

S55 Rev122 Saturn Occ
Ingress & Egress
DSS-34 & DSS-43

12/9/09
S55 Rev122
①



Ops Room: Aseel (atcho!), Danny, John, Don (baca)
ACE: Young Guy?
NOPE: Lu & Jack

David there w 1825
Arr at 1834

All there at
8
1 got there at
9.

Problems with RSRI during pre-cool. Asked for it to be rebooted (was not accessible inspite of it being on network. The host process for gconnect/scan was not running). Reboot completed & all ok.

VSRI taxi problems during prelx load prior day. Use WVSRI2 instead. (knew about this ahead of time).

Weather: Fine. ϕ wind.

Prelx
Ingress: 3-way w/ 2

Egress: 3-way w/ 3

fgain
43 XR 59 > John
43 SR 49 >

43 XL 35 > Don
43 SL 31 >

34 XR 54 > Danny
34 KR 54 >

1749 Lu telling 34 that they keep seeing lots of error msgs in LMC logs for both revrs. Anticipate problems?
→ believe not going to be problem for this pass

1759 Lu giving 34 recam. from rcur OE to clear LMC messages

1803 Lu asking 34 to init range on DCOS.

1815 alt auto

1820 SNT measurement

43 X 24.617

43 S 19.417

34 X 28.131

34 Ka 86.480

} EL $\approx 37.5^\circ$

1823 Disabled SNT on all except 34Ka

1825 Another alt auto at 34. ADC amp on 1B was -6.9 & 1A was 8.x.

1831 Asked NOPEs if there were plans still to ~~do~~ conscan at 43 during first few mins
 \Rightarrow Jack said that Lu is there & he says there's no need to do that anymore

Pointing model: David said they debated a lot. During last occ, David offset model (offset was already in model). Today, since we cross meridian between ingress & egress, expect offset to be different. For ingress, expect ≈ -4 offset which monopulse will take care of. For egress, we'll likely need to enter (manually) positive offset.

1839 Starting to see s-band signal.

1840 pretty strong s-band signal

1841 Ka-band signal

1842 Sherry signals in all bands

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1847 Monopulse enabled.

no visible change.
David said expects primary model to be very good at this time but gets a little worse later on

1850 ADC amp. not stable on RSR1B.

Asked John to melt his backup S-band recorder on WSR21B, & had Danny take it & use it for Ka-band backup.

1852 Pc/No. mess.

43 XR	53.76
43 SR	43.71
43 XL	27.4
43 SW	18.9
34 XR	48.98
34 Ka	49.00

185440 First record on WSR21B 34 Ka

1855 Lu called on blk phone asking if we had .5dB jump in Ka power when monopulse was enabled → not really visible.

DSS-34 Ka-band was fluctuating for a bit at first but stabilized in 1852

1906 Asked NOPS if they are seeing small fluctuations on 43 X-band.. about .3-.5 dB? (more like .3. DSS-34 doesn't move any)

⇒ They are seeing a .3dB drop in Ka power when monopulse was enabled but will check with antenna OS

1911 Jack said Lu is having antenna OG look at antenna performance but they are seeing .3dB fluctuations at S-band too when they zoom in & DSS-34 X-band

⇒ We ^{on our side} don't see them at 34 X-band, & ⁴³S-band looks pretty good, it's 43 X-band that they are more visible at

Lu asking for period of oscillations at 43

1927 Told NOPS it's difficult to determine period since they are more like fluctuations NOT oscillations. It did get better ~ 1900 but hard to give exact times until we plot data

⇒ Jack said that they have antenna OG looking at plots now. Don't have an explanation yet

Weird signal drop. Seen at X (both 43 & 34) & Ka
~ 1920 - 1945

1950 Weather update from 34 started to get overcast

1955 34 said that incoming crew reported light rain.

2022 Ka - LOS

~~3042~~

213105 X LOS (43)

34 LOS closed loop

213042

203535 S LOS

Interview Playback 1825 - 2055

Eggers (Canberra shift change)

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2149 called 34 to clear Manupuloe
offsets in prep for eggers
they were in A ($\frac{1}{2}$ m delay or so)

2150 recording started

2223 Quick SNT meas (at 34 only). Was planning
to do one with both but slipped my mind.

34 X 24.243
34 K 49.954

2224 Disabled Ka-band SNT

2225 Asked 34 for weather update
Partly cloudy. Wind 14.8 kph

2227 Starting to see weak intermittent weak S-band
signal in PSR
(222025 in PSR)

2230 43 I/L S-band

223119 Starting to see weak X-ray signal

223435 43 I/L X-band

2238 started seeing intermittent Ka-band signal.

34 unable to lockup on Ka-band until traps here out

2302 Ka I/L DSS-34

2330 D_c/No

43 XR 55.03
43 SR 43.78
43 XL 16.23
43 SL 22.44

34 XR 48.94
34 KR 48.45

2358 monopulse enabled. \Rightarrow u.4 dB dump.

0001 Talk w/ NOPEs about 34 talk
signal variation & freq. Variation made it
difficult for them to lockup.

00052 S-band LOS
000122 X-band LOS

0017 SNT Measurement

43X 21.116
43S 21.153
34X 26.264
34Ka 54.356

Canberra supports
~~Alpha~~ Team
earlier
Charlie Team later

Egress
Playback 2210 - 0020