

AMS Short Course on Aviation Weather – A User and Provider Perspective
Sunday, January 6, 2013, Austin, TX

The AMS Short Course on Aviation Weather – A User and Provider Perspective will be held on January 6, 2013, preceding the 93rd AMS Annual Meeting in Austin, Texas. Preliminary programs, registration, hotel, and general information will be posted on the AMS Web site (www.ametsoc.org <http://www.ametsoc.org/>) in mid-September 2012.

Aviation touches nearly every part of our daily lives and the economy both domestically and abroad; and the aviation community makes thousands of safety-dependent decisions each day, nearly all of them impacted by weather. The meteorological enterprise--government, academic and commercial sectors--supports air transportation, including commercial passenger flights, cargo, law enforcement, medical evacuation, crop dusting, oil exploration, military, and a vast array of other operations. These operations and others benefit from improved forecasts and advisories; improved interaction and understanding between the operators and weather providers; and from any technological or social advancement which provides more reliable, timely, and accurate weather information.

This course will provide the participants an opportunity to gain both a pilot's and meteorologist's perspective about operational aviation weather decision making during all phases of flight to include pre-flight, ground operations, enroute and landing. It will show how weather data are sensed and gathered; how the data are converted into information which is then used by computers and how meteorologists add value to it; and finally, how the weather information is made relevant to pilots, air traffic controllers, flight dispatchers and other users such as airport authorities. This course will also highlight the types of weather which have the greatest impact on the safe and efficient operation of the National Airspace System and allow a glimpse at how these weather situations are handled by the broad aviation community. It will also provide an overview of technological advancements, promising new research, discuss the increasing role of social media, and preview the growing importance of work by social scientists to enhance the understanding of weather information by all aviation weather users. The instructors will direct the audience to sessions within the AMS conference which may provide more detailed information on specific areas of interest.

The course is aimed at both the pilot and professional aviation forecasting communities; other users and providers of weather information (e.g. air traffic controllers and flight dispatchers); students interested in broadening their perspective and awareness in aviation meteorology; teachers and broadcast meteorologist who seek a better understanding of aviation operational considerations and the impact of forecasts and warnings on aviation operations. It may also be of interest and offer valuable insights to the public which relies on a safe and efficient aviation system.

The goal is to provide the participants with a fundamental understanding of the cradle to grave pathway of weather data and information which is critical to pilots' decisions. It will also provide the perspectives of both forecasters and aviation weather researchers. They will give an overview of the current state-of-the-art forecast process; a view of how weather information will be enhanced in the future through improved forecasts and delivery methods; and the involvement of

social scientists and training. All of this is aimed at creating better operational decision making now and in the future. To facilitate this, the course will include a brief exercise/case study to illustrate a real world example of how weather and the decisions based on this weather led to a fatal outcome. It will then be followed by a discussion on how advanced technology, improved training with social science involvement, and/or improved forecasts might have led to a better outcome for the chosen scenario.

The course format consists of four, 45-minute segments with presentations, lectures and discussion followed by a 30 minute case study and practical exercise. The total time will be four hours.

The instructors for the course are:

Dr. Bruce Carmichael – Director of the Aviation Applications Program at NCAR

Dr. John Lanicci – Professor, Applied Meteorology Program, ERAU

Dr. “Chip” West – NWS Meteorologist in Charge, CWSU ATL

Warren Qualley – Senior Weather Expert Harris Corporation

Pat Murphy – NWS Warning Coordination Meteorologist, Aviation Weather Center

Jody James – NWS Warning Coordination Meteorologist, Lubbock, TX

Jon Cunningham - Mosaic ATM, Inc

CAPT Barry Choy – NWS Chief Science Officer, NCEP

Aviation Community Representatives

Refreshments will be available during the break.

For more information please contact CAPT Barry Choy (barry.choy@noaa.gov) at the National Centers for Environmental Prediction, 5830 University Research Court, Suite 4600 (W/NP), College Park, MD 20740, Ph. 301-683-1324, Cell 202-286-2940.