AMENDMENT TO
5405-EX-PL-96

PIPER & MARBURY
L.L.P.
1200 NINETEENTH STREET, N.W.
WASHINGTON, D.C. 20036-2430
202-861-3900
FAX: 202-223-2085

BALTIMORE
NEW YORK
PHILADELPHIA
EASTON

WRITER'S DIRECT NUMBER
(202) 861-6471
FAX: (202) 861-4160

August 21, 1996

HAND DELIVERY

Douglas Young
Office of Engineering and Technology
Federal Communications Commission
2000 M Street, N.W., Room 271-A
Washington, D.C. 20554

Re: Omnipoint Communications Inc.
Amendment and Request for Expedition
Application for Part 5 Experimental License
FCC File # 5045-EX-PL-96

Dear Mr. Young:

By this letter, Omnipoint Communications Inc. ("Omnipoint") files an amendment to modify certain technical information in its Part 5 license application referenced above (the "Application"), and requests that the Commission expeditiously consider the Application. Omnipoint filed the initial Application on July 26, 1996. Subsequently, Omnipoint discussed the Application with Commission staff and, in response to staff concerns, agreed to file the attached amendment.

Omnipoint requests that the Commission consider the Application, as amended, in an expeditious manner and grant it by no later than September 6, 1996. Omnipoint has recently learned that it will receive significant shipments of mobile PCS handsets to the warehouse facility in the month of September. Expedition is necessary for Omnipoint to effectively test and verify the operation of its handsets to be used in the commercial operation of Omnipoint's broadband PCS system in the New York MTA. As Omnipoint described in Attachment 1 of the Application, the requested experimental license is to permit Omnipoint to establish a PCS test transmitter at the premises it will use for warehousing its mobile subscriber equipment. Testing of the equipment allows Omnipoint to detect any malfunctions at the warehouse facilities, avoiding the delay and

expense of discovering problem handsets only after they have been shipped for commercial use to the New York MTA system.

Omnipoint submits that expedition is in the public interest in this case because it will facilitate the rapid introduction of competitive wireless services in the New York MTA. Omnipoint's competitive services will offer both wireless and wireline consumers more service choices and a more competitive local market for telecommunications services.

Omnipoint appreciates your prompt consideration of these issues. Should you have any questions regarding these matters, please contact the undersigned directly.

Sincerely,

Mark J. O'Connor
Counsel for Omnipoint
Communications, Inc.

/mjo

cc: Carl Huie (OET)

AMENDMENT TO EXPERIMENTAL LICENSE APPLICATION, FCC FILE # 5045-EX-PL-96

1. Omnipoint Communications Inc. hereby amends its referenced application for a new experimental radio service station to revise the maximum effective radiated power (Item 4(c) of the Application) downward to 10 milliwatts. (0.01 watts). The Commission should note that mobile transmit power is stated as 1.0 watts peak power. However, the mobile station is under automatic power control of the base station and, under normal circumstances, will be controlled to a level very close to that of the base station transmitter, 10 milliwatts, in the amended application. (The same gain antenna will be used for transmit and receive at the base station, and the signal threshold settings are also similar; therefore the transmitted powers will be very similar.) OCI also notes that, as stated, a very low, in-building antenna will be used so that the signal will be confined to a hundred meters or so, at most.

2. The opportunity for interference to either a fixed microwave incumbent or the licensed Block A PCS operator is exceedingly remote, given the 10 milliwatts requested power. Applicant Omnipoint has conducted a frequency search of the FCC's database for the frequency ranges 1920-1955 MHz and 1840-1875 MHz ranges, covering both the base station and mobile station transmit frequencies proposed herein. The data shows the nearest station is located some 15.09 km from the proposed new experimental station. The second closest stations are 28.11 km distant. The free space path loss at 15 km is the frequency in question is -121.6 dB. Allowing for 10 dB building attenuation, and even assuming that the victim microwave receiver is using a 20 dB gain antenna boresighted onto the proposed experimental station, the received interference level is:

+10 dBm	ERP
-10 dB	Building attenuation (inside radiator)
-121.6 dB	Path loss
+20 dB	Assumed victim receive antenna gain
-101.6 dBm	Received Signal Level

Typically, the desired goal in a 2 GHz microwave link is -40 to -50 dBm, resulting in a signal to interference ratio of 50 to 60 dB, more than adequate to assure that interference will not be caused, even under the worst-case condition of a boresighted antenna. We also note that the thermal noise in a 2 GHz microwave receiver, assuming a 1 MHz bandwidth, is -114 dBm. With a 10 dB noise figure for the microwave receiver (typical value, as it includes front-end filtering and feedline losses), the signal from the 10 mw proposed experimental station would barely be detectable above the thermal noise.

3. The proposed experimental station will be installed in the first floor of a two-story concrete block warehouse building. The warehouse building is approximately 150 feet x 150 feet. Based upon Applicant's experience in measuring building penetration losses, and

considering that the experimental station will be located near the center of the building, 20 to 25 dB attenuation would be expected. For conservative calculation purposes, the study at point 2 above was run assuming only 10 dB of building shielding. The warehouse is located in a business park complex.