

# HF Campaign 21 MAY 17

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①

A3156 5.15~~5~~ MHz on Paul.  
 checkout 5.5, 9.5 AZ=348  
 gr → usrp 1.1 day  
 ch → checkout - 1120

~~11:20~~  
 11:20 Brief  
 checkout Running, usrp Running

11:34 420 kW

11:38 Brief HE off, on  
 list - 12:08 Sat Pass

2:30 Done - switch to 8.175 MHz

A3194 mataska

12:30 HE off for change of FREQ, move AZ to 168°

12:40 Bring up 8.175 MHz

12:55 420 kW

12:56 off 1 m.

57:28 on

59:00 off

13:00:00 on

01:00 off 1w

02:00 + on 2min

04:00 + off 3min

7:00 + on 1min

8:00 + off 1min

9:00 + on 5min

14:00 + off 2min

16:00 + on 1min

} done manually.

1 on, 1 off

2 on, 3 off

1 on, 1 off

5 on, 2 off

1 on, 1 off

1 on

13:00

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13:17:00 + off 1min

18:00 + ON 1min

19:02 + off 1min

20:00 + ON 1min

21:00 + off 3min

24:00 + ON 4min

28:00 + off 1min

29:00 + ON 2min

31:00 + off 7min

38:00 + ON 2min

40:00 + off 3min

43:00 + ON 3min

46:00 + off 1min

47:00 + ON 3min

50:00 + off 1

51:00 + ON 1min

52:02 + off 2min

54:00 + ON 6min

14:00:00 + off 1min

14:01:00 + 3min ON

14:04 + off 8min

12:00 + ON 1

13:00 + off 2

15:00 + ON 1

16:00 + off 3

19:00 + ON 1min

20:00 + off 1min

21:00 - ON 5min

14:XX

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26:00 + off 1

27:00 + on 1

28:00 - off 7

35:00 - on 2

37:00 - OFF 1

38:00 - ON 4. Power = 419KW.

42:00 - OFF 1

43:00 - ON 1

44:00 - OFF 1

45:00 - ON 2

47:00 - OFF 1

48:00 - ON 1

49:00 - OFF 4

53:00 - ON 2

55:00 - OFF 2

57:00 - ON 2

59:00 - OFF 1

~~Eliana~~ H3171 8.175MHz. dual beam (168, 1.1, 11)

15:00 Increase power to 480KW

Max Power 480KW

15:05 + OFF 5min FoF2 = 9.9MHz dBfs Tx

15:10 + -10dB 2min Power = 17KW } -12.7 1

15:12 + -8dB 2min Power = 30.8KW } -15.2 2

15:13 + -6dB 2min Power = 59KW } -13.5 3

15:15 + -4dB 2min Power = 128KW } -15.2 4

15:17 + -2dB 2min Power = 275KW } -12.0 5

15:19 + -1dB 2min Power = 362KW } -12.0 6

15:21 + -0.5dB 2min Power = 416KW } FoF2 = 10.5

## 21 watt

Time	Gain	Duration	Power	Notes
15:23	0 dB	2 min	Power = <del>430 KW</del> 478.6	480 (circled) { -2.2
15:25	-0.5 dB	2 min	Power = 422 KW	{ -5.2
15:27	-1 dB	2 min	Power = 365 KW	{ -3.5
15:29	-2 dB	2 min	Power = 266 KW	{ -5.2
15:31	-4 dB	2 min	Power = 120.4 KW	{ -2.0
15:33	-6 dB	2 min	Power = 55.8 KW	{ -2.2
15:35	-8 dB	2 min	Power = 29.8 KW	<del>FoF2 = 10.3</del>
15:37	-10 dB	2 min	Power = 8 KW	
15:38	10 min OFF			FoF2 = 9.25
15:48	-8 dB	2 min	Power = 17 KW	(-8.7)
15:50	-5.5 dB	2 min	Power = 70.6 KW	(-8.2) ✓
15:52	-5 dB	2 min	Power = 84 KW	(-7.7) ✓
15:54	-4.5 dB	2 min	Power = 100 KW	FoF = 9.1 (-7.2) ✓
15:56	-4 dB	2 min	Power = 124 KW	(-6.7) ✓
15:58	-3.5 dB	2 min	Power = 152 KW	(-6.2) ✓
16:00	-3.0 dB	2 min	Power = 183 KW	(-5.7) ✓
16:02	-2.5 dB	2 min	Power = 223 KW	(FoF2) (8.92) (-5.2) ✓
16:04	-2 dB	2 min	Power = 271 KW	(-4.7) ✓
16:06	-1.5 dB	2 min	Power = 321 KW	(-4.2) ✓
16:08	-1 dB	2 min	Power = 376 KW	(-3.7) ✓
16:10	-0.5 dB	2 min	Power = 422 KW	(-3.2) ✓
16:12	Max.	2 min	Power = 482 KW	(-2.7) ✓
16:14	-0.5 dB	"	Power = 423 KW	(-3.2) ✓
16:16	-1 dB	"	Power = 367 KW	(-3.7) ✓
16:18	-1.5 dB	"	Power = 317 KW	(-4.2) ✓
16:20	-2 dB	"	Power = 267 KW	(-4.7) ✓
16:22	-2.5 dB	"	Power = 217 KW	(-5.2) ✓
16:24	-3 dB	"	Power = 173 KW	(-5.7) ✓

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16:26	-3.5 dB	Power = 145 KW	(-6.2)
16:28	-4.0 dB	Power = 118 KW	(-6.7)
16:30	-4.5 dB	Power = 95.4 KW	(-7.2)
16:32	-5 dB	Power = 78.8 KW	(-7.7)
16:34	-5.5 dB	Power = 66 KW	(-8.2)
16:36	-6 dB	Power = 55 KW	(-8.7)

16:38:30 OFF.

FoF2 = 8.55  
@ 16:30

~~16:48~~  
~~16:49~~ 430 off switch to 5.125 MHz.

17:14 430 back on. Full Power  
 17:32 500 KW Power Levels  
 17:34:00 + off 7 min  
 :40:00 + on 3 min Full Power  
 :48:00 + off 7 min off  
 :50:00 + on 3 min 2 db down  
 :53:00 + off 7 min  
 8:00:00 + on 3 min Full Power  
 03:00 + off 7 min  
 10:00 + on down 3 db  
 13:00 + off 7 min  
 17:00 + on Full Power  
 20:00 + 7 min off  
 27:00 + on 2 db down 3 min  
 30:00 + off 7 min  
 37:00 + on Full Power  
 40:00 + off 7 min  
 47:00 - on 1 db down

-4.6  
 -7.7  
 -5.6  
 -8.1  
 -2.9  
 -5.3

dB F

18:50:00

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18:50:00 + off 7 min

57:00 + on Full Power 3 min

19:00:00 + off 7 min

19:07:00 + on 3 min 1 db down

10:00 + 7 min off

17:00 + on Full Power 3 min 1 db down

20:00 + off 7 min

27:00 + on -2 db

30:00 + off 7 min

37:00 + on 3 min Full Power Lower some a few  
1 db to get water to start

40:00 + off 7 min

47:00 + on 3 min 3 db down

50:00 + off 7 min

57:00 + on Full Power 3 min

10:00:00 + 7 min off

07:00 + -6 db on 3 min

10:00 + 7 min off

17:00 + ~~off~~ full power 3 min

20:00 + off 7 min

27:00 + -3 dB 3 min

30:00 + off 7 min

37:00 + full power (500 kW) 3 min

40:00 + off 7 min

47:00 + -2 dB 3 min

50:00 + off 7 min

57:00 + full power

1:00 + off 7 min

07 + -1 dB 3 min

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- 21:07 + 0 dB 3 min
- :10 + off 7 min
- :17 + full power 3 min
- :20 + off 7 min
- :27 + ~~off~~ -1 dB 3 min
- :30 + off 7 min
- :37 + full power 3 min
- :40 + off 7 min
- :47 + -2 dB 3 min on
- :50 + off 7 min
- :57 + full power 3 min
- 22:00 + off 7 min
- :07 + -3 dB 3 min
- :10 + off 7 min
- :17 + full power 3 min
- :20 + off 7 min
- :27 + -6 dB 3 min
- :30 + off 7 minute
- :37 - full power

3 min on 7 min off till 2

22:40 7 min off till 2:00 AM

22:47 3 min on } Loop

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02:00 Jaga Done eliona START  
H3171 5.125 MHz cw 5 on 5 off

02:05:19 START 5 min on 5 min off.

09:50 TX5 fault PA. SCREEN.

Restart autotoggle 5 min on 5 min off

09:55:00 on 5 min Brought tx2 down - 2db  
- TX5 PA cathode current = 18 amps.

9:55 about changed the bias on TX5 to bring down  
the cathode current.

10:30 STOP on/off.

Turn off 1 TX at a time to check for  
avcng TX2 made the biggest change.

10:37 ~ HE off to check Power supply.

11:02 mode at to 3E8°. ch=11, gv=1.1  
HF FREQ = 5.1 MHz

11:17 Bring up TX. TX2 off - waiting on  
Pilot.

11:21 375 kW 5TX - TX2 off

11:30 500 kW all 6TX

11:32 1 min on 1 min off } autotoggle.

11:33

1 min off

11:34 930 tripped - Resetting.

11:46 - TX5 tripped PA AC fault.

Don't remember Best up.



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- 11:46 H30 TX stripped Bean supply current  
- MAY BE Power Fluctuations.
- 11:49 ~ 430 TX Back up.
- 11:52 430 TRIPPED again - Bring Beckley to  
74KV (was 76KV)
- 11:54:49 H30 Back up. [ 517 551 ] 73KV
- 12:34: STOP auto toggle

Eliane Nossa H3171  
Max power = 500 Kw. →  
Power levels

dBm	Tx
-4.8	1
-7.9	2
-5.7	3
-8.8	4
-3.2	5
-5.9	6

- 12:37 OFF (3min)
- 12:40 ✓ -6dB Power = ~80.7 (-10.8) ✓
- 12:42 ✓ -5.5dB Power = 93.6KW (-10.3) ✓
- 12:44 ✓ -5dB = 109KW (-9.8) ✓
- 12:46 ✓ -4.5dB 128KW (-9.3) ✓
- 12:48 ✓ -4dB 150.4KW (-8.8) ✓
- 12:50 ✓ -3.5dB 180KW (-8.3) ✓
- 12:52 ✓ -3dB 213KW (-7.8) ✓
- 12:54 ✓ -2.5dB 251KW (-7.3) ✓
- 12:56 ✓ -2dB 290KW (-6.8) ✓
- 12:58 ✓ -1.5dB 327 (-6.3) ✓
- 13:00 ✓ -1dB 374 (-5.8) ✓
- 13:02 ✓ -0.5dB 439 (-5.3) ✓
- 13:04 ✓ 0dB Max power = 505KW (-4.8) ✓
- 13:06 ✓ -0.5dB 439 (-5.3) ✓

Trip (12:47).  
↳ all Tx

Blanketing @  
6MHz  
FoF2 = 8.7MHz

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13:30	✓ -1.5dB	Power = 322KW (-6.3)✓
13:32	✓ -2dB	273KW (-6.8)✓
13:34	✓ -2.5dB	230KW (-7.3)✓
13:36	✓ -3dB	196KW (-7.8)✓
13:38	✓ -3.5dB	165KW (-8.3)✓
13:40	✓ -4dB	140 (-8.8)✓
13:42	✓ -4.5dB	120 (-9.3)✓
13:44:05	✓ -5dB	102.4 (-9.8)✓
13:46	✓ -5.5dB	86 (-10.3)✓
13:48	✓ -6dB	76.8 (-10.8)✓
13:50	✓ -6.5dB	67KW (-11.3)✓
13:52	OFF	

13:39  
430 came  
down

14:30 - to 8.175 MHz.

heavy arc in 430 waveguide  
lots of 430 crowbars.

14:45 Tx2 DRVR AC Fault. - Reset.

14:50 3 sec on 1 sec off with manual  
on off - longer

Natasha Jackson (H3194)

14:51 3/1 s on/off. Power = ~~218KW~~ 425KW

14:55 OFF (5min)

15:00 ✓ ON (1min)

15:01 ✓ OFF (1min)

15:02 ✓ ON (2min)

15:03 ✓ ON (5min)

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5  
13:07 ✓ ON (1 min)

13:08 ✓ OFF (1 min)

13:09 ✓ ON (5 min)

13:14 ✓ OFF (2 min)

13:16 ✓ ON (1 min)

13:17 ✓ OFF (1 min)

13:18 ✓ ON (1 min)

13:19 ✓ OFF (1 min)

13:20 ✓ ON (1 min)

13:21 ✓ OFF (3 min)

13:24 ✓ ON (4 min)

13:28 ✓ OFF (1 min)

13:29 ✓ ON (2 min)

13:31 ✓ OFF (7 min)

13:38 ✓ ON (2 min)

13:40 ✓ OFF (3 min)

13:43 ✓ ON (3 min)

13:46 ✓ OFF (1 min)

13:47 ✓ ON (3 min)

13:50 ✓ OFF (1 min)

13:51 ✓ ON (1 min)

13:52 ✓ OFF (2 min)

13:54 ✓ ON (6 min)

14:00 ✓ OFF (1 min)

14:01 ✓ ON (3 min) \* plasma line (bipurcat.)  $FoF2 = 10 \text{ MHz}$ .

14:04 ✓ OFF (8 min)

14:12 ✓ ON (1 min)

14:14 ✓ OFF (2 min)

$FoF2 = 9.425$

$FoF2 = 9.85$

$FoF2 = 10 \text{ MHz}$ .

$FoF2 = 9.95$

$FoF2 = 10.05$

5  
1

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16 14:15 ✓ ON (1min)

FoF2 = 10.25 MHz.

16 14:16 ✓ OFF (3min)

16 14:19 ✓ ON (1min)

16 14:20 ✓ OFF (1min)

16 14:21 ✓ ON (5min)

FoF2 = 10.25 MHz

16 14:26 ✓ OFF (1min)

16 14:27 ✓ ON (1min)

16 14:28 ✓ OFF (7min)

{ FoF = 10.2 MHz.

16 14:35 ✓ ON (2min)

{ FoE = 3.26 MHz

16 14:37 ✓ OFF (1min)

FoF = 10.2, FoE = 3.2

16 14:38 ✓ ON (4min)

double plasma layer.

FoEs ≈ 6

16 14:42 ✓ OFF (1min)

16 14:43 ✓ ON (1min)

16 14:44 ✓ OFF (1min)

16 14:45 ✓ ON (2min)

FoF = 9.8 FoEs = 4.9

16 14:47 ✓ OFF (1min)

16 14:48 ✓ ON (1min)

16 14:49 ✓ OFF (4min)

16 14:53 ✓ ON (2min)

FoF = 9.7 FoE = 3.16

16 14:55 ✓ OFF (2min)

FoEs = 4.75

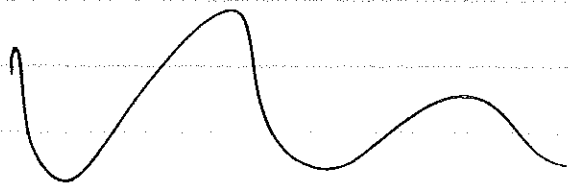
16 14:57 ✓ ON (2min)

16 14:59 ✓ OFF (1min)

FoF2 = 9.85 FoE = 3.01

17 15:00 done stop auto toggle.

FoEs = 3.75



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Juha

8.175 MHz

30<sup>min</sup> on / 7 min off

0, -6dB, 0, -3dB,  
0, -2dB, 0, -1, 0, -1, 0,  
-2, 0, -3, 0, -6, 0, -3, 0, -2  
0, -1

17:06 → Enable Power = 433KW

17:09 → OFF (1min) FoF = 9.8 MHz dBfs

17:10 0dB down (full power) (3min)

17:13 OFF

17:20 ON (-6dB → (-9) Tx=1)

17:23 OFF

-3 (→1)  
-5.5 (→2)  
-3.9 (→3)  
-5.9 (→4)  
-2.2 (→5)  
-2.8 (→6) Tx

Change freq.

17:37 increasing power.

		dBfs	Tx
17:51	Power 503.9KW	-4.3	1
		-7.4	2
		-5.6	3
		-8.2	4
		-2.5	5
		-5.2	6

17:53 OFF (7min) FoF = 9.8 MHz. FoEs = 2.2'

18:00 On (3min) 0dB max power (-4.3) Tx2, Tx5 trip.

18:03 OFF (7min)

18:10 ON (3min) power = 78 kW (-6dB → -10.3)

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18:20 ON (3 min)  $\emptyset$  dbfs max power (-4.3) 509 kw

18:23 OFF (7 min)

18:30 on (3 min) -3 dbfs 175 kw

18:33 off (7 min)

18:40 on (3 min)  $\emptyset$  dbfs TX6 Fault PA SCREEN

18:43 off (7 min)

18:50 on (3 min) -2 dbfs 279 kw

18:53 off (7 min)

19:00 on (3 min)  $\emptyset$  dbfs

19:04 off (6 min)

19:10 ON (3 min) -1 dbfs 387 kw

19:13 off (7 min)

19:20 on (3 min)  $\emptyset$  dbfs TX2 flt

19:22 off

19:23 (0 dB) power =

19:27 off

19:31 on full power test. 483 kw

19:34 off full power test

19:36 on full power test 488 kw

~~19:38 off~~

19:40 on full power (3 min) 0 dbfs

19:43 off (7 min)

19:50 on (3 min) -1 dbfs 365 kw

19:53 off (7 min)

20:00 on (3 min) 0 dbfs TX2 flt. driv. dc current

20:03 off (7 min)

20:10 on (3 min) -1 dbfs TX2 bias gain adj. V.I.

20:13 off (7 min)

-4.3	Tx6 flt.
-7.4	Tx2 flt
-5.6	
-8.2	
-2.5	
-5.5	→ adjusted

-4.4
-7.8
-5.7
-8.3
-2.7
-5.4

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20:20	on (3min)	0 dbfs	476 Kw	
20:23	off (7min)			
20:30	on (3min)	-2dbfs	268 Kw	
20:33	off (7min)			
20:40	on (3min)	∅dbfs	491 Kw	
20:43	off (7min)			
20:50	on 3min	-3dbfs	-7.4 dBFS	194.6 Kw
20:53	off (7min)		-4.4 dBFS (set)	
21:00	on 3min	∅dbfs		486 Kw
21:03	off (7min)			
21:10	on 3min	(-6)	-10.4 dBFS	73.5 Kw
21:13	off (7min)			493.9
21:20	on 3min	∅dbfs		483.9 Kw
21:23	off (7min)			
21:30	on (3min)	-7.4 dBFS (-3dbfs)		198.5 Kw
21:33	off (7min)			
21:40	on (3min)	∅dbfs	-4.4 dBFS	501.8 Kw
21:43	off (7min)			
21:50	on (3min)	(-2dbfs)	(-6.4 dBFS)	275.1 Kw
21:53	off (7min)			
22:00	on (3min)	(∅dbfs)	-4.4 dBFS	494.2 Kw
22:03	off (7min)		(-1dbfs)	
22:10	on (3min)	(-1dbfs)	-5.4 dBFS	362.1 Kw
22:13	off (7min)			
22:20	on 3min	∅dbfs	-4.4 dBFS	492.5 Kw
22:23	off 7min			
22:30	on (3min)	(-1dbfs)	5.4 dBFS	369.7 Kw
22:33	off (7min)			
22:40	on (3min)	∅dbfs		

Time	State	Duration	dBFS	Power (KW)	dBFS
22:43	off	7min			
22:50	ON	3min	(-2dBFS)	258.2 KW	dBFS-6.4
22:53	off	7min			
23:00	ON	3min	∅ dBFS	503 KW	dBFS-4.4
23:03	off	7min	(-6dBFS)		
23:10	ON	3min	(-6dBFS)	72.5 KW	
23:13	off	7min			
23:20	ON	3min	∅ dBFS	-4.4 dBFS	501 KW
23:23	off	7min			
23:30	ON	3min	-3dBFS	-7.4 dBFS	197.2 KW
23:33	off	7min			
23:40	ON	3min	∅ dBFS	-4.4 dBFS	494.9 KW
23:43	off	7min			
23:50	ON	3min	-2dBFS	-6.4 dBFS	270.0 KW
23:53	off	7min			
24:00	ON	3min	∅ dBFS	-4.4 dBFS	497.5 KW
24:03	off	7min			
24:10	ON	3min	-1dBFS	-5.4 dBFS	365 KW
24:13	off	7min			
24:20	ON	3min	∅ dBFS	-4.4 dBFS	496.4 KW
24:23	off	7min			
24:30	ON	3min	-1dBFS	-5.4 dBFS	376.6 KW
24:33	off	7min			
24:40	ON	3min	∅ dBFS	-4.4 dBFS	497.5 KW
24:43	off	7min			
24:50	ON	3min	-2dBFS	-6.4 dBFS	274.0 KW
24:53	off	7min			
01:00	ON	3min	∅ dBFS	-4.4 dBFS	500.0 KW
01:03	off	7min			



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DP 01:10	on 3 min	-3 dBFS	-7.4 dBFS	196.2 kw
P 01:13	off 7 min			
DP 01:20	on 3 min	Ø dBFS	-4.4 dBFS	493.0 kw
IP 01:23	off 7 min			
B 01:30	on 3 min	-6 dBFS	-10.40	72.6 Kw
B 01:33	off 7 min			
IP 01:40	on 3 min	Ø dBFS	-4.4 dBFS	500.7 kw
IP 01:43	off 7 min			
P 01:50	on 3 min	-3 dBFS	-7.4 dBFS	196.2 Kw
P 01:53	off 7 min			

Start ↓

END H 3155 A2=168, 91=1.1  
ch=11

02:00:40 H 3171 auto toggle 3 sec on 1 sec off

02:10:00 Time correction AND 5 min on 5 min off  
using siggen for [3-1] from aut oggler [5.125 MHz]

6:30 Put scope on 1 uR was had scope  
in 50 Ω + into DANA'S Box had 250 Ω  
loads.

6:55 siggen cable now directly into DANA'S  
Box

see a glitch on each 4 sec on, need to check  
Note: we have not had the 5 MHz filter with  
siggen hike. Need to put it in and adjust the  
level later.

09:30 stop, Signal Gen setup ]- AM modulation was 100%  
Not 100%

9:30, 38 AM = 100% 3 sec on 1 sec off

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9:35:05 Am off - cw to check Level >

9:36 check Power Level

09:42:XX Part in 5 MHz filter. outp Drive  
Wout -2 dbu to +3 dbu

09:44 HF off -

Felix goes to 740 FOLK

11:10 on all TX Faltt

11:11 on -3 dbts to bring them up.

11:23:XX START 30n boff using siggen with  
filter

NO 430. RCV chos done after 1 hour  
down time 5.1 MHz from siggen.

12:01 off

Power	-5.0
Level	-8.4
in	-6.0
dbts	-9.1
	-3.3
	-6.2

12:13 change to 8.175 from standard signal gen.

12:29 off

12:32 on

-3.0
-5.7
-4.1
-6.1
-2.3
-2.1

H3194 NJ

05/23/17

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Natasha pseudo on off

12:37 off  
12:40 on (1 min)

41 off (1 min)

42 on (2 min)

44 off (2 min)

47 on (1 min)

48 off (1 min)

49 on (5 min)

54 off (2 min)

56 on (1 min)

57 off (1 min)

58 on (1 min)

59 off (1 min)

13:00 on (1 min)

13:01 off (3 min)

13:04 on (4 min)

13:08 off (1 min)

13:09 on (2 min)

13:11 off (7 min)

13:18 on (2 min) 408 kw

13:20 off (3 min)

13:23 on (3 min) 414 kw

13:26 off (1 min) ~~414 kw~~

13:27 on (3 min)

13:30 off (1 min)

13:31 on (1 min)

13:32 off (2 min)

13:34 on (1 min) 410 kw

Continuation N.S.  
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13:40	off (1 min)	
13:41	on (3 min)	418 kw
13:44	off (8 min)	
13:52	on (1 min)	
13:53	off (2 min)	
13:55	on (1 min)	
13:56	off (3 min)	
13:59	on (1 min)	
14:00	off (1 min)	
14:01	on (5 min)	
14:06	off (1 min)	
14:07	on (1 min)	419 kw
14:08	off (7 min)	
14:15	on (2 min)	
14:17	off (1 min)	
14:18	on (4 min)	415 kw
14:22	off (1 min)	
14:23	on (1 min)	
14:24	off (1 min)	
14:25	on (2 min)	413 kw
14:27	off (1 min)	
14:28	on (1 min)	416 kw
14:29	off (4 min)	
14:33	on (2 min)	415 kw
14:35	off (2 min)	
14:37	on (2 min)	
14:39	off (1 min)	
14:40	on (3 on 1 off) (1 min)	

sec > 3 sec on 1 sec off continue  
start off auto toggle

23 MAY 17

(21)

14:50 off (10 min)  
15:00 on (1 min)  
15:01 off (1 min)  
15:02 on (2 min)  
15:04 off (3 min)  
15:07 on (1 min)  
15:08 off (1 min)  
15:09 on (5 min)  
15:14 off (2 min)  
15:16 on (1 min)  
15:17 off (1 min)  
15:18 on (1 min)  
15:19 off (1 min)  
15:20 on (1 min)  
15:21 off (3 min)  
15:24 on (4 min)  
15:28 off (1 min)  
15:29 on (2 min)  
15:31 off (7 min)  
15:38 on (2 min)  
15:40 off (3 min)  
15:43 on (3 min)  
15:46 off (1 min)  
15:47 on (3 min)  
15:50 off (1 min)  
15:51 on (1 min)  
15:52 off (2 min)  
15:54 on (1 min)

23 MAY 17

(22)

Auto

16:00 off (1min) change toggle 5 sec. on 1 sec. off

16:01 on (3min)

16:04 off (8min)

16:12 on (1min)

16:13 ✓ OFF (2min)

16:15 ✓ ON (1min)

16:16 ✓ OFF (3min)

16:19 ✓ ON (1min)

16:20 ✓ OFF (1min)

16:21 ✓ ON (5min)

16:26 ✓ OFF (1min)

16:27 ✓ ON (1min)

16:28 ✓ OFF (7min)

16:35 ✓ ON (2min)

16:37 ✓ OFF (1min)

16:38 ✓ ON (4min)

16:42 ✓ OFF (1min)

16:43 ✓ ON (1min)

16:44 ✓ OFF (1min)

16:45 ✓ ON (2min)

16:47 ✓ OFF (1min)

16:48 ✓ ON (1min)

16:49 ✓ OFF (4min)

16:53 ✓ ON (2min)

16:55 ✓ OFF (2min)

16:57 ✓ ON (2min)

16:59 ✓ OFF (1min)

17:00 ✓ ON (1min)

16:50 New uspf Disk  
✓ 170523 ✓

HF Campaign 2nd notebook  
23 MAY 17

(23)

May 23 / Natasha Jackson - Booth.

17:10	off (5min)	
17:15	on (7min)	17:16 430MHz tx down
17:22	off (1min) on (3min)	17:18 430MHz tx up → Switch to CW to check power levels.
17:25	on (1min)	Back to Auto toggle 5sec on 1sec off
17:26	off (4min)	
17:30	on (1min)	
17:31	off (1min)	
17:32	on (2min)	
17:34	off (3min)	
17:37	on (1min)	
17:38	off (1min)	
17:39	on (5min)	412kw max hold.
17:44	off (2min)	
17:46	on (1min)	
17:47	off (1min)	
17:48	on (1min)	
17:49	off (1min)	
17:50	on (1min)	
17:51	off (3min)	
17:54	on (4min)	
17:58	off (1min)	
17:59	on (2min)	
18:01	off (7min)	↓ 413kw max hold
18:08	on (2min)	

23 May 17

(24)

18:10	off (3 min)	
18:13	on (3 min)	
18:16	off (1 min)	
18:17	on (3 min)	
18:20	off (1 min)	
18:21	on (1 min)	
18:22	off (2 min)	
18:24	on (6 min)	406 kw
18:30	off (1 min)	change auto toggle to 3sec on 1sec off.
18:31	on (3 min)	
18:34	off (8 min)	
18:42	on (1 min)	
18:43	off (2 min)	
18:45	on (1 min)	
18:46	off (3 min)	
18:49	on (1 min)	
18:50	off (1 min)	
18:51	on (5 min)	
18:56	off (1 min)	
18:57	on (1 min)	
18:58	off (2 min)	<del>change auto toggle to 3</del>
19:00	on (5 min)	
19:05	OFF (5 min)	
19:10	on (5 min)	
19:15	off (5 min)	
19:20	on (5 min)	430 kw. mat Hold.
19:25	off (5 min)	



10

23 May 17

(25)

19:30	on (5 min)	444 Kw
19:35	off (5 min)	
19:40	on (5 min)	430mHz Tx down
<del>19:45</del> 19:45	off (5 min)	19:46 430mHz Tx up.
19:50	on (5 min)	
19:55	off (5 min)	
20:00	on (5 min)	May 23 midnight Earth Exit a fast moving stream of solar wind.
20:05	off (5 min)	
20:10	on (5 min)	
20:15	off (5 min)	turn off at 20:16, checking Tx & power.
20:20	on (5 min)	
20:25	off (5 min)	
20:30	on (5 min)	
20:35	off (5 min)	
20:40	on (5 min)	
20:45	off (5 min)	
20:50	on (5 min)	
20:55	off (5 min)	
21:00	on (5 min)	
21:05	off (5 min)	
21:10	on (5 min)	
21:15	off (5 min)	430mHz Tx down
<del>21:20</del>	<del>(5 min)</del>	
21:18		Change of frequency 8.175 to 5.125

)

21:51 CW for power levels set up  
 21:52 started 3on and 1sec off power 500KW

23 MAY 17

(26)

22:02 ON (6 min) (3 sec on 1 sec off) Auto toggle 6 min on, 6 min off

f of z = 4.7 MHz

23:58 OFF

5.125

23:59 ON CW Stanford signal gen 495 kW

00:02 ON CW LHCP MCL 495 kW

Setting power levels

echotek [-4.5, +4.5]

testing LCP F-1

00:05 - Back to LCP 450 kW min change

ch => ZA = 0 s.b.

had lots of extra noise in the LCP. so don't use it. will just use RCP.

Alternately Power and LCP. [Labs of Area]

00:50 OFF

01:00 ON (10 sec) then Back off

01:05 ON

01:20 + OFF (10 min)

01:30 + ON (50 min)

1.41 - 1.82 oh ZA 0 => 1 => 0

02:20 + OFF (15 min)

02:35 + ON (15 min)

24 MAY 17

(27)

T2869

03:11 Start. 3:11am 05/24/17 CPA/WP  
 SUMAN, Peal Bean  
 Down = 6.1 ch = 11, AZ = 385  
 gr = 7 WSP  
 ch  $\rightarrow$  echotele [5.5, 9.5]

08:48 HF Power has been low at 8:48 it is 392KW

09:00 SUMAN Don testix  
 9: -7 10: - look at problem with ch

430 RF off

09:10 Load h HCP File - test

09:14 RF 430 ~~was off~~ - Back on

9:17 cRow Bar 5.0998 SPAN 19.6 KHz

10:00 Peal Berahoot ~~5.1 @ 20KHz~~ Full Sw  
 Linear sweep chirp 4.9 MHz. 1 ms dc  
 extrig 200 Hz Rep FREQ

10:44 chirp on Bring in up TX  
 WSP [5.5, 9.5] ch gr = WSP  
 AF = 160 gr = 6 ch = 6

10:45 CW  
 11:06 466 kW. CW

11:06:4 START chirping

11:08 -1 db

11:25 HF off For check of new chirp  
 TX2 dipped TX2 -2 db

11:30 HF off TX2 Broadband has had input Power

24 MAY 17

(28)

11:40 - TX Broad band was overheating. Backup

11:45 CW chirp 50-50  
CW 50% chirp 50%  
↳ 5.09 MHz

11:55 - TX 2 broadband overheating again  
- try pattern some fans. - 14KW

12:05 - TX 2 Back to 80KW.

12:15 TX 2 drops again to 14KW

12:31 TX 2 Backup

12:38 TX 2 down. 2 chg.

13:55 Power Dip TX 430 down. wait 15 min  
for TX 30 TX warm up.

14:26 To 8 MHz 8.175 cfm BW = 30 kHz  
Pauls 8.178 pad gun / chirp  
29.4 kHz BW  
4.9ms chirp - 2 chg  
200 kHz Rep Rate

14:45 CW ⇒ chirp

14:50 ~~50% CW 50% chirp~~  
5 sec chirp 5 sec CW 8.16

14:51 CW still airing. ↗  
TX 6 tripped Reverse Power.

15:07/00 50% CW 50% chirp 1/2 sec [other CW

15:125 check RE monitor cable 2, 5

TX 6 Back

24 MAY 17

(29)

15:32 all Back

15:33 Back to chipping

15:40 - Phil to dish

- can. off 430 RF for a few minutes

16:07 RF on CW 0.17 Smtz on Stanford Siggen.  
setting power levels.

16:15 Power is <sup>set</sup> 380 kw due to acc., Nathana Jackson

16:16 off (4 min)

16:20 on (1 min)

16:21 off (1 min)

16:22 on (2 min) lost GUI HF Synth went on for ~ 30 sec.

16:24 off (3 min) ?

16:27 on (1 min) 395 kw

16:28 off (1 min)

16:29 on (5 min)

16:34 off (2 min)

16:36 on (1 min)

16:37 off (1 min)

16:38 on (1 min) 392 kw

16:39 off (1 min) moving dome to 1.1

16:40 on (1 min) AZ 168, GD 1.1, Line 11

16:41 off (3 min)

16:44 on (4 min) tx 6 fault vs power.

-2.8
-5.7
-4.0
-5.7
-2.6
-3.0

dbfs

24 MAY 17

(30)

16:48	off (1 min)		
16:49	on (2 min)		
16:51	off (7 min)		
16:58	on (2 min)	395 kw	
17:00	off (3 min)		
17:03	on (3 min)	lots of arc.	
<del>17:06</del>	off (1 min)		
17:07	on (3 min)	lots of arc	
17:10	off (1 min)		
17:11	on (1 min)		
<del>17:12</del>	off (2 min)		
17:14	on (6 min)		
17:20	off (1 min)		
17:21	on (3 min)	<del>395 kw</del>	
17:24	off (8 min)		
17:32	on (1 min)		
17:33	off (2 min)		
17:35	on (1 min)	<del>395 kw</del> 396 kw	
17:36	off (3 min)	← Osvaldo turn it on one minute before	
17:38	on (2 min)		
17:40	off (1 min)		
17:41	on (5 min)	395 kw	17:41
17:46	off (1 min)		17:46
	on (1 min)		17:47
	off (7 min)		17:48
	on (2 min)		17:55
	off (1 min)		17:57

24 MAY 17

(31)

17:58	on (4 min)	
18:02	off (1 min)	
18:03	on (1 min)	
18:04	off (1 min)	
18:05	on (2 min)	388 kw
18:07	off (1 min)	
18:08	on (1 min)	
18:09	off (4 min)	
18:13	on (2 min)	
18:15	off (2 min)	
18:17	on (2 min)	
18:19	off (1 min)	
18:20	on (1 min)	
18:21	off (3 min)	
18:24	on (5 min)	
18:29	off (1 min)	
18:30	on (4 min)	
18:34	OFF (7 min)	TR 5 PAAC fault
18:41	on (3 min)	
18:44	off (1 min)	
18:45	on (1 min)	
18:46	OFF (1 min)	
18:47	ON (3 min)	
18:50	OFF (2 min)	
18:52	ON (2 min)	
18:54	OFF (6 mins)	
19:00	Setting auto toggle to 3sec on 1 off and 5 min on 5 min	

3 sec on 1 sec off on Auto toggle  
5 min on 5 min off on switch

power is 412 on max hold. (32)

24 MAY 17

19:05 off (5 min)  
19:10 on (5 min)  
19:15 off (5 min) Tx 5 fault PA AC  
19:20 on (5 min)  
19:25 off (5 min)  
19:30 on (5 min)  
19:35 off (5 min)  
19:40 on (5 min)  
19:45 off (5 min)  
19:50 on (5 min)  
19:55 off (5 min) @ freq. change from 8.175 to 5.125

20:08 file = RCPH -MEL 5mhz 80kw. hfsynth

20:09 on for leveling power levels.

20:18 Power levels are 490kw

-4.3
-7.8
-5.8
-8.5
-2.8
-5.3

20:20 (3sec on, 1sec off) for 5min on

20:25 off (5 min) 5min off

20:30 on (5 min)

20:35 off (5 min)

20:40 on (5 min)

20:45 off (5 min)

20:50 on (5 min)

20:55 off (5 min)

21:00 on (5 min)

21:05 off (5 min)



Wed 24th May 2017 5.125MHz

24 MAY 17

(33)

21:40 on (5min)

21:45 off (5min)

21:50 on (5min)

21:55 off (5min)

22:00 on (5min)

22:05 off (5min)

22:10 on (5min)

22:15 off (5min)

22:20 on (5min)

22:25 off (5min)

22:30 on (5min)

22:35 off (5min)

22:40 on (5min)

22:45 off (5min)

22:50 on (5min)

22:55 off (5min)

23:00 on (5min)

23:05 off (5min)

23:10 on (5min)

23:15 off (5min)

23:20 on (5min)

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(34)

23:25 off (5 min)

23:30 on (5 min)

23:35 off (5 min)

23:40 on (5 min)

23:45 End NJ

23:45 start RCP setup - MCL T2689

Set up and save ~~170525~~

Rh CP - 5mHz - mcl - 80kw - 170525.

23:55 start LCP setup. 287.7°

Lh CP - 5mHz - mcl - 80kw - 170525.

05/25/17

00:00 RHCP selected 106.0°

-4.4

-7.4

00:10 on (40 min) CW 505 kw

-5.8

~~00:20~~

-8.6

00:12 Adjusted -0.2 dbfs on tx 2

-2.6

Set to -7.6 dbfs

-5.3

10:36 Adjusted tx 6 0.1 dbfs

00:50 off (15 min)

00:52 LHCP. set up 287.7°

01:05 on (15 min)

01:06 adjust power levels.

25 MAY 17

(35)

11:10	Power set at 490 Kw	
01:20	off (10 min)	
01:30	on RHCP 106° 495 Kw	
02:20	off RHCP	
02:22	LHCP 207.7° setup.	
02:35	on for 15 min 486 Kw	
02:50	off.	AZ = 34.5 ch = 11, gr = 1.1
02:51	setup for SC 5.125 RHCP, auto toggle set to 900 sec on	
03:00	on (15 min) 496 Kw 106°	300 sec off
03:15	off (5 min)	
03:20	on	-4.4
03:35	off	-7.6
03:40	on	-5.8
03:55	off	-8.6
04:00	on	-2.6
04:15	off	-5.2
04:20	on	
04:35	off	
04:40	on	
04:55	off	
05:00	on	
05:15	off.	

25 May 17

(36)

05:35 off (5 min)  
 05:40 on (15 min)  
 5:55 ~~on~~ (5 min) off  
 6:00 on (15 min) Adjust power levels  
 6:15 off (5 min)  
 6:20 on (15 min) start Auto toggle 504 Kw  
 6:35 off (5 min)  
 6:40 on (15 min)  
 6:55 off (5 min)  
 7:00 on (15 min) 500 Kw  
 7:15 off (5 min)  
 7:20 on (15 min) 501 Kw  
 7:35 off (5 min)  
 7:40 on (15 min)  
 7:55 off (5 min)  
 8:00 on (15 min)  
 8:15 off (5 min)  
 8:20 on (15 min)  
 8:35 off (5 min)  
 8:40 on (15 min)  
 8:55 off (5 min)

echotek 201705-24d

echotek [5.5, 9.5]  
 AZ = 348 PR = 1.1, ck = 11

9:54 Pool 5.1 kHz come up cw  
 10:00 3 sec on 1 sec off 420 kW  
 10:01 + 3dbm on siggen 3db 400  
 10:02 => cw Readjust level  
 10:05 Back to Pool off using Pools siggen.

echotek  
 hf 20170525

25 MAY 17

(37)

10:20	Sat Pass		
11:00	STOP Paul. switch to 8.175 MHz Pulse 9sec on 3sec off.		
	TX6 - trouble screw PA & coupling, lots of arcing Run with TX1-5.		
12:05	9 sec on 3 sec off	(10 mins)	TX5 trapped 12:13 Cbdas checked
12:15	OFF	(5 mins)	
12:20	9 sec on / 3 sec off	(10 mins)	TX5 trapped 12:21 Only 4 TXs from 12:21 PR.
12:30	<del>OFF (5 mins)</del>		
12:30	OFF	(5 mins)	
12:35	ON	(10 mins)	15 sec on / 5 sec off TX1-4 only TX1, 4, 3, 4 12:40 TX5 back on 12:43 TX2 trapped
12:45	OFF	(5 mins)	
12:50	ON	(12 min)	180 sec on / 60 sec off 12:50 TX5 running low
13:02	OFF	(3 min)	
13:05	ON	(10 mins)	7 sec on / 3 sec off 13:06 TX5 trapped 13:08 TX5 back up
13:15	OFF	(5 mins)	
13:20	ON	(10 min)	7 sec on / 3 sec off TX6 back on 13:23 TX6 down 13 26
13:30:03	OFF	(5 min)	
13:35	ON	(5 min) CW	TX6 being brought back up TX5 power increased
13:40	ON	(10 min)	7 sec on / 3 sec off.
13:50	OFF	(5 min)	
13:55	ON	(10 min)	7 sec on / 3 sec off TX5 off (overhead)
14:05	OFF	(5 min)	
14:10	ON	(10 min)	5 sec on / 2 sec off
14:20	OFF	(5 min)	

-3.1	dB
-5.6	
-4.5	
-6.0	
-2.6	-2.1
-2.3	-2.8

14.976389

- 6 enhancement or spreader

H3194

25th May 17 (8.125 MHz)

(38)

C14:21 FoF2 7.8 MHz - from plasma line

14:25 ON (5 min) 4 sec on / 3 sec off.

14:30 OFF (5 min)

TX6 tripped off

14:35 ON (5 min)

4<sup>5</sup> sec on / 3 sec off

- arcing  
TX5 still off.

14:40 OFF (5 min)

14:37 - TX6 brought back up

- arcing started

14:39 TX6 taken off line.

14:40 OFF (5 min)

NO TX5, NO TX6

14:45 ON (5 min)

8 sec on / 3 sec off

FoF2 7.8 MHz

14:50 OFF (5 min)

FoF2 7.9 MHz

TX5 brought back up

14:55 ON (5 min) CW

TX5 running 60kW

15:00 ON (5 min)

8 sec on / 3 sec off

15:05 OFF (5 min)

15:10 ON (5 min) 8 sec on / 3 sec off.

15:15 OFF (5 min)

15:20 ON (5 min) (8 sec on / 3 sec off)

15:25 OFF (5 min)

15:30 ON (5 min) 3 sec on / 1 sec off

15:37 MPL just above 8 MHz

15:35 OFF (5 min)

15:40 ON (5 min) 3 sec on / 1 sec off

15:45 OFF (5 min)

15:50 ON (5 min) 3 sec on / 1 sec off.

Armed critical

15:55 OFF (5 min)

16:00 ON (5 min) 3 sec on / 1 sec off

16:05 OFF (5 min)

16:10 ON (5 min) 3 sec on / 1 sec off

16:15 OFF (5 min)

16:20 ON (5 min) 3 sec on / 1 sec off

TX1	-3.1
TX2	-5.6
TX3	-4.5
TX4	-6.0
TX5	-2.5
TX6	-2.8

H3194 25M May 17 8.175 MHz

TX5 running lower (in 60kw), TX6 off

(39)

16:25	OFF	(5 min)	
16:30	ON	(5 min)	CLW TX6 brought back up - had error 16:32 TX6 taken down
16:35	ON	(5 min)	3 sec on / 1 sec off
16:40	OFF	(5 min)	
16:45	ON	(5 min)	8 sec on / 3 sec off
16:50	OFF	(5 min)	
16:55	ON	(2 min)	8 sec on / 3 sec off
16:57	OFF	(1 min)	
16:58	ON	(2 min)	8 sec on / 3 sec off
17:00	OFF	(1 min)	
17:01	ON	(3 min)	3 sec on / 1 sec off
17:04	OFF	(1 min)	
17:05	ON	(5 min)	5 sec on / 2 sec off
17:10	OFF	(2 min)	
17:12	ON	(3 min)	5 sec on / 2 sec off
17:15	OFF	(1 min)	
17:16	ON	(2 min)	5 sec on / 2 sec off
17:18	OFF	(2 min)	
17:20	ON	(4 min)	7 sec on / 2 sec off
17:24	OFF	(1 min)	
17:25	ON	(3 min)	
17:28	OFF	(2 min)	
17:30	ON	(5 min)	9 sec on / 3 sec off
17:35	OFF	(1 min)	
17:36	ON	(4 min)	9 sec on / 3 sec off

H3194 25th May 17 8.175 MHz  
 TX5 running reduced power ~ 60kW  
 TX6 down

- 3.1
- 5.6
- 4.5 (40)
- 6.0
- 2.5
- 4.8

17:40	OFF	(5 min)		
17:45	ON	(3 min)	9 sec on / 3 sec off	
17:48	OFF	(2 min)		
17:50	ON	(3 min)	9 sec on / 3 sec off	
17:53	OFF	(1 min)		enhancement has been
17:54	ON	(4 min)	9 sec on / 3 sec off	
17:58	OFF	(2 min)		FoF2 ~ 8.8 MHz
18:00	ON	(1 min)	9 sec on / 3 sec off	
18:01	OFF	(3 min)		
18:04	ON	(6 min)	9 sec on / 3 sec off	
18:10	OFF	(2 min)		
18:12	ON	(4 min)	9 sec on / 3 sec off	
18:16	OFF	(1 min)		
18:17	ON	(7 min)	9 sec on / 3 sec off	
<del>18:24</del> 18:24	OFF	(3 min)		TX6 back on ~ 40kW
18:27	ON	(3 min)	9 sec on / 3 sec off	
18:30	OFF	(4 min)		FoF2 8.8 MHz
18:34	ON	(6 min)	9 sec on / 3 sec off	
18:40	OFF	(2 min)		18:43 TX6 taken 10 min to heat up + 18:46 FoF2 8.7 MHz
18:42	ON	(6 min)	9 sec on / 3 sec off	
18:48	OFF	(2 min)		FoF2 8.8 MHz
18:50	ON	(5 min)	9 sec on / 3 sec off	
18:55	OFF	(5 min)		



25th May 2017 8:175 MHz

(41)

TX 5 running reduced power ~60kw

TX 6 down (lots of arcing after 10 mins)

19:00	ON	(5 min)	3 sec on / 1 sec off	FUP ~ 8.5 MHz
19:05	OFF	(5 min)		FUP ~ 8.45 MHz
19:10	ON	(5 min)	3 sec on / 1 sec off	14:15 FUP ~ 8.4 MHz
19:15	OFF	(5 min)		19:14 FUP ~ 8.3 MHz
19:20	ON	(5 min)	3 sec on / 1 sec off	TX 6 on back, turned off arcing
19:25	OFF	(5 min)		14:24 line depth beams off
19:30	ON	(5 min)	3 sec on / 1 sec off	14:26 FUP ~ 8.2 MHz
19:35	OFF	(5 min)		14:33 FUP ~ 8.0 MHz
19:40	ON	(5 min)	3 sec on / 1 sec off	
19:45	OFF	(5 min)		
19:50	ON	(5 min)	3 sec on / 1 sec off	
19:55	OFF			
20:00	ON	(5 min)	3 sec on / 1 sec off	
20:05	OFF		- switching to 5.125 MHz.	

20:20	Bring up	5.125 MHz	All 6 TXs	TX1 - 4
20:30	ON	(5 min)	3 sec on / 1 sec off	TX2 - 8
20:35	OFF	(5 min)		TX3 - 6
20:40	ON	(5 min)	3 sec on / 1 sec off	TX4 -
20:45	OFF	(5 min)		TX5 -
20:50	ON	(5 min)	3 sec on / 1 sec off	TX6 -
20:55	OFF	(5 min)		
21:00	ON	(5 min)	3 sec on / 1 sec off	
21:05	OFF	(5 min)		

25M May 2017

8.125 MHz

(42)

All TXs on ~~at~~ equal power ~ 79kw

21:10	ON (5 min)	3 sec on / 1 sec off
21:15	OFF (5 min)	
21:20	ON (5 min)	3 sec on / 1 sec off
21:25	OFF (5 min)	
21:30	ON (5 min)	3 sec on / 1 sec off
21:35	OFF (5 min)	
21:40	ON (5 min)	3 sec on / 1 sec off
21:45	OFF (5 min)	
21:50	ON (5 min)	3 sec on / 1 sec off
21:55	OFF (5 min)	
22:00	ON (5 min)	3 sec on / 1 sec off
22:05	OFF (5 min)	
22:10	ON (5 min)	3 sec on / 1 sec off
22:15	OFF (5 min)	
22:20	ON (5 min)	3 sec on / 1 sec off
22:25	OFF (5 min)	
22:30	ON (5 min)	3 sec on / 1 sec off
22:35	OFF (5 min)	
22:40	ON (5 min)	3 sec on / 1 sec off
22:45	OFF (5 min)	
22:50	ON (5 min)	3 sec on / 1 sec off
22:55	OFF (5 min)	
23:00	ON (5 min)	3 sec on / 1 sec off
23:05	OFF (5 min)	
23:10	ON (5 min)	3 sec on / 1 sec off
23:15	OFF (5 min)	

crabber on switch

~~crabber~~

25th May 2017 5.125 MHz

All TXs on - all equal power

Total ~ ~~500~~ <sup>460</sup> kW

(43)

23:20 ON (5 min) 3 sec on / 1 sec off

23:25 OFF (5 min)

23:30 ON (5 min) 3 sec on / 1 sec off

23:35 OFF (5 min)

23:40 ON (5 min) 3 sec on / 1 sec off

23:45 ON (5 min) CW

- power level check

Total power = 462 kW

TX 1 = 76.1 kW

-4.7

TX 2 = 74.7 kW

- 8.1

TX 3 = 74.5 kW

- 6.3

TX 4 = 81.5 kW

- 9.0

TX 5 = 79.0 kW

- 2.5

TX 6 = 76.9 kW

- 5.9

23:50 ENV EXP. - OFF

23:51 Setting up for MCL Exp.

RHCP 480 kW

RHCP - 5 MHz - MCL - 80 kW - 170526. Hz synth.

23:57 LHCP

RHCP - 5 MHz - MCL - 80 kW - 170526. Hz synth.

00:00 ON (50 min) 106° RHCP.

00:07 Adjusting Power levels

TX 1 = -4.5 TX 4 = -8.9

TX 2 = -7.9 TX 5 = -2.4

TX 3 = -5.9 TX 6 = -5.6

dBfs

26 MAY 17

(14)

00:50 off (RHCP)  
00:51 setting up LHCP  
01:05 on (LHCP for 15min) TX 1 -4.6  
TX 2 -7.6  
287.7° 496kw TX 3 -5.3  
TX 4 -8.7  
TX 5 -2.8  
TX 6 -5.4

01:20 off (LHCP) for 10min  
01:21 setting for RHCP.

01:30 on ~~RHCP~~ RHCP 106° 490kw

2:20 off RHCP  
2:21 setting LHCP

2:35 on LHCP 287.0° 494kw

2:50 off LHCP end of MCL Exp.

2:51 setting RHCP 106° 5.125  
CW ~~300 sec on 300 sec off~~

03:00 on (~~15min~~)

03:43 off. for AEC

03:44 on tx 6 Linear Auge blown

03:50 tx 6 online

7:10 tx 4 fault IPA ADC

7:12 tx 4 online