

Sooners talk a lot about the weather, but they also do something about it.

Keeping an eye on the weather in Oklahoma is always a good idea, but developments in the weather business on the North Campus of the University of Oklahoma merit more than just seasonal attention to wind and rain or the absence thereof.

In December the federal government announced plans to move the National Weather Service's Oklahoma City forecast center to Norman to become part of a weather center which has been developing quietly on the North Campus for a number of years. When all the anticipated governmental agencies and private-sector enterprises are in place, Oklahoma's resources in the study, research, training and instrumentation related to the weather will be unsurpassed anywhere.

Already affiliated with the weather center are the OU School of Meteorology, now a division of the new College of Geosciences; the National Severe Storms Laboratory (NSSL); the Interim Operational Test Facility (IOTF) from the NEXRAD (Next Generation Radar) program; the National Weather Service Forecast Office; the Oklahoma Climatological Survey; the National Oceanic and Atmospheric Administration (NOAA); the Cooperative Institute for Mesoscale Meteorological Studies (CIMMS); and other private-sector meteorologists in central Oklahoma.

Frank Stehli, dean of the College of Geosciences, calls this combination "quite a powerhouse in meteorology," and he is convinced that this center of strength will attract other components to the weather center.

Already meteorologists throughout the country have come to realize that if their research interests involve severe storms, Norman, Oklahoma, is the place to be. Oklahoma came equipped with the world's greatest weather laboratory at no cost to the taxpayer. Endowed by nature with an excessive amount of severe storms, the Sooner state is a meteorologist's paradise. That weather-conscious Oklahomans would go into the busi-

ness in a big way was inevitable.

Attracted both by nature's laboratory and by the University's meteorology program, the NSSL set up shop on the North Campus in the 1960s with Edwin Kessler as its director. The OU/NSSL relationship has been exceedingly profitable with NSSL scientists and engineers serving as adjunct professors and active participants in the graduate programs in meteorology, physics and electrical engineering and computer science, while giving OU students and faculty a supporting role in dramatic developments in severe storms detection and forecasting and lightning and hail research.

The revolutionary new Doppler radar, which enables scientists literally to look inside storms and make measurements of the precipitation, wind speeds, etc., was developed and tested by NSSL, and many of the OU students who witnessed this breakthrough eventually will be operating Dopplers in forecasting offices throughout the country.

Ready to deal with the societal impact of meteorological studies is the Oklahoma Climatological Survey, founded in 1977 under the direction of OU's Amos Eddy. Last year the OCS became a statutory state agency with external grants totaling \$750,000 to conduct research on the economic impact of climate, weather modification and climate services for developing countries.

More important to Oklahoma, however, is OCS's potential for service to the public and private sectors in climatological planning. For example, when meteorologists using Dopplers can predict the exact amount of precipitation in a given storm system, OCS can advise emptying the appropriate amount of water from reservoirs by generating extra electrical power, making room for the expected rainfall which would otherwise be wasted in runoff.

An important link between NSSL and the University is provided by the CIMMS, a joint OU/NOAA project. CIMMS, directed by George Lynn Cross Research Professor of Meteorology Yoshi K. Saski, currently has \$1 million in grants to support re-

search in severe storms and numerical modeling.

The IOTF, recently established on the North Campus, is expected to be designated a permanent facility in that location for the purpose of developing computer graphics and other techniques to improve the operational use of Doppler radar in the Next Generation Radar project. IOTF is headed by former NSSL scientist Ken Wilk.

The relocation of the National Weather Service Office as part of the weather center will bring together the forecaster with the researcher through improved communication to advance warning capabilities, implement new weather technology, eliminate costly duplication of effort and instrumentation by sharing resources and speed the transition from laboratory to operational use.

Ken Crawford, who earned his Ph.D. at OU, is uniquely qualified to manage this new operation of the National Weather Service. As the meteorologist-in-charge, he has guided the Oklahoma City office through a portion of the Joint Doppler Radar Project, secured funding for the first technology-transfer meteorologist in the National Weather Service, and using NSSL technology, drastically improved tornado and severe storm warnings for Oklahoma.

OU President William S. Banowsky, in acknowledging a recent tribute to the Oklahoma Meteorological Industry from the Oklahoma City News Broadcasters Association, Inc., cited the development of an international weather center on the North Campus as a graphic illustration of what can be accomplished through a public/private partnership.

"While states everywhere are scrambling to compete for the scientific and technological plums that survive where traditional industries perish," Banowsky said, "Oklahoma has achieved — almost without realizing it — a preeminent position in a highly specialized field that affects every person on earth every day of their lives."

Who would have imagined that Oklahoma's preoccupation with its troublesome turbulence would have such a payoff.