G-AIRMET Elements

- Ceiling < 1000 feet
- Visibility < 3 miles
- Mountain Obscuration
- Moderate Icing
- Freezing Levels
- Surface Winds >30 knots
- Moderate Turbulence
- Low-Level Wind Shear

G-AIRMET Benefits

- A *primary* and *unrestricted* weather product that can be used for decision making
- Depicts hazardous weather areas more accurately in time and space
- Better understood through the use of intuitive, interactive and selectable graphics
- Updated twice as often as text-based AIRMETs

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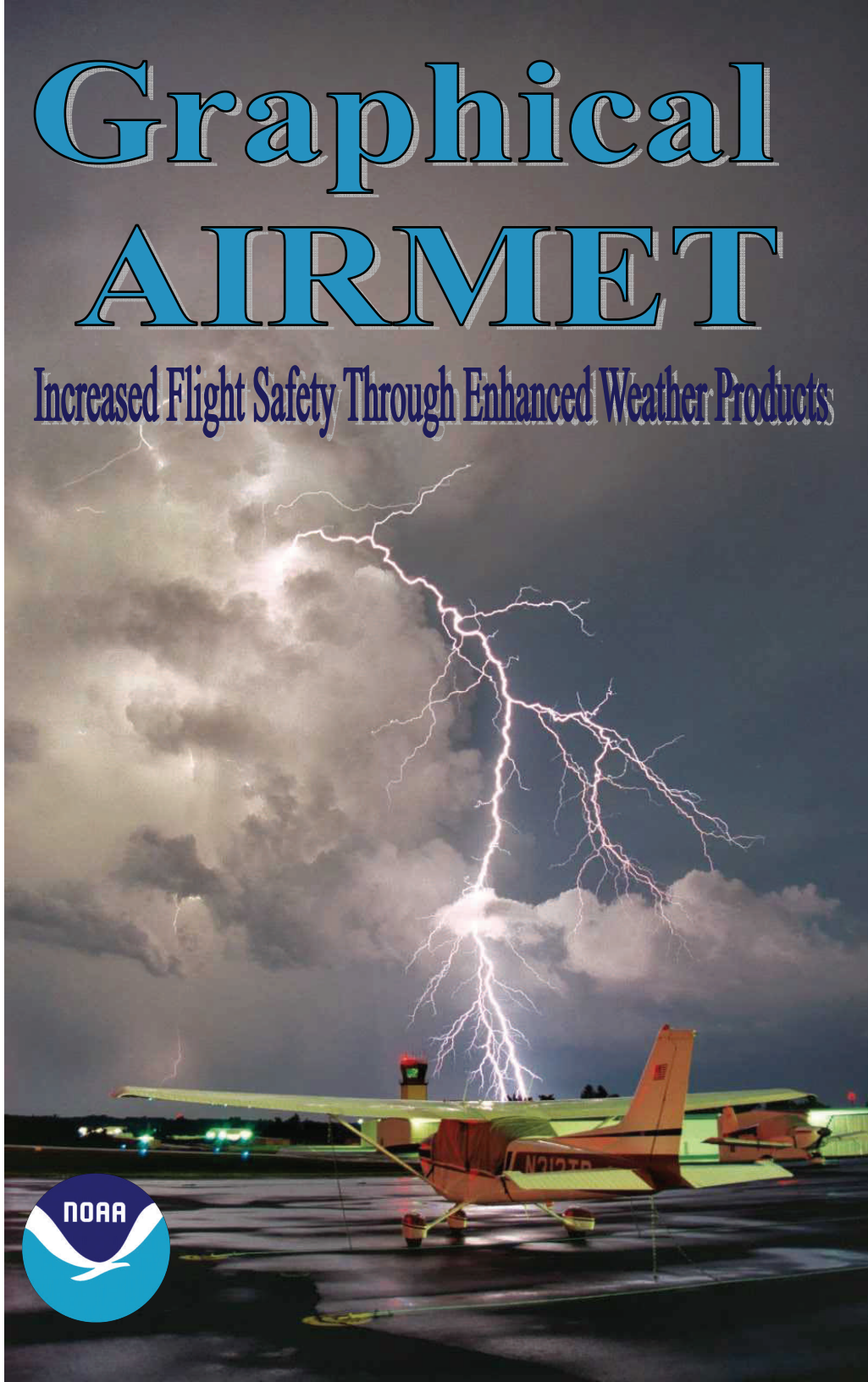
Cover photo courtesy of Kevin Orr

July 2008

Graphical AIRMET

Increased Flight Safety Through Enhanced Weather Products



G-AIRMET

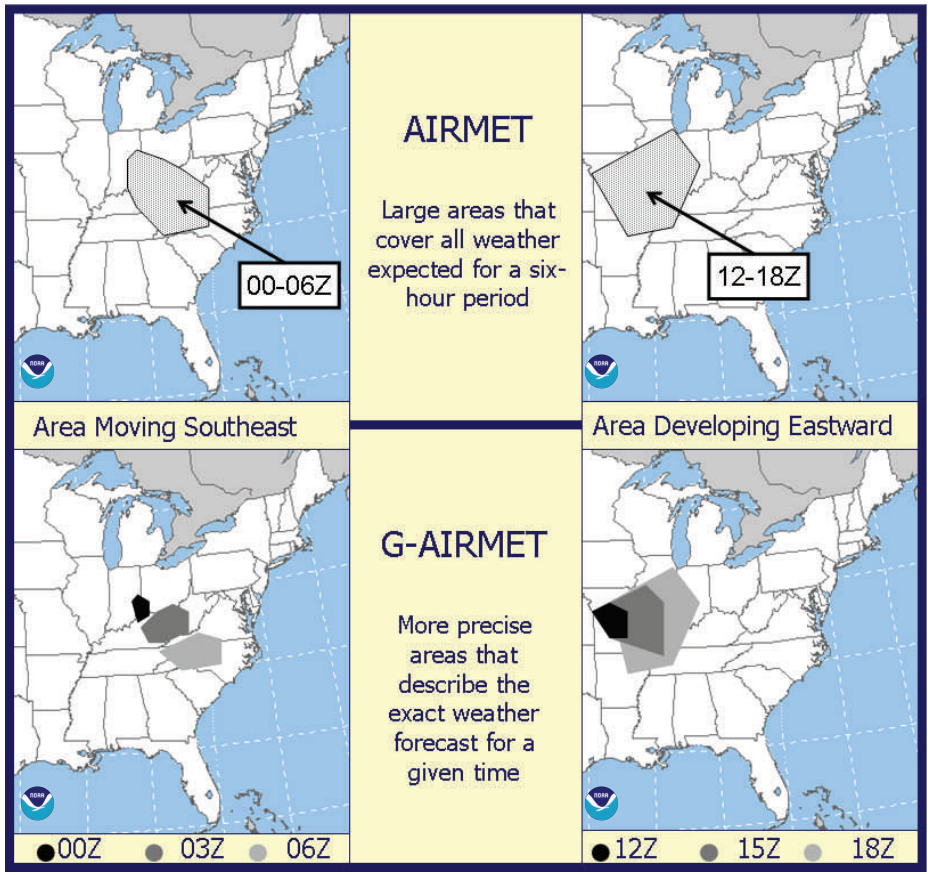
More Precision = Better Decisions

The new Graphical-AIRMET product, known as the "G-AIRMET," is a decision-making tool based on weather "snapshots" updated at quicker time intervals. The G-AIRMET identifies hazardous weather in space and time more precisely than text products can, enabling pilots to maintain high safety margins while flying more efficient routes.

At NOAA, our goal is to maximize aviation safety and air space efficiency by providing the most accurate and timely weather information possible to enhance both pre-flight and in-flight decision making. For decades, NOAA has issued text-based AIRMETs (Airmen's Meteorological Information) that have provided broad-scale descriptions of hazardous weather. Often referred to as a time "smear", the text-based AIRMET requires meteorologists to describe hazardous weather over large geographical areas for six-hour periods. G-AIRMET will provide more precise, and informative weather hazard depictions than the text only AIRMET.

Aviation weather users have found that pictures are worth a thousand contractions. G-AIRMETs provides a better path from the aviation meteorologist to the weather user, by providing precise, interactive and easy to understand graphical displays. Meteorologists can now put their energy into creating and updating G-AIRMET weather graphics, while the traditional text AIRMETs are generated from, and totally consistent with, G-AIRMET information.

Photo courtesy of JPDO



The two weather scenarios above compare the depiction of the current text-based AIRMET and the new G-AIRMET.

For more information go to http://aviationweather.gov/testbed/g-airmet

The scenario on the left shows an area of weather moving rapidly from southwestern Ohio to western North Carolina, while slowly growing. The depiction of text-based AIRMET (top-left) encompasses or smears the entire region for the full six-hour forecast period. However, the G-AIRMET (bottom-left) is able to depict the precise position, size, and shape of the hazard area at three distinct times within the six-hour period.

The scenario on the right shows an area of weather developing from central