

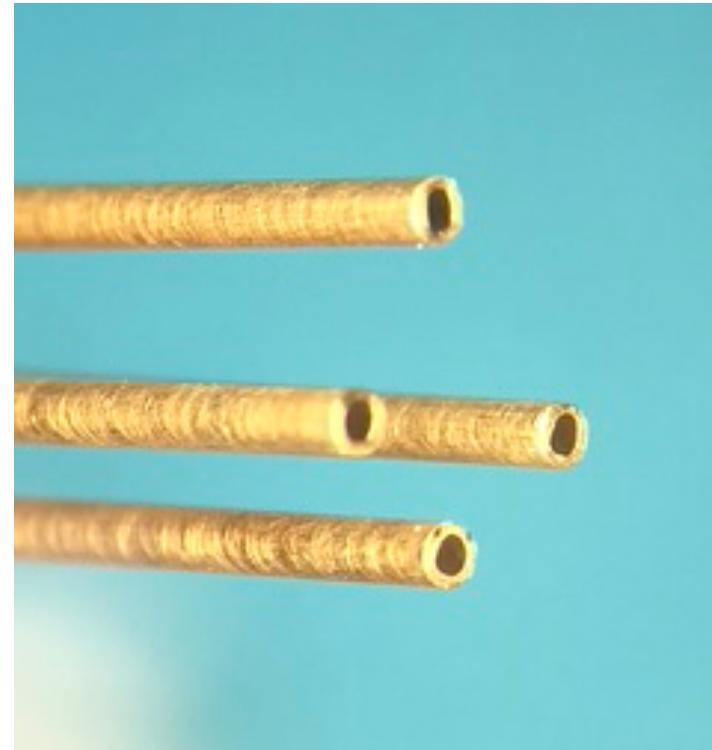
General Update

- SPR
 - domain setup
 - Testing capture code and voltage gateware
 - ATA Control server upgrade (antcntl)
 - Handover of SRI to SETI (infrastructure / network)
- ATA signal chain verification
 - Power drop investigation ISM 902-928MHz
 - Called PG&E nothing new yet!
 - Further work in localization
 - ISM band measurements within the main Building
- Observation
 - Test Observation with voltage capture code
- ATA integration into GNU Radio (Ellie)
 - Testing control of ATA antennas and building GNU Radio control blocks
 - Moved IF switch into gnuradio network
 - Test USRP hooked up to gnuradio1 server

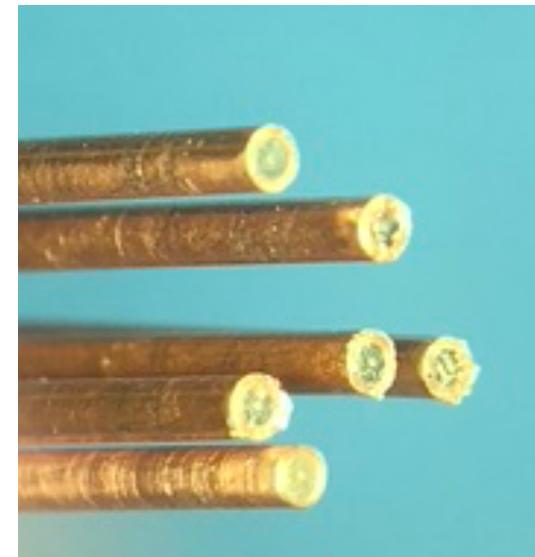
Antonio Feed update

- 3C –(020)
 - Inner feed assembly, LNA module (Minex)
 - PAX Box calibrated
 - Initial testing / installation on antenna / TSYS
- 1K – (012)
 - Tuning Cryocooler
 - PAX Box calibrated
 - Initial testing / installation on antenna / TSYS
- 4J – (006)
 - Inner feed assembly, LNA module (Minex)
 - Tuning Cryocooler
 - PAX Box calibrated
 - Initial testing / installation on antenna / TSYS
- 1H – (013)
 - Inner feed assembly, LNA module (Minex)
 - Requires all retrofits!
 - PAX Box calibrated
 - Initial testing / installation on antenna / TSYS

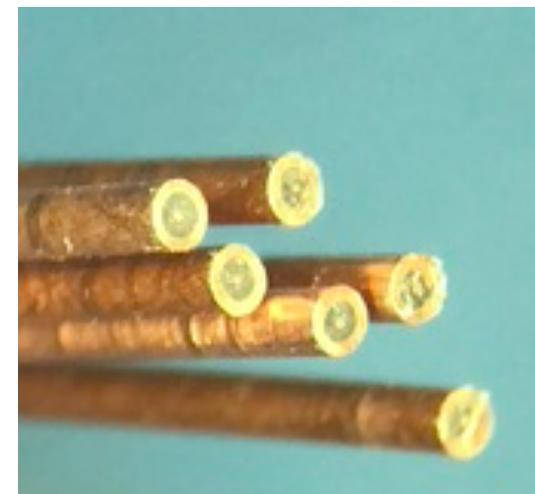
Coaxial Preconditioning



Before

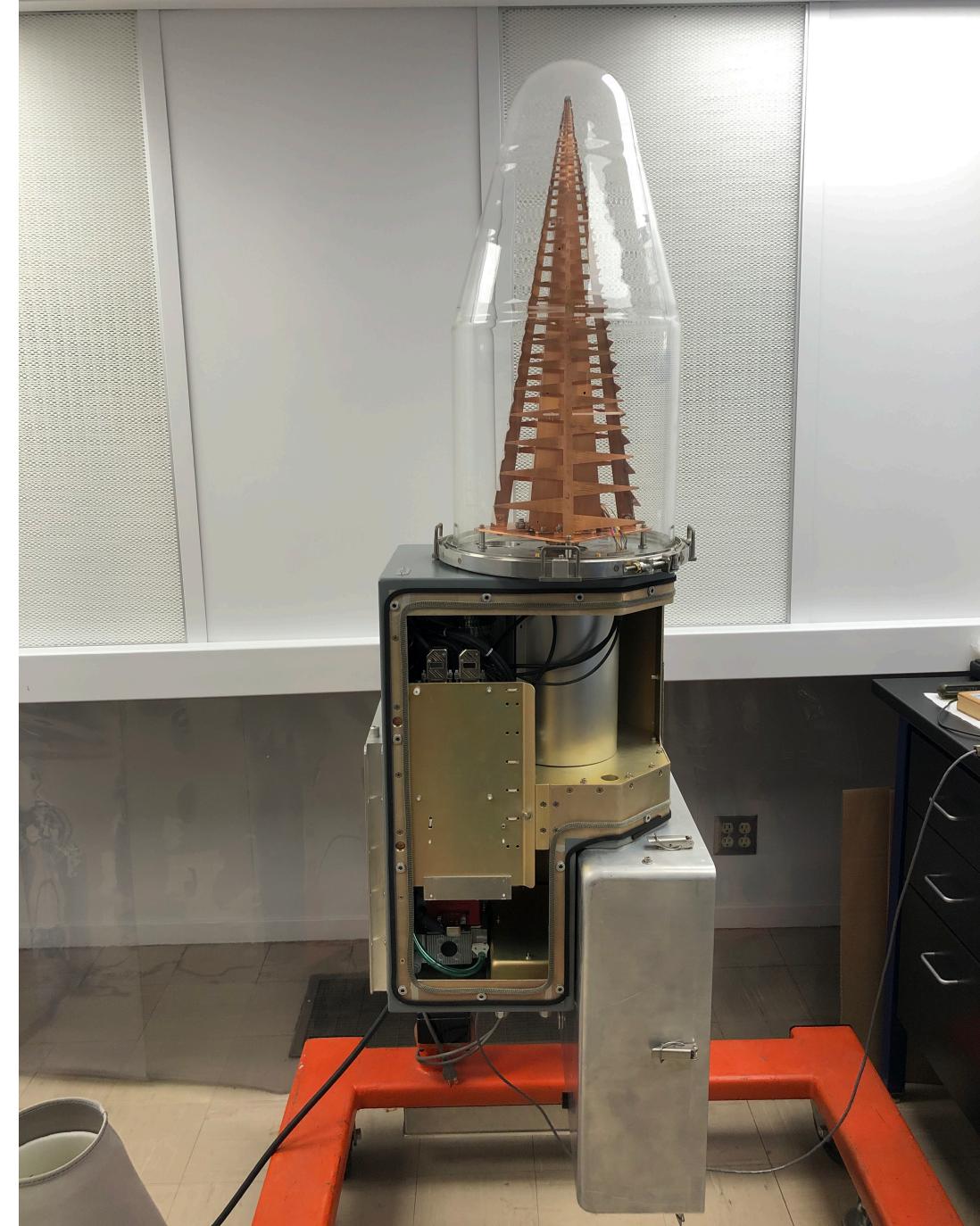
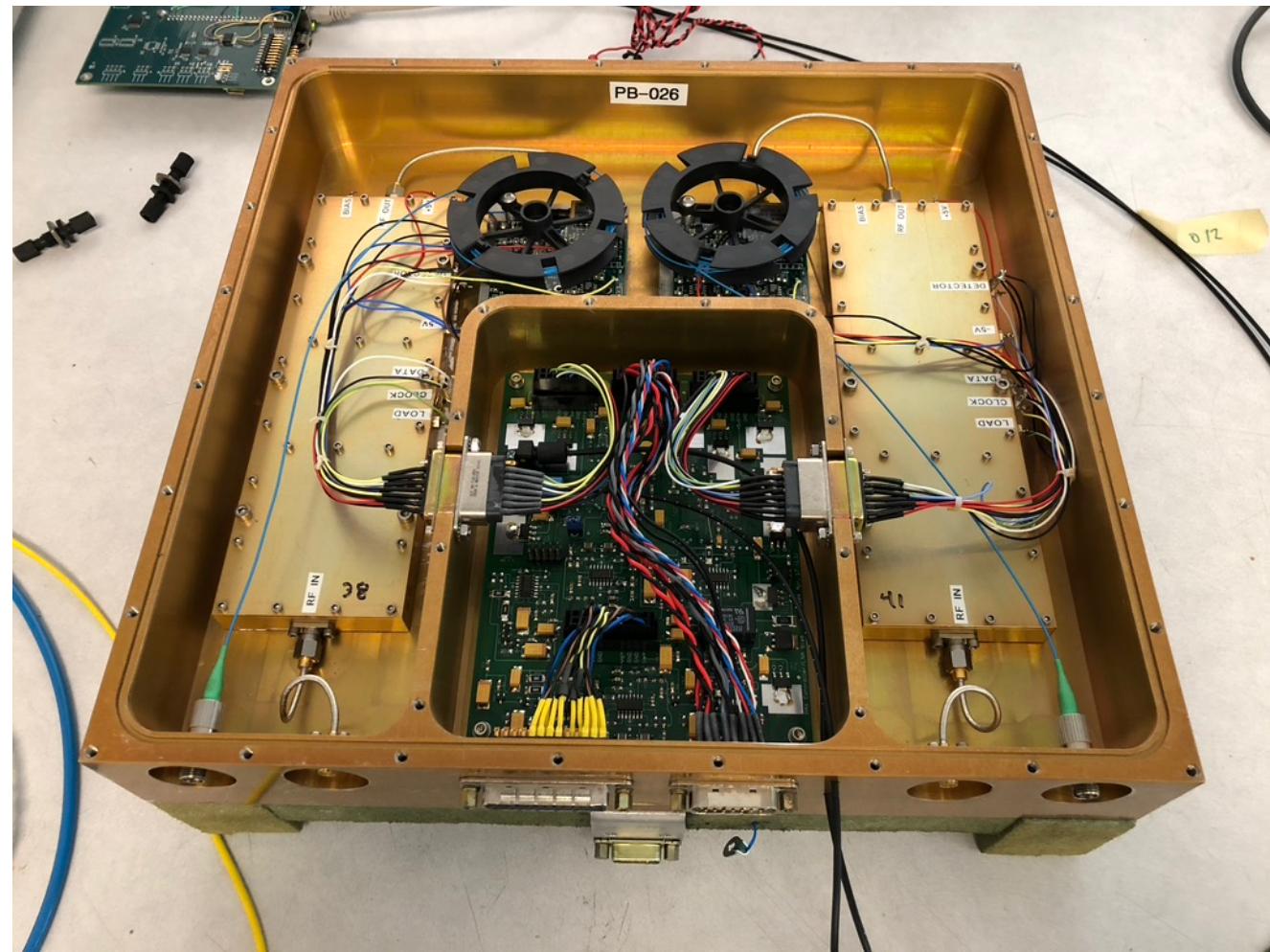


After



1K Refurbishment

- All “DONE” except of tuning cryocooler and installing new log-periodic feed



Refurbishment Overview

- Antonio Feed Inventory

Feed List		Feed Revision Overview							
Number	Installed Ant.	Tip-Link: R03	Temp S. Isolation	New Harness	Bellow Removed	Cryo Tuned	Firmware 5.4	Gold-Plated	Preconditioned Coax
5C4-002	Minex								
5C4-003	Feed Lab (5B)								
5C4-004	2E								
5C4-005	2A								
5C4-006	Feed Lab (4J)		x	x	x	In Progress	x		
5C4-007	Minex								
5C4-008	1G								
5C4-009	Minex								
5C4-010	2B								
5C4-011	3L								
5C4-012	Feed Lab(1K)	x	x	x	x	In Progress	x	x	NA
5C4-013	Feed Lab (1H)								
5C4-014	2J								
5C4-015	Minex								
5C4-016	SSL								
5C4-017	Minex								
5C4-018	2H	x	x	x	x	x	x	x	NA
5C4-019	1C		x	x	x	x			
5C4-020	Feed Lab (3C)	In Progress	x	x	x	x	x	In Progress	In Progress

ATA Control Server Overview

- Proposed route forward

Host: antenna
ControlBoxServer
DriveBoxServer
CopleyServer
RimBoxServer
CryoServer
PAXBoxServer
DishServer
deadmans-switch

Host: AntCtl 2.0

AntennaServer
RecoveryServer
GeodesyServer
SLALIBServer
NOVASServer
WeatherServer
WindsockServer
LOServer
InternetServer
TimeServer
AlarmServer
PredictServer

Host: Old-DSP

IBOBServerFXA
IBOBServerBFA
IBOBServerIDBFA
IBOBServerBFB
IBOBServerIDBFB
IBOBServerIDBFC
IFServer
EventServer
VideoXServer
VCC4RCamServer

Host: DataBase

MetaDataSource
AntennaLogServer
DataServer



SPR Clean Up



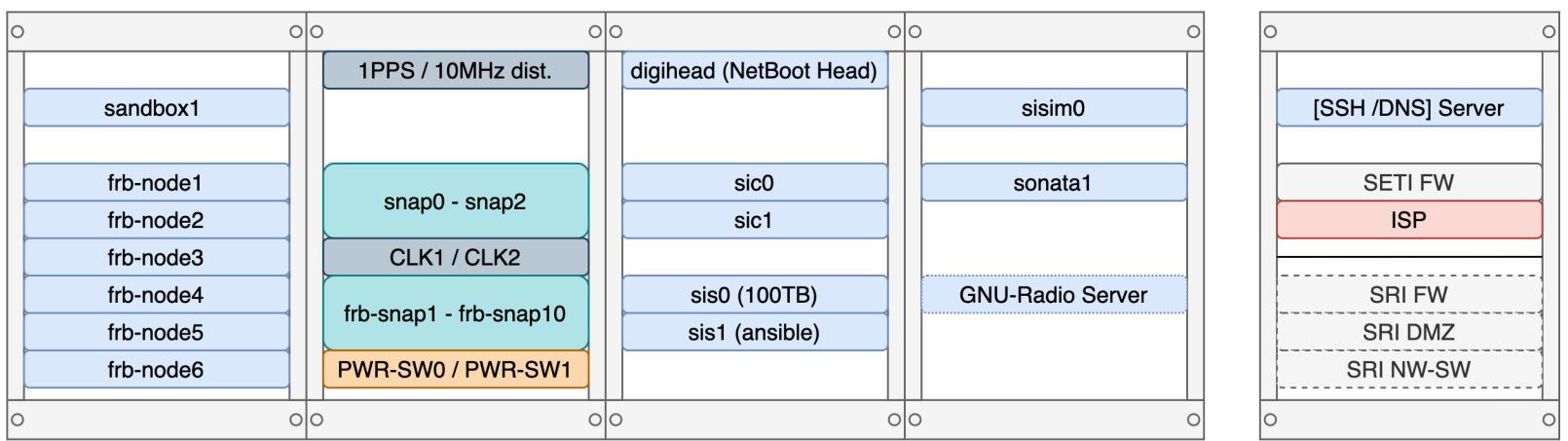
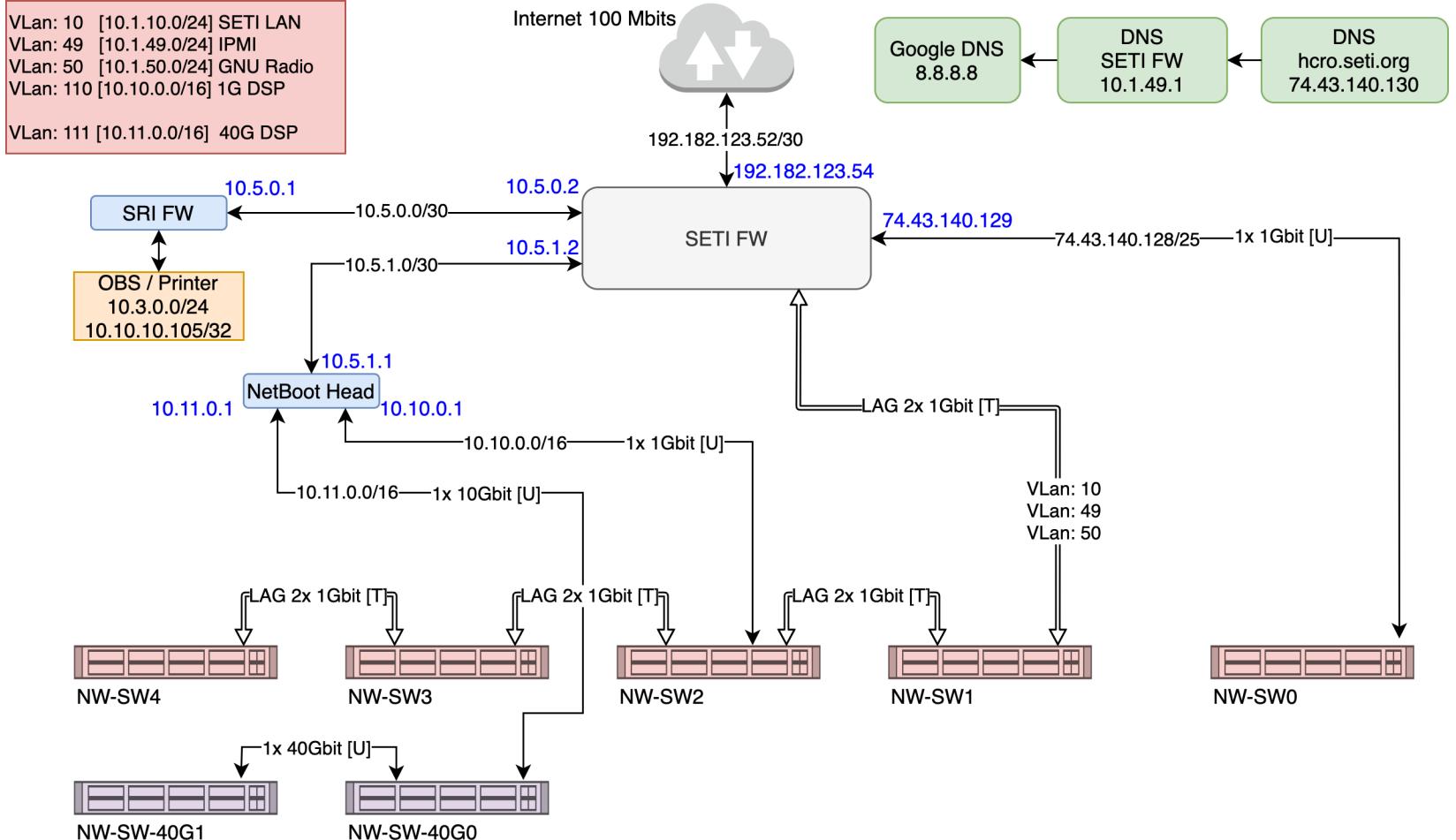
Update

Network changes:

- DNS implemented
- Network range changed
- LAG 2x 1Gbit implemented
- VLANs implemented
- Setup SIC1 to analyze data
- Setup IPMI

To Do:

- Setup DNS domain
(hcro.seti.org)



Student Projects and Internships:

Name	Type	Duration (dd/mm/yyyy)	Description	Status
Olivia Durrett	Internship	15/06/2020 to TBC	Astronomical observations and data analysis of pulsars and FRBs	
Sarah Schoultz	Internship	01/07/2020 to 15/10/2020	Outreach, update of posters at ATA, local RFI monitoring	
Daniel Allspach	REU SETI	07/06/2020 to 15/08/2020	Astronomical observations and data analysis of pulsars and FRBs	
Ellie White	REU Berkeley	08/06/2020 to 14/08/2020	GNU Radio Enabled Capabilities for RFI Monitoring and Beamforming	
Hellen Peng	URAP Berkeley	24/02/2020 to 01/05/2020	Software development to control digital step attenuator for IF power leveling	Finished