



“For significant improvement to weather support for the space program, resulting in safer, less expensive, and more efficient launch, landing, and ground processing operations.”

The KSC Weather Office Team provides products and services to the space program to reduce cost, risk and delay through improved weather support. Substantial improvements have been made to instrumentation, launch commit criteria, forecasting techniques, concepts of operation and other aspects of weather support. The team is comprised of NASA personnel from the Weather Office and support contractor personnel from ENSCO, Inc. and British Aerospace Engineering Systems.

The Weather Office provides NASA-wide staff meteorology support to the Shuttle, Constellation, and expendable launch vehicle programs. It serves as staff meteorologist to KSC and supports Department of Defense operations. Directly and through its contractors the Weather Office conducts applied research and development and transitions the resulting technology to operations. The contractors operate and maintain specialized weather instrumentation for maintaining the safety of spaceflight operations.

The quality of Weather Office output is demonstrated by its use as an integral part of operational support and its publication in peer-reviewed journals and conference papers. Operational use shows its immediate value to NASA while publication shows its technical soundness and value to a wider professional audience. In the past five years, the Weather Office team published 11 peer-reviewed journal articles, and presented 29 professional conference papers. Many of these describe products that have improved weather forecasting accuracy and timeliness for spaceflight operations. Others describe revised launch commit criteria that increased safety and reduced launch delays. Acceptance of so many papers by peer-reviewed journals from an organization with its focus on operations rather than research shows the innovative nature of the work being done. A major evaluation criterion for journal referees is whether the submitted work is an original and innovative contribution. The Office encourages its members to develop and grow their ability for such innovative work through continuing education and participation in professional conferences.

The Office is widely respected for its expertise, and for its ability to bring that expertise effectively to bear on short notice with limited resources. For example, a tool developed to assess visibility requirements established by the Columbia Accident Investigation Board needed to be modified at the last minute to support a new configuration of cameras for tracking STS-127. The modifications were delivered with time to spare and no additional funding was required. Customer satisfaction is demonstrated by many customer-initiated awards. NASA-initiated awards include Space Act Awards for new technology developments, Group Achievement Awards for particular projects, KSC Center Director’s “Silver Dollar” awards for specific outstanding achievements, and more. Awards from the US Air Force and the National Weather Association were received based on nominations from the 45th Weather Squadron, a primary user of the products delivered by the team.

The Weather Office team is routinely asked to join “tiger teams”, integrated product teams, and working groups by NASA programs, the Air Force and other organizations because of its experience, expertise and track record of productivity. These same qualities justify NASA recognition of this outstanding organization’s accomplishments through this Group Achievement Award.



Back Row: Bill Bauman, Joe Barrett (ENSCO/AMU), Frank Merceret (KSC), Gavin Oglesby (BAE), William Gober (BAE)
 Front Row: John Madura (KSC), Mark Wheeler, Winnie Crawford (ENSCO/AMU), Jennifer Wilson (KSC), Leela Watson (ENSCO/AMU), Michael Farrell (BAE)