UCAR Membership Committee Review of the New Application of the
University of Northern Colorado

On behalf of the UCAR Membership Committee, Ken Bowman and Tom Bogdan submit for your consideration the University of Northern Colorado’s application for membership to the University Corporation for Atmospheric Research (UCAR). We visited the University of Northern Colorado (UNC) in Greeley, CO, on June 10. The visit was enjoyable and informative. We met with the dean (Dr. Ellen Gregg), department head (Dr. William Hoyt), meteorology faculty (Drs. Wendilyn Flynn and David Lerach), and several meteorology students; and we toured the meteorology facilities.

Program of Studies and Research

The meteorology program at UNC is focused on undergraduate education. It is located in the Department of Earth and Atmospheric Sciences, which is in the College of Natural and Health Sciences. The program offers B.S. and M.A. degrees in Earth Sciences with emphases in Meteorology.

The core meteorology faculty consists of one associate and two assistant professors. One professor (Dr. Cindy Shellito) is currently teaching and studying abroad as a Fulbright Scholar. Other Earth Science faculty members teach courses in related fields (e.g., hydrology and oceanography) that are offered as electives for students in the meteorology program.

The undergraduate curriculum at UNC meets the recommendations of the American Meteorological Society (AMS), the National Weather Association (NWA), and the U.S. Air Force ROTC program. Of the 120 credit hours required for a B.S. degree, students take 34 hours of mathematics, physics, chemistry, statistics, and computer science, and 38 hours of meteorology and closely related subjects. Faculty members are actively updating the curriculum to ensure continued relevance.

In recent years graduating students have joined the Air Force, the National Weather Service, and private companies as forecasters. Some students have continued on to graduate school. There is an active student chapter of the American Meteorological Society.

Over the last eight years enrollment in the meteorology emphasis has ranged from 20 to 54 students, while the number of degrees awarded per year has ranged from 4 to 12.

Teaching facilities include a "smart" classroom and a computer lab with relevant data and software systems (LDM, GEMPAK, IDV, WRF, and NCL). Plans are currently underway to upgrade both the teaching and research computing facilities.
All of the meteorology faculty members have active research programs, which is notable because of their heavy teaching loads. Research activities fall broadly into the areas of climate, paleoclimate, and mesoscale meteorology. In addition, Dr. Steve Anderson, Director of the UNC Math and Science Institute (MAST) has collaborated with UCAR on a NASA Research Experiences for Teachers Institute (RETI). There are a few active research grants in the program, and the newer faculty members are developing and submitting research proposals to national agencies.

The faculty of the UNC meteorology program are working energetically to improve their undergraduate educational program and to develop funded research that will involve both undergraduate and graduate students.

**Recommendation and Assessment of the Evaluation Committee**

In summary, we find that UNC meets the UCAR membership criteria. They have an active program of study and research in the atmospheric sciences. They are contributing to progress in the atmospheric sciences through their research and scholarship. And they have participated in UCAR activities in the past and plan to expand that participation in the future.