

**Abstract submitted 9 January 2004 for the 41st Space Congress, Session 1B,  
Technology Solutions Delivered to Operational Space Programs**

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**A Decade of Weather Technology Delivered to America's Space Program by the  
Applied Meteorology Unit**

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The Applied Meteorology Unit (AMU) is a unique joint venture of NASA, the Air Force and the National Weather Service. The AMU develops, evaluates and transitions new technology and techniques to improve weather support to spaceport operations at the Eastern Range and Kennedy Space Center. Its primary customers are the 45th Weather Squadron at Cape Canaveral Air Force Station, the Spaceflight Meteorology Group at Johnson Space Center, and the National Weather Service Office in Melbourne, FL. Its products are used to support NASA's Shuttle and ELV programs as well as Department of Defense and commercial launches from the Eastern Range. Shuttle support includes landing sites beyond the Eastern Range.

This paper will first present a brief overview of the AMU and how it is tasked by its customers to provide high priority products and services. The balance of the paper will present a sampling of products delivered over the last ten years that are currently in operational use. Each example will describe the problem to be solved, the solution provided, and the operational benefits of implementing that solution.