

S7d Rev 170 Rings & Atm Oce
Rings(E) Atm

Rev 170
DOY 225 ①

NOPEs : Jack , then Sandy

ACE : Bill then Herken

n1800 Second shift

1020 rec a e RSRs

Danny still setting up WRSRs .. Scripts did not work!

1025 ~~63~~ Briefing

BOT 1125 TLM off 3-way w/ 43

XMtr on 114620

Xmtr off 150833

EOT 1830

Equip green

Weather clear skies . Not much wind 9-10 km/hr

103555 Switch 1-way @ Canberra

103740 SFRO K

104130 SNT measurement. Asked 34 & 43 to enable SNT

1043 readings

43X	20.283	
43S	24.902	
34X	25.882	DCC 5
34 Km	62.11	DCC 6

104430 Disable SNT except X @ 34

1046
1047

TLM off
Pc/No

43X	53.65
43S	42.47
34X	47.97
34 Km	47.52

again
60
50
55
55

David noted high humidity
↑
low EL offsets are good

626 305
6369

1053 Asked 34 for weather update
Clear & no wind

1056 Switch to 2-way & 3-way
43 34

1058 stations 1/L

1108 Pc/No

43X 53.29

43S 42.03

34X 47.6

34Kc 46.9

David:
High humidity @ Canberra
~80%
thinks part of it is due
to weather

David saying printing
is very good.

1112 Told 34 that started going through atmosphere
& plan is to have mono enabled throughout.
If it gets disabled @ any point, let us
know before re-enabling.

1123 signals @ Madrid

All started recording by 112430

112559 SS mono enabled (@ ~6.5 degrees EL)
~3dB jump & cleaner signal
(no wiggles)

WVSR offsets (1-way to 2-way)

S + 745,054

X + 2,731,860

Ka + 10,381,070

113230 Told 43 that time in timeline for XMTR off (114428) is what we think is their xmit limit. Can they confirm?

→ yes, it is.

1138 Told SS a 10 dB drop ^{sudden} in Ka-band power. Know why?

SS → Don't know why mono opt disabled. re-enable?

me → Clear offsets & re-enable

1140 SS re-enable mono opt

Ka-band signal fluctuations

1144 NOPE (Sandy) asking for DR for mono automatically disabling itself.

114428 43 XMTR off

114620 63 XMTR on

1149 David reporting a 2.8 dB difference between 34 (better) @ SS @ same EL angle

1150 NOPE (Sandy) told 63 he doesn't see those rumpus

1155 Started rumpus now



1155 3d said mono in & out so took it out.

Talked w/

turn xmtr on & no ramping.

xmtr, Xa & ramping

~~101933~~
101932

115651 ^{SS} MON opt disabled

1157 → Asked ACE to check w/ station what happened
TSF freq. Didn't sweep. Just fixed
freq. & left it there

115450 ^{NOPE giving ACE time} when they started ramping
(63)

Time when
station started ramping

Talked w/ ACE ^{over} told him didn't hear "no ramp"
during pre-call. Heard no sweep
Heiten → pretty sure he heard it, He didn't do it

Talked w/ NOPE (Sandy) over blk phone

Did ACE say no ramp?

Sandy He said turn xmtr on @ Xa & no sweep
Station mis interpreted as no ramp.

me what should he have said?

Sandy ramp U/L but do not perform a sweep

Xa 7175418560.

if too far off from s/c capture range,
s/c would prob. not even see it.

BLF 7175027100

Station was radiating @ average of min & max Xa
62KHz from XA. U/L freq. was pretty far off.
The DST will most likely not see it
Essum thinks this is good news because otherwise we'd be rams
out too

DST
below range
x/ 1.5kHz

Essam says that ionosphere OCE may still be viable

NOPE: New 2-way 1444
~~Essam~~: (Ramps OCE is OK)

2-way signals drifting out of 2-way revrs.

WVSRs still see 2-way signal

↓
(1-way w/ offset)

1234 Danny thinks signals were virtually coherent the whole time. S-band was 2-way when we lost it.

1250 Danny thinks his 43 X was LCP.

Yes!!!! He didn't have revrs sets to LCP, which was correct path for RCP

34 had X-band
63 kicked in before progress } so not fully lost

Still not clear what happened w/ predicts. Ramps were included in SPS file. So how no ramp @ station?

Called NOPE (Sunday) again

Commands that station has to enter to invoke
But ACE said not perform a tone & just turn xmtr on
Could request voice recording to check

1312 NOPE (Sandy) asking 63 to open DR to documentation
when called me & said they'll take blame for it since it Projects.
Madrid DRs should've been in BM & he should've caught it sooner. Asked if we lost data. \Rightarrow 10 min of Trops here

63: M106875 for no ramps
55: M106874 for mono automatically opening out of lock

Ingress Playback

RSPs: 1020-1215 ... 1K 0730-1215
WVSR: 43 1020-1215
34 1028-1215

Egress

55: Clear mono affects
(AZ 0.32, EL -4.25)

Exit 3-way w/ 43

All revrs switch to 1-way prodx during 1-way period (was suppose to be n 2 mins, no n 10)

In RSP2 prodx, 1-way is 3-way w/ 3

1358 Started recording

1358 Asked 55 to clear mono affects

1405 Asked 63 & 55 to enable SNT on all

63X	22.852	EL n 32.5
63S	24.185	
55X	25.271	
55Kn	50.477	

1408 Disable all except X @ 55

1st time ever try to lockup on
exit channel!

1424 Danny says he sees S-band 1-way in
narrow subchannel, but hard to see in wide.

1428 X-band 1-way

142820 2-way lock! (3-way w/ 43)

2-way rcrs X on right
1-way w/ offset centered

DL prdx not
compensate for
atmosphere

143330 1-way

prdx 3-way w/3 (corrected for atmosphere)

Resid in 2-way rcrs

- X-band - 412
- Ka-band - 2328
- S-band - 165

~~1435 SS X-band FL~~

144354 switch to 2-way @ 63 (3-way w/ 63 @ 55)
(this is when station started ramping)
signal offset & drifting to left (in 2-way rcrs)
didn't work stations to try to acquire
1-way w/ offset rcrs have signal centered

1451 SS X-band 1/L

1452 Ka 1/L (saw they were having trouble @
first - told them resid us 500 Hz. Drifting
fast to zero @ 150 Hz when they locked)

1455 P1/No

63X 54.86

63S 42.31

SSX 48.11

SSKa 45.7

EL 37.8

1458 Enable mono

→ +2 dB jump in power

Ka-band looking better than during magnev.
(David said wind 5.6 km/hr lower than before)

2-way OCCS can lock deep in the atmosphere.
(But data today will not be useful bec. of
interference).

150833 63 transmitter off

1538 Told SS to configure X in open-loop mode
→ wait till lose signal or volt returns?
→ wait

153850 SS LOS X & Ka, X in open-loop
mono still enabled even though don't have
a signal, disable?

→ yes

offsets Az 4.15

EL -1.82

154030 SS clear offsets

1604 Told stations to lockup out of mag B

∴ w/1636 SS USB dip in power. Saw it & why? Rev170
→ didn't see it. manipulate? DOY225
→ wait on mono (6)

1755 Asked SS to enable manipulate
⇒ w/1 dB increase in power

Playback Madrid Ingress:

225/1124 - 225/1250

Playback Gress: 225/1338 - 225/1820