

Whippany Road, Whippany, NJ 07981-0903

United States of America
FEDERAL COMMUNICATIONS COMMISSION
EXPERIMENTAL
SPECIAL TEMPORARY AUTHORIZATION

EXPERIMENTAL
(Nature of Service)

K B 2 X T H
(Call Sign)

XD MO
(Class of station)

S-0120-EX-91
(File number)

NAME AT & T BELL LABORATORIES

Continental United States
(Location of station)

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

Frequency MHz	Authorized Power (watts)	Emission Designator
824-849	300 (output)	NON/30KOF2B/F3E/F7W
869-894	300 (output)	NON/30KOF2B/F3E/F7W

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 February 1, 1991 and
will expire 3:00 A.M. EST. July 31, 1991

FEDERAL
COMMUNICATIONS
COMMISSION

S-0120-EX-91



AT&T Bell Laboratories

Whippany Road
Whippany, New Jersey 07981-0903
201 386-3000

January 11, 1991

Mr. H. Franklin Wright, Chief
Frequency Liaison Branch
Spectrum Engineering Division
Room 7326
Federal Communications Commission
1919 M Street N.W.
Washington, DC 20554-1300

Dear Mr. Wright:

This is to request a Special Temporary Authority for our Experimental Radio Station License KB2XTH File #9250-EX-R-89 for a period of six months from February 1, 1991 to August 1, 1991.

As the number of cellular subscribers increases, the need for more efficient use of the cellular band becomes more urgent. In order to accomplish this it appears to be necessary to go to digital modulation methods: TDMA is a method we would like to investigate.

The cellular service provider in the area, NYNEX Mobile Communications, has requested Bell Labs to use the part of the cellular spectrum which falls in the expanded frequencies for this work, as the experiments are least likely to cause interference if they are done in this band. None of the AT&T Bell Labs' licenses allow for use of this part of the spectrum or the use of this type of emission. The experimental license KB2XTH does allow for standard cellular emissions in the old cellular band so we would like an STA to use in conjunction with this license, which would permit these experiments to be carried out. These experiments are designed to see if TDMA methods are practical in the cellular service and to compare it with the present FM analog methods now being used.

The following information is provided to support the STA request.

1. The need for this STA is to permit experimental operation of cellular telephone equipment employing TDMA emissions and to utilize the entire spectrum in the extended cellular band (824 - 849 MHz; 869 - 894 MHz), as specified in Sec. 2.106 of the Commission rules.
2. The purpose of the operation is to experimentally evaluate digital technology as applied to cellular telephone service, and to gain engineering data.

3. The proposed time of operation is from 0800 to 2200 EST. from February 1, 1991 to July 31, 1991.
4. The station call sign is KB2XTH. This will be cellular telephone service.
5. Equipment to be used.
 - a. AT&T AUTOPLEX® Series II Cellular Cell-site base station with standard FM transceivers and prototype TDMA transceivers.
 - b. OKI AMERICA, INC Dual Mode TDMA/FM mobile transceivers.
6. The input power will be -19 dbm to per channel to a linear amplifier. Providing 20 watts per channel to the antenna.
7. The emissions will be TDMA, FM (SAT plus voice) or wide band data.

If there are any questions concerning this STA application, please call Tom Aikin at (201) 386-6691, Tom is handling this for me.

Very truly yours,

R. W. Willis
R. W. Willis
Supervisor
FCC Testing

54423-4666-RWW/tta

Copy to

H. Michitsh-7u-3nc13

T. T. Aikin
D. L. Huff
R. D. Royer
J. E. Russell

300w
Non/300w/PTT/RWW

Approved by OMB
3060-0440
Expires 12/31/90

FEDERAL COMMUNICATIONS COMMISSION
FEE PROCESSING FORM



01-15-91 8820192 101

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)
AMERICAN TELEPHONE AND TELEGRAPH COMPANY

MALING ADDRESS (Line 1) (Maximum 35 characters - refer to instruction (2) on reverse of form)
Mr. R. W. Willis Rm 1C-228A

MALING ADDRESS (Line 2) (if required) (Maximum 35 characters)
WHIPPANY ROAD

CITY
WHIPPANY

STATE OR COUNTRY (if foreign address) NEW JERSEY	ZIP CODE 07981-0903	CALL SIGN OR OTHER FCC IDENTIFIER (if applicable) KB2XTH
--	-------------------------------	--

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) FEE TYPE CODE	(B) FEE MULTIPLE (if required)	(C) FEE DUE FOR FEE TYPE CODE IN COLUMN (A)	FOR FCC USE ONLY							
(1) <table border="1" style="display:inline-table; border-collapse: collapse;"><tr><td style="width:20px; height:20px; text-align:center">E</td><td style="width:20px; height:20px; text-align:center">A</td><td style="width:20px; height:20px; text-align:center">E</td></tr></table>	E	A	E	<table border="1" style="display:inline-table; border-collapse: collapse;"><tr><td style="width:20px; height:20px; text-align:center">0</td><td style="width:20px; height:20px; text-align:center">0</td><td style="width:20px; height:20px; text-align:center">0</td><td style="width:20px; height:20px; text-align:center">1</td></tr></table>	0	0	0	1	\$ 35.00	
E	A	E								
0	0	0	1							

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) FEE TYPE CODE	(B) FEE MULTIPLE (if required)	(C) FEE DUE FOR FEE TYPE CODE IN COLUMN (A)	FOR FCC USE ONLY							
(2) <table border="1" style="display:inline-table; border-collapse: collapse;"><tr><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td></tr></table>				<table border="1" style="display:inline-table; border-collapse: collapse;"><tr><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td></tr></table>					\$	
(3) <table border="1" style="display:inline-table; border-collapse: collapse;"><tr><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td></tr></table>				<table border="1" style="display:inline-table; border-collapse: collapse;"><tr><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td></tr></table>					\$	
(4) <table border="1" style="display:inline-table; border-collapse: collapse;"><tr><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td></tr></table>				<table border="1" style="display:inline-table; border-collapse: collapse;"><tr><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td></tr></table>					\$	
(5) <table border="1" style="display:inline-table; border-collapse: collapse;"><tr><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td></tr></table>				<table border="1" style="display:inline-table; border-collapse: collapse;"><tr><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td></tr></table>					\$	

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	