ATTN: Joshua Wurman; 100 E. Boyd Street, #1422; Norman, OK 73019

United States of America

FEDERAL COMMUNICATIONS COMMISSION

EXPERIMENTAL

SPECIAL TEMPORARY AUTHORIZATION

EXPERIMENTAL
(Nature of Service)

WA2XNA
(Call Sign)

XC MO
(Class of station)

S-3113-EX-97
(File number)

NAME UNIVERSITY OF OKLAHOMA - SCHOOL OF METEOROLOGY

along west coast in California, Oregon, and Washington
(Location of station)

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

Frequency (MHz)	Authorized Power (ERP)	Emission Designator
9360	250 kW	2M00P0N
9380	250 kW	2M00P0N

Purpose of Operation: Use of radar for meteorological studies including El Nino, CALJET, and Marine Boundary Layer.

Special Conditions: In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.

The station identification requirements of Section 5.152 of the Commission's Rules are waived.

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 January 20, 1998 and will expire 3:00 A.M. EST. July 20, 1998

S-3113-EX-97

The University of Oklahoma

SCHOOL OF METEOROLOGY

& S-2988-97

03 November 1997

Federal Communications Commission
Experimental Licensing Branch, Suite 230
200 M Street NW
Washington, DC 20554

WI2XNA

Dear Sirs:

This letter is a request for a Special Temporary Authority for two mobile weather radar systems. We have submitted FCC Form 442 (file number 5802-EX-PL-97, received 24 June 1997), but it has not yet been fully processed. We would like to test our radars this winter and conduct field experiments starting in January 1998.

1. Testing and Calibration: In support of the programs described below in items 2-4.

   We request authorization to transmit at 9.360 and 9.380 GHz at 250 kW peak power with 250 W mean power at varying locations in the Oklahoma, Kansas, Colorado, Arizona, and Texas region during the period 01 December 1997 - 30 October 1998 for the purposes of testing and calibration. Our weather radar systems are described in form 442, including the use of ~40dB gain antennas (~1° beamwidth) with maximum heights above the ground < 6 meters.

2. Coastal Marine Research Program: In support of the Office of Naval Research grant N000 14-96-1-1112, Observations and Modeling of the Marine Boundary Layer, CALJET and El Niño studies.

   starting 1-18-98

   We request authorization to transmit from the same systems as above at various locations along the US west coast in California, Oregon, and Washington.

   The purpose of this activity is to observe landfalling and coastal weather systems, the marine boundary layer, and El Niño associated phenomena.

   appr'd 1-20-98 HFW

3. Tornado structure study: In support of National Science Foundation grants NSF-ATM-9703032 and NSF-ATM-9616417.

   We request authorization to transmit from the same systems as above at various locations in the mid-western US including Oklahoma, Texas, New Mexico, Kansas, Nebraska, Iowa, South Dakota, Colorado, and Wyoming, from 01 April - 30 June 1998.

   The purpose of this activity is to study the structure and formation process of tornadoes, convective storm initiation, and the boundary layer.

Energy Center, 100 East Boyd, Room 1310, Norman, Oklahoma 73019-0470 PHONE: (405) 325-6561 FAX: (405) 325-7689

4. Hurricane Study: In support of a pending grant from the National Science Foundation.

We request authorization to transmit from the same systems as above at various locations in the Southeastern and Gulf States (Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, and Texas) from 15 August - 30 October 1998.

The purpose of this activity is to observe landfalling hurricanes.

The radars are tunable within the 9.3-9.4 GHz range (and beyond). If 9.360 GHz and 9.380 GHz are problematical, we could operate in nearby frequency bands.

If any further information is needed, please contact me at 405-325-0589 or jwurman@ou.edu

Thank you for considering this request.

Josh Wurman

Joshua Wurman
Manager, Doppler On Wheels Program
School of Meteorology,
University of Oklahoma
100 E. Boyd Street #1422
Norman, OK 73019

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jwurman@ou.edu

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF ENGINEERING AND TECHNOLOGY

2000 M STREET, N.W., SUITE 230
WASHINGTON, D.C. 20554

January 20, 1998 2 38 pm

FROM: **Carl Huie**

Telephone: **(202) 418-2430**
Fax #: **(202) 418-1918**

TO:

Name: Josh Wurman
Organization: UNIVERSITY OF OKLAHOMA
Telephone: (408) 646-8300 rm 307
Fax #: (408) 646-8130

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COMMENTS:

Authorization in mail.