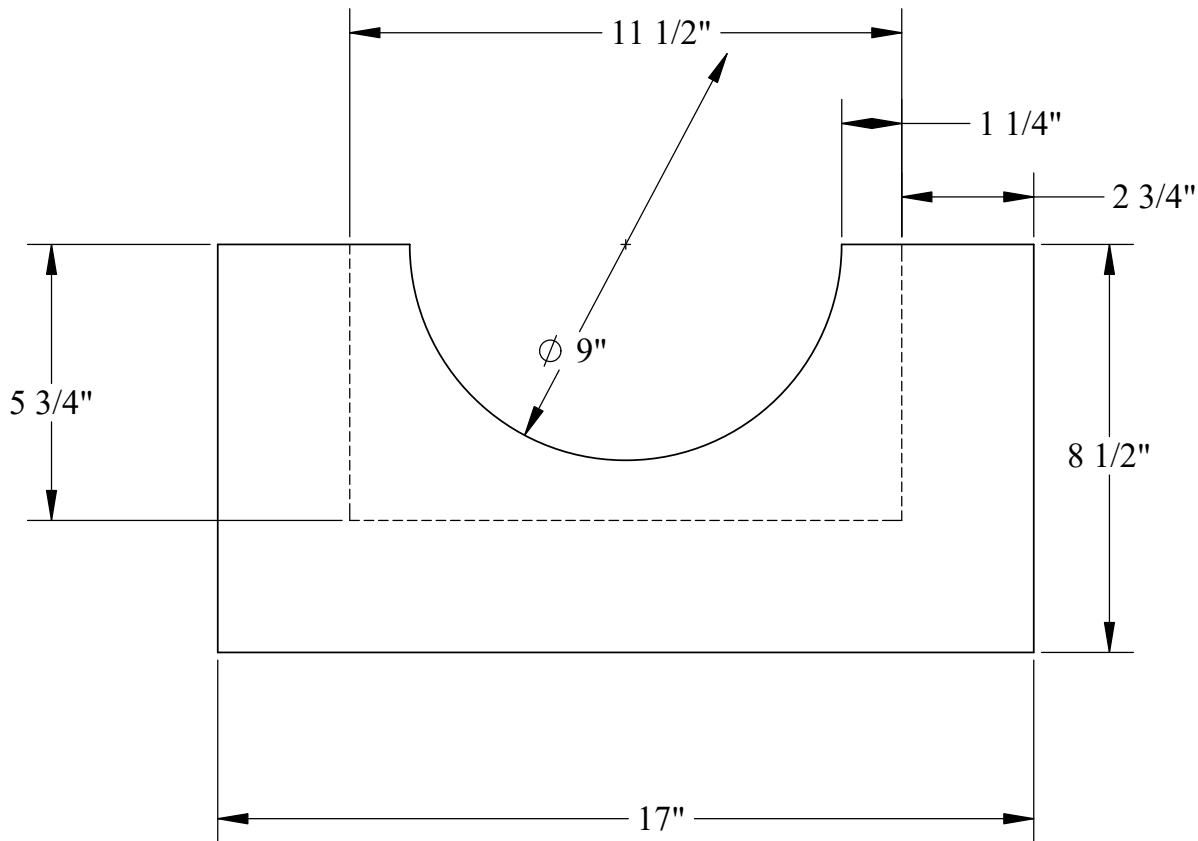
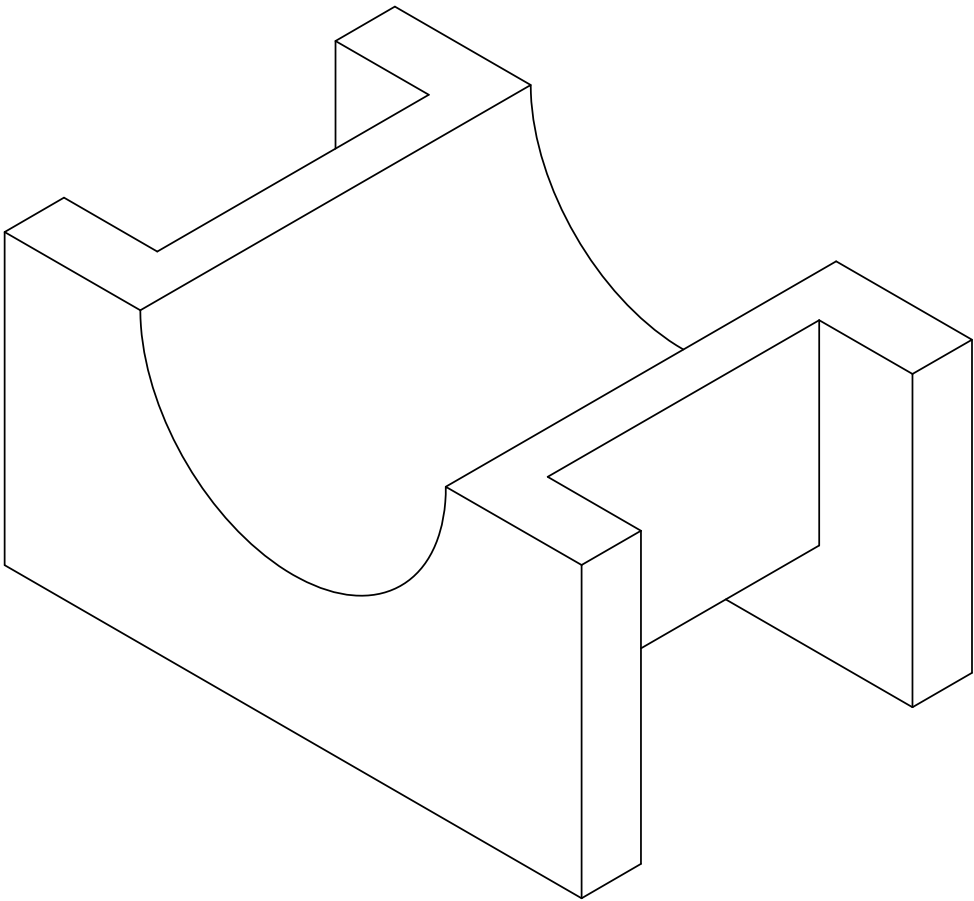
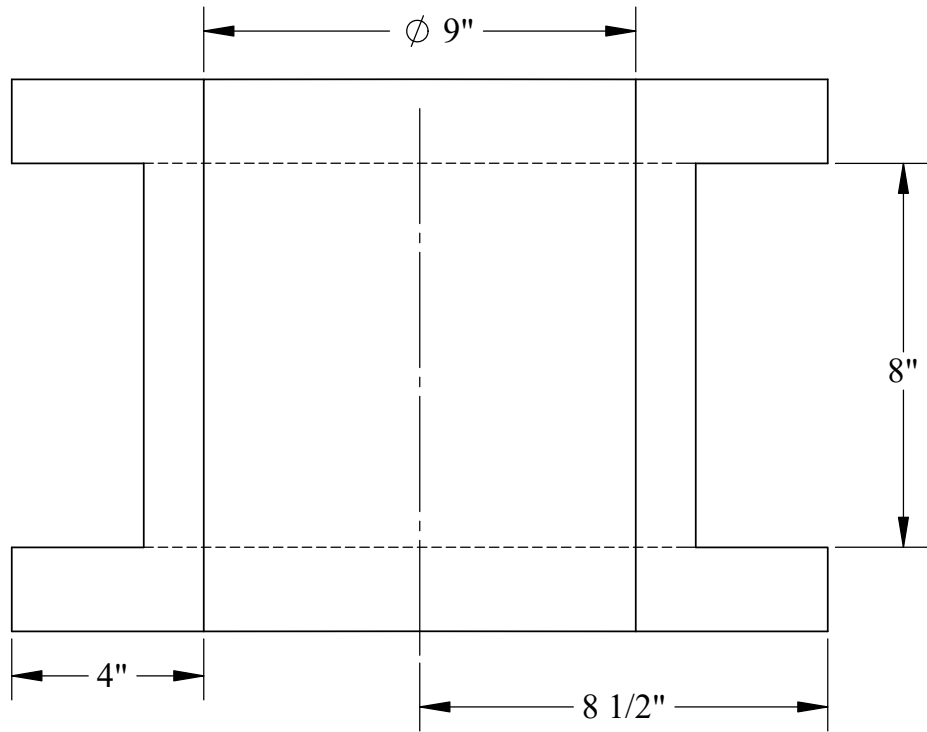
Material Bronze	Drawn By - Date RWC 10-2018	Sub-Assembly Bedplate
Weight (Lbs) 15.18	Description Shaft Bearing Aft-B (BOTTOM)	
Scale 1:2		
Part # BP 12		



U.S.S. Monitor Steam Engine

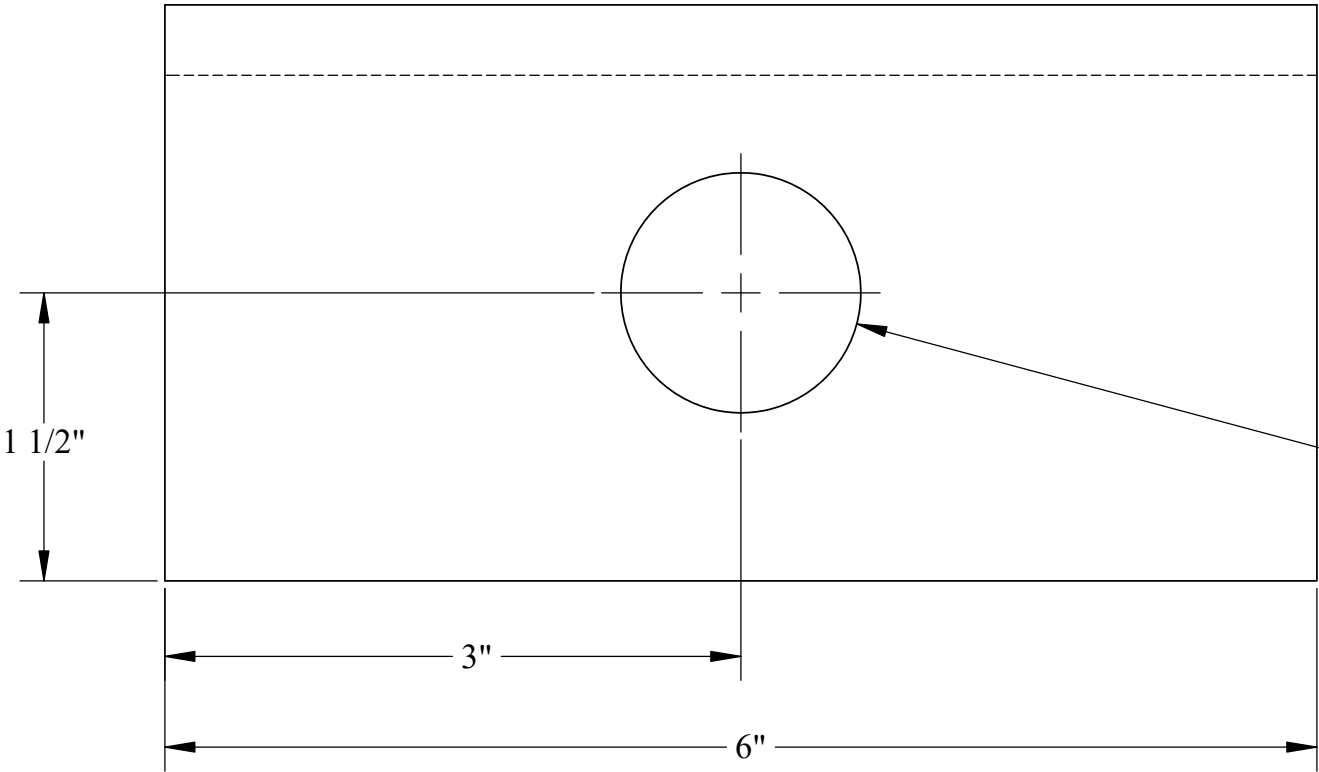
Material STEEL	Drawn By - Date RWC 10-2018	Sub-Assembly Bedplate
Weight (Lbs) 178.66	Main Bearing Cap	
Scale 1:4		
Part # BP 13		



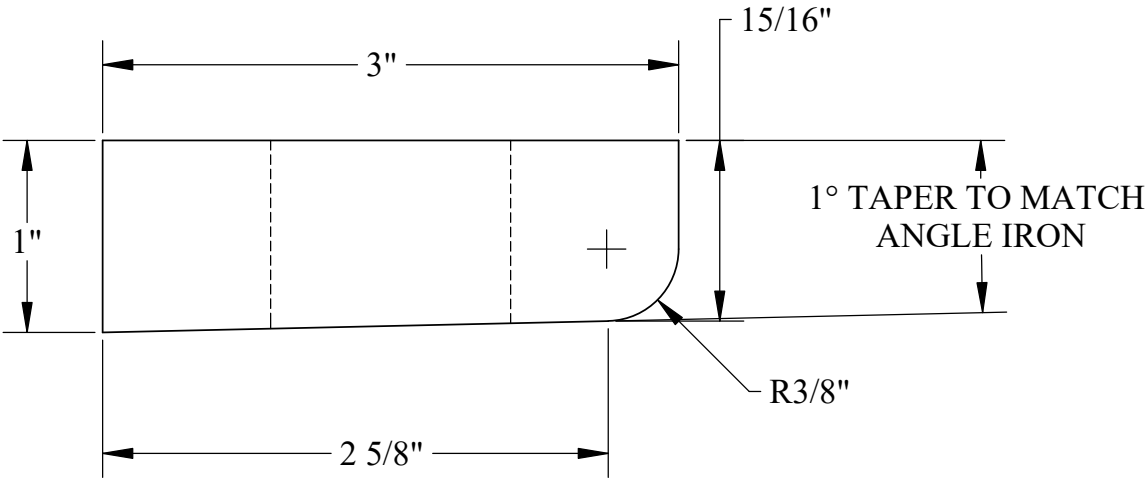
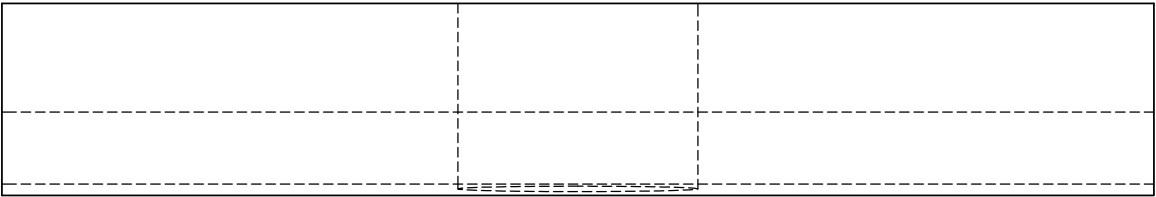
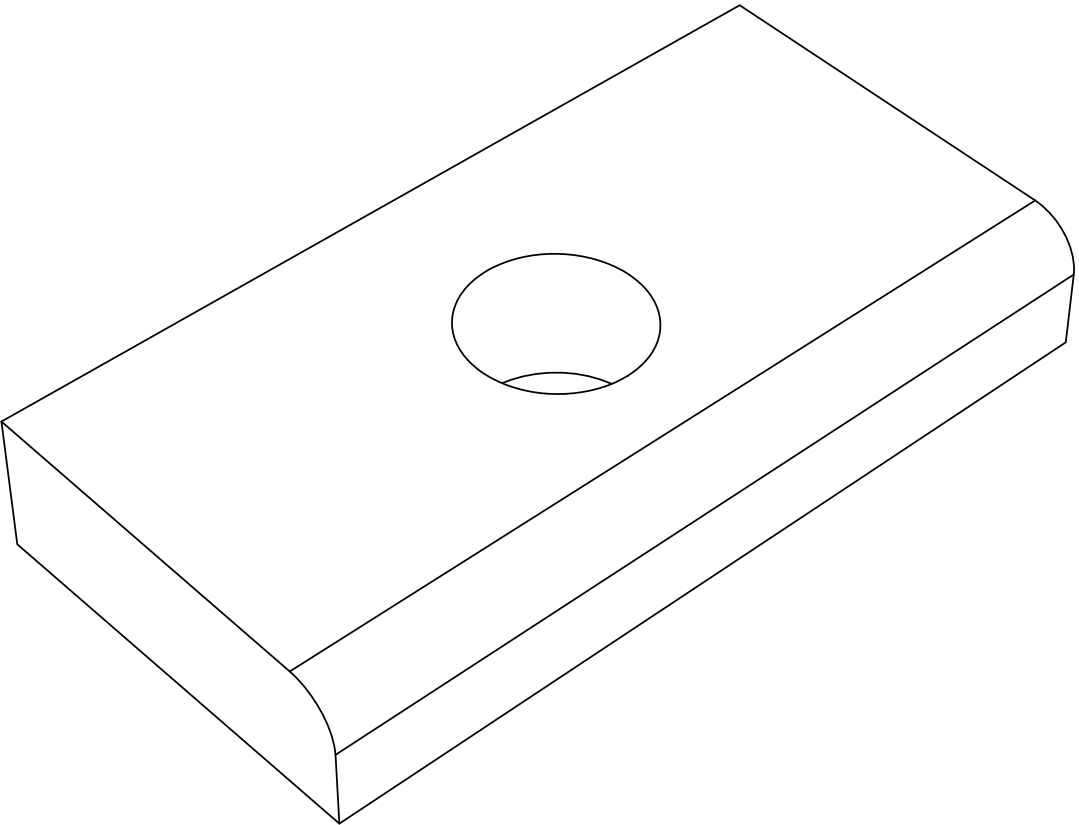


U.S.S. Monitor Steam Engine

Material Bronze	Drawn By - Date RWC 4 - 2026	Sub-Assembly Bedplate
Weight (Lbs) 200.59	Main Bearing- Bottom	
Scale 1:4		
Part # BP 15		



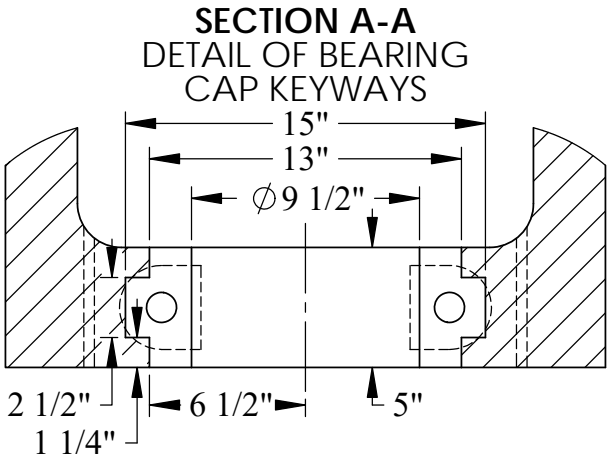
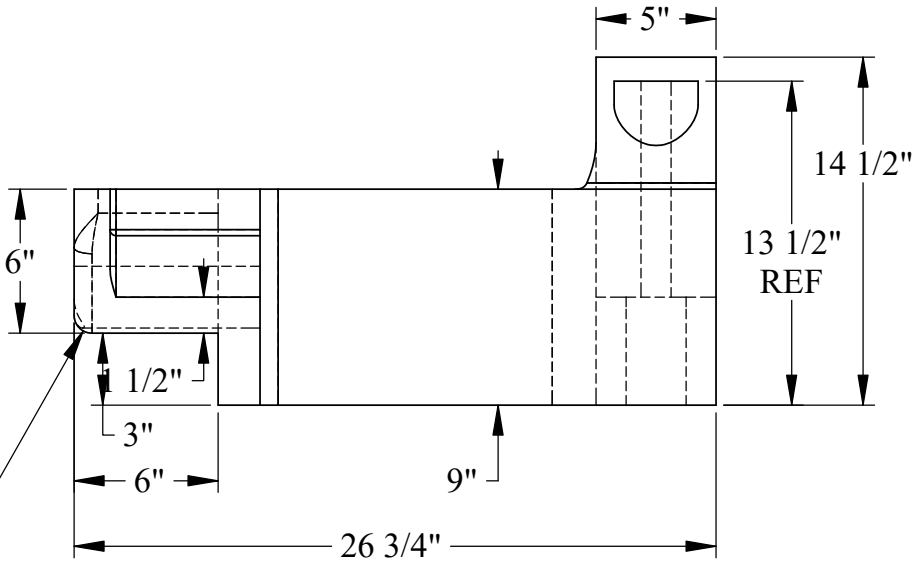
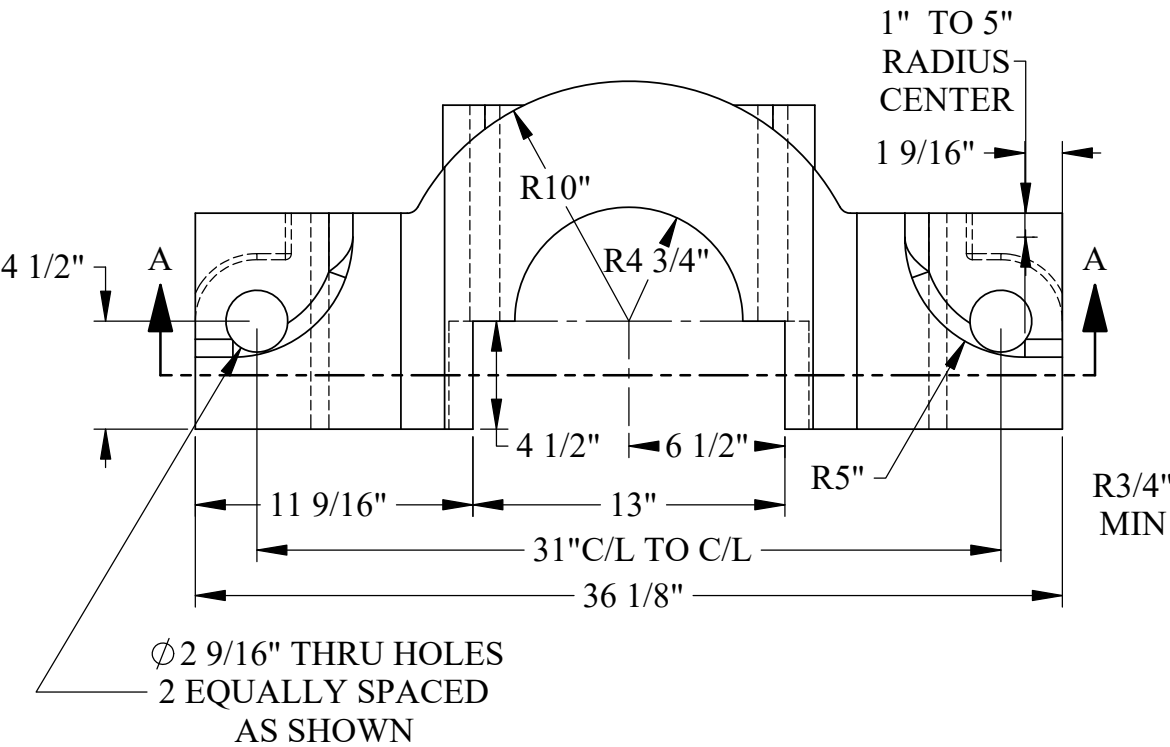
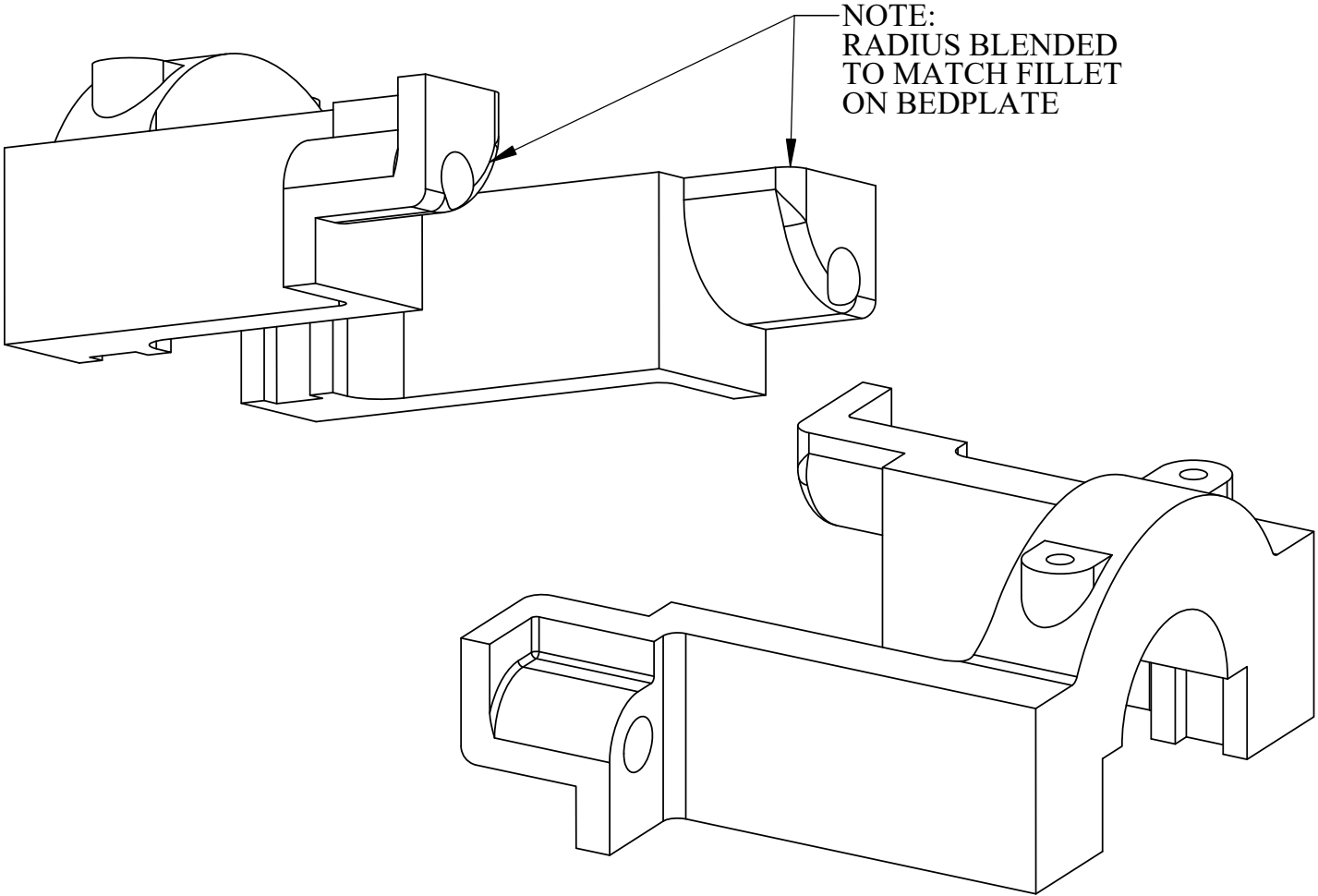
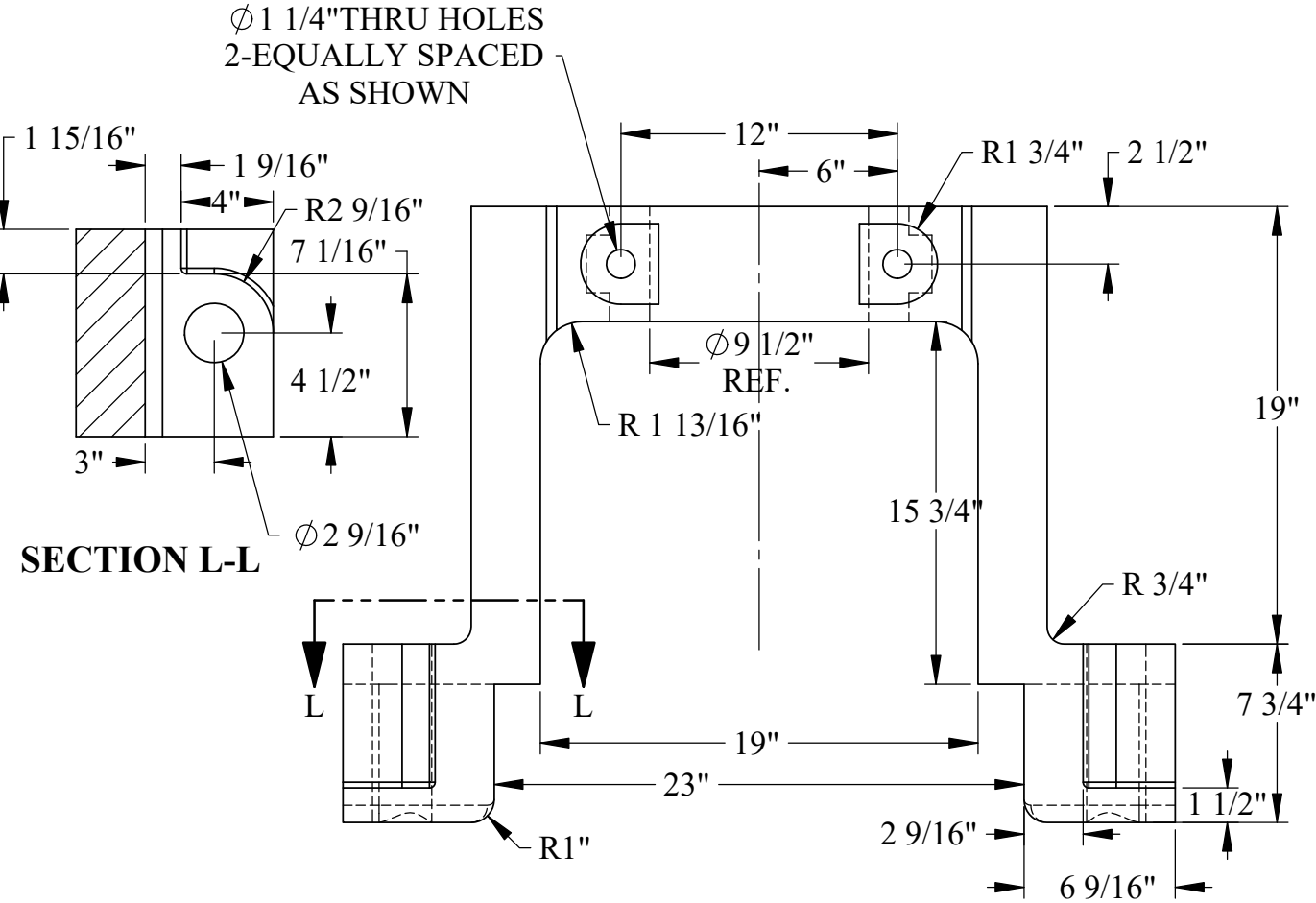
Ø 1 1/4" THRU NHOLE



NOTE:  
MATERIAL MAY HAVE  
BEEN CAST IRON

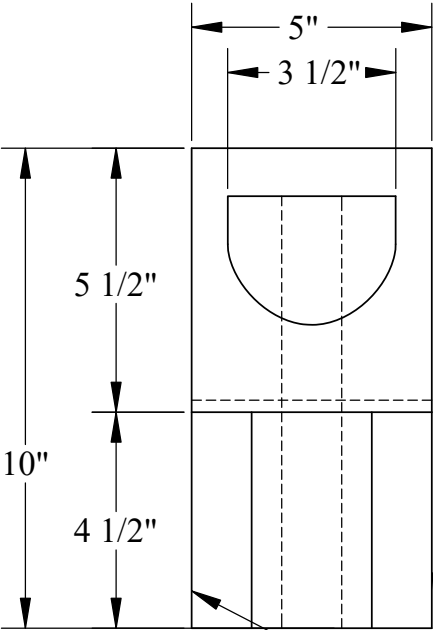
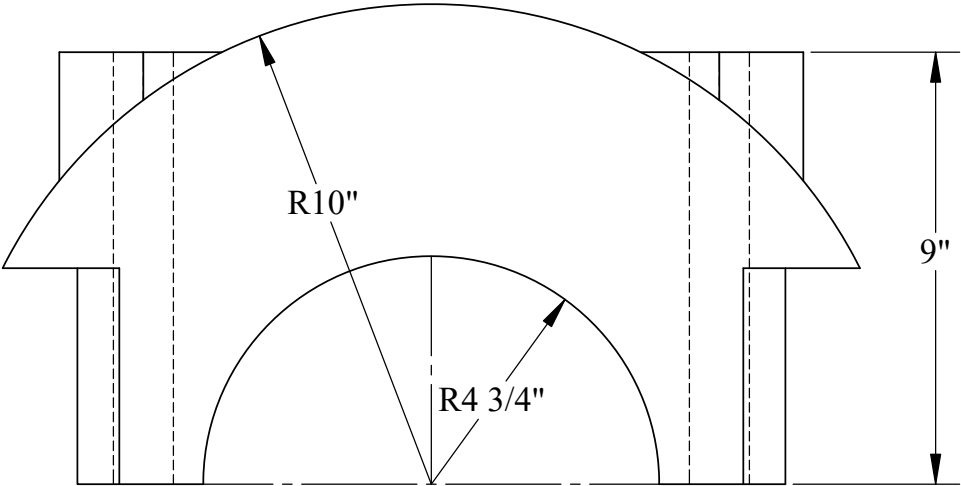
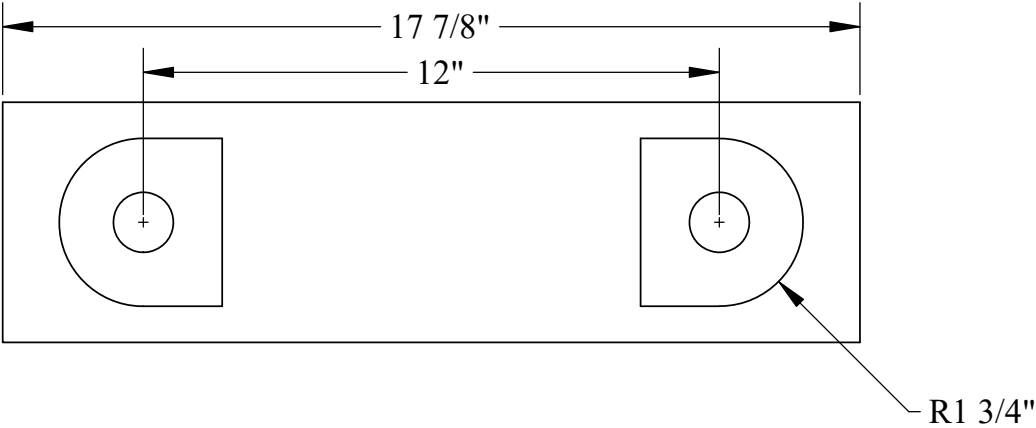
U.S.S. Monitor Steam Engine

Material STEEL	Drawn By - Date RWC 10-2018	Sub-Assembly Bedplate
Weight (Lbs) 4.58	Description Bedplate Bulkhead Washer	
Scale 1:1		
Part # BP 16		

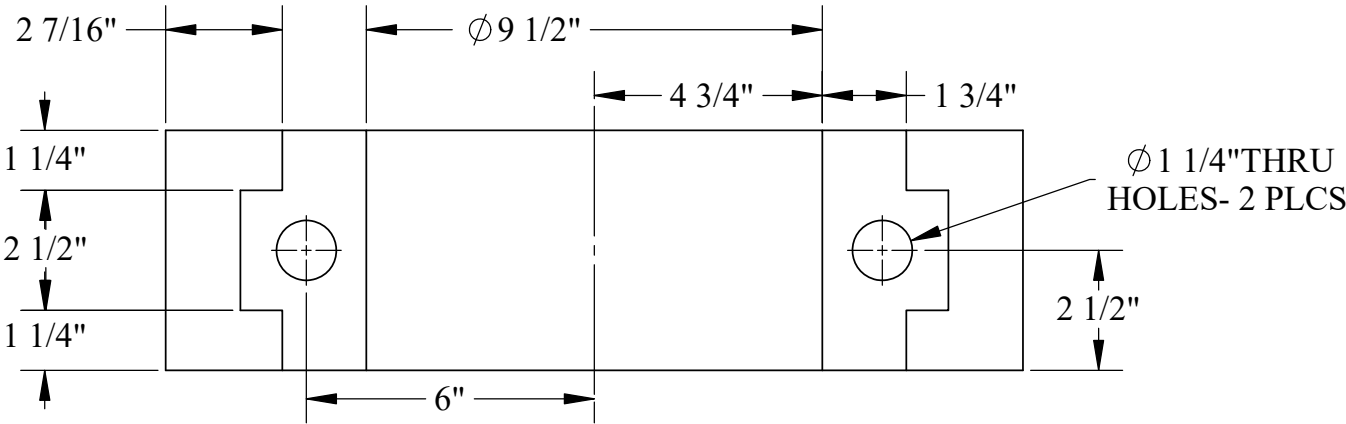
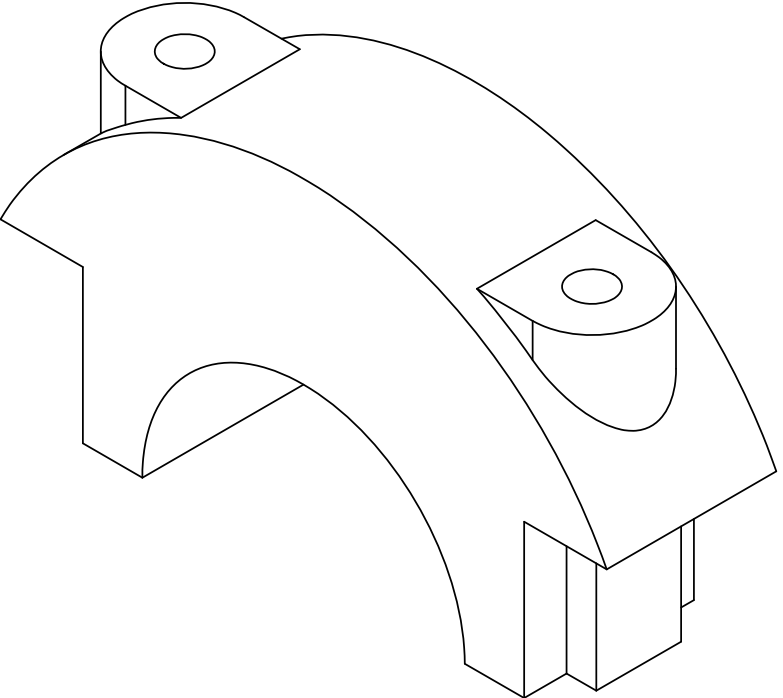


U.S.S. Monitor Steam Engine

Material Cast Iron	Drawn By - Date RWC 10-2018	Sub-Assembly Bedplate
Weight (Lbs) 581.31	Description <b>Thrust Bearing Extension Bracket</b>	
Scale 1:8		
Part # <b>BP 18</b>		

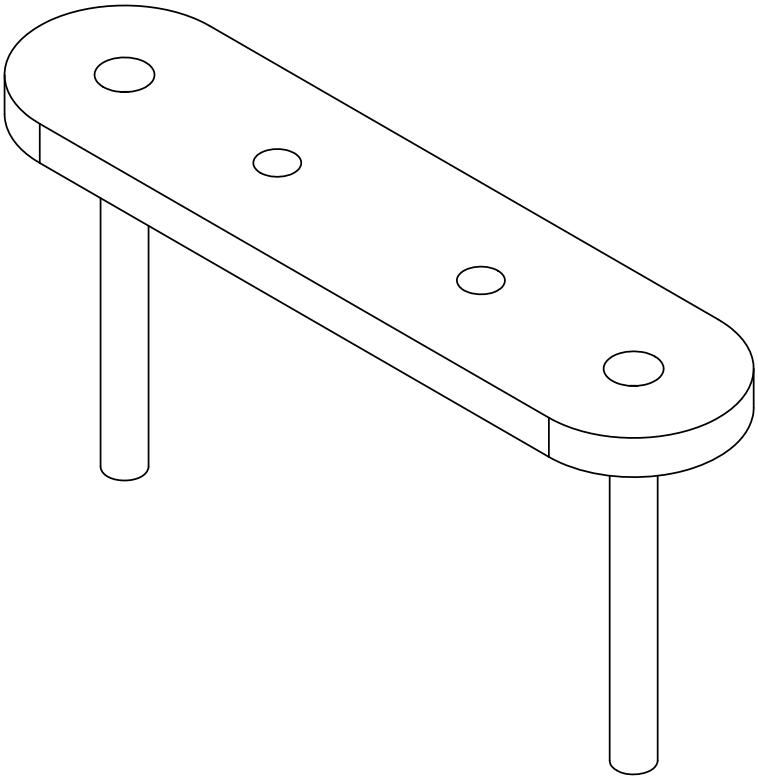
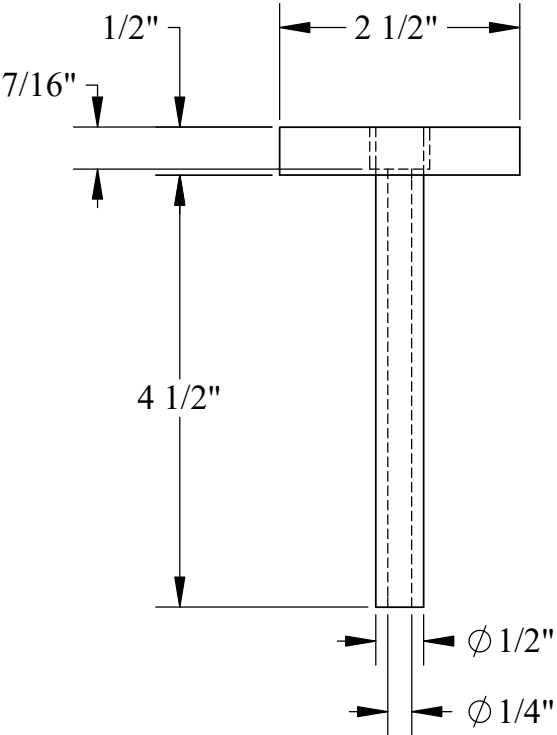
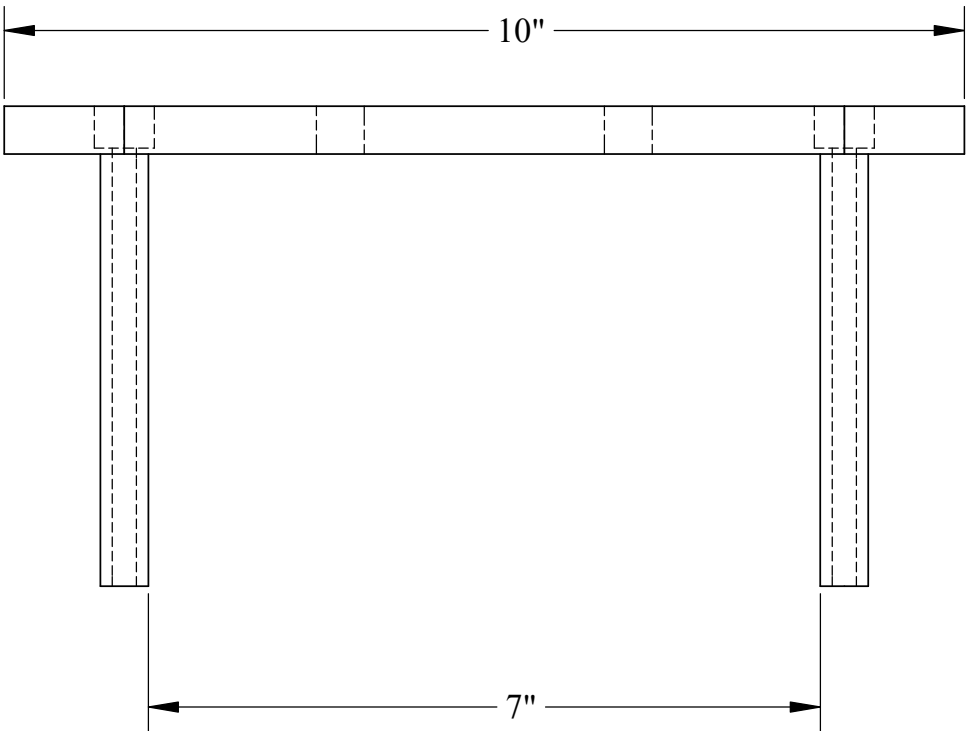
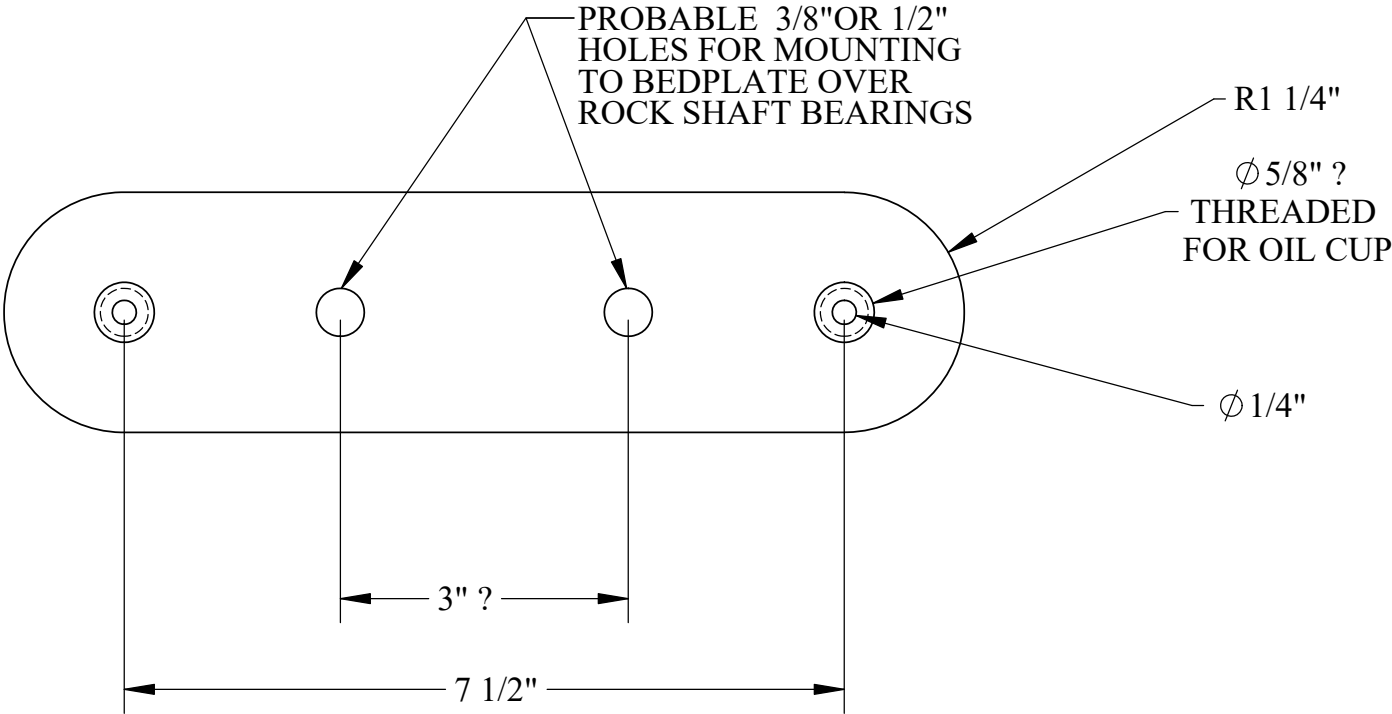


NOTE:  
BOTH THESE SURFACES  
TO BE FACED



U.S.S. Monitor Steam Engine

Material Cast Iron	Drawn By - Date RWC 10-2018	Sub-Assembly Bedplate
Weight (Lbs) 126.18	Thrust Bearing Extension Bracket Cap	
Scale 1:4		
Part # BP 19		



NO DETAIL EXISTS FOR THESE BRACKETS - MOST LIKELY FABRICATED AT CONSTRUCTION TIME.  
THE PIPES MAY HAVE THREADED INTO THE OIL CUP BOTTOM ITSELF AND THE CUP THREADED INTO THIS BRACKET, AS MANY CUPS USED WICKS TO DISTRIBUTE OIL OVER A TIME.

U.S.S. Monitor Steam Engine

Material STEEL	Drawn By - Date RWC 12-2018	Sub-Assembly Bedplate
Weight (Lbs) 3.62	Description Bearing Bracket-Oil Cups	
Scale 1:2		
Part # BP 20		