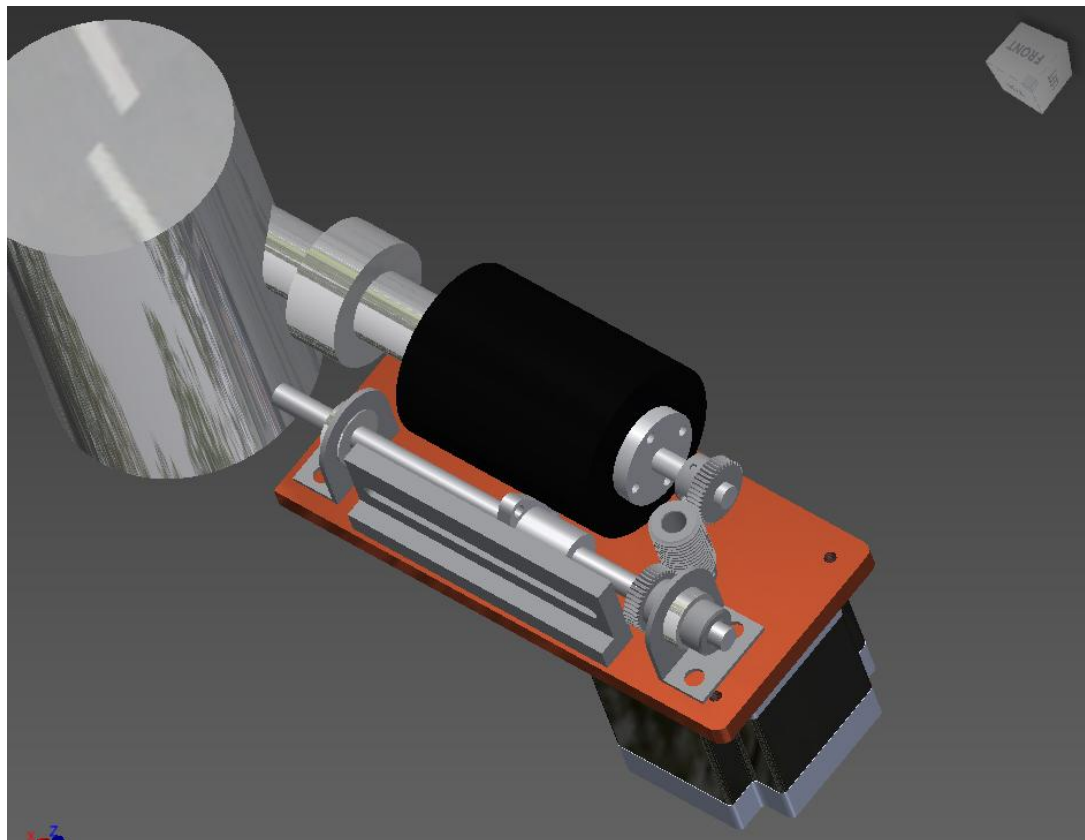


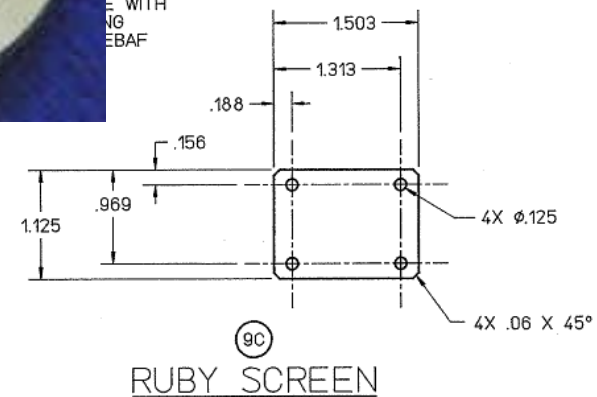
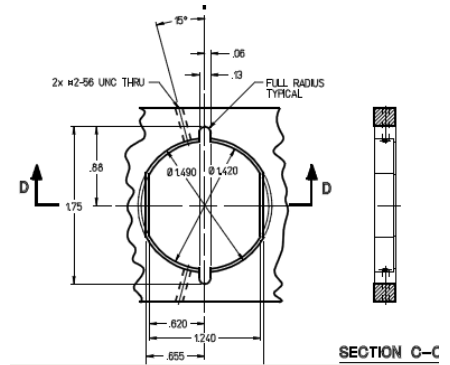
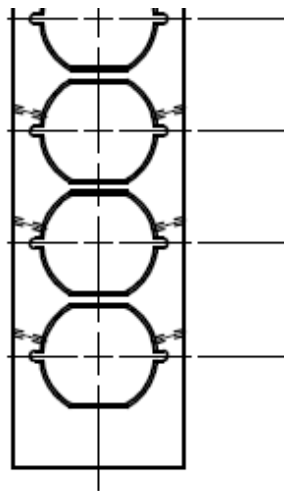
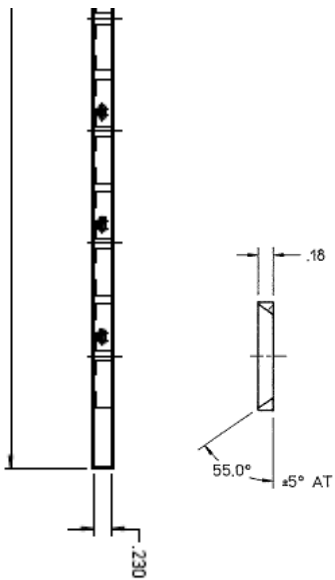
Target Ladder Controller

Existing	Upgrade	Labor	Procure	Status
PSUB channel needed	STAC5 stepper controller/ioc	Wes	FEL spare	App being adapted
Ladder falls w/o power	Worm gear eliminates free fall	John	Gear parts \$250	Pending procurement OK
Vacuum limit switch	Air side limit switch	John	Gear parts \$250	Pending procurement OK
Target positions approx.	Survey ladder w/ new controls	S&A + Wes	None	Pending final ladder
Ladder motion not-interlocked	Maskable target motion FSD	John + Wes + PSS	0	Queued-up



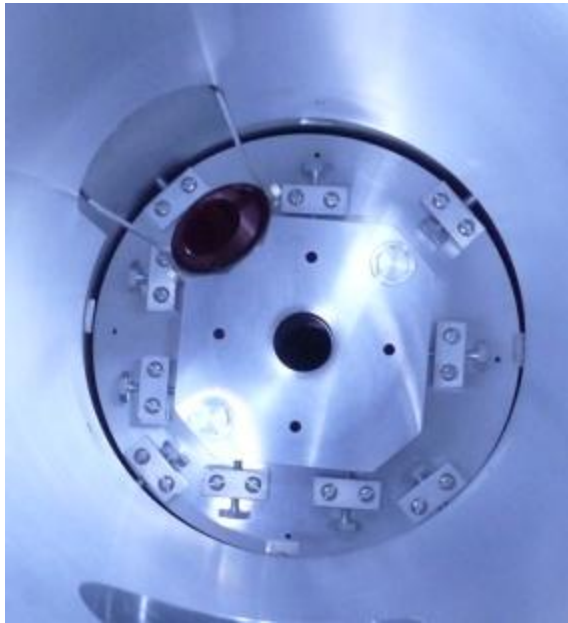
Target Ladder

Existing	Upgrade	Labor	Procure	Status
Ladder <ul style="list-style-type: none"> • 10 circles • 6 rectangles • 1 viewer chip • Spring-y 	<ul style="list-style-type: none"> • Ladder 16 uniform circles Thru hole, viewer or target Stiffer if thicker 	Danny	Al ladder \$2.2k	Quotes now Pending request
1 viewer chip, attached	2 viewers at any target position Viewer adapter to any slot	Danny	Adapter rings \$500 est.	Danny designing
+/-10% target thickness	FE-SEM on broken 0.5 and 1 um Thickness and uniformity	Mamun	0	Starting



Detector (Air Side)

Existing	Upgrade	Labor	Procure	Status
Collimator position unknown	Survey collimator	S&A	None	Complete
Competing detector acceptance	Test w/ nosepiece removed Modify lead + new nose	TBD	TBD	Riad/Marty to advise
Vacuum window thickness SPIN2000: 0.05mm = 2 mil	Marty suggests 4 or 6 mil better	TBD	TBD	TBD



VS.



Vacuum Chamber

Existing	Upgrade	Labor	Procure	Status
45 L/s pump (<2000)	45 L/s pump (>2010)	0	0	Complete
11 L/s FE pump (<2000)	25 L/s pump (2009)	0	0	Jim checking now
Al dump plate	TBD (see below)	TBD	>\$5k	TBD

Dump Plate Issues:

- Too early to have directed labor and procurement table.
- Distinguish motivations: **low Z** vs. **higher power**
- energy vs. current requirements: **calibration** vs. **photocathode/ops studies**
- Beam management: **worst case (no target)** vs. **Sam's power off plate results**

Priorities?

- Cleaner and understood spectra at any current => low Z at low power is OK
- Sufficient beam power for 1% gold calibration
- Characterizing differences between 499MHz and 31MHz asymmetry
- Operating at higher current at 5MeV and managing beam power