

EVLA Feed Cone

Current Status
Feed Circle Layout
Structural Design
Feed Mounting
Feed Heaters
Cost



Current Status



-
- Four built to date.
 - One mock-up.
 - Three installed. (Antennas 13, 14 & 16)
 - Extrusions and Base Plates ordered for all.
 - Panels Ordered for all.

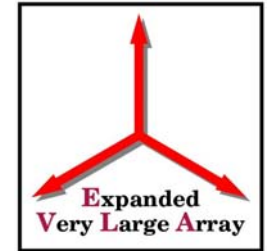


Antenna 13 Feed Cone

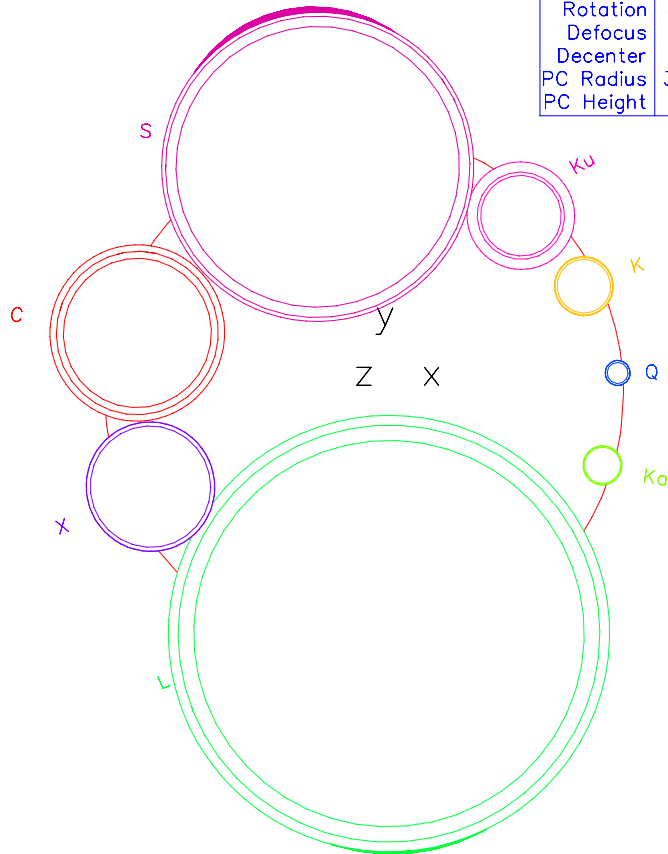




Feed Circle



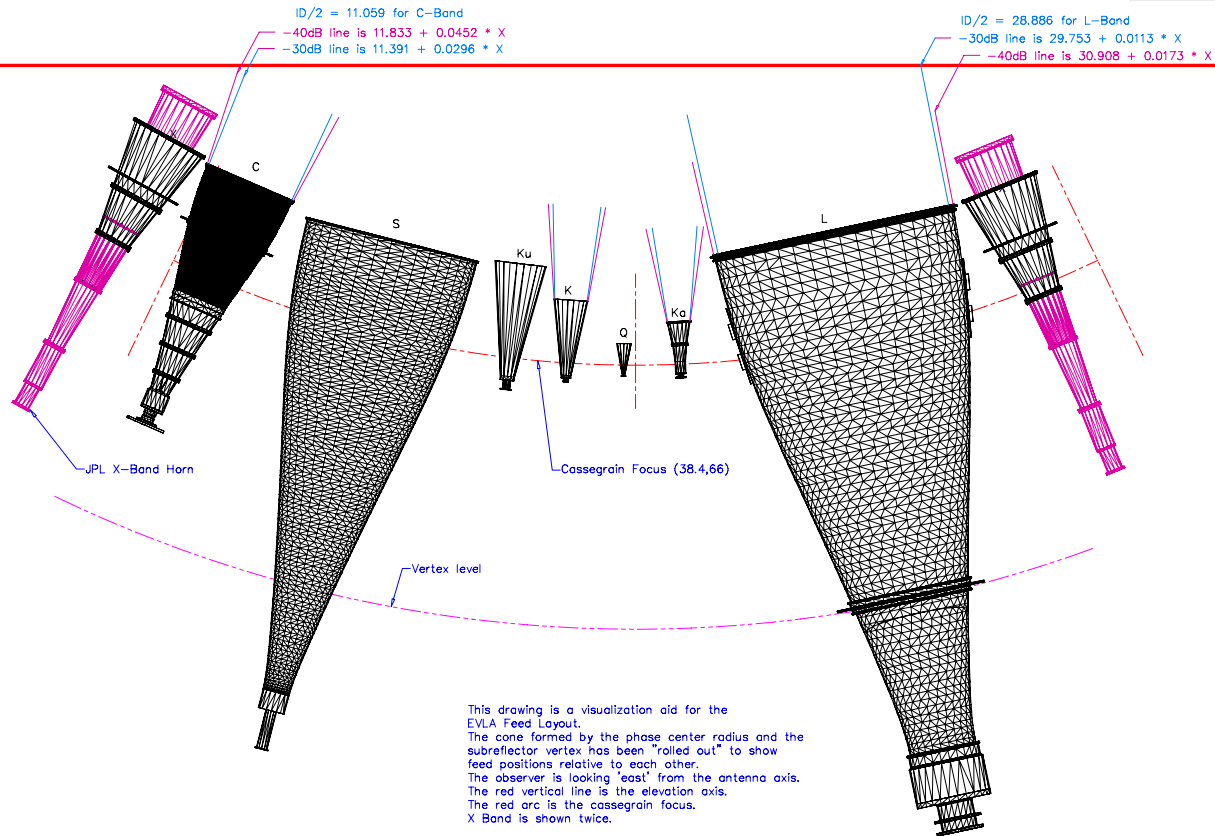
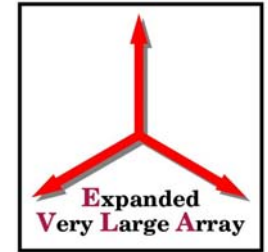
	Q	K	Ku	S	C	X	L	Ka
Rotation	4.5°	25.9°	47.6°	101.6°	165.2°	-156.3°	-84.1°	-16.9°
Defocus	0	0	0	42	10	8.5	56.5	0
Decenter	0	0	0	0	0	0	2	0
PC Radius	38.4	38.4	38.4	45.213	39.819	40.032	48.42	38.4
PC Height	66	66	66	18.486	56.101	54.616	10.365	66



EVLA Feed Circle Layout - 30dB Limit
Jim Ruff 3/6/02

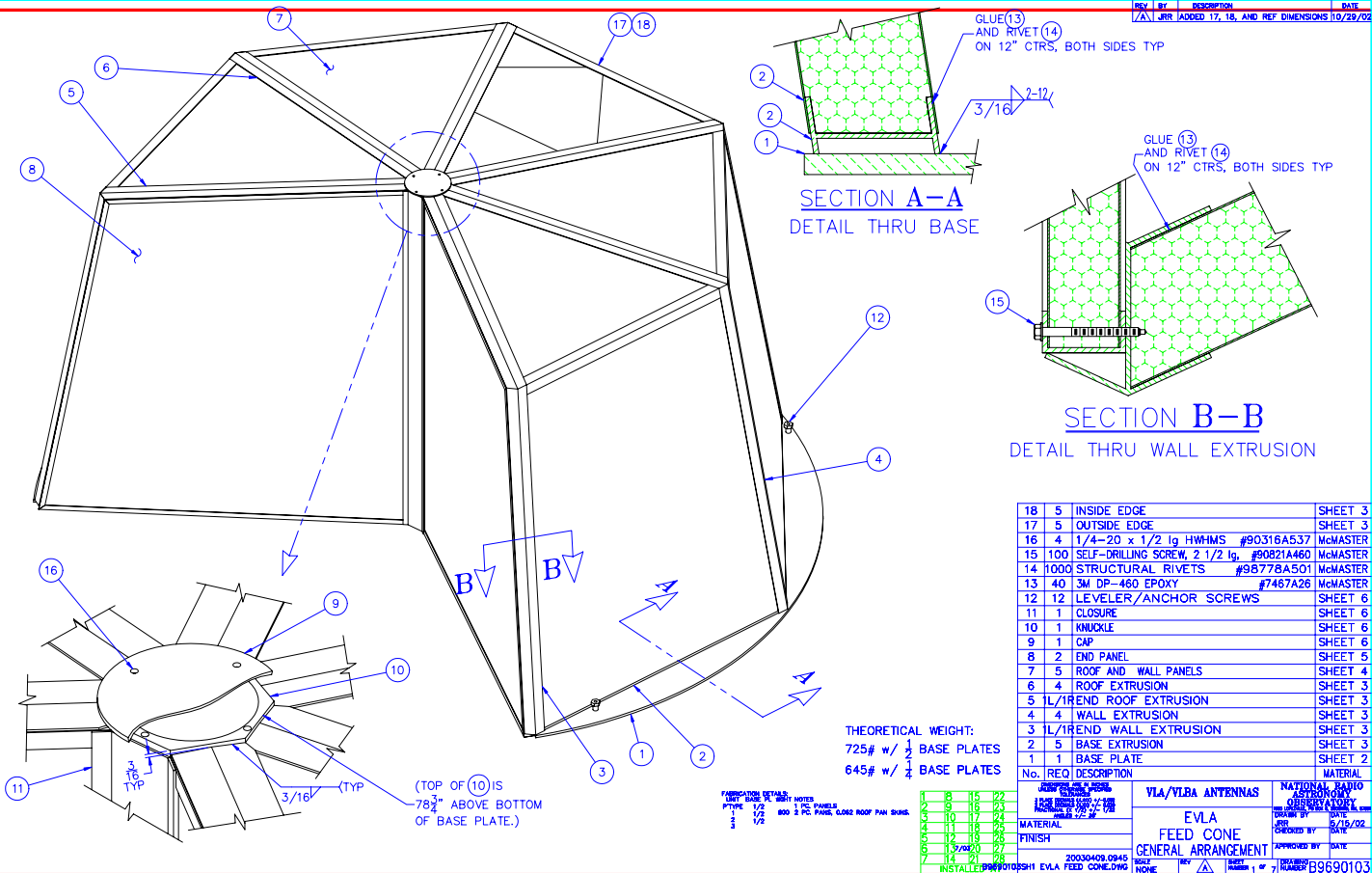
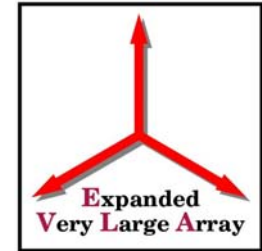


Feed Circle 'Rolled Out'



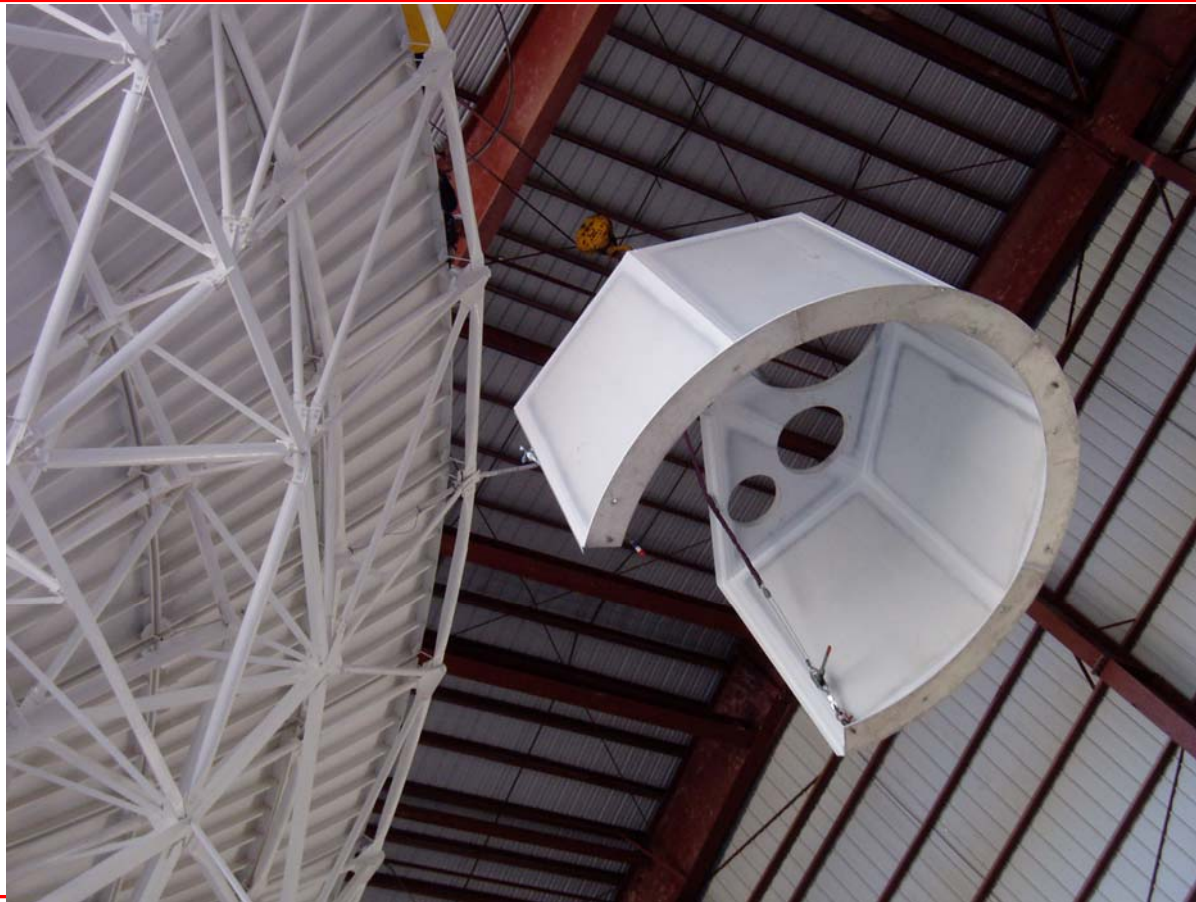


Feed Cone Structure



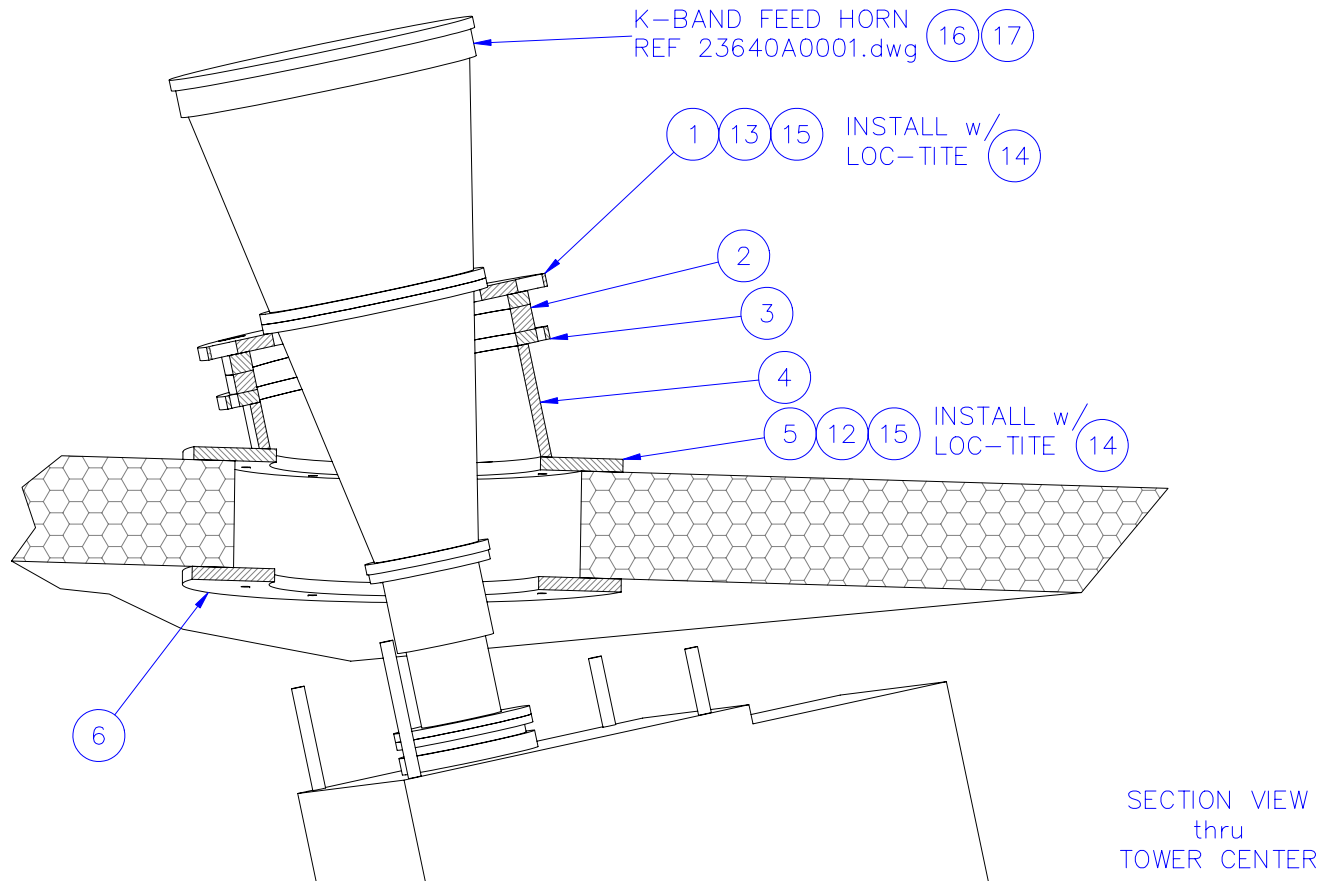
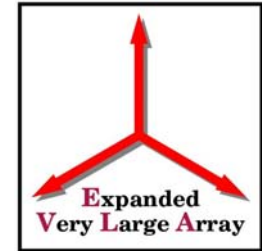


Feed Cone Being Installed in A13



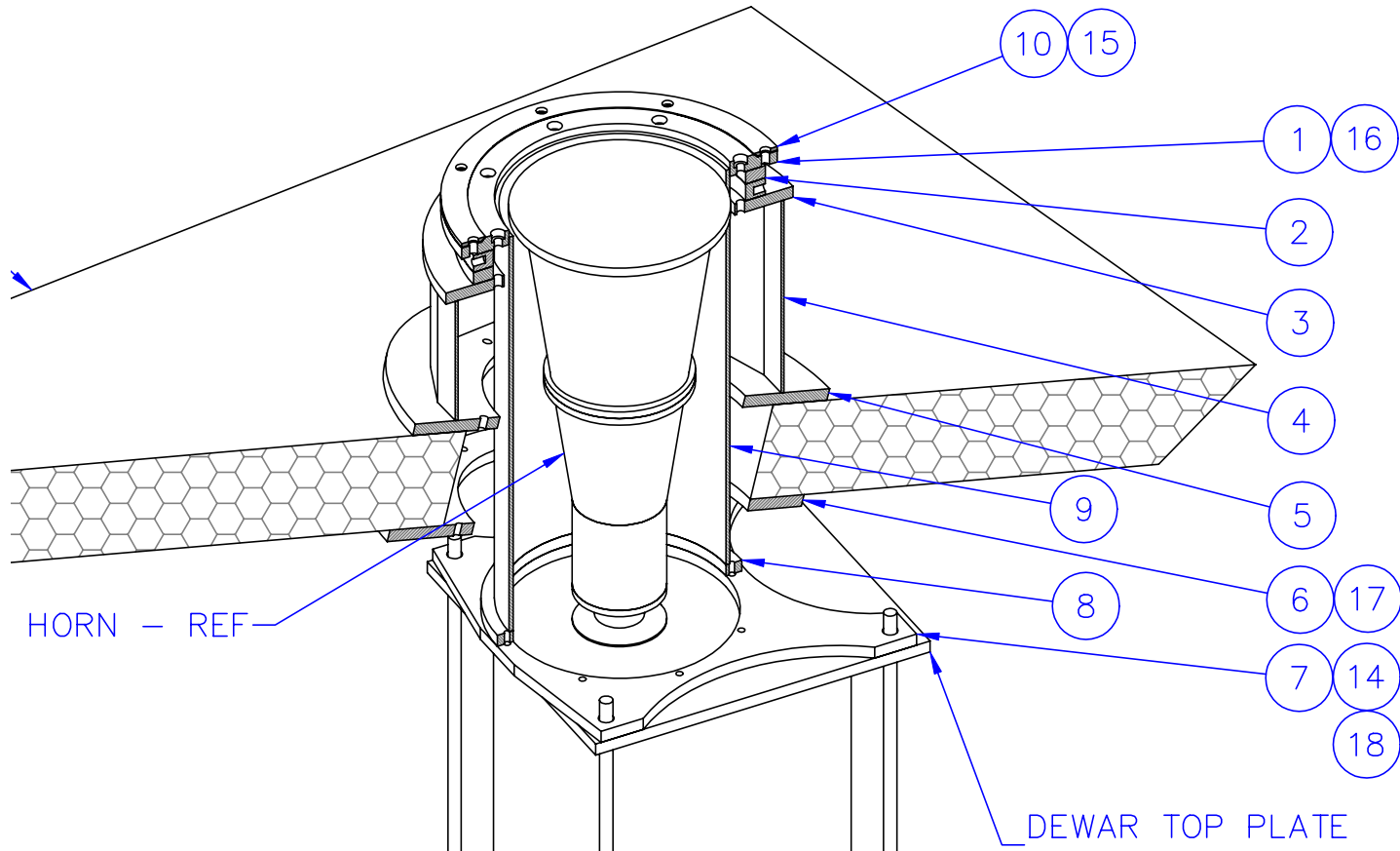


K-Band Feed Mount C, X, and Ku Similar





Ka-Band Feed Mount Q-Band Similar



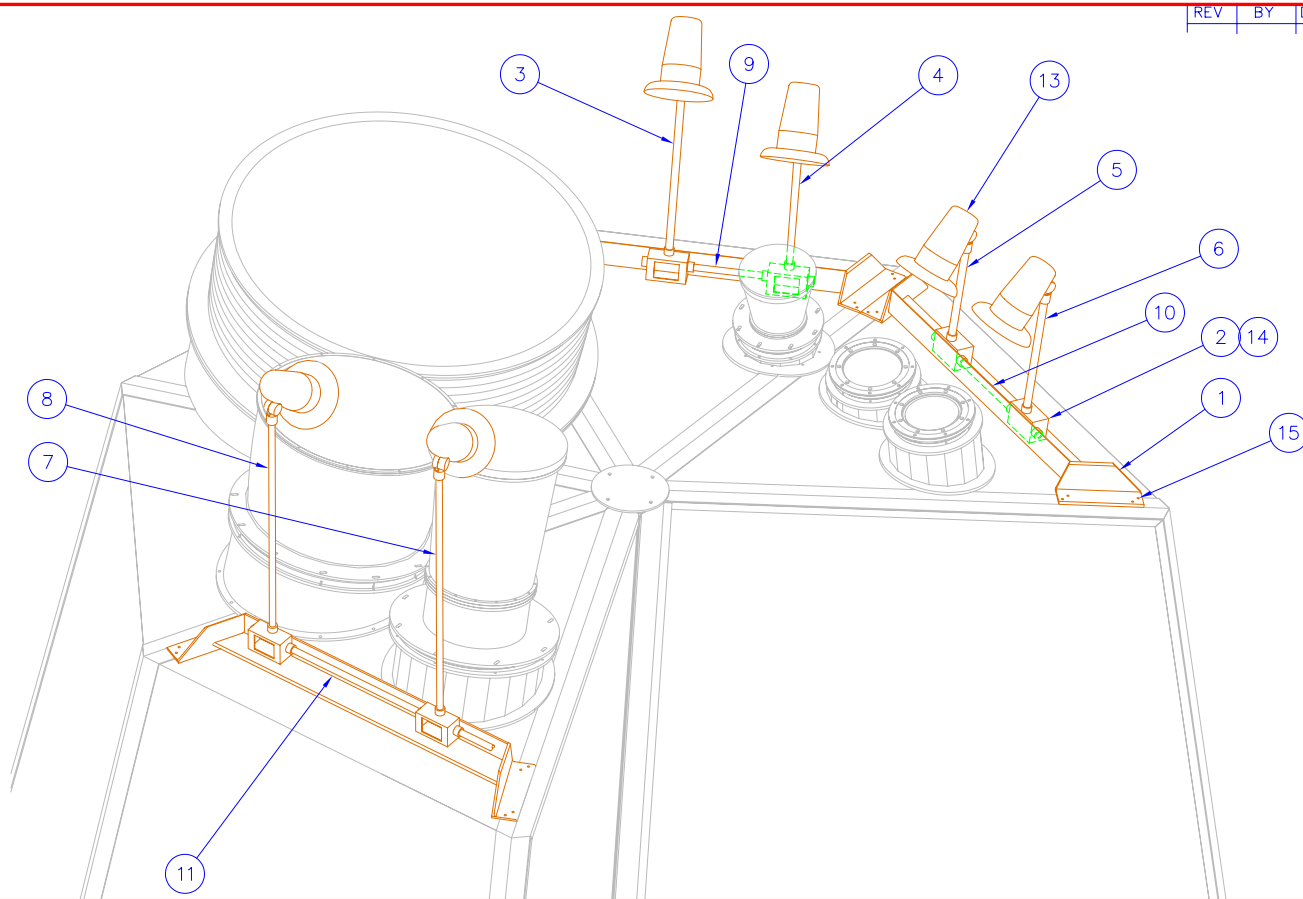


A14 Feed Cone and A13 Feed Mounts



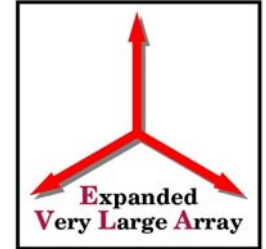


Feed Heaters





Feed Cone Cost



Actual Production Feed Cone Costs.
(Not included: Feed mounts, Feed Cone Floor,
Skirt, 'Combo Strips', Feed Heaters, etc.)

\$5550 Laminated Panels

\$275 Extrusions

\$1050 Base Plates

\$1125 Consumables

\$8000 Total

Assembly & Installation labor ~ 4 man-months