

United States of America
FEDERAL COMMUNICATIONS COMMISSION
EXPERIMENTAL
SPECIAL TEMPORARY AUTHORIZATION

EXPERIMENTAL
(Nature of Service)

K K 2 X C V
(Call Sign)

XD FX & MO
(Class of station)

S-1132-EX-92
(File number)

NAME OMNIPOINT CORPORATION

Scanticon Hotel, Princeton Marriott and Hyatt Regency, Princeton, NJ
(Location of station)

Special Temporary Authority is hereby granted to operate the radio transmitting apparatus described below:

Frequency MHz	Authorized Power (watts)	Emission Designator
1850-2200	5 (ERP)	1

- (1) Licensee is authorized to use various modes of modulation, bandwidth, and data rates. None of these modes of transmission shall extend beyond the band limits set forth above.

This special temporary authorization is granted upon the express condition that it may be terminated by the Commission at any time without advance notice or hearing if in its discretion the need for such action arises. Nothing contained herein shall be construed as a finding by the Commission that the authority herein granted is or will be in the public interest beyond the express terms hereof.

This special temporary authorization shall not vest in the grantee any right to operate the station nor any right in the use of the frequencies designated in the authorization beyond the term hereof, nor in any other manner than authorized herein. Neither the authorization nor the right granted hereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934. This authorization is subject to the right of use of control by the Government of the United States conferred by Section 706 of the Communications Act of 1934.

This authorization effective July 27, 1992 and
will expire 3:00 A.M. EST. September 27, 1992

FEDERAL
COMMUNICATIONS
COMMISSION

PEPPER, HAMILTON & SCHEETZ

ATTORNEYS AT LAW

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WRITER'S DIRECT NUMBER

(202) 828-1447

July 13, 1992

S-1132-Ex-92

KK2XCV

EXPRESS MAIL

Federal Communications Commission
Experimental Radio Service
P.O. Box 358320
Pittsburgh, PA 15251-5320

Re: Application of Omnipoint Corporation for Special
Temporary Authority to Operate Spread Spectrum
Devices

Dear Sir or Madam:

I am writing on behalf of Omnipoint Corporation ("Omnipoint") to request Special Temporary Authority for Omnipoint to test spread spectrum pocket telephones under actual conditions in the 1850 to 2200 MHz band. Omnipoint specifically requests this STA to operate a total of seventeen base stations inside three hotels--the Scanticon Hotel, the Princeton Marriott and the Hyatt Regency--in Princeton Forrestal Village (Princeton, New Jersey), together with a total of 100 handsets, for a period of sixty days beginning July 27, 1992. Obtaining the STA by that date is critical to permit Omnipoint to install its equipment before the beginning of the Governors Conference, particularly given the high level of security that will be present to protect President Bush and fifty governors who will attend.

As indicated in the attached Statement of Douglas G. Smith, Omnipoint requires this STA to enable it to install and pretest its equipment before the 1992 Governors Conference, test the equipment during the Governors Conference (August 1-5, 1992) and continue testing for a reasonable period thereafter. The handsets and equipment would be eligible for operation under Omnipoint's Experimental License (call sign KK2XCV) but for the number of units involved. Omnipoint has undertaken extensive field measurements to ensure that its operation under this STA will not cause any interference with nearby microwave links.

PEPPER, HAMILTON & SCHEETZ

July 13, 1992
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Please call if we can answer any questions or provide any additional information.

Sincerely,



David A. Wormser

Enclosures: Statement of Douglas G. Smith (with attachments)
 FCC Form 155 (Fee Processing Form)
 Check for \$35.00

cc: H. Franklin Wright

**Statement of
Douglas G. Smith
in Support of
Application for Special Temporary Authority**

I, Douglas G. Smith, am submitting this statement in support of Omnipoint Corporation's application for Special Temporary Authority to install and operate one hundred spread spectrum PCS pocket phones and seventeen base stations at the Governor's Conference this year in Princeton, NJ, and to continue our tests for several weeks thereafter. I am specifically submitting this statement to demonstrate that Omnipoint's operation under the STA will cause no interference to any licensee in the 1850-2200 MHZ band.

At the outset, Omnipoint's operation under the STA would comply with the terms of its Experimental License (call sign KK2XCV) but for the number of units of equipment required. As such, all of the equipment will be very low powered, peaking at 100mW spread across approximately 10 MHz (including guardbands) or less than 40 microwatts per OFS analog channel.

In addition, all of the Omnipoint base stations will be mounted inside of three hotels, in conference rooms, lobbies and restaurants. The main conference area, the area we expect will generate the most calls over Omnipoint equipment, is in an area within the Scanticon Hotel having walls 18 inches to 2½ feet thick.

Omnipoint, moreover, has undertaken extensive field measurements around the hotels and in the area of incumbent

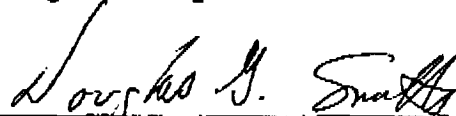
microwave links. The exact characteristics of every microwave link in all of northern New Jersey as well as all of the links within the RF horizon of northern New Jersey have been carefully documented and analyzed, and have been confirmed by two independent consulting firms, Comsearch and Impulse Telecom (see our July 8, 1992 Experimental License Report).

As can be seen by the attached analysis, there are no microwave receivers whose beampaths are within the RF horizon of the test location. Further, the closest eleven receivers range from 43° offset to the beampath (at 12.85 miles) to 115° offset to the beampath at the closest link 9.3 miles away.

As we documented in our earlier Experimental License Interim Report (see June 25, 1992 submission), even if all of the Omnipoint handsets on a given 10 MHz channel are at peak power and all of them somehow obtain line of sight Free Space propagation to an OFS user on that 10 MHz channel, the Omnipoint system cannot raise their noise floor by the 1 dB specified by the TSB10-E unless they are within five miles at 90° offset to the beampath. (At all other offsets, assuming Free Space propagation, the Omnipoint system can operate even closer.) Given that all of the Omnipoint systems will be indoors, not only would it be impossible to violate TSB10-E, but even using Hata suburban propagation assumptions we calculate that all of the handsets could be within 2.3 miles. Since there are no OFS receivers closer than 9.3 miles, there is no possibility of interference even under extreme loading and propagation assumptions.

Accordingly, we respectfully request a Special Temporary Authority to operate up to 100 handsets and 17 base stations in the 1850-1990 MHz band at the Princeton locations for 60 days beginning July 27, 1992.

Respectfully submitted



Douglas G. Smith
President
Omnipoint Corporation

Date: July 13, 1992



Princeton Forrestal Village OES Survey

Link	Call Sign	f _{RX} (MHz)	Degrees off Beampath	Distance (meters)	Distance (miles)
1	KED45	1985	110	20471	12.72
	KEG76	1875	42	31316	19.64
2	WNTG424	1900	43	20683	12.85
	WNTG423	1980	103	31450	19.54
3	KED46	1865	59	20683	12.85
	KED45	1915	58	20471	12.72
4	WNE0950	1970	32	48981	30.43
	WTNG424	1890	127	31450	19.54
5	KEG77	1885	66	19925	12.38
	KED45	1965	54	20471	12.72
6	WNTK505	1880	165	26162	16.26
	WNTA826	1960	8	55530	34.51
7	WHK717	1900	20	42710	26.54
	WHK716	1980	115	14915	9.27
8	KEB68	1965	108	15806	9.82
	KGC96	1865	10	83250	51.73
9	KED44	1945	39	33093	20.56
	KEG77	1865	87	19925	12.38
10	WNTE214	1970	18	42227	26.24
	SOURLAND	1890	66	14089	8.75
11	KBX88	1905	4	46361	28.81
	KED44	1985	175	33093	20.56
12	WAJ80	1945	44	33961	21.10
	WAH713	1905	40	26936	16.74
13	KEB69	1855	14	58062	36.08
	KEB68	1945	75	15806	9.82
14	KBX86	1975	5	74576	46.34
	KBX88	1915	171	46361	28.81

STA Request: Princeton Forrestal Village July 1992



Link	Call Sign	f _{Rx} (MHz)	Degrees off Beampath	Distance (meters)	Distance (miles)
15	WNEQ632	1870	1	86871	53.98
	WNEQ631	1950	179	74461	46.27
21	WHK718	1960	14	90423	56.19
	WHK717	1880	150	42710	26.54
22	KED43	1985	11	82153	51.05
	KBX88	1905	161	46361	28.81
25	WESTOR	1880	25	68074	42.30
	WNTE214	1960	136	42227	26.24
31	KWB44	1860	2	99626	61.90
	WAJ80	1935	174	33961	21.02

STA Request: Princeton Forrestal Village July 1992

FEDERAL COMMUNICATIONS COMMISSION
FEE PROCESSING FORM

FCC/MELLON JUL 14 1992
~~S-1132 EX-92~~
07-15-92 2300765 001

Please read instructions on back of this form before completing it. Section I MUST be completed. If you are applying for concurrent actions which require you to list more than one Fee Type Code, you must also complete Section II. This form must accompany all payments. Only one Fee Processing Form may be submitted per application or filing. Please type or print legibly. All required blocks must be completed or application/filing will be returned without action.

SECTION I

APPLICANT NAME (Last, first, middle initial)
Omnipoint Corporation

MAILING ADDRESS (Line 1) (Maximum 35 characters - refer to Instruction (2) on reverse of form)
7150 Campus Drive

MAILING ADDRESS (Line 2) (if required) (Maximum 35 characters)

CITY
Colorado Springs

STATE OR COUNTRY (if foreign address) Colorado	ZIP CODE 80920	CALL SIGN OR OTHER FCC IDENTIFIER (if applicable)
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Enter in Column (A) the correct Fee Type Code for the service you are applying for. Fee Type Codes may be found in FCC Fee Filing Guides. Enter in Column (B) the Fee Multiple, if applicable. Enter in Column (C) the result obtained from multiplying the value of the Fee Type Code in Column (A) by the number entered in Column (B), if any.

(A)	(B)	(C)	
FEE TYPE CODE	FEE MULTIPLE (if required)	FEE DUE FOR FEE TYPE CODE IN COLUMN (A)	FOR FCC USE ONLY
(1) E A E		\$ 35.00	

SECTION II — To be used only when you are requesting concurrent actions which result in a requirement to list more than one Fee Type Code.

(A)	(B)	(C)	
FEE TYPE CODE	FEE MULTIPLE (if required)	FEE DUE FOR FEE TYPE CODE IN COLUMN (A)	FOR FCC USE ONLY
(2)		\$	
(3)		\$	
(4)		\$	
(5)		\$	

ADD ALL AMOUNTS SHOWN IN COLUMN C, LINES (1) THROUGH (5), AND ENTER THE TOTAL HERE. THIS AMOUNT SHOULD EQUAL YOUR ENCLOSED REMITTANCE. →

TOTAL AMOUNT REMITTED WITH THIS APPLICATION OR FILING	FOR FCC USE ONLY
\$ 35.00	35.00