

COMMENTS FROM SITE 3

Site 3 Kennedy Center

Date: August 6, 1999

Weather Conditions: Clear Sky; 80°

Comments: No significant change in satellite signals when Northpoint goes ON or OFF.

Northpoint Technology – DBS Compatibility Test – Washington DC Area

Rx Site Data Log

Kennedy Center

Rx Site No.

3

p1

Set:

1/1

Re: Rx Condx Ref. No.

1

Date / Time:

8/16/99 9:50 EDT

Re: Tx Condx Ref. No.

1

Operator:

Adura

Data Measurements:

NPTx Carrier Freq. (GHz)

12.47

Disk Filename

X

(1) NP Signal – NPTx ON:

DBS1 Ant:

Power (Px)

-51.5dB

TV Pix

Plot ID

3-1

File Rec

X

(2) DBS Signals – NPTx OFF: (Do also ssp data on page 2).

Sat 1 Ant:

Power (Px)

TV Pix

Plot ID

File Rec

X

Sat 2 DTV Ant:

Power (Px)

-65.8dB

TV Pix

Plot ID

3-2b

File Rec

X

Sat 3 ES Ant:

Power (Px)

-66.0dB

TV Pix

Plot ID

3-2c

File Rec

X

Sat 4 ES Ant:

Power (Px)

-64.0dB

TV Pix

Plot ID

3-2d

File Rec

X

(3) DBS Signals – NPTx ON: (Do also ssp data on page 2).

Sat 1 Ant:

Power (Px)

TV Pix

Plot ID

File Rec

Sat 2 DTV Ant:

Power (Px)

-65.5dB

TV Pix

Plot ID

3-3b

File Rec

X

Sat 3 ES Ant:

Power (Px)

-66.17dB

TV Pix

Plot ID

3-3c

File Rec

X

Sat 4 ES Ant:

Power (Px)

-64.3dB

TV Pix

Plot ID

3-3d

File Rec

X

(4) NPTx OFF.

Northpoint Technology – DBS Compatibility Test – Washington DC Area

Rx Site Data Log

Rx Site No.

3

p2

Set:

1/1

Signal Strength Pointer (ssp) Data –

(2a) NPTx OFF:

Sat 1	T-											Avg:	
Sat 2	T-18	84	84	83	82	81	80	80	81	82	83	Avg:	82.0
Sat 3	T-18	91	91	91	91	91	91	91	91	91	91	Avg:	91.0
Sat 4	T-18	98	98	98	98	98	98	98	98	98	98	Avg:	98.0

(3a) NPTx ON:

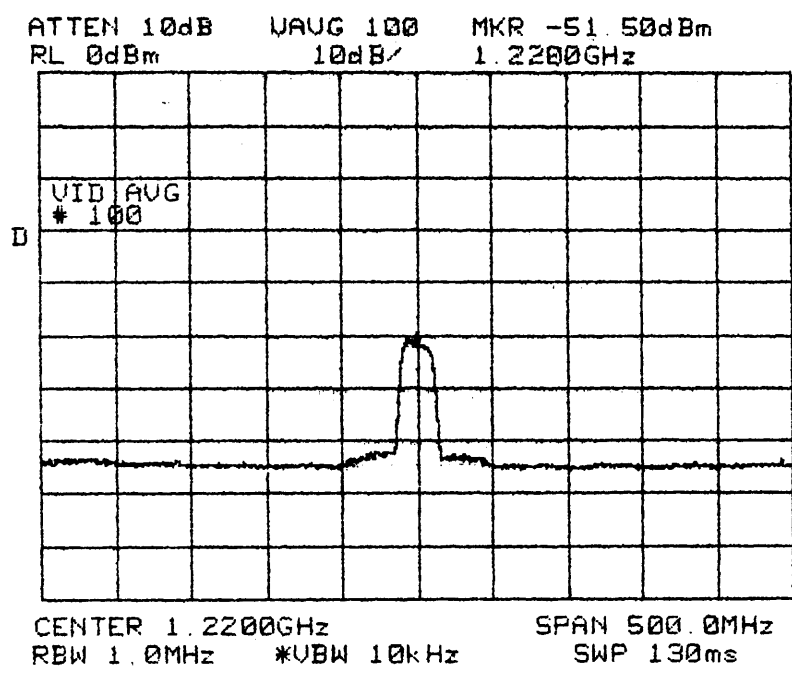
Sat 1	T-18											Avg:	
Sat 2	T-18	81	83	79	84	79	82	85	82	80	81	Avg:	81.4
Sat 3	T-18	90	91	89	91	90	90	91	91	91	91	Avg:	90.5
Sat 4	T-18	97	97	97	98	97	97	97	97	97	97	Avg:	97.1

Legend // Comments:

NPTx – Northpoint Transmitter.

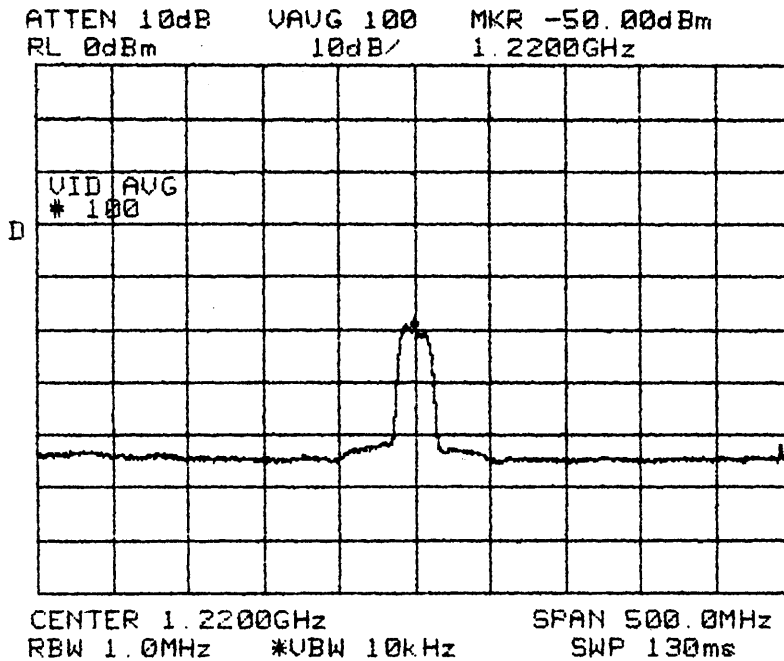
No significant change in satellite signals when TX goes ON or OFF.

08/06/99
27

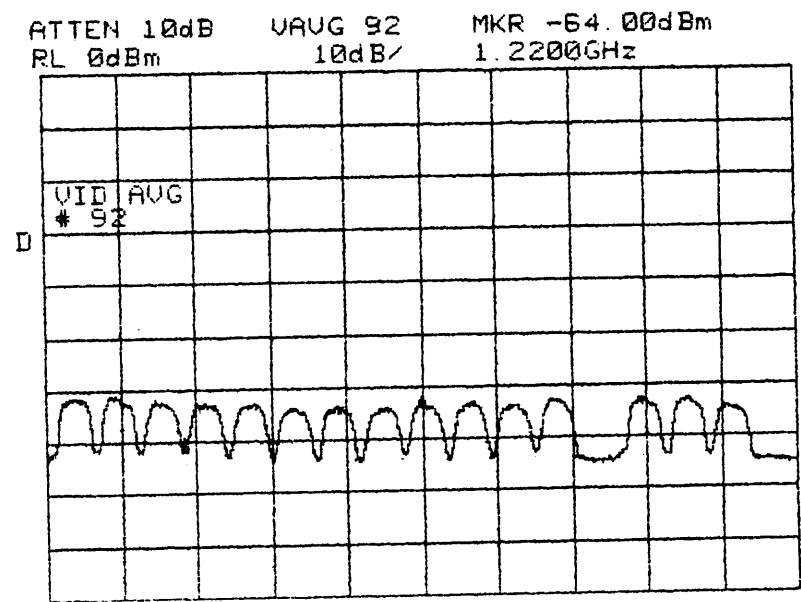
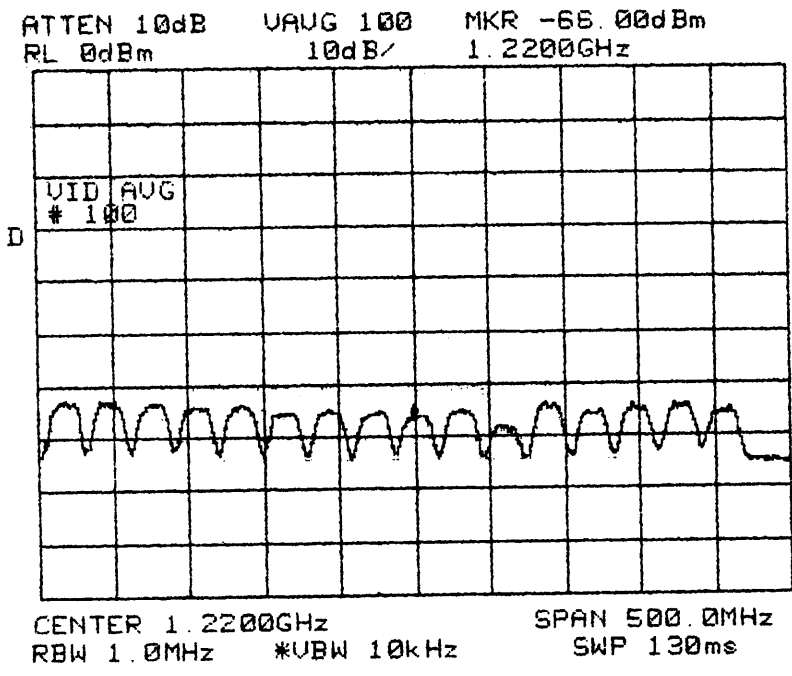


Site # 3
08/06/99

2nd North pt tx reading
obtained just before data
acquisition. (time 12:05 PM)

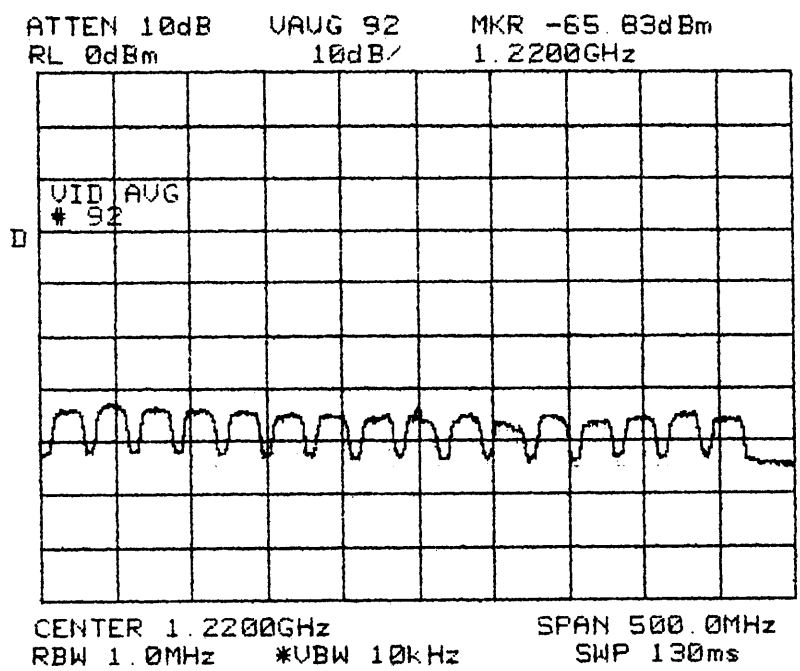


Power
08/06/99
JL-5



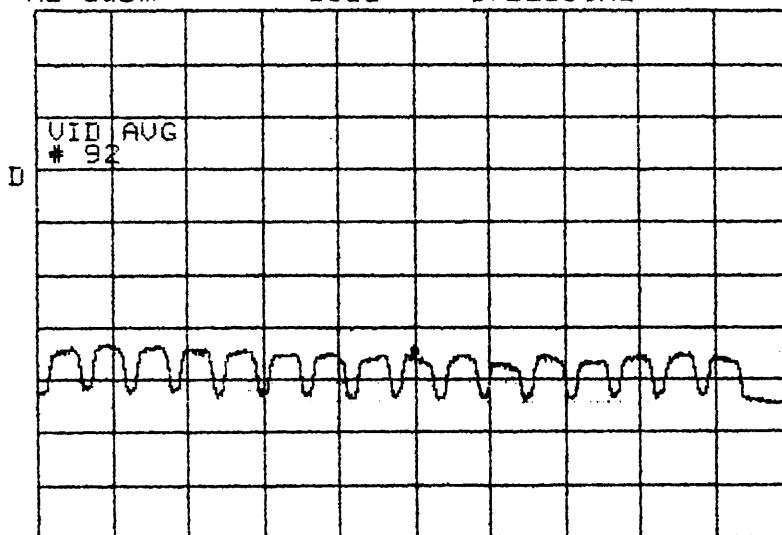
3-2c

Adura
08/06/97
3-2d



Adwq
8/6/99

ATTEN 10dB VAUG 92 MKR -65.50dBm
RL 0dBm 10dB/ 1.2200GHz

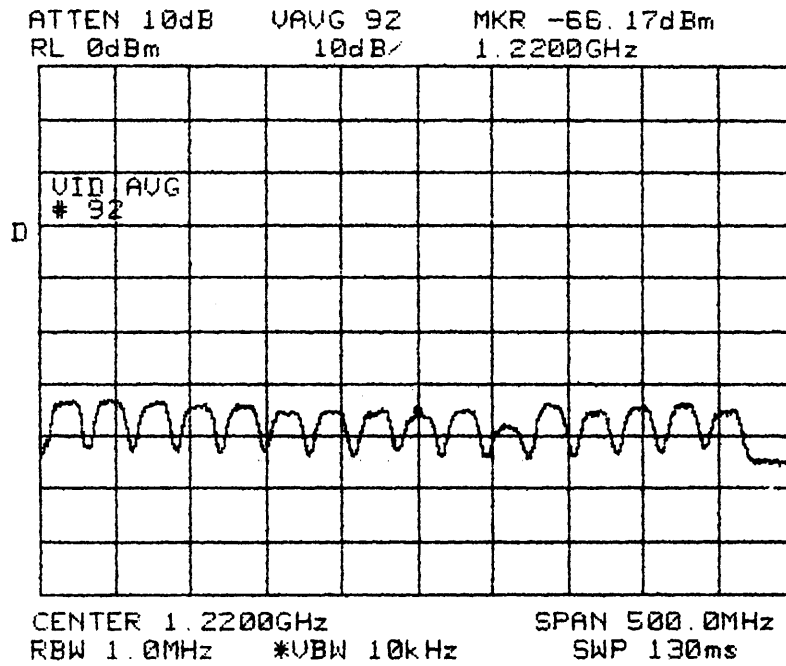


CENTER 1.2200GHz SPAN 500.0MHz
RBW 1.0MHz *VBW 10kHz SWP 130ms

3-36

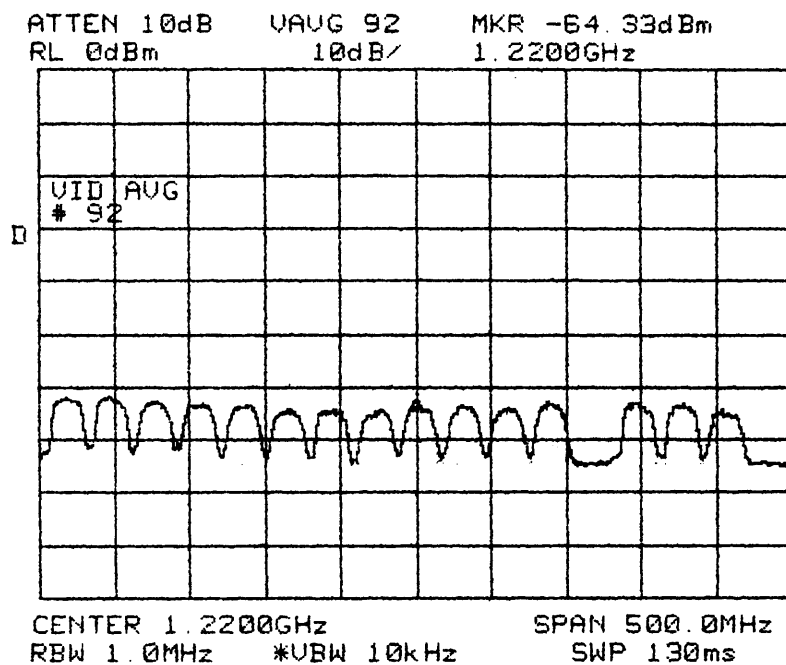
Adura 08/06/99

3-37



8/6/19
Adhure

3-30



Rx Site Location Log

Rx Site No.

3

p1

Set:

1

Site Name:

Date / Time:

8/6/99 09:43 EDT

Kennedy Center

Operator:

Alu

GPS Receiver Reading at Site:

Lat: N 38° 53.684'

Time Read 1407

GMT

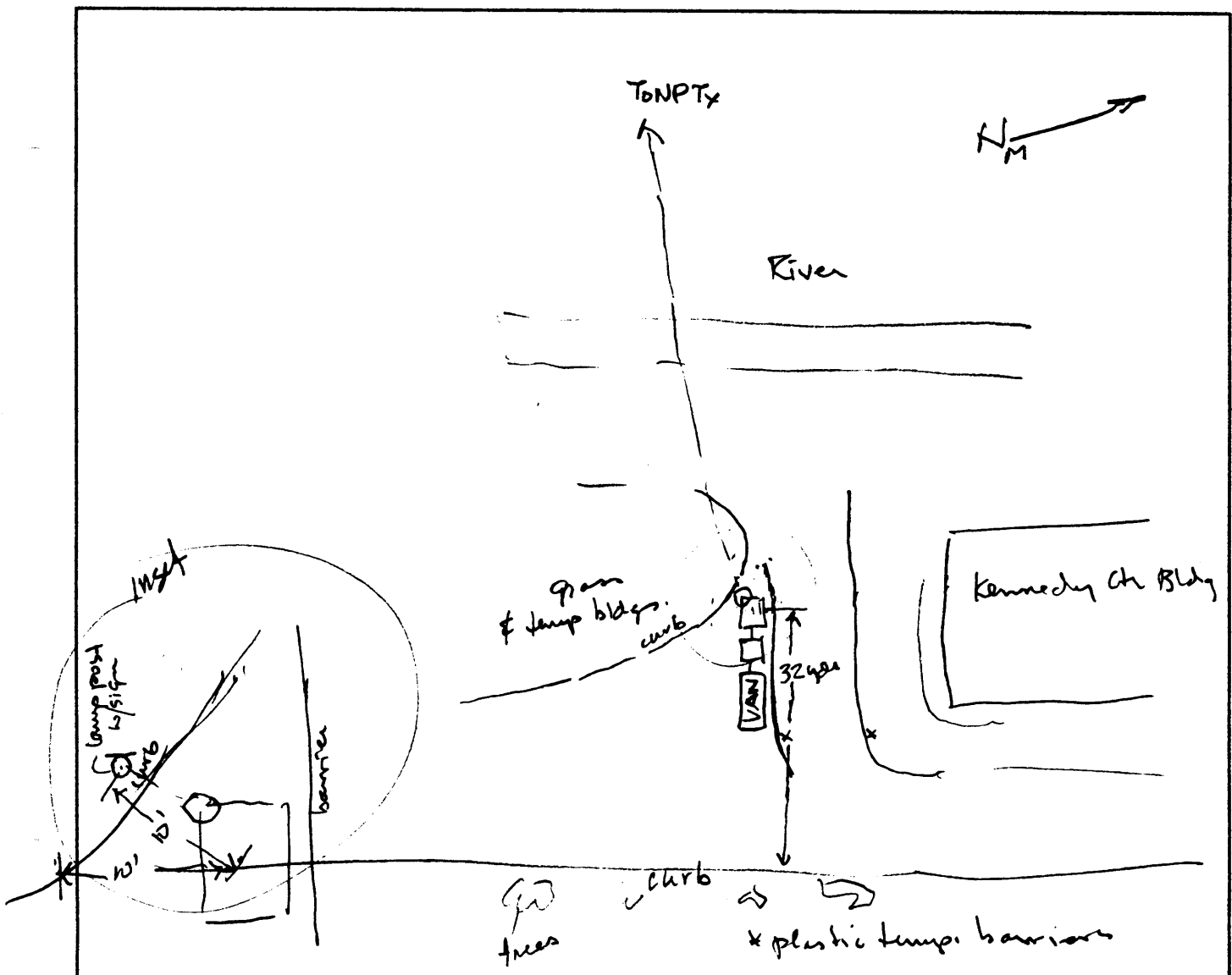
EDT

Lon: W 077° 03.297'

Elev: 420' (not reliable)

Weather: clear sky
~ 80°F

Map Sketch (show street reference and local benchmark features):



COMMENTS FROM SITE 3

Site 3 Kennedy Center

Date: August 14, 1999

Weather Conditions: Partly cloudy/hazy

Comments:

Northpoint Technology – DBS Compatibility Test – Washington DC Area

Rx Site Data Log Kennedy Center

Rx Site No.

3R

p1

Set:

2/1

Re: Rx Condx Ref. No.

1

Date / Time:

8/14/99 10:00 EDT

Re: Tx Condx Ref. No.

1

Operator:

Jonathan

Data Measurements:

NPTx Carrier Freq. (GHz)

12.47

Disk Filename

(1) NP Signal – NPTx ON:

	NP	Ant: DBS1			
Power (Px)	-48.17	TV Pix		Plot ID	3R-1
				File Rec	

(2) DBS Signals – NPTx OFF: (Do also ssp data on page 2).

Sat 1		Ant:			
Power (Px)		TV Pix		Plot ID	
				File Rec	
Sat 2	DTV	Ant: NP3			
Power (Px)	-66.17	TV Pix		Plot ID	3R-2a
				File Rec	
Sat 3	ES (615)	Ant: NP2			
Power (Px)	-66.33	TV Pix		Plot ID	3R-2b
				File Rec	
Sat 4	ES (119)	Ant: NP4			
Power (Px)	-67.50	TV Pix		Plot ID	3R-2c
				File Rec	

(3) DBS Signals – NPTx ON: (Do also ssp data on page 2).

Sat 1		Ant:			
Power (Px)		TV Pix		Plot ID	
				File Rec	
Sat 2	DTV	Ant: NP3			
Power (Px)	-65.67	TV Pix		Plot ID	3R-3a
				File Rec	
Sat 3	ES (615)	Ant: NP2			
Power (Px)	-66.17	TV Pix		Plot ID	3R-3b
				File Rec	
Sat 4	ES (119)	Ant: NP4			
Power (Px)	-66.83	TV Pix		Plot ID	3R-3c
				File Rec	

(4) NPTx OFF.

Northpoint Technology – DBS Compatibility Test – Washington DC Area

Rx Site Data Log

Rx Site No. 32 p2
Set: 21

Signal Strength Pointer (ssp) Data --

(2a) NPTx OFF:

	Sat 1	T-										Avg:	
DTV	Sat 2	T-18	80	81	82	77	78	83	79	84	80	82	Avg: 80.6
ES-615	Sat 3	T-18	92	92	92	92	92	92	92	93	92	92	Avg: 92.1
ES-119	Sat 4	T-18	89	89	88	88	89	89	90	89	88	88	Avg: 88.7

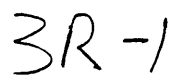
(3a) NPTx ON:

	Sat 1	T-										Avg:	
DTV	Sat 2	T-18	79	76	80	82	76	81	81	82	80	79	Avg: 78.9
ES-615	Sat 3	T-18	92	91	91	91	91	92	91	91	91	91	Avg: 91.8
ES-119	Sat 4	T-18	87	87	87	87	86	87	87	87	87	88	Avg: 87.0

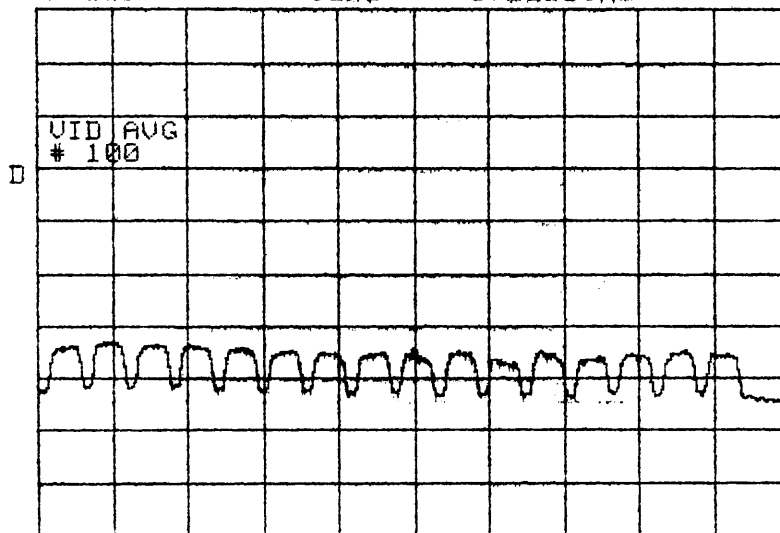
Legend // Comments:

NPTx – Northpoint Transmitter.

Ant LNB — [] → DBS Rx
 |
 splitter
 ↓
 To SA



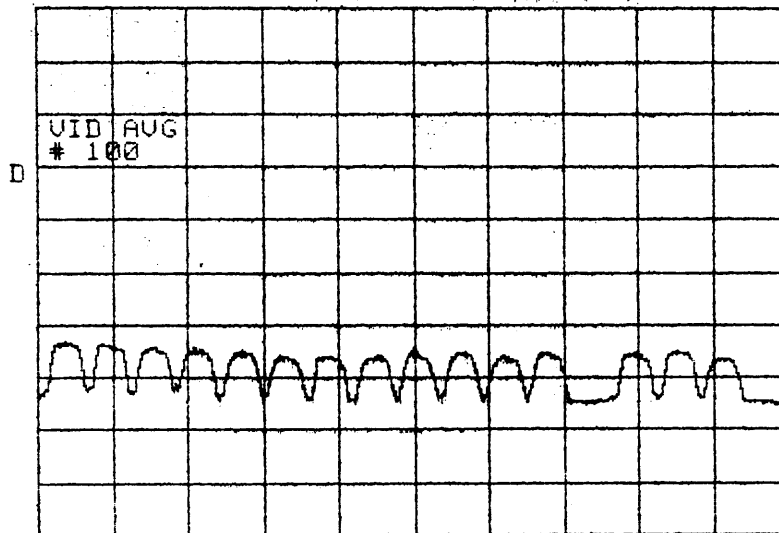
ATTEN 10dB UAUG 100 MKR -66.17dBm
RL 0dBm 10dB/ 1.2200GHz



CENTER 1.2200GHz SPAN 500.0MHz
RBW 1.0MHz *UBW 10kHz SWP 130ms

3R-2a

ATTEN 10dB VAUG 100 MKR -66.33dBm
RL 0dBm 10dB 1.2200GHz



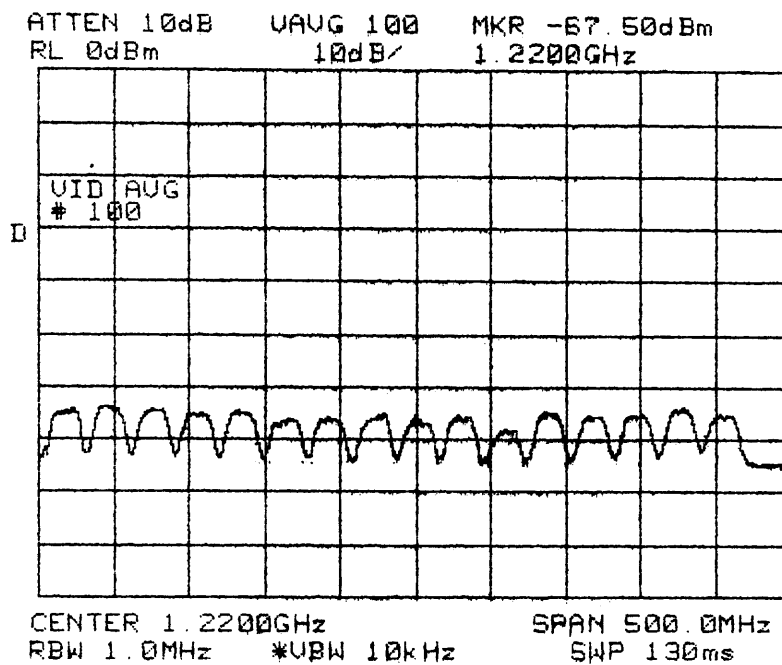
CENTER 1.2200GHz SPAN 500.0MHz
RBW 1.0MHz *VBW 10kHz SWP 130ms

3R-26

ES (119) sat signal

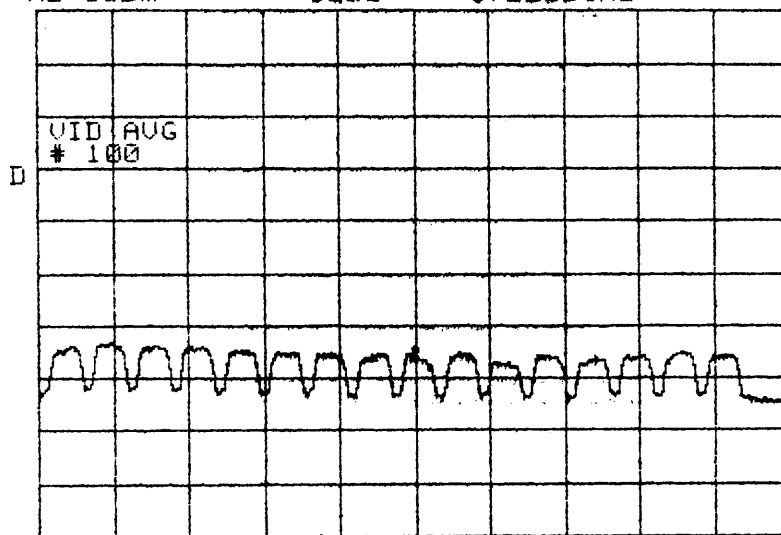
(splitter output to SA)

NPTx - OFF



3A-2C

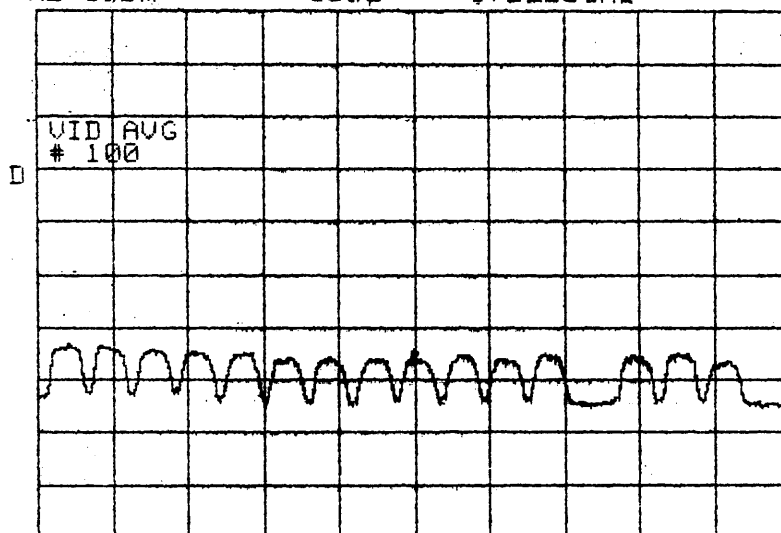
ATTEN 10dB VAUG 100 MKR -65.67dBm
RL 0dBm 10dB/ 1.2200GHz



CENTER 1.2200GHz SPAN 500.0MHz
RBW 1.0MHz *VBW 10kHz SWP 130ms

3R-39

ATTEN 10dB UAUG 100 MKR -66.17dBm
RL 0dBm 10dB/ 1.2200GHz

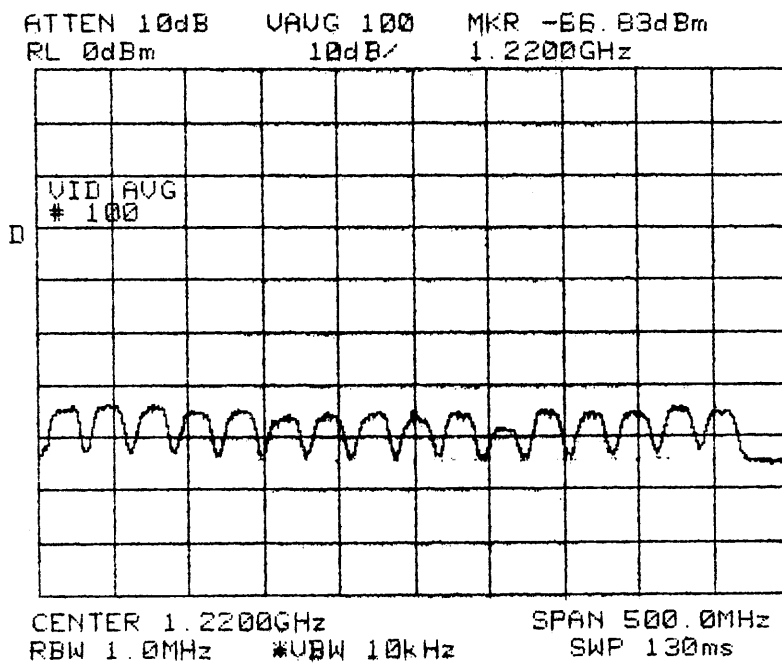


CENTER 1.2200GHz SPAN 500.0MHz
RBW 1.0MHz *VBW 10kHz SWP 130ms

3R-36

ES (119) Sat signal
(splitter output to SA)

NP Tx - ON



3R-3c

Rx Site Location Log

3R

p1

_____ / _____

8/14/99 10:00 EDT

Kennedy Center

Jonathan

Lat: N 38° 53 681'

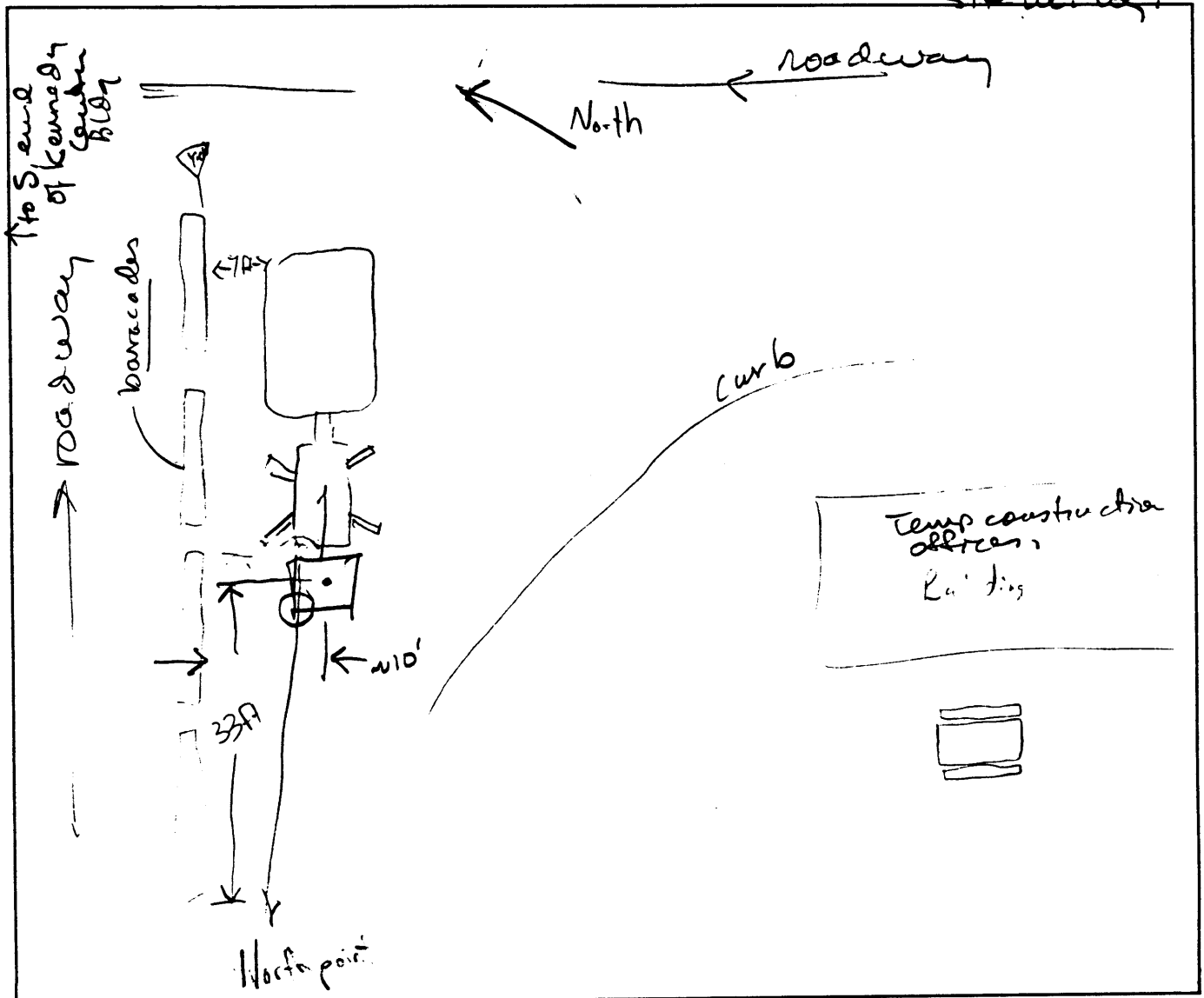
Time Read 16:09:28 ^{8:29} ~~EDT~~

Lon: W 077° 03.345'

Elev: 310

Weather: partly cloudy, hazy

See also previous
site loc. log.



Northpoint Technology - DBS Compatibility Test - Washington DC Area

Rx Site Cond./Event Log -- BER Data

(Re: Lucent / Newtec - NTC/2063/rx system.)

Rx Site No.

3R

p1

Set:

1.1

Re: Rx Cond. Ref. No.

1

Date / Time:

B 1/4/99 10:17 EDT

24 hr time

Re: Tx Cond. Ref. No.

1

Operator:

Deer

Data Measurements:

NPTx Carrier Freq. (GHz)	12.47	NEC Filename	Log B-1-24.
Satellite Monitored	ES119	Transponder	T-18

(See separate Rx Site Data Log for Signal Power and Related Cond.)

Note: DRW clock (TIME) is +16s > log. // Demod RF input from Splitter - *

#	Time - EDT	Condition / Event
		NPTx - OFF (has been for a few minutes)
	10:24:00	Start observations (Demod already logging)
	10:24:45	Airline passage
	10:25:10	Note Wx is DC - mostly clear, slight haze - 89°F
	10:26:46	Bus passed by site → W (~40' away from DBS ant to N)
	1:25	car passed → E (~15' away to N)
	1:25	Bus passed → N (~75' away to East)
	10:28:00	Airline passed
	1:20	2 cars passed
	10:32:36	Bus → N (~75' to East)
	10:37:18	Airline passed // car & truck → W (~40' to N)
	10:37:54	Airline "
	10:38:22	Bus → N (~75' to E)
	10:39:17	Airline passed
	10:41:35	car → W (~40' to N)
	10:42:07	car → N (~75' to E)
	42:55	car → E (~15' to N)
	10:43:44	Note - Wx same
	10:44:21	car → W (~40' to N)
	10:45:57	Bus then car → W (~40' to N)
	10:46:45	car → E (~15' to N) then car → W (~40' to N)
	49:44	truck → N (~75' to E) then car → E (~15' to N)
	50:36	car → W (~40' to N)
	10:51:18	Airline passage (out band)
	51:38	Bus → N (~75' to E)
	52:47	car → E (~15' to N)
	54:02	Airline then Bus → W (~40' to N)
	54:49	Bus → N (~40' to N)
	55:04	2 Buses → N (~75' to E)
	55:24	2 cars → N (~40' to N)
	55:25	airliner → S (directly overhead)
	55:36	Bus → N (~75' to E)
	56:00	car → N (~75' to E)
	57:22	Airline → S (directly overhead)
	58:51	Airline "
	11:00:33	Airline "
	11:02:52	Airline passed

* Note - not get able to set for LNB power from Demod

Northpoint Technology – DBS Compatibility Test – Washington DC Area

Rx Site Condx/Event Log -- BER Data

(Re: Lucent / Newtec – NTC/2063/xx system.)

Rx Site No.

3R

pp2

Set:

1/1

Re: Rx Condx Ref. No.

1

Date / Time:

8/14/99 11:01 EDT

Re: Tx Condx Ref. No.

1

Operator:

Jonathan / Dwy

Data Measurements:

NPTx Carrier Freq. (GHz)	12.47	NTC Filename	Log 8-14-99
Satellite Monitored	ES 119	Transponder	T-18

(See separate Rx Site Data Log for Signal Powers and Related Condx.)

#	Time – EDT	Condition / Event
	11:02:49	NPTx - ON see spectrum plot
	03:01	2 Cars → N
	03:38	2 Cars → E
	03:49	Bus E
	03:59	Airliner passed
	04:16	Car → W (40' to N)
	04:36	Same Car → E
	05:15	Car → W, 2 Cars → N
	06:01	Airliner passed
	07:10	2 Cars → E
	07:44	1 Car → W (40' to N)
	08:25	2 Cars → E (15' to N)
	08:47	2 Buses → W (40' to N)
	09:20	2 Buses → E (15' to N)
	10:31	Bus → W (40' to N) NPT Signal -46
	11:00	Bus + Car → W (40' to N)
	12:04	Bus → E (75' to N)
	12:32	Car → E (15' to N)
	12:48	Airliner passed
	13:18	Car → W (40' to N) Temp. 92°
	11/14:00	sky is less cloudy - still hazy
	14:52	Airliner passed
	15:54	Car → W (~40' to N)
	16:10	Car → E (15' to N)
	16:30	"
	16:55	Airliner passed
	11.16:52	- Started (checked R) E6/A10 logging (was checked earlier but found to be off)
	18:15	Airliner passed
	20:42	helicopter passed (out bound)
	21:52	2 cars → E (15' to N)
	22:21	2 Buses → N (~40' to N)
	23:41	2 Buses → N (~75' to E)
	25:20	2 Buses → E (~15' to N), Airliner passed (out bound)
	27:16	1 Car → E (~15' to N)
	27:04	Airliner passed

Northpoint Technology – DBS Compatibility Test – Washington DC Area

Rx Site Condx/Event Log -- BER Data

(Re: Lucent / Newtec – NTC/2063/xx system.)

Rx Site No.

3R

p3-

Set:

1/1

Re: Rx Condx Ref. No.

1

Date / Time:

8/14/99 11:29 EDT

Re: Tx Condx Ref. No.

1

Operator:

Jonathan

Data Measurements:

NPTx Carrier Freq. (GHz)	12.47	NTC Filename	Log 8-14-99
Satellite Monitored	ES-119	Transponder	T-18

(See separate Rx Site Data Log for Signal Powers and Related Condx.)

#	Time – EDT	Condition / Event
	11:29:40	Car → E (~15' to N)
	:47	Airliner passed
	30:26	Bus → W (~40' to N)
	:49	Bus → N (~15' to E)
	31:29	" "
	31:58	2 Cars → E (~15' to N)
	33:26	Airliner passed (over road)
	34:24	Bus → W (~40' to N)
	:36	Airliner passed
	151	Bus → N (~15' to E)
	36:40	Car → E
	11:36:50	EB/No unchecked again *ble*
	37:27	Bus → W
	38:03	2 Buses → N
	38:30	2 Cars → W
	39:13	2 Cars → E
	39:55	Car → W, Car → E
	40:44	Car → E
	41:03	"
	41:21	5 Cars → E and 1 Car → W
	43:09	2 Cars → W, Car → E
	:44	2 Cars → W
	44:04	Car → N and Car → W and 4 Cars → E
	45:00	2 Cars → W
	11:45:31	*Note +11.6 Eb/No estimation
	11:45:55	Airliner passed
	48:15	Car → E
	49:06	2 Cars → E, Car → W, Car → N
	120	Airliner passed
	51:20	Van → E
	52:30	helicopter passed
	11:54:18	*Note* We find that Eb/No is checked again
	11:55:50	Airplane passed
	58:10	Bus → N
	11:59:30	Stopping environmental operations
	12:05:16	Exit Program

Note Eb/No still checked

COMMENTS FROM SITE 3

Site 3 Kennedy Center

Date: August 17, 1999

Weather Conditions:

Comments:

Northpoint Technology – DBS Compatiblilty Test – Washington DC Area

Rx Site Data Log

Kennedy Center

Rx Site No.

3

p1

Set:

2/

Re: Rx Condx Ref. No.

1

Date / Time:

8/17/99 10:25 EDT

Re: Tx Condx Ref. No.

1

Operator:

Adura

Data Measurements:

NPTx Carrier Freq. (GHz)

12.47

Disk Filename

X

(1) NP Signal – NPTx ON:

Power (Px)	-50.50dB	Ant: DBS1	TV Pix	Plot ID	3-1	File Rec	
-65.2 – apparent water reflection at lower elev.							

(2) DBS Signals – NPTx OFF: (Do also ssp data on page 2).

Sat 1		Ant:		Plot ID		File Rec	
Power (Px)		TV Pix					
Sat 2	DTV	Ant: NP3		Plot ID	3-2b	File Rec	X
Power (Px)	-66.17dB	TV Pix					
Sat 3	ES (61.5)	Ant: NP2		Plot ID	3-2c	File Rec	X
Power (Px)	-66.50dB	TV Pix					
Sat 4	ES (119)	Ant: NP4		Plot ID	3-2d	File Rec	X
Power (Px)	-66.67dB	TV Pix					

(3) DBS Signals – NPTx ON: (Do also ssp data on page 2).

Sat 1		Ant:		Plot ID		File Rec	
Power (Px)		TV Pix					
Sat 2	DTV	Ant: NP3		Plot ID	3-3b	File Rec	X
Power (Px)	-66.17dB	TV Pix					
Sat 3	ES (61.5)	Ant: NP2		Plot ID	3-3c	File Rec	X
Power (Px)	-66.67dB	TV Pix					
Sat 4	ES (119)	Ant: NP4		Plot ID	3-3d	File Rec	X
Power (Px)	-67.17dB	TV Pix					

(4) NPTx OFF.

Northpoint Technology – DBS Compatibility Test – Washington DC Area

Rx Site Data Log

Kennedy Center

Rx Site No.

3

p2

Set:

21

Signal Strength Pointer (ssp) Data –

(2a) NPTx OFF:

Sat 1	T-											Avg:	
Sat 2	T-18	82	82	83	84	83	82	82	84	81	83	Avg:	82.7
Sat 3	T-18	91	91	92	92	93	92	91	92	92	92	Avg:	91.8
Sat 4	T-18	89	89	89	89	89	89	88	88	89	88	Avg:	88.7

(3a) NPTx ON:

Sat 1	T-18											Avg:	
Sat 2	T-18	80	82	80	84	82	84	76	80	81	82	Avg:	81.1
Sat 3	T-18	91	92	91	90	92	91	91	91	91	91	Avg:	91.1
Sat 4	T-18	88	89	88	88	88	88	88	88	88	88	Avg:	88.1

Legend // Comments:

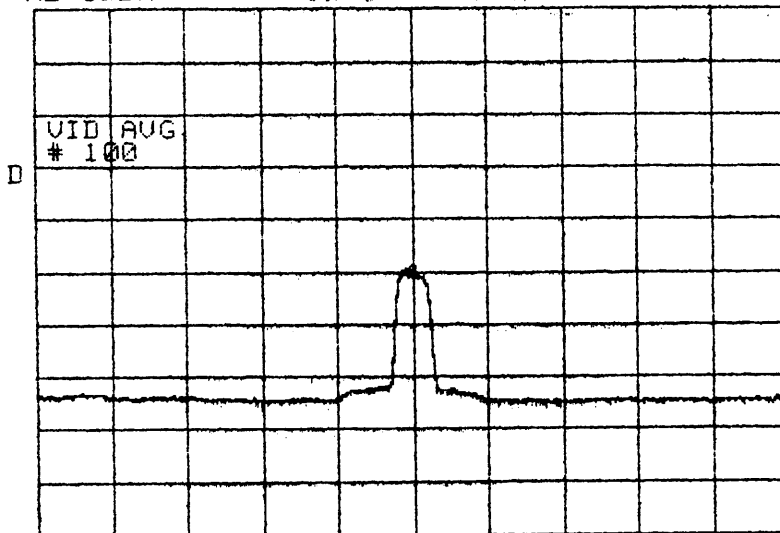
NPTx – Northpoint Transmitter.

8/17/99

3-1 Adura!

Repeat

ATTEN 10dB VAWG 100 MKR -50.50dBm
RL 0dBm 10dB/ 1.2200GHz



CENTER 1.2200GHz SPAN 500.0MHz
RBW 1.0MHz *VBW 10kHz SWP 130ms