

HF Campaign 16 Mar 18

①

12:00 CW up 5.125 MHz RCP
4.9 sec on 4 sec off out of
5 min on 5 min off (or 15 min on)
tx about

14:58:xx RAN for about 1 min on to get Power level

15:02:07 Natasha short seq. (RCP)
20 min on, CW off, ... no pulsing
OFF @ 15:22:07

ON @ 15:32:07 PWR OUT: 360 kW

OFF @ 15:42:07

ON @ 15:47:07 PWR OUT: 350 kW

OFF @ 15:57:07 => ~~FELIX~~ JUNK / NATASHA-SHORT-20180315.txt
FELIX

16:03

16:03:06 Natasha long sequence CW/gated by long intervals of few
AZ: 284.996 minutes (RCP)
DOME: 1.1

FELIX - JUNK / NATASHA V3 - 20180315.txt

Power ≈ 355 kW

Although the sequence is 2 hrs long we will run for only
90 min.

END: 17:31:07

17:39 - on CW adjust Power level.

18:10:02 + start

18:10:00 25th START gonorrady #2-20180315

12:00:00

14:00:00

16:00:00

check ke

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18:19:20 RF check level

144 PKTU PK

280 PKTOP

410

18:20:12

91 mV

18:22:2

137 mV

	✓	✓	✓	✓	✓
	16	25	50	75	100
	1.581	2.5	3.535	4.33	5
	10 361	16 383	23 170	28 377	32 907

18:35:02

18:35:02 START ⇒ sine problem

0, -1, -3, -6, -10

~~20~~
~~20~~
~~20~~

18:43 CW ON

-4.6

20.6 kW

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18: 45	-10dB	-14.6	✓	20.6 kW
47	-6dB	-10.6	✓	61.5 kW
49	-3dB	-7.6	✓	155.4 kW
51	-1dB	-5.6	✓	302 kW
53	0dB	-4.6	✓	405 kW
55	-10dB			22.6 kW
57 57	-10dB			22.7 kW
→ 59	-6 25%	-10.6		66.0 67.1 kW
7 19:01	-3 50%	-7.6		166.7 166
03	-1 75%	-5.6		211.7 211
05	0 100%	-4.6		416 kW ←
07	-6 25%	-10.6		64.1 kW
09	-3 50%	-7.6		160.7 kW
11	-1 75%	-5.6		308.5 kW
13	0 100%	-4.6		414.1 kW
15	-10	-14.6		22.1 kW
17	-10	-14.6		22.0 kW
19	-6	-10.6		66.0 kW
21	-3	-7.6		164.5 kW
23	-1	-5.6		308.1 kW
25	0	-4.6		401.7 kW
27	-6	-10.6		62.6 kW
29	-3	-7.6		155.7 kW
31	-1	-5.6		302 kW
33	0	-4.6		

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19:33 CW, Phil looking for arc.

19:55 - bring up Power TO 450KW
NO arcing

19:48 HF off

March 17/2018.

8:00 return on TX HV
trouble with serial port H/Ectrol

10:00 START bringing up HF power.

11:13 auto toggle 2 min on 1 min off 382 kW

11:25 TX5 TRIP PARAC

11:37 autotoggle 9 sec on, 4 sec off

11:38 TX5 PA A AC trip - reset.

11:47 50W 2 off hot/cold smoke, generator

11:54 9-4 autotoggle

12:00:5 CW to get power levels.

12:05:00 Natashe using sequencer with P/404
12:05:18 9,4 is 92.8 ms before flicker
13:06:18 END

11.9 000

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- 13:07 CW calibrate PWR output 372.5 kW
- 13:10 OFF → waiting until 13:15 for next sequence
- 13:15 9sec ON / 4 sec OFF, with 5 min ON / 5 min OFF,
from signal generator by Manual trigger
means of AM signal
- 13:20 go to CW
- 15:23 TX6 TRIPPER circuit Breaker on
wall. Rest Backup 15:36
- 15:48 9:4
- 16:53:30 CW calibration of Port: 373.7 kW
- 16:56:30 OFF
- 17:00:00 Datasta long sequence with 9sec ON / 4 sec OFF
- 18:00:00 OFF
- 18:01:30 ON CW 5.125 MHz check PWR output 373 kW
- 18:03:30 OFF
- 18:04:30 ON CW 5.10067 MHz check PWR output 405 kW
Bringing the power levels up to around 75 kW per generator
final output is about ~~450~~ 451.4 kW
- 18:13:00 OFF Wait until 18:15 to start next sequence

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[KW]

18:15	= 3dB	-7.4 ✓	
:17	- 1dB	-5.4 ✓	
:19	0dB	-4.4 ✓	450 kW
:23	-3dB	-7.4 ✓	186 kW
:25	-1dB	-5.4 ✓	333 kW
:27	0dB	-4.4 ✓	453 kW
:31	-10dB	-14.4 ✓	23 kW
:35	-3dB	-7.4 ✓	186 kW
:37	-1dB	-5.4 ✓	354 kW
:39	0dB	-4.4 ✓	459.8 kW
:43	-3dB	-7.4 ✓	169.8 kW
:45	-1dB	-5.4 ✓	338.3 kW
:47	0dB	-4.4 ✓	451.3 kW
:51	-10dB	-14.4 ✓	23.5 kW
:55	-3dB	-7.4 ✓	184.8 kW
57	-1dB	-5.4 ✓	348.3 kW
59	0dB	-4.4 ✓	453.9 kW
19:03	-3dB	-7.4 ✓	168.7 kW
05	-1dB	-5.4 ✓	337.9 kW
07	0dB	-4.4 ✓	454.9 kW
11	-10dB	-14.4 ✓	23.6 kW
15	-3dB	-7.4 ✓	182.5 kW
17	-1dB	-5.4 ✓	348.8 kW
19	+0dB	-4.4 ✓	451.7 kW
23	-3dB	-7.4 ✓	167.5 kW
25	-1dB	-5.4 ✓	337.3 kW
27	0dB	-4.4 ✓	459.2 kW

V31	30	-10 dB	-14.4	23.4
V35	34	-3 dB	-7.4	184.0
V37	36	-1 dB	-5.4	347.0
V39	38	0 dB	-4.4	454.8
V43	44	-3 dB	-7.4	170.8
V45		-1 dB	-5.4	336.0
V47		0 dB	-4.4	453.7
V51		-10 dB	-14.4	22.9
V55		-3 dB	-7.4	180.9
V57		-1 dB	-5.4	344.1
V59		0 dB	-4.4	452.8
20:03		-3 dB	-7.4	167.5

1 dB
0 dB
-10 dB

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18:05 PWR increase, TX1 tripped, ALL TX tripped. Un-intentional increase of several 1dB steps when the intention was to increase by 0.1dB.

18:14 TX5 will not come back online. END of the day for HF. TS.R. continues.

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7:30 Trouble shooting TX5 DRV A DC

9:24 BRING up 1-6 without TX5 to warm then up, 3.125 MHz, CW

9:42 300KW using 5 TX's.

9:50 330 KW 5 TX'S 2min on 1min off auto toggle

53 on

56 on

59 on

02 on

05 on

08 on

11 on

10:37 - STOP Auto toggle adjust Power.

10:42 - START auto toggle 20min 1min off
350 KW with 5 TX [70KW each]

10:59 - Power Dip - host 120 commercial
- stopped auto toggle lower 1dB CW
- Reset Broadcast Back up 1dB

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11:07:08 RF off for a few secs.

11:08 START auto toggle 2m on 1m off
5 TX 350KW.
Now lots of arcing.

11:09 TRIED turning off BroadBAND 1 by 1
- didn't see arcing go away.

11:24 - RF off

11:25 RF enable on auto toggle

11:44:30 RF off for a few seconds.

11:49 - STOP auto toggle BDRIVE TX 5 up

12:00 TX 5 up to 65KW
Power ~ 440KW.

12:06:02 Start sequence + 9/4 s.

Natasha long sequence

~~12:06:02~~ ~~12:06:02~~ ~~12:06:02~~ ~~12:06:02~~ ~~12:06:02~~ ~~12:06:02~~ ~~12:06:02~~ ~~12:06:02~~ ~~12:06:02~~ ~~12:06:02~~

13:25 Stop sequence

13:30 5/5 min ON/OFF + 9/4 sec. (1h) manual

5.125 MHz (still)

14:30 15/5 min ON/OFF + 9/4 sec (2h) manual

16:15 Fof2 ~ 8MHz

16:30 Start long sequence Natasha + CW (1.5h)

16:37:13 ~~ALL STARTED STARTED~~ seq., RF off till 16:30

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16:41:13 ~~start~~ 5min seq end // => STARTED long seq. 16:27:13

16:47:13 on 5min [t+20]
[t+20]

only printing out some of
the steps [for Ref]
see file for complete set

16:51:13 [t+24] on 4min

16:58:13 [t+31] off 7min

17:10:13 [t+43] on for 5min

17:40:13 [t+1:13 t-tox 2min.]

18:00 OFF fc ~ 6.9MHz Raining.

Change of freq. 5.100067MHz

power ramp

min % dB

0-2 25% -6

2-4 50% -3

4-6 75% -1

6-8 100% 0

8-10 50% -3

10-12 75% -1

12-16 100% 0

16-18 10% -10

18-20 OFF OFF.

Power 450kW.

18:10 0

0 -4.4
dB value Tx1 power 18 Mar 18

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Time	dB	value	Tx1 power	Time	dB	value	Tx1 power
18:10	-6	-10.4	69.4 kW	19:10	-6	-10.4 ✓	75.6 kW
18:12	-3	-7.4	190 kW	19:12	-3	-7.4 ✓	194 kW
18:14	-1	-5.4	~350 kW	19:14	-1	-5.4 ✓	358 kW
18:16	0	-4.4	450 kW	19:16	0	-4.4 ✓	465 kW
18:18	-3	-7.4	184.8 kW	19:18	-3	-7.4 ✓	177 kW
18:20	-1	-5.4 ✓	358 kW	19:20	-1	-5.4 ✓	344.7 kW
* 18:22	0	-4.4 ✓	470 kW	* 19:22	0	-4.4 ✓	460 kW
18:26	-10	-14.4	24 kW	* 19:26	-10	-14.4 ✓	23 kW
18:28	OFF	✓	--	19:28	OFF	-- ✓	
18:30	-6	-10.4 ✓	90 kW	19:30	-6	-10.4 ✓	75 kW
18:32	-3	-7.4 ✓	195 kW	19:32	-3	-7.4 ✓	191 kW
18:34	-1	-5.4 ✓	359 kW	19:34	-1	-5.4 ✓	357 kW
18:36	0	-4.4 ✓	470	19:36	0	-4.4 ✓	490 463 (Tx 2 dB up)
18:38	-3	-7.4 ✓	177	19:38	-3	-7.4 ✓	182
18:40	-1	-5.4 ✓	346	19:40	-1	-5.4 ✓	350
* 18:42	0	-4.4 ✓	458	* 19:42	0	-4.4 ✓	460
18:46	-10	-14.4 ✓	23	19:46	-10	-14.4 ✓	20
18:48	OFF	--	--	19:48	OFF	-- ✓	
18:50	-6	-10.4 ✓	81	19:50	-6	-10.4	72
18:52	-3	-7.4 ✓	201	19:52	-3	-7.4 ✓	186
18:54:16	-1	-5.4 ✓	322	19:54	-1	-5.4 ✓	354
18:56	0	-4.4 ✓	412	19:56	0	-4.4 ✓	467
18:58	-3	-7.4 ✓	188	19:58	-3	-7.4 ✓	176
19:00	-1	-5.4 ✓	360	20:00	-1	-5.4 ✓	350
* 19:02	0	-4.4 ✓	460	20:02	0	-4.4 ✓	460
19:06	-10	-14.4	23	20:06	-10	-14.4 ✓	25
19:08	OFF	--	--	20:08	OFF	--	

genera:
195A
1288K

Tx6 down
**

* 18:49 → low commercial power Tx6 ¹² care ~~to~~ down but they back up

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$K_p = 6$

20:10	-6	-10.4	72.6KW
20:12	-3	-7.4	188KW
20:14	-1	-5.4	355KW
20:16:15	0	-4.4	468KW
20:18	-3	-7.4✓	177KW
20:20	-1	-5.4✓	349
*20:22	0	-4.4✓	464
20:26	-10	-14.4✓	23
20:28	OFF	-- ✓	
20:30	-6	-10.4✓	74.5
20:32:40	-3	-7.4✓	192
20:34	-1	-5.4✓	357
20:36	0	-4.4✓	467
20:38	-3	-7.4✓	175
20:40	-1	-5.4✓	349
*20:42	0	-4.4✓	458
20:46	-10	-14.4✓	22.kw
20:48	OFF	✓	

20:50 Done experiment

20:52 ~~2 min on~~ 2 min on, 2 min off auto toggle

- 55 - off
- 57 - on
- 59 - off
- 21:01 on
- 03 off

looks like wogaidt arc at lower heights, Bat goes away when it's off
21:20 (about) done. dropped Below CR level