

UNIVERSITY OF MICHIGAN

COLLEGE OF ENGINEERING ATMOSPHERIC, OCEANIC AND SPACE SCIENCES

SPACE RESEARCH BUILDING 2455 HAYWARD ANN ARBOR, MICHIGAN 48109-2143 TELEPHONE: 734 764-3335 FAX: 734 764-4585



Mr. Douglas Young Federal Communications Commission Experimental Licensing Branch 2000 M St., Suite 230 Washington DC 20554

Feb. 22, 2000

Dear Mr. Young,

The University of Michigan, Dept. of Atmospheric, Oceanic and Space Science, requests temporary permission to operate our four-frequency Doppler radar system to measure lake surface currents along the shore of Lake Michigan near St. Joseph MI and Benton Harbor MI (on the southeast shore of the lake). We request permission to operate over the period Feb. 28 to April 15, 2000. This radar system has operated successfully with no interference at Santa Cruz and Moss Landing CA as well as near Virginia Beach VA in 1997 under the call sign WA2 XEJ. In March and April of last year we operated our radar at St. Joseph MI in the same manner we are requesting here without interference (a copy of the license is attached). We are participating in a multi-agency field experiment jointly funded by NOAA and NSF (Larry Clark is the scientific officer). The project is called EEGLE (Episodic Events: Great Lakes Experiment) and I have included a short note on the experiment.

We are working with the city manager, water works manager and parks manager of the City of St. Joseph to insure the we do not interfere either by way of radio or physically with normal activities in the city. We have identified radar sites at the water works, a city park and on the Whirlpool Headquarters site for the radars. No other HF radars are scheduled to operate in the EEGLE experiment.

The University of Michigan radar system, for which we are requesting permission to operate in this letter, consists of two stations about 10 km apart. We plan to operate from a shore line site at the St. Joseph Water Works (Mike O'Malley, supervisor) or from a bluff site at a city park. The second radar would operate from the Whirlpool Corp. Headquarters site (Robert Deaton, Global Manager of Construction and Workplace Design) just north of Benton Harbor MI. The radar transmits with quarter wavelength vertical antennas and receives with an array of eight small loop antennas stretching over about 50 meters. For this experiment we request permission to use the following operating characteristics:

Peak Power - Watts ERP	Emission Designator
500	100KPON
500	100KPON
500	100KPON
	Watts ERP 500 500 500

Please advise us as soon as possible about granting a special temporary authorization to operate this radar system in the area and during the time described above. A FAX of the license to the number below would be most helpful. If you have questions, I can be reached at 734-764-5151 (5137 FAX) or by email at jfv@engin.umich.edu.

Many thanks for your help with the successful Chesapeake Bay experiment in 1997 and the EEGLE operations last spring. We reported last year's results at both the EEGLE All Hands Meeting in Minneapolis and the AGU Ocean Sciences Meeting in New Orleans a few weeks ago.

Yours sincerely,

Prof. John F. Vesecky Principal Investigator

John F. Veseday

HF Radar Program