

***NATIONAL WEATHER SERVICE
PRODUCT/SERVICE DESCRIPTION DOCUMENT (PDD)
TYPE: Official Product
DATE: April 24, 2003***

AVIATION AREA FORECAST (FA) (BULLETIN IDENTIFIER - FA) DRAFT 1.0

Part 1 - Mission Connection

1. Product/Service Description:

Aviation Area Forecasts (FAs) describe in abbreviated language the development and occurrence or expected occurrence in time and space of specified en-route weather phenomena below Flight Level (FL) 45,000 ft (450). The FA is a forecast of visual meteorological conditions (VMC), clouds, and general weather conditions over an area the size of several states. In Alaska, the FA also includes forecasts of Instrument Flight Rule (IFR) conditions as well as other AIRMET and SIGMET information on thunderstorms, wind, icing and turbulence. Over CONUS and Hawaii, the FA must be used in conjunction with the in-flight aviation weather advisories to understand the complete weather picture. Together, they are used to determine forecast en-route weather and to interpolate conditions at airports for which no Terminal Area Forecasts (TAFs) are issued.

2. Purpose/Intended Use:

FAs are intended for dissemination to all pilots to enhance safety. They are issued in support of Federal Aviation Administration (FAA) air traffic controllers and the National Airspace System (NAS).

3. Audience:

The target audience for the product includes: general and commercial aviation, military and government agencies.

4. Presentation Format:

NWS disseminates the FA in text, bulletin format using approved ICAO contractions. Text and graphical FAs are also available from the Aviation Weather Center (AWC) website at <http://aviationweather.gov/> and the Alaska Aviation Weather Unit (AAWU) website at <http://aawu.arh.noaa.gov/>. Text FAs for Hawaii are available from the Honolulu Forecast Office website at <http://www.prh.noaa.gov/pr/hnl/>.

5. Feedback Method:

The National Weather Service (NWS) is constantly seeking to improve its products based on user feedback. Customers can provide continuous feedback through the National Centers for Environmental Prediction Aviation Weather Center (AWC) Webmaster via <http://aviationweather.gov>, the Alaska Aviation Weather Unit (AAWU) Webmaster at <http://aawu.arh.noaa.gov/>, and through the Honolulu Forecast Office Webmaster at <http://www.prh.noaa.gov/pr/hnl/>. Customers may also contact the Aviation Weather Services Branch, National Weather Service Headquarters (NWSH) via the e-mail link below. The AWC, AAWU, Honolulu Forecast Office, and the NWSH also obtain feedback the e-mail

link (below) to the Aviation Weather Services Branch, National Weather Service Headquarters (NWSH).

Technical and policy questions, and comments regarding FAs may be addressed to:

National Weather Service
Attn: Richard Stone W/OS23
Aviation Weather Services Program Manager
1325 East-West Highway
Silver Spring, MD 20910
e-mail: Richard.Stone@noaa.gov.

Part 2 - Technical

1. Format and Science Basis:

The FA consists of a:

- a. A 12 hour forecast plus a 6 hour outlook. In Alaska the outlook is 18 hours. All times are Coordinated Universal Time (UTC). All distances except visibility are in nautical miles. Visibility is in statute miles. The FA covers conditions between the surface and 45,000 feet (FL450).
- b. A synopsis section, which is a brief summary of the location and movement of fronts, pressure system, and circulation, patterns for an 18-hour period.
- c. CONUS and Hawaii). A VFR clouds and weather section, which is a 12 hour forecast, in broad terms, of clouds and weather significant to flight operations plus a 6 hour categorical outlook. This section is usually several paragraphs. AIRMET Sierra supplies information regarding Instrument Flight Rule (IFR) conditions. The breakdown may be by states, by well-known geographical areas, or in reference to location and movement of a pressure system or front. A categorical outlook, identified by OTLK, is included for each area breakdown.
- d. (Alaska) Each aviation zone includes; a clouds and weather section, which is a 12 hour forecast, in broad terms, of clouds and weather significant to flight operations plus a 18 hour categorical outlook; a mountain pass section (in selected zones); a turbulence section; and an icing and freezing level section. Each aviation zone contains relevant AIRMET and SIGMET information.

Examples of FA format may be found on the Aviation Weather Center website at <http://aviationweather.gov/awc/awc-fa.html>. Examples of the Alaska FA Format may be found on the AAWU website at <http://aawu.arh.noaa.gov/areaforecasts.php>. Examples of the Hawaii FA Format are available at <http://www.prh.noaa.gov/pr/hnl/>.

2. Availability:

Customers can receive the product via the Internet, NOAAPORT, and the WAFS and SADIS Satellite Distribution Networks. Additional information on NWS aviation product dissemination is available at: <http://weather.gov/om/disemsys.shtml>.

- a. The CONUS FAs (FAUSs) are produced three times daily for each of two areas. The following are issuance times for FAUSs (NOTE: All times are Universal Time Coordinated (UTC) and are based on U.S. Standard Time; subtract one hour to all issuance times for U.S. Daylight Savings Time): BOS/MIA - 0145/0945/1845; CHI/DFW - 0245/1045/1945; and SLC/SFO - 0345/1145/2045.
- b. The Gulf of Mexico FA (FAGX) are valid for 12 hours with a 12 hour extended outlook, are produced twice daily at 1030 and 1830 UTC.
- c. The Caribbean FA (FACA) is produced four times daily at 0330, 0930, 1530, and 2130 UTC.
- d. The Alaskan FAs are produced four times daily at 0245, 0845, 1445, and 2045 UTC during standard time and 0145, 0745, 1345, and 1945 UTC during daylight time.
- e. Hawaii FAs are produced four times daily at 0340, 0940, 1540, and 2140 UTC.

3. Additional Information:

A description of FA policy, area of responsibility, abbreviations and definitions, standards and guidelines, and methods of product dissemination are located in NWS Instruction 10-810 and 10-811 which is available via the Internet at

http://www.nws.noaa.gov/directives/010/operation_services.htm.