## **Return Evaluation Comments**

This unit has been in continuous operation for 3 years. 2 months. Vacuum may have failed about 2 months ago? Four tip links are damaged and rexolite is abraded by very rough vibration.

## **History from Data Sheet**

Serial Num: 5C4-002-A

2015-08-14 Rob A's board latest software & 12v jumper (rev a on board sn), Cooler vibration system update, Metal Flex bellows 347/304ss, vac gage removed, emi filter at hermetic d-sub up-date, Viton Orings at SS base plate & borosilicate glass installed. Noise test completed very good results, vac & cryo working properly (data saved), HC PAX set-up & installed.

2015-08-18 Delivered to HC (1of2), installed on antenna 4J, 24+48v power supply up-dates added to Rim Box, Turbo & Cryo working properly, X pole poor performance, Y pole very good.

2015-08-24 Feed Test Report sent to HC (Elin).

2015-12-17 Control Board firmware up-dated to 3.12 at Hat Creek.

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2018-06-01? Jon Richards had Mark move this Feed from Antenna 4J to 1E for testing reasons. 2018-08-01 HC Trip Rob S., Feed has a very loud Diaphragm pump but cooling to 67K/240watts, Vac 90k/16watts, ran out of time & parts, will replace the Diaphragm pump when we return in the fall to install new Feeds.

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2018-10-26 Feed delivered from Hat Creek by Jon Richards (3of4).

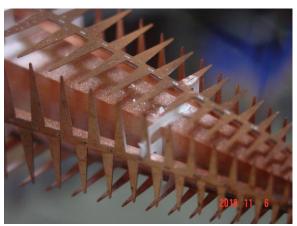
2018-10-(30-31) Removed Feed from transport box into Screen room, checked LNA's condition, both poles have structure (data saves), biasing working properly

(x -.50\_.08\_1.20\_40.9)(y -.50\_.07\_1.20\_41.8), started pumpdown, Turbo stalled out at 12krpms, Diaphragm pump not running?, changed out Diaphragm pump & working properly, started pumpdown, Turbo stalled out at 26krpms, ran Diaphragm pump all night on hi-speed. Started pumpdown, got to 90krpms in 5min, Turbo working ok (90k/10w)(data saved), started cooldown but stopped once it looked correct (266K/301K/82watts)(data saved). Turned off Feed & set aside for inspection of tip. 2018-11-06 Removed Glass to inspect Pyramid & Tip, signs of some vibration, some Rexolite dust (stand-offs), all 4 sides of the Tip have damage (data saved), no signs of moisture, inside of enclosure dusty, Feed has been in continuous use sense 8/2015.

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Rexolite dust on interior of glass



Quite a bit of dust on arms & pyramid.

