STRATEGIC DIRECTIONS FOR WSR-88D DOPPLER WEATHER SURVEILLANCE RADAR IN THE PERIOD 2007-2025

Abstract for presentation at the
31st International Conference on Radar Meteorology
6-12 August 2003, Seattle, Washington

In Spring 2002, the NEXRAD stakeholder agencies requested that the NEXRAD Technical Advisory Committee (TAC) develop a strategic plan for the long-term evolution of the total NEXRAD system. The plan would address both the WSR-88D system and the national radar network, and describe possible enhancements for the 2007-2020 timeframe. The intent is to guide the evolution of the radar through the final 15 to 20 years of its design life cycle, taking advantage of new technologies as they become available.

A select group of 25 weather radar experts was solicited to provide short discussions of the emphases they believe development of the NEXRAD Program should have for the period 2007-2020. In providing their comments, these experts were asked to consider both enhancements and upgrades to the WSR-88D system, and broader strategies for the national network as a whole. The responses were analyzed by members of the TAC and synthesized into a series of points. TAC members also incorporated their own perspectives in preparing this paper.

This paper is a continually evolving document that provides possible “strategic directions” for the radar and the national network. The presentation will present and discuss the synthesis of the TAC, and suggest areas where additional research and new technology development is needed to realize the potential inherent in the NEXRAD system.

Authors:
John T. Snow
Chair, NEXRAD Technical Advisory Committee
Dean, College of Geosciences
The University of Oklahoma
Sarkeys Energy Center, Suite 710
100 East Boyd Street
Norman, Oklahoma 73019-0628
E-mail: jsnow@ou.edu

Rhonda Scott
Executive Secretary (Acting), NEXRAD Technical Advisory Committee
Radar Operations Center
Applications Branch
1200 Westheimer Drive
Norman, OK 73069
Email: rhonda.b.scott@noaa.gov