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# EVLA Machined Feeds

## Current Status

## Mechanical Designs

## Ka, C, and X Band horns

## EDM Circular to Rect. Transition



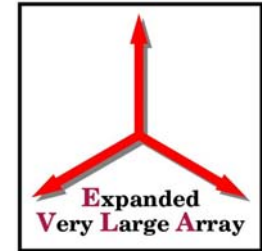
# Current Status



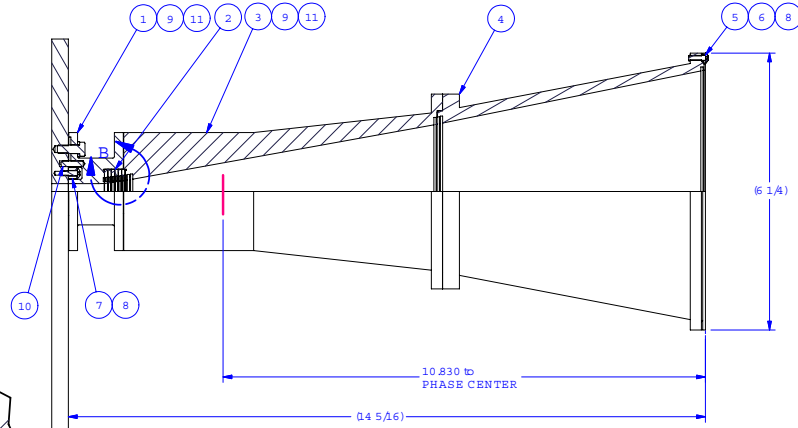
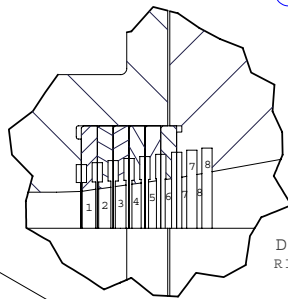
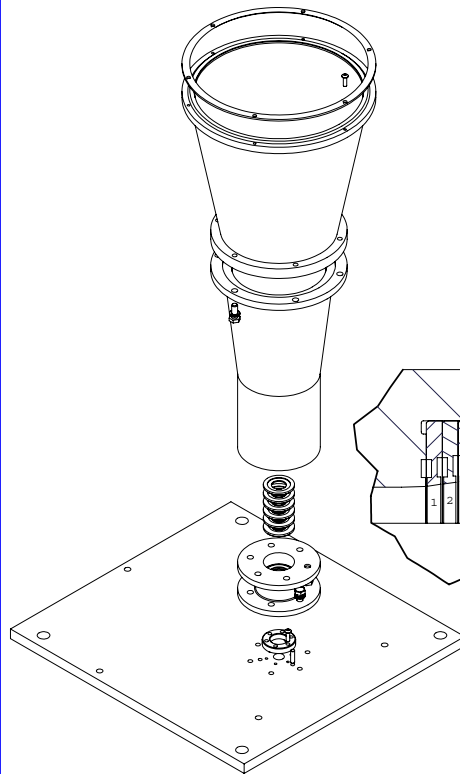
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- Ka-Band: Three Prototypes built.
  - C-Band: Two Laminated Prototypes built.
    - Two Machined Prototypes ordered.
  - X-Band: Two Prototypes in Production.



# Ka-Band Feed Horn



NOTES:



REV	DATE	DRAWN BY	APPRVD BY	DESCRIPTION
11	18			#10 LOCK WASHER #91475A027 MCMMASTER
10	3			1/8 DIA x 1/2 L HARDENED DOW EL P N #98381A471 MCMMASTER
9	18			#10-32 x 1/2 L HHMS #92314A829 MCMMASTER
8	6			#4-40 x 3/8 L BUTTON HEAD HS CS #92949A108 MCMMASTER
7	1			VACUUM WINDOW RETAINER SHEET 6
6	1			WINDOW SHEET 6
5	1			APERTURE WINDOW RETAINER SHEET 6
4	1			UPPER SECTDN SHEET 5
3	1			LOWER SECTDN SHEET 4
2	1			set RING LOADS SHEET 3
1	1			THROAT FLANGE SHEET 2

UNLESS OTHERWISE SPECIFIED  
DIMENSIONS ARE IN INCHES

TOLERANCES UNLESS OTHERWISE SPECIFIED:  
 > UNLESS OTHERWISE SPECIFIED  
 > PLACE DECIMAL (XXX): 0 .2005  
 > PLACE DECIMAL (XX): 0 .205  
 > PLACE DECIMAL (X): 0 .01  
 > PLACE DECIMAL ( ): 0 .1

MATERIAL:  
 FNEH:  
 CHROMATE TO MIL-C-5541D Class 3

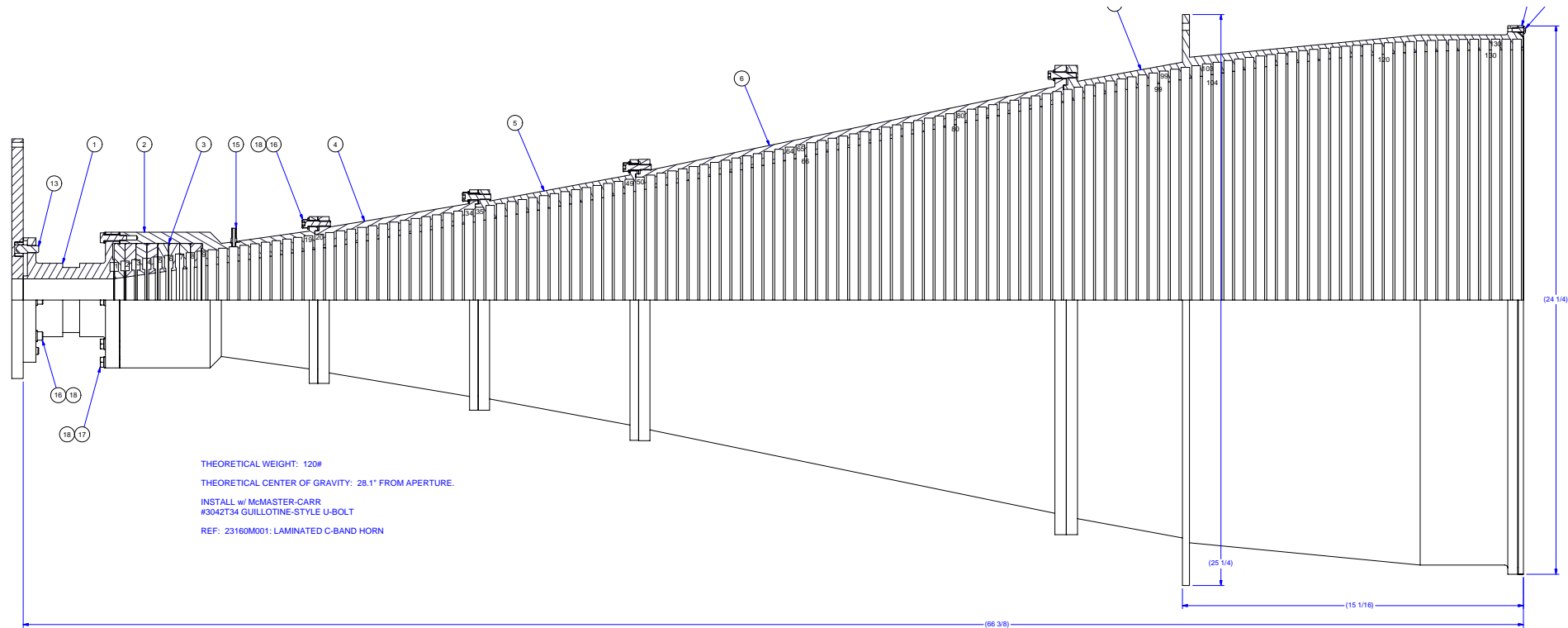
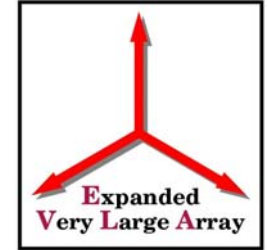
ITEM	QTY	DESCRIPTION	SOURCE
EVL A Ka-BAND FEED HORN		NATIONAL RADIO ASTRONOMY OBSERVATORY	
GENERAL ARRANGEMENT		SOCORRO, NM 87801	
DRAWN BY: JRR		DATE: 10/7/2003	
DESIGNED BY: SR KANTH/JRR		DATE: 10/7/2003	
APPROVED BY:		DATE:	

General Arrangement ent.lvw

SHEET NUMBER: 1 OF 6	REV.:	SCALE: NTS	DRAWING NUMBER: 23635M 001
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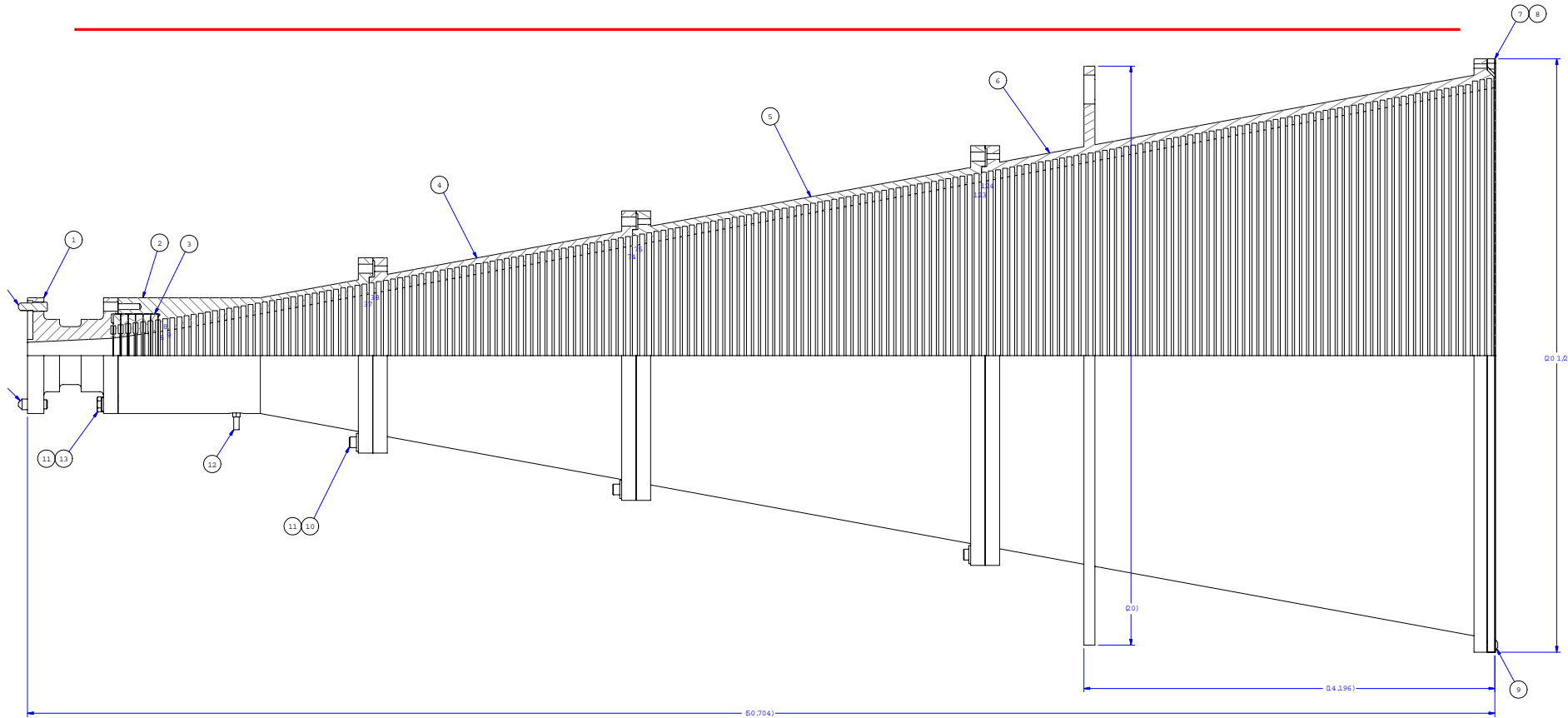


# C-Band Feed Horn





# X-Band Feed Horn



THEORETICAL WEIGHT: 72 lbs



# C-Band EDM Circular to Rectangular Transitions

