(1) it is time to move on to urban tests, using higher transmitter towers and increased power[59/] (where the threat of interference to DBS subscribers is quite real); and (2) the Commission should -- on the basis of this record -- proceed to establish rules authorizing this new service.

Whether Northpoint should be permitted to put actual DBS subscribers at risk based on the instant record is for the Commission to decide, presumably based on input from the potentially affected DBS licensees. What is clear beyond peradventure, however, is that there is not a scintilla of evidence in the record to support the proposition that the rulemaking sought by Northpoint should be undertaken. Indeed, if any conclusion can be drawn from Northpoint's patently flawed tests -- the results of which are proffered without any acknowledgment of or explanation for those flaws -- it is that, even in the absurdly artificial environment of the King Ranch, the system cannot operate in the manner claimed.

V. IN ADDITION TO JEOPARDIZING EXISTING DBS SYSTEMS, NORTHPOINT THREATENS PROPOSED NGSO FSS SYSTEMS.

Northpoint does not address the potential impact of its proposed technology on NGSO FSS systems, such as the SkyBridge System. Under ITU rules, NGSO FSS systems are allocated in the subject bands on an primary basis,[60/] while Northpoint itself proposes secondary status for its systems.[61/]

[59/] DCE Report at 9.

[60/] See ITU Radio Regulations, footnote 55.487A.

[61/] Northpoint also fails to consider how it will protect other terrestrial services operating in the subject bands. See Petition at 17-18. As noted in Section II above, terrestrial FS services are permitted on a co-primary basis in these

(continued...)

Instead of facing this threshold issue, Northpoint questions the ability of provisional power limits applicable to NGSO FSS systems adopted at WRC-97 to protect Northpoint.[62/] Without any technical analysis (or indeed any explanation whatsoever), Northpoint concludes that NGSO systems honoring the WRC-97 limits would interfere with deployment of its technology.[63/] In brief, Northpoint has it backwards.

As an initial matter, Northpoint has confused the various provisional limits adopted at WRC-97. It cites "two sets of provisional power flux density ("pfd") limits," apparently in reference to the equivalent power flux-density ("epfd") and aggregate power flux-density ("apfd") limits of Resolution 538 (WRC-97),[64/] which apply to the BSS frequency bands covered by Appendices 30 and 30A of the ITU Radio Regulations. These limits are not, in fact, pfd limits, which do not take into account receive antenna gain discrimination. More fundamentally, the epfd limits and apfd limits were not designed to protect terrestrial operations in the BSS bands, as Northpoint asserts.[65/] Rather they were derived taking into account the needs of BSS systems operating from the GSO arc.[66/]

61/ (...continued)
bands under ITU rules, and is permitted in the U.S., in both cases so long as BSS systems operating according to the BSS plans are protected.

62/ Petition at 17.

63/ Id. at 18.

64/ See WRC-97 Final Acts at 428.

65/ Petition at 17.

66/ Again without any analysis whatsoever, Northpoint questions whether the (continued...)

Northpoint ignores the true pfd limits in the ITU Radio Regulations[67] and proposed at WRC-97[68] that are designed to protect terrestrial systems. Although these limits were derived on the basis of the protection requirements of FS systems, and the operating parameters of an actual Northpoint system are undetermined at this time,[69] Northpoint provides no evidence whatsoever that these limits would fail to protect Northpoint systems. In fact, Northpoint is likely to be protected by the WRC-97 pfd limits. The real problem, which Northpoint has ignored, is the interference that Northpoint will almost certainly cause to NGSO FSS systems, such as the SkyBridge System.

Apparently concerned that its system cannot co-exist with NGSO FSS systems,[70] Northpoint urges the Commission to "consider carefully the respective

---

66/ (...continued)
provisional epfd and apfd limits adopted at WRC-97 will protect DBS systems. Petition at 18. In a variety of forums, SkyBridge has demonstrated the ability of the WRC-97 limits to protect DBS systems. See, e.g., the SkyBridge Application, Section V.A.1 and Appendix B, Sections I.A and I.B. It is not clear what Northpoint hopes to gain from its specious assertions regarding SkyBridge. What is clear is that the Northpoint system presents a significant and direct threat to existing and future DBS systems.

67/ ITU Radio Regulations, Table S21-4.

68/ Resolution COM5-23 (WRC-97), WRC-97 Final Acts at 433.

69/ Even Northpoint does not know the parameters that will be used in actual systems. The purpose of their experiments, which are still ongoing, is to determine the range of usable parameters. DCE Report at 9; Petition at 14. Furthermore, Northpoint has not applied to the Commission for authority to operate its system, which would require specification of actual operating parameters.

70/ For example, in a cover letter to its DCE Report, addressed to Regina Keeney, Chief, International Bureau, dated January 15, 1998, Northpoint states that "[t]he proposed SkyBridge system . . . is mutually exclusive with Northpoint."

benefits to domestic consumers" of its technology versus NGSO systems.[71] Coming from Northpoint, this is an odd request; according to Northpoint, the prime beneficiaries of the Northpoint technology are DBS licensees, and, as discussed above, DBS operators have yet to embrace the Northpoint technology.[72] On the other hand, the benefits to the public from the services that would be offered, and the additional competition that would be provided, by state-of-the-art global NGSO broadband systems, such as SkyBridge, are indisputable (and not challenged by Northpoint).[73]

---

[71] Petition at 18.

[72] See supra Section III.

[73] The United States is a critical market for all NGSO systems, including SkyBridge, notwithstanding Northpoint's remarks to the contrary in its March 20, 1998, reply comments on the SkyBridge Application. See n.7 supra. In those comments, at 1, Northpoint inexplicably characterized the SkyBridge system as targeting "infrastructure-poor countries around the world." Although the benefits of SkyBridge access to underdeveloped regions of the world are enormous (and an advantage of NGSO FSS systems as compared to terrestrial systems such as Northpoint), serving the huge unmet demand for the broadband services in the United States (and other developed countries) is of key importance to SkyBridge (and other NGSO FSS systems).

Additionally, it is worth noting that, while Northpoint seeks to characterize itself as the savior of the DBS subscriber otherwise unable to receive local television signals, it also appears to have targeted the very same broadband data market that it claims provides an inadequate basis to support licensing NGSO systems in that band. Petition at 5, 11-13. Northpoint cannot have it both ways. (In fact, Northpoint's proposed services are largely akin to those to be provided by the Local Multipoint Distribution Service ("LMDS"), for which a separate allocation in the 28 GHz band exists that does not pose a threat to DBS systems. See, e.g., Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services, First Report and Order and Fourth Notice of Proposed Rulemaking,

(continued...)

In any case, the real issue at this point is the interference threat posed to existing and future primary services in the subject bands, including both DBS services and NGSO FSS services. Northpoint has failed to demonstrate that its system will not cause interference to these primary services.

73/ (...continued)
FCC 96-311, rel. July 22, 1996.)

CONCLUSION

Northpoint has failed to provide any reliable evidence that its system can co-exist with DBS and NGSO FSS systems. In particular, the experiments conducted under its experimental license are fatally flawed, and no conclusions can be drawn from the results. For these reasons, and those given above, the Northpoint Petition should be denied.

Respectfully submitted,

SKYBRIDGE L.L.C.

By: _____

Phillip L. Spector
Jeffrey H. Olson
Diane C. Gaylor
Paul, Weiss, Rifkind, Wharton & Garrison
1615 L Street, N.W., Suite 1300
Washington, D.C. 20036
Telephone: (202) 223-7300
Facsimile: (202) 223-7420

Its Attorneys

Dated: April 20, 1998

TABLE 1 - PATH LOSSES

Comsearch Report Figure 3.1-	Site	Distance (feet)	Azimuth (degrees)	Transmitter Power (dBm)	Power Reduction (dBm)	Line Loss (dB)	Transmitter Antenna On-axis Gain (dBi)	Transmitter Antenna Off-axis Loss[1]	Transmit EIRP[2] (dBmi)	Received Signal[3] (dBmi)	Measured Path Loss (dB)	Calculated Path Loss[4] (dB)	**Discrepancy (dB)**	Transmitter Antenna Notes[6]
1&2	2	1800	42	29	0	2	10	24	13	-92	105	109.1	**4.1**	Out of main lobe
3&4	3	1320	143	29	0	2	10	2	35	-73	108	106.4	**-1.6**	Main lobe
5&6	4	6330	123	29	0	2	10	4	33	-96	129	120.0	**-9.0**	Out of main lobe
7&8	5	7400	156	29	0	2	10	1	36	-87	123	121.4	**-1.6**	Main lobe
9	6	8975	180	29	18	2	10	0	19	-104	123	123.1	**0.1**	On axis
10&11	7 (Fig 3.1-10)	5280	180	29	0	2	10	0	37	-82	119	118.5	**-0.5**	On axis
--	7 (Sec 4.2)	5280	180	29	0	2	10	0	37	-89	126	118.5	**-7.5**	On axis
12&13	8	1320	180	29	0	2	10	0	37	-68	105	106.4	**1.4**	On axis
14&15	9	600	250	29	20	2	10	5.5	11.5	-96	107.5	99.6	**-7.9**	Out of main lobe
16&17	10	610	312	29	0	2	10	23	14	-85	99	99.7	**0.7**	Out of main lobe
18&19	11	1400	344	29	0	2	10	33	4	-87	91	106.9	**15.9**	Out of main lobe
20&21	12	1100	0	29	0	2	10	40	-3	-84	81	104.8	**23.8**	Backlobe
22	13	9.9 miles	216	29	0	2	10	26	11	-121	132	138.4[5]	**6.4**	Main lobe

dBmi = decibels above 1 millwatt radiated isotropically

(1) This is the loss as determined from the material provided by DCE in the Engineering Supplement to FCC Form 442 on May 29, 1997 (Fig. 2) for the Custom Horn Antenna in the azimuth direction. As noted in Section IV.B above, it is not clear whether this antenna was the same as that used in the tests.
(2) Transmitter power - power reduction - line loss + transmitter antenna on-axis gain - transmitter antenna off-axis loss.
(3) From figures referenced in first column.
(4) Illustrated in Figure I below.
(5) Possible presence of trees.
(6) The main lobe azimuth is 180 ± 55 degrees (or 125 to 235 degrees).

FIGURE I - CLEAR PATH LOSS

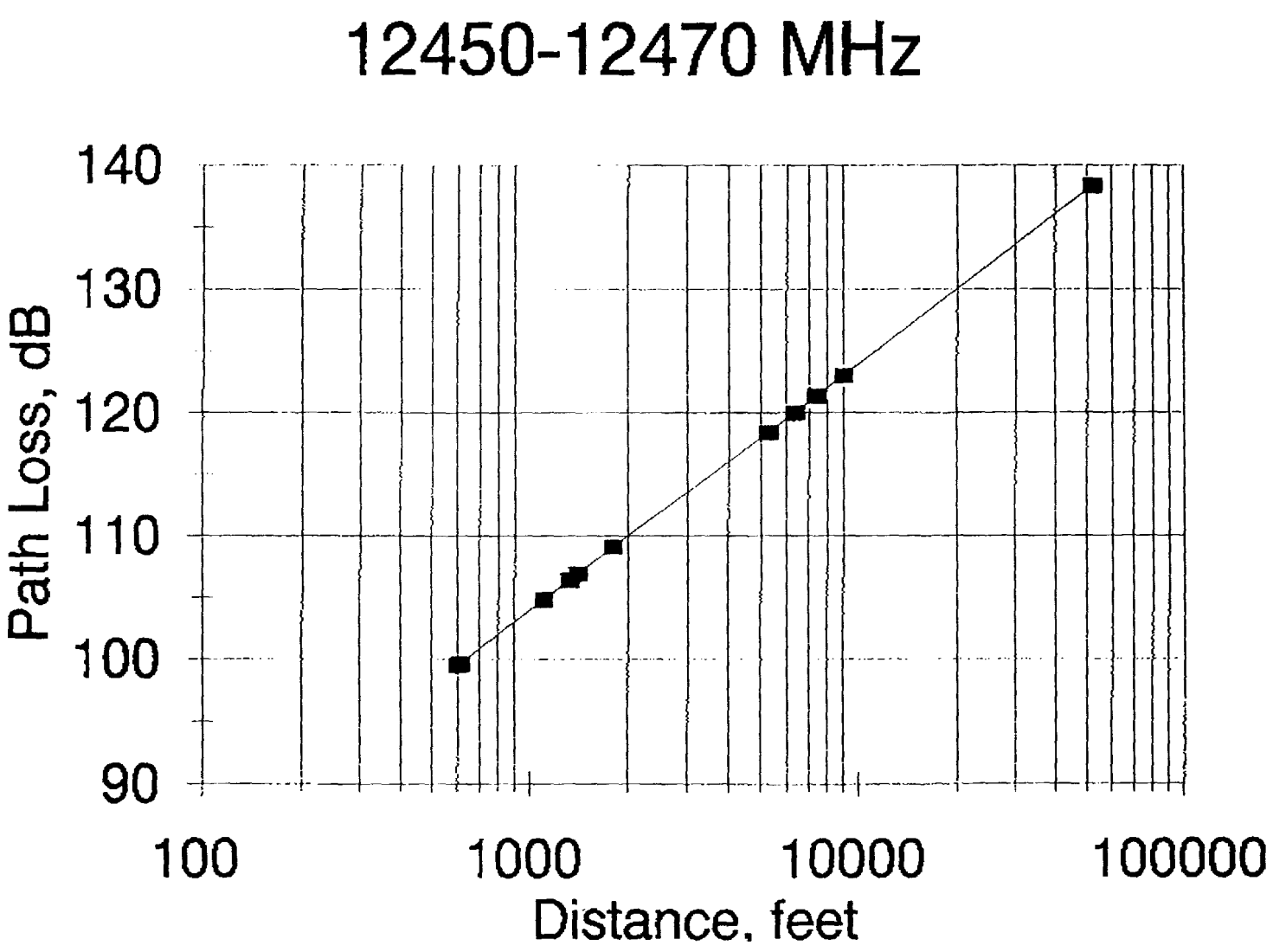


TABLE II

POINTING ELEVATIONS TO BSS SATELLITES

Elevation (degrees)

City	State	61.5W Echo	101W DirecTV	110W US	119W Echo	148W Echo	157W US	166W US	175W US
King Ranch	TX	42	58	55	50	26	18		
Seattle	WA	20	34	34	35	30	26	22	16
Washington	DC	43	38	33	27				
Bangor	ME	37	29	24	18				
San Diego	CA	22	48	51	52	40	33	26	18

RANGE: 18 to 58 (tested for 56 to 58 degrees per Northpoint)

POINTING AZIMUTHS TO BSS SATELLITES

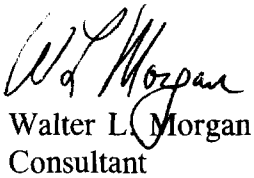
Azimuth (degrees from true north)

City	State	61.5W Echo	101W DirecTV	110W US	119W Echo	148W Echo	157W US	166W US	175W US
King Ranch	TX	125	187	205	220	250	255		
Seattle	WA	114	161	165	177	212	222	231	240
Washington	DC	158	217	227	236				
Bangor	ME	168	223	232	240				
San Diego	CA	112	150	165	181	228	237	245	251

RANGE: 112 to 255 (tested for 186 to 205 per Northpoint)

CERTIFICATION OF PERSON RESPONSIBLE FOR PREPARING ENGINEERING INFORMATION

I hereby certify that I am the technically qualified person responsible for preparation of the engineering information contained in the Opposition of SkyBridge, dated April 20, 1998, to which this certification is attached; that I am familiar with Part 25 of the Commission's rules; that I have either prepared or reviewed the engineering information submitted in this application; and that it is complete and accurate to the best of my knowledge and belief.

By: 

Walter L. Morgan
Consultant
Communications Center

Dated: April 20, 1998

CERTIFICATE OF SERVICE

I hereby certify that the foregoing Opposition of SkyBridge L.L.C. was served by first-class mail, postage prepaid, this 20th day of April, 1998 on the following persons:

Richard E. Wiley, Esq.
R. Michael Senkowski, Esq.
Nancy J. Victory, Esq.
Eric W. DeSilva, Esq.
Wiley, Rein & Fielding
1776 K Street, N.W.
Washington, D.C. 20006

Theresa Knadler

Theresa Knadler