**Feed Status**

|  |  |
| --- | --- |
| Document last update | 2021-06-28 |
| Feed ser. num. (rev) | 5C4-010-A |
| Last worked on | 2016-01-25 |
| Antenna (previous/current) | 2B, 2C |
| Original build date | 2015-12-01 |
| Number of cooldown cycles | 3(2016-02-04) |
|  |  |

**Critical Component Summary**

|  |  |
| --- | --- |
| ATA Feed  Control Board | S.N. 24a |
| Sunpower CryoTel GT  Cryocooler | S.N. GT15-91 |
| Sunpower GT Gen II  Cryo Controller | S.N. 50031135058 |
| Pfeiffer Hi Pace 80  Turbo Pump | S.N. 15862518 |
| Pfeiffer TC 110  Electronic Drive Unit | S.N. 74482788 |
| Pfeiffer MVP 006-4  Diaphragm Pump | S.N. 28404545 |
| H.S. Martin  Borosilicate Glass Radome | S.N. 014 |
| Pyramid | S.N. 010 |

**Retrofits**

|  |  |
| --- | --- |
| Temp S. Isolation | X |
| New Wire Harness | X |
| Bellow Removed | X |
| Cryo Tuned | X |
| Firmware 5.4 | X |

**Vibration Measurements**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Before Tuning | Tuned | Re-tune #1 | Re-tune #2 | Re-tune #3 |
| X | 0.12 | 0.08 |  |  |  |
| Y | 0.04 | 0.03 |  |  |  |
| Z | 0.22 | 0.15 |  |  |  |

|  |  |
| --- | --- |
| **Chassis Up-Dates** | **Vac & Cryo Up-Dates** |
| 15 pin Hermetic Feedthur Filter | RTD Wire Routing |
| 48v Through Control Board | Buna-n O-Rings |
| Vibration System (Metal Flex) | Turbo Centering Ring w/Screen |
| Control Board 12v Jumper |  |
| Control Board Firmware 3.12 |  |
| Foreline/Valve Layout Change |  |
|  |  |
|  |  |
|  |  |

**HISTORY**

2015-12-(01-10) Rob A’s board latest software & 12v jumper (rev a on board sn), Cooler vibration system, Metal Flex bellows 347/304ss, no vac gage, emi filter at hermetic d-sub up-date, Buna-n O-rings at SS base plate & borosilicate glass installed. Noise test completed, very good results, vac good (9-10watts) & cryo had to be set to 70K, if set at 65K cryo cooling would not stop when pump shutdown (data saved), HC PAX set-up & installed.

2015-12-17 Delivered to HC (4of5), installed on antenna 2B, 24+48v power supply up-dates added to Rim Box, X pole failed (data saved), removed from antenna to return to Minex.

2015-12-(21-22) Checked X & Y poles, hot load test with indication of broken input lead on X pole, photos show X pole input coax center conductor pull back up to 0.020" and break.

2015-12-29 Disassemble Dewar & remove Pyramid, remove LNA assy, examined LNA shows no issues.

2016-01-18 Replaced input coax assy, re-assembled Pyramid, installed Pyramid & Glass on Feed, started pumpdown & cooldown, all working properly.

2016-01-22 Noise test completed, both poles working very well, vac & cryo(70K) working properly (data saved).

2016-01-27 Delivered to HC (2of2), installed on antenna 2B. Turbo, Cryo & LNAs working properly, Noise test preformed for X & Y (data saved).

2016-02-04 Feed Test Report sent to HC (Elin).