

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 Compatibililty Test – Washington DC Area

Rx Site Data Log

Kennedy Center

Rx Site No.

3

p1

Set:

111

Re: Rx Condx Ref. No.

1

Date / Time:

8/16/99 9:50 EDT

Re: Tx Condx Ref. No.

1

Operator:

Aduwa

Data Measurements:

NPTx Carrier Freq. (GHz) 12.47

Disk Filename X

(1) NP Signal – NPTx ON:

	<u>DBS1</u>	Ant:			
Power (Px)	<u>-51.5dB</u>	TV Pix		Plot ID	<u>3-1</u>
				File Rec	<u>X</u>

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

Sat 1		Ant:			
Power (Px)		TV Pix		Plot ID	
				File Rec	<u>X</u>

Sat 2	<u>DTV</u>	Ant:			
Power (Px)	<u>-65.8dB</u>	TV Pix		Plot ID	<u>3-2b</u>
				File Rec	<u>X</u>

Sat 3	<u>ES</u>	Ant:			
Power (Px)	<u>-66.0dB</u>	TV Pix		Plot ID	<u>3-2c</u>
				File Rec	<u>X</u>

Sat 4	<u>ES</u>	Ant:			
Power (Px)	<u>-64.0dB</u>	TV Pix		Plot ID	<u>3-2d</u>
				File Rec	<u>X</u>

(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	<u>DTV</u>	Ant:			
Power (Px)	<u>-65.5dB</u>	TV Pix		Plot ID	<u>3-3b</u>
				File Rec	<u>X</u>

Sat 3	<u>ES</u>	Ant:			
Power (Px)	<u>-66.17dB</u>	TV Pix		Plot ID	<u>3-3c</u>
				File Rec	<u>X</u>

Sat 4	<u>ES</u>	Ant:			
Power (Px)	<u>-64.3dB</u>	TV Pix		Plot ID	<u>3-3d</u>
				File Rec	<u>X</u>

(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

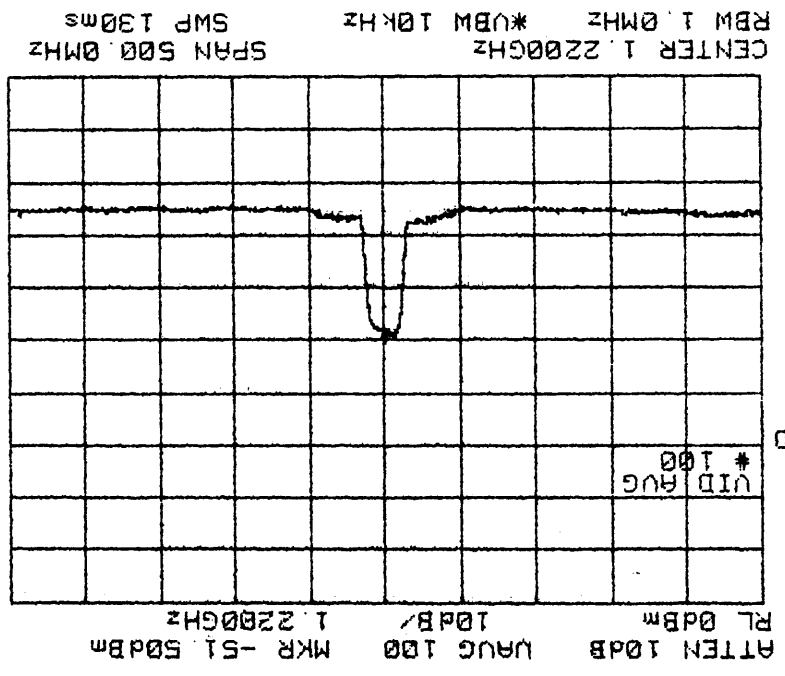
(3a) NPTx ON:

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

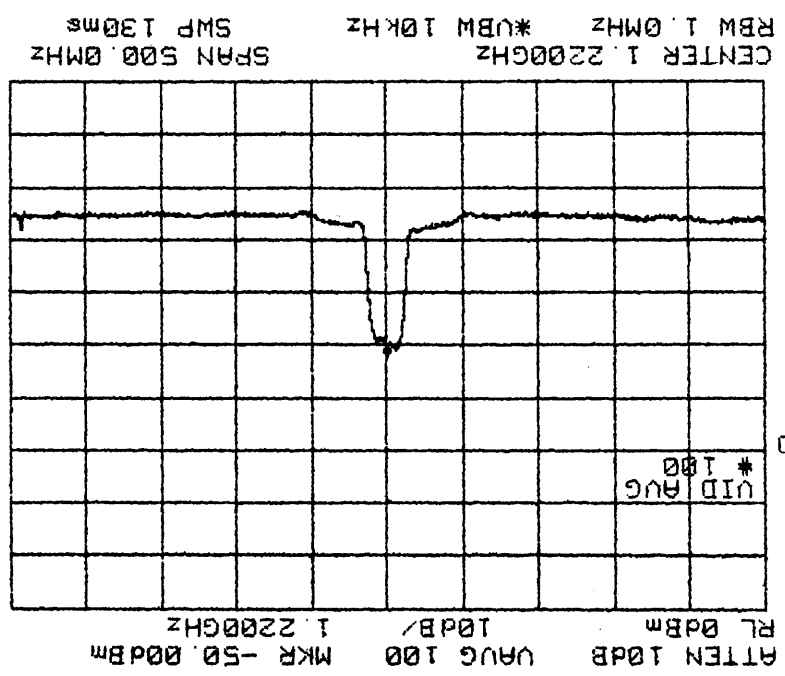
Legend // Comments:

NPTx – Northpoint Transmitter.

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

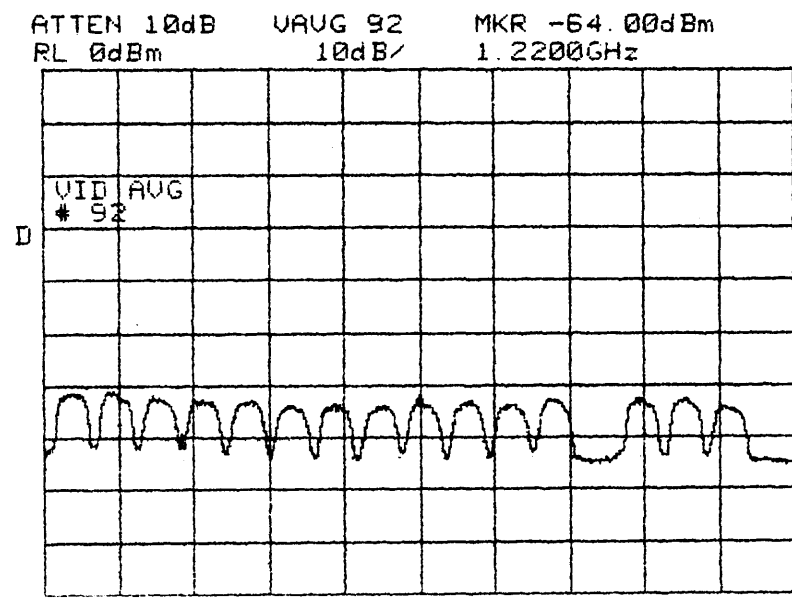
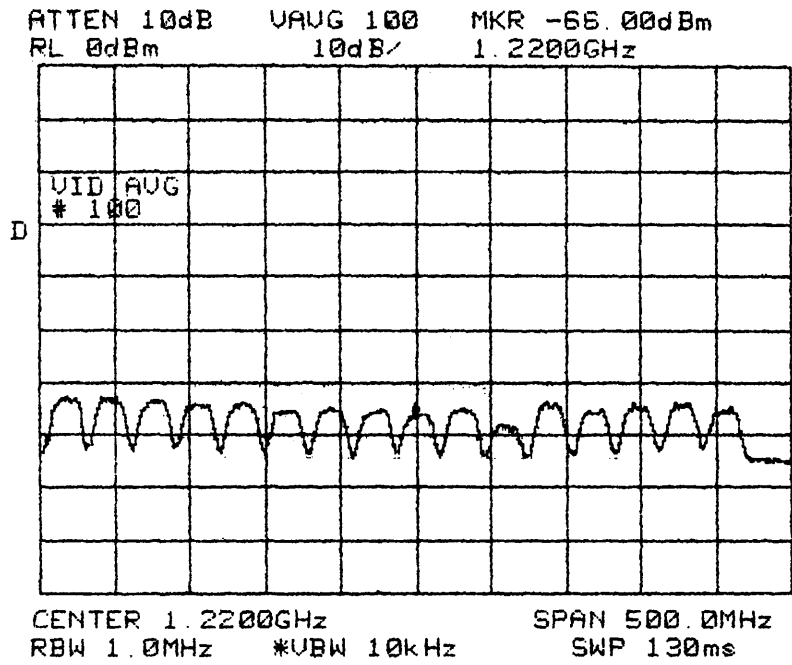


08/06/99
 Ted
 2

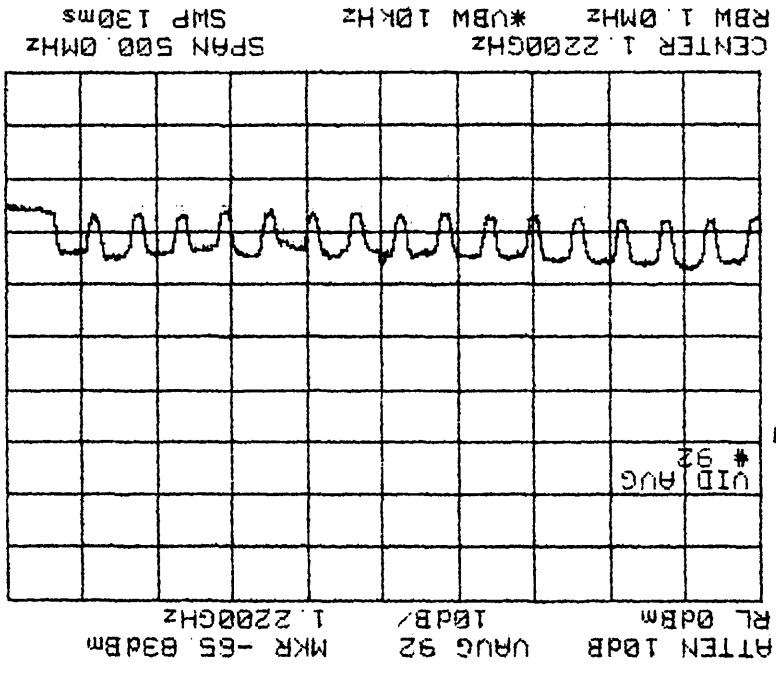


Sta # 3
 08/06/99
 2nd North pt tx reading
 obtained prior before data
 acquisition. (time 12:05 PM)

Toura
08/06/99
3-25



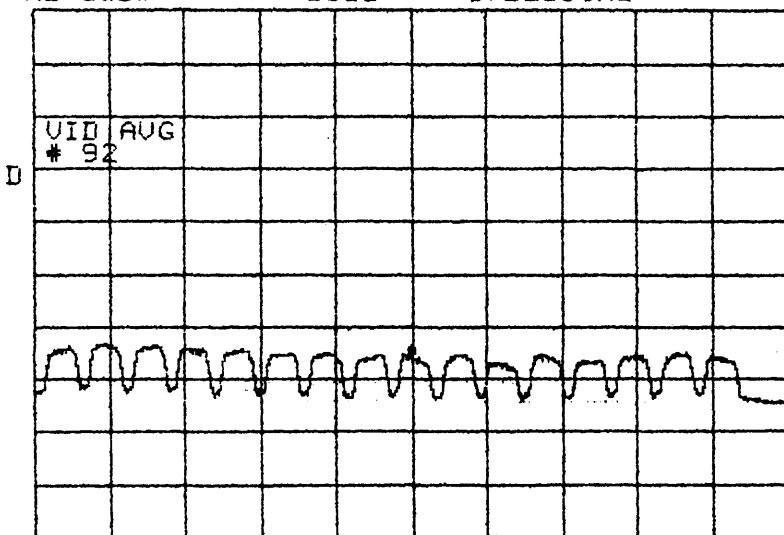
3-25



3-2d
 08/06/99
 Adura

Adwq
8/6/99

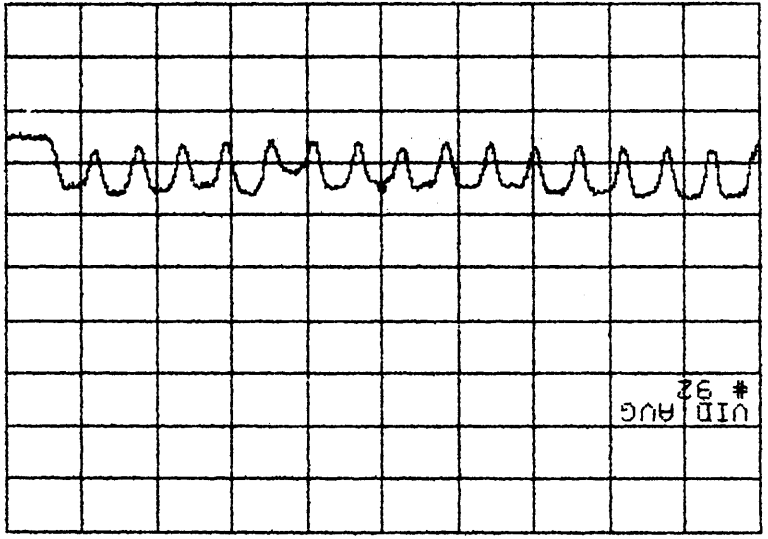
ATTEN 10dB VAUG 92 MKR -65.50dBm
RL 0dBm 10dB/ 1.2200GHz



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

3-36

CENTER 1.2200GHZ
SPAN 500.0MHZ
RBM 1.0MHZ *VBW 10KHZ
SMP 130ms



ATTEN 10dB URG 92 MKR -65.17dBm
RL 0dBm 10dB/ 1.2200GHZ

VID AVG # 92

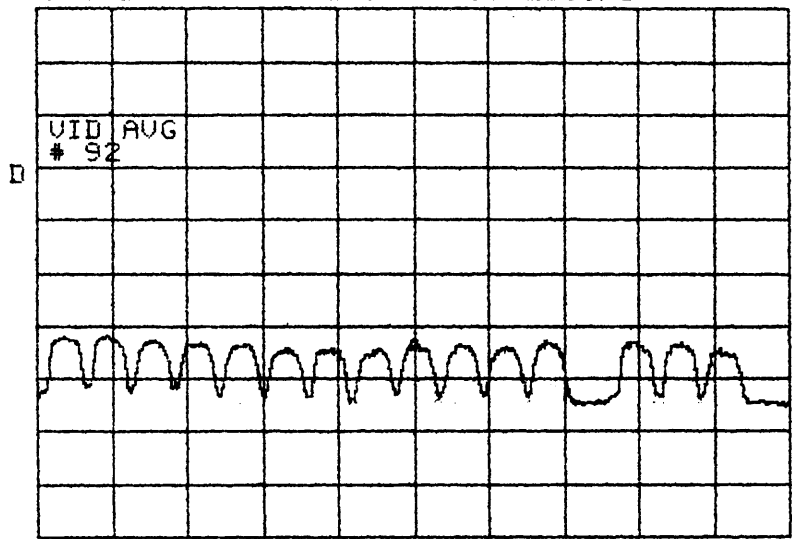
73-3

Adura 08/06/99

8/6/19
Adura

3-38

ATTEN 10dB VAUG 92 MKR -64.33dBm
RL 0dBm 10dB/ 1.2200GHz



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

Northpoint Technology - DBS Compatibility Test - Washington DC Area

Rx Site Location Log

Rx Site No. 3
Set: 1

p1

Site Name:
Kennedy Center

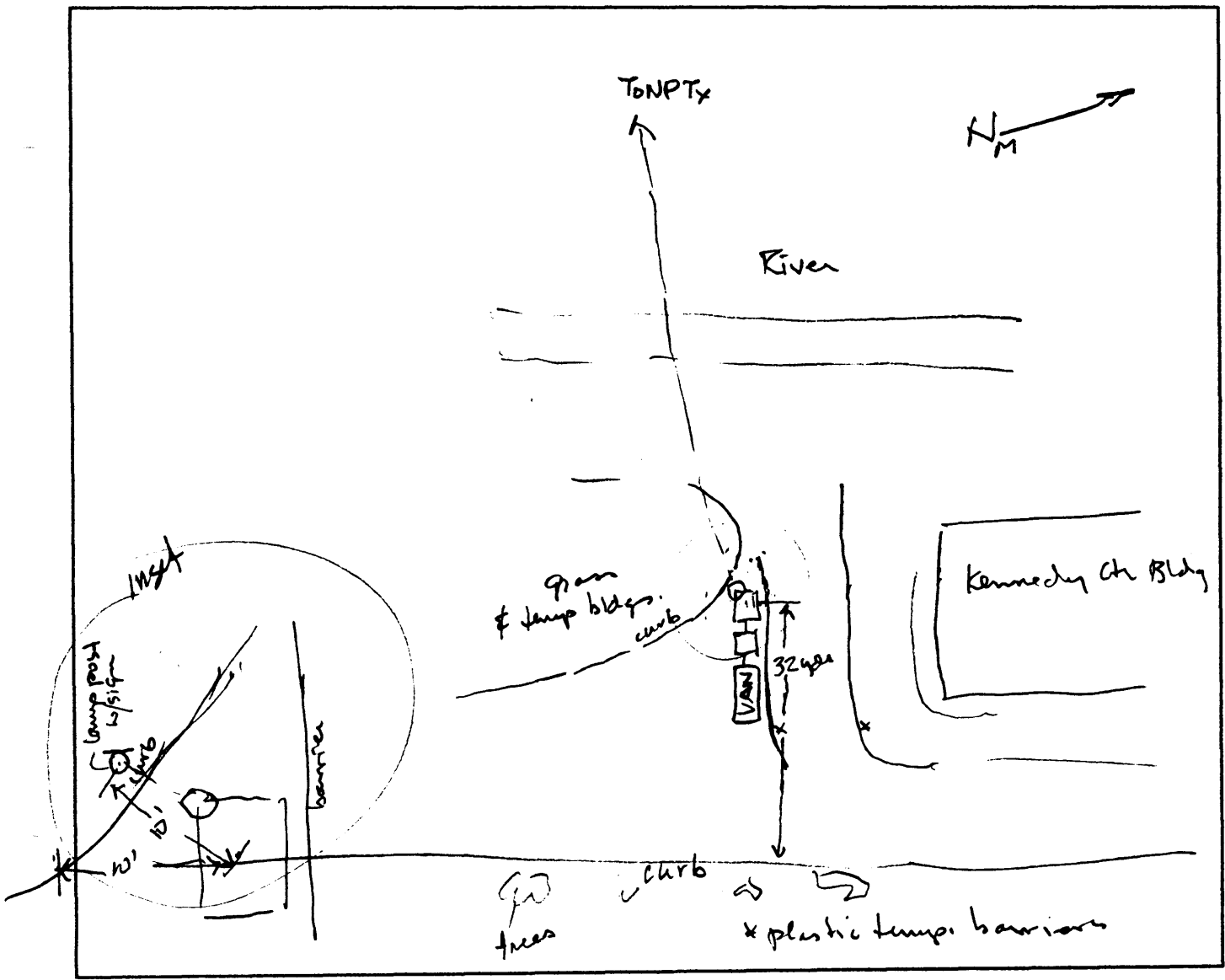
Date / Time: 8/6/99 09:43 EDT

Operator: DLW

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/

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 Compatibililty 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

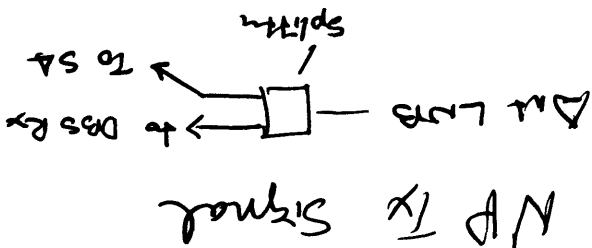
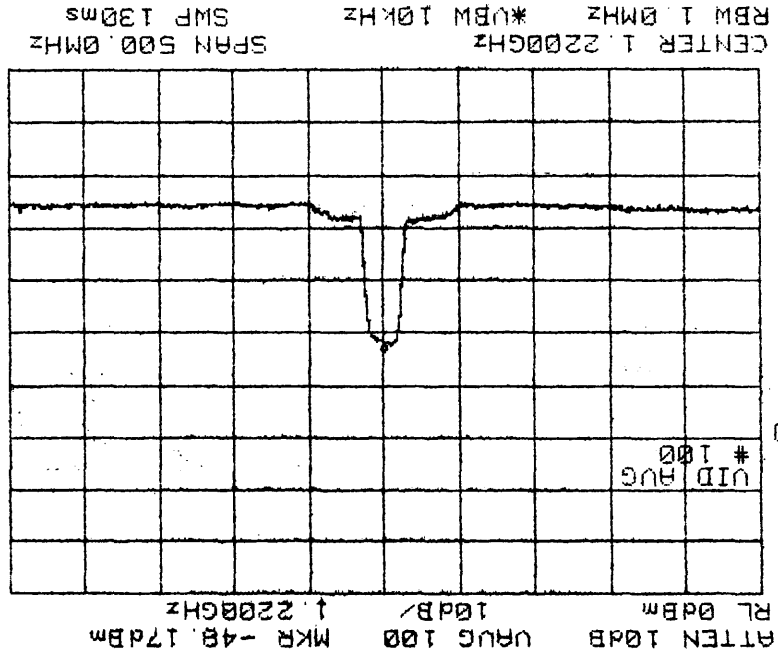
(3a) NPTx ON:

	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:	91.2
S-119	Sat 4	T-18	87	87	87	87	86	87	87	87	87	88	Avg:	87.0

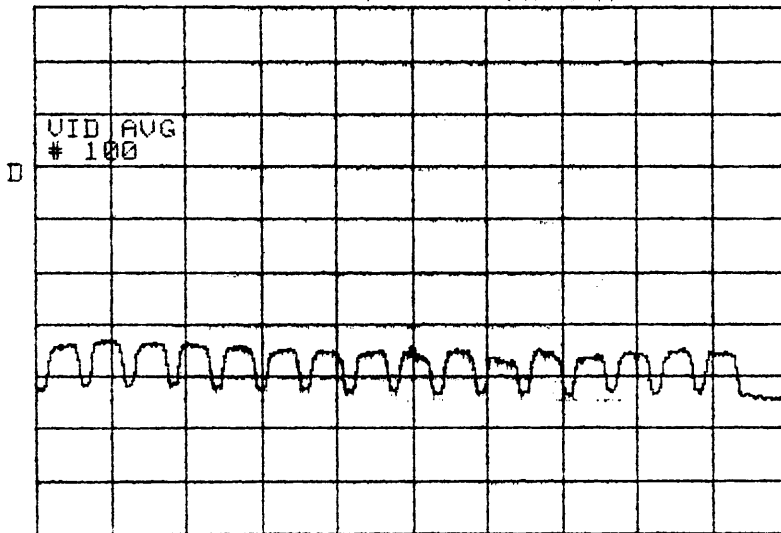
Legend // Comments:

NPTx – Northpoint Transmitter.

3R-1



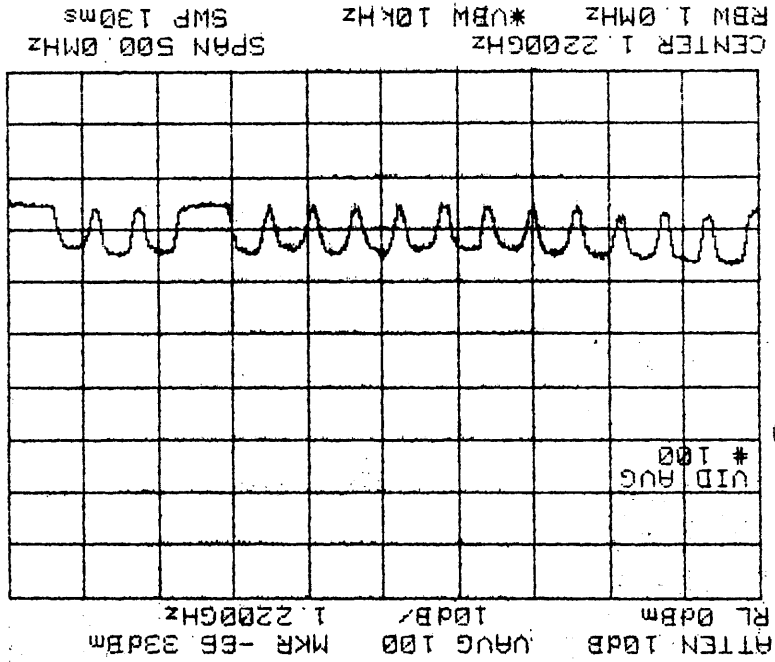
ATTEN 10dB UAUG 100 MKR -66.17dBm
RL 0dBm 10dB/ 1.2200GHz



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

3R-2a

3R-26

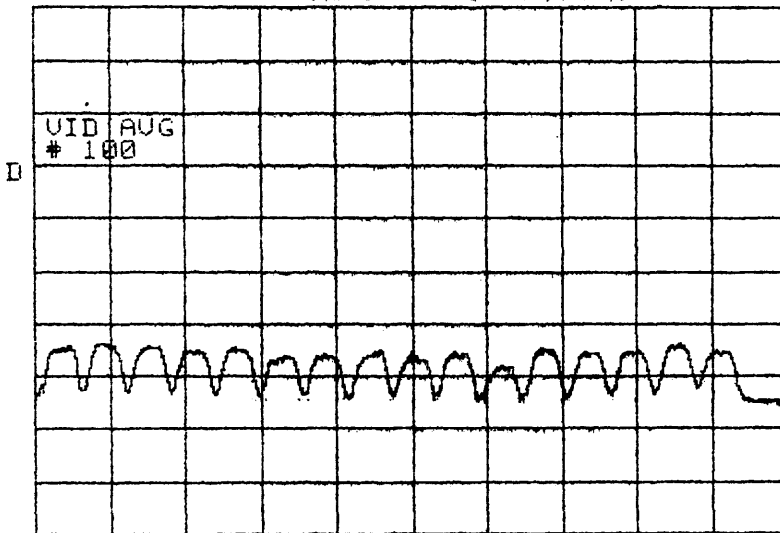


ES (119) sat signal

(splitter output to SA)

NPTx - OFF

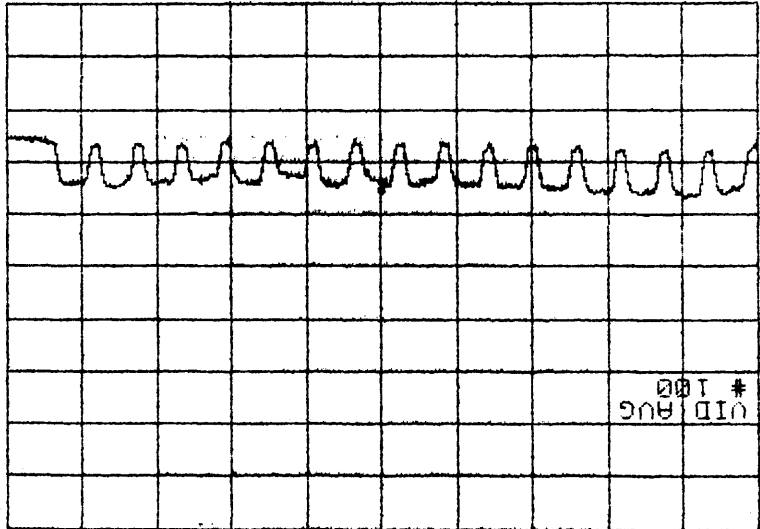
ATTEN 10dB VAVG 100 MKR -67.50dBm
RL 0dBm 10dB/ 1.2200GHz



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

3A-2c

CENTER 1.2200GHZ
SPAN 500.0MHZ
RBW 1.0MHZ *VBW 10KHZ
SMP 130ms

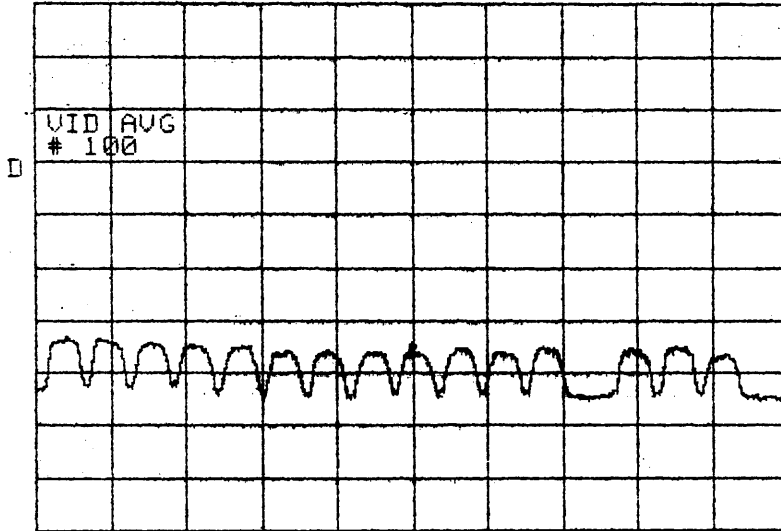


ATTEN 10dB URG 100 MKR -65.67dBm
RL 0dBm
10dB/ 1.2200GHZ

100
VID 100

3P-39

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

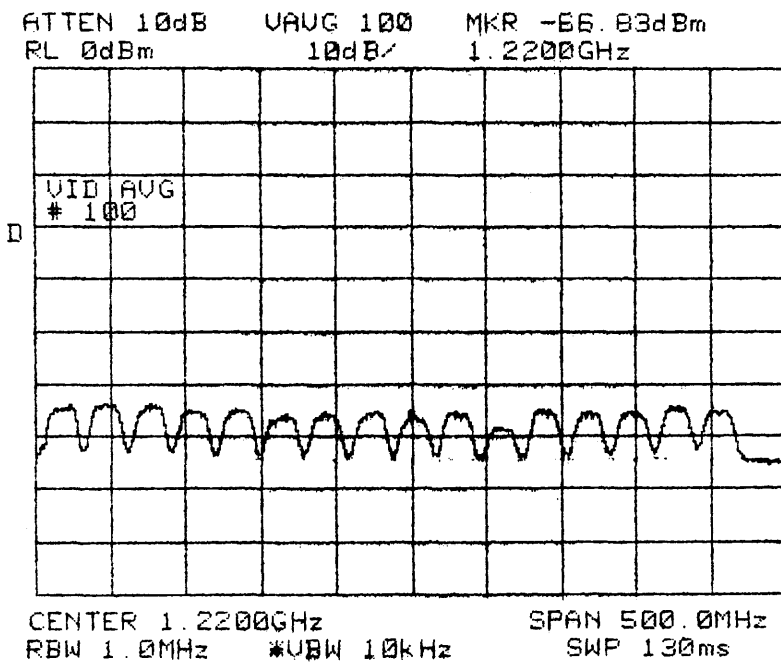


CENTER 1.2200GHz SPAN 500.0MHz
RBW 1.0MHz *VBW 10kHz SWP 130ms

SR-36

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

NP Tx - ON



3R-3c

Northpoint Technology – DBS Compatibility Test – Washington DC Area

Rx Site Location Log

Rx Site No. 3A p1
Set: /

Site Name:

Date / Time:

8/14/99 10:00 EDT

Kennedy Center

Operator:

Jonathan

GPS Receiver Reading at Site:

Lat: N 38° 53 681'

Time Read 16:09:28 ^{GMT} ~~EDT~~

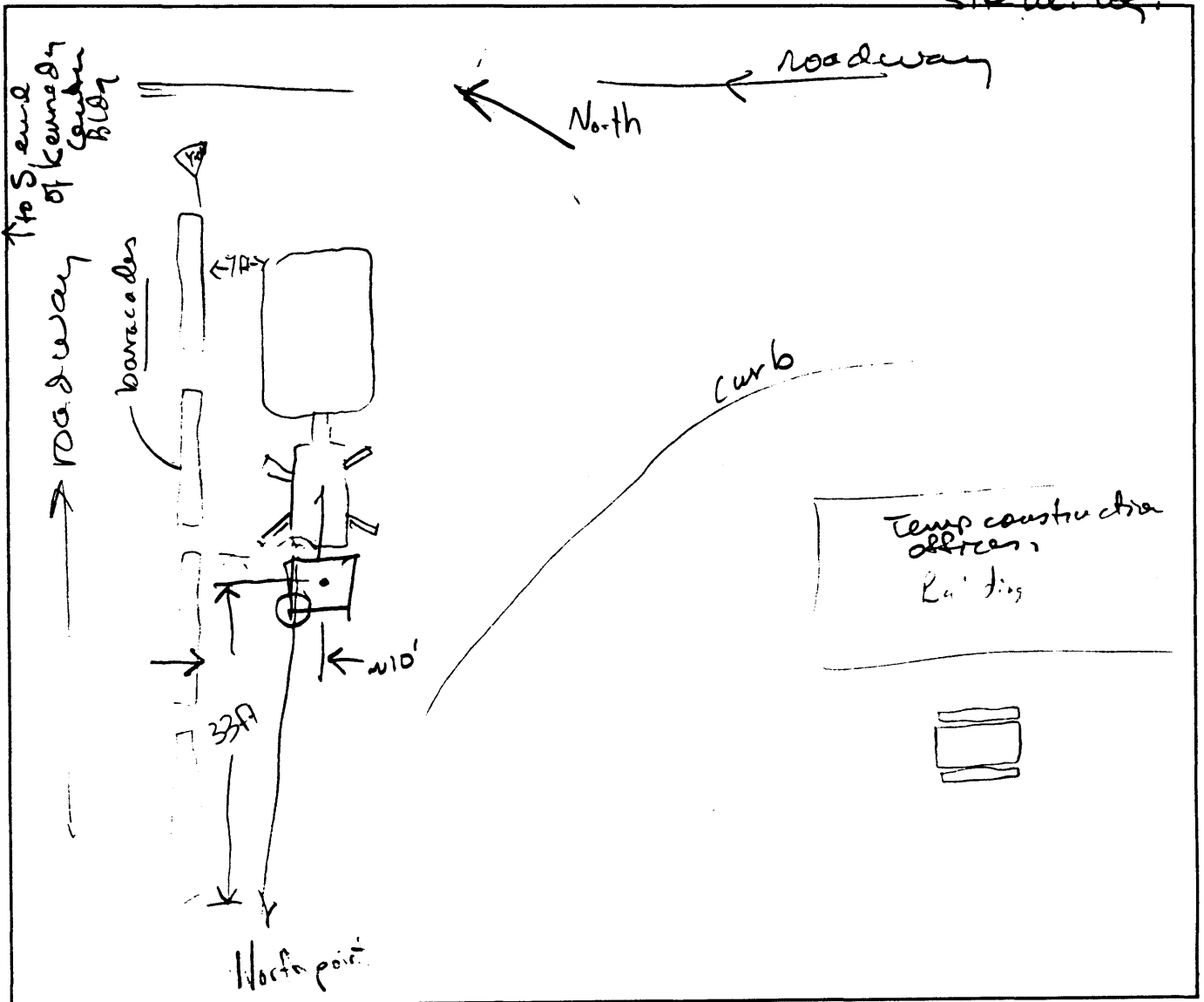
Lon: W 077° 03.345'

Elev: 110

Weather: *partly cloudy, hazy*

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

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

Sets 1 1

Re: Rx Condx Ref. No. 1 Date / Time: 8/14/99 10:17 EDT 24 hr time

Re: Tx Condx Ref. No. 1 Operator: Dhu

Data Measurements:

NTPx Carrier Freq. (GHz)	12.47	NEC Filename	Log B-294.
Satellite Monitored	ES119	Transponder	T-18

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

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 W)
	10:27:15	Car passed → E (~15' away to N)
	10:28:00	Bus passed → N (~75' away to East)
	10:28:12	Airline 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)
	43:55	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	Airliner → S (directly overhead)
	58:51	Airliner " " "
	11:00:33	Airliner " " "
	11:02:57	Airline passed

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

Northpoint Technology – DBS Compatiblilty 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 - DM see spectrum plot
	02:01	2 Cars → N
	03:39	2 Cars → E
	03:49	Bus E
	03:59	Airliner passes
	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)
	16:16	Car → E (15' to N)
	16:30	"
	16:55	Airliner passed
	11.16:52	- Sfrax test (checkboxes 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 → W (~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:

Janakia

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 (overhead)
	34:24	Bus -> W (~40' to N)
	:36	Airliner passed
	151	Bus -> N (~15' to E)
	46:40	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
	43:08	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
	:20	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	Airliner 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 Compatibility Test - Washington DC Area

Rx Site Data Log

Kennedy Center

Rx Site No.

3

Repeat
pl

Set:

21

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:

Ant:	DBS1
Power (Px)	-50.50dB
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:	
Power (Px)		TV Pix	
Plot ID		File Rec	

Sat 2	DTV	Ant: NP3	
Power (Px)	-66.17dB	TV Pix	
Plot ID	3-2b	File Rec	X

Sat 3	ES (61.5)	Ant: NP2	
Power (Px)	-66.57dB	TV Pix	
Plot ID	3-2c	File Rec	X

Sat 4	ES (119)	Ant: NP4	
Power (Px)	-66.67dB	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: NP3	
Power (Px)	-66.17dB	TV Pix	
Plot ID	3-3b	File Rec	X

Sat 3	ES (61.5)	Ant: NP2	
Power (Px)	-66.67dB	TV Pix	
Plot ID	3-3c	File Rec	X

Sat 4	ES (119)	Ant: NP4	
Power (Px)	-67.17dB	TV Pix	
Plot ID	3-3d	File Rec	X

(4) NPTx OFF.

Northpoint Technology – DBS Compatibility Test – Washington DC Area

Rx Site Data Log

Kennedy Center

Rx Site No. 3
 Set: 21

p2

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:

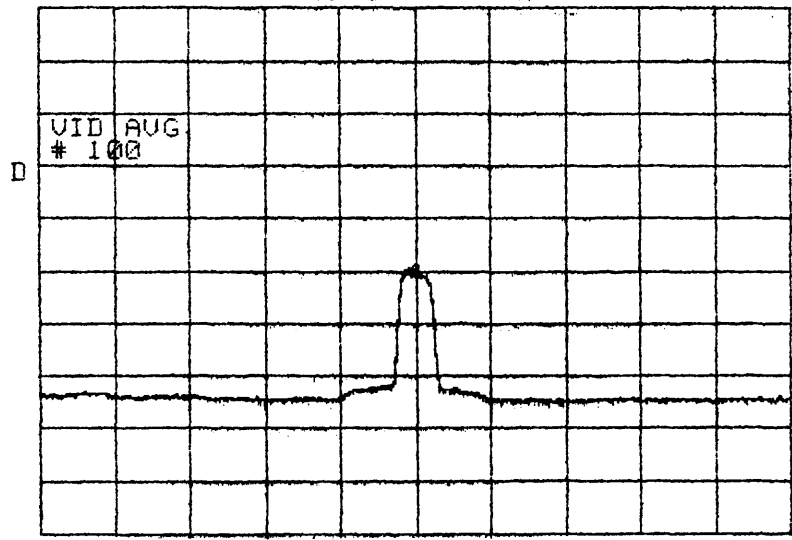
NPTx – Northpoint Transmitter.

8/17/99

3-1 (dura)

Repeat

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



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