Regional Performance Objective
MET

LUIS SANCHEZ
REGIONAL OFFICER
AERONAUTICAL METEOROLOGY AND ENVIRONMENT

State National Air Navigation Plan (ANP) Development Workshop & First
NAM/CAR Air Navigation Implementation Working Group (ANI/WG) Aviation
System Block Upgrades (ASBU) Task Force (TF) Meeting (ASBU/TF/1)
Mexico City, Mexico, March 12-15, 2018
ASBU – Block 0-AMET

- WAFS
- IAVW
- Tropical cyclone watch
- Aerodrome warnings
- Wind shear warnings and alerts
- SIGMET and OPMET
provide aeronautical meteorological en-route forecasts in uniform standardized formats:
(global gridded forecasts of upper wind, upper-air temperature and humidity, geopotential altitude of flight levels, flight level and temperature of tropopause, direction, speed and flight level of maximum wind, cumulonimbus clouds, icing, and clear-air and in-cloud turbulence)

issued 4-times per day, with fixed time validity T+0 to T+36 at 3-hour time-steps

global forecasts of significant weather (SIGWX) phenomena in binary code form / issued 4-times per day, with validity at T+24.
Welcome to WIFS

The World Area Forecast System (WAFS) Internet File Service (WIFS) is provided by the United States National Weather Service (NWS) Aviation Weather Center (AWC) as a highly reliable Internet source of meteorological products. The purpose of WIFS is to provide timely delivery of critical aviation-related weather information to support air traffic management and flight operations in over 80 countries, and regional meteorological telecommunications between the United States and nations in the Caribbean and Central America. This service is available to all authorized customers. Once the FAA approves a user state to access the WIFS system, the AWC will issue a user name and password which will be required to access the data. The International Civil Aviation Organization (ICAO), in Amendment 75 to Annex 3, recognizes the use of the Internet to access aviation weather data in support of flight planning. The WIFS provides this capability and serves an important function backing up the International Satellite Communications System (ISCS). The FAA plans to discontinue the satellite service in June of 2012. The WIFS will become the primary service at that time.

Access to the WIFS data requires a user name and password.

Click Here to Register

View Frequently Asked Questions (FAQ)

Return to Aviation Weather Center
Monitor and provide advisories to MWOs and aircraft operators of volcanic ash in the atmosphere.

Advisories support the issuance of SIGMET on these events by the respective MWOs.

Advisory information on volcanic ash is prepared by VAACs (nine designated VAACs – CAR Washington).

VAAC Responds to a notification that a volcano has erupted, or is expected to erupt or volcanic ash is reported in its area of responsibility.

Based on the cooperation of aviation and non-aviation operational units using information derived from observing sources and networks.

ICAO recognizes the importance of State volcano observatories in their role of providing information on the pre-eruption and eruption of volcanoes.
The five most recent messages are listed first, followed by an alphabetical listing by volcano name. Where available, graphics are also shown.

<table>
<thead>
<tr>
<th>Message Text</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graphic</td>
<td></td>
</tr>
</tbody>
</table>

The map shows the current volcanic ash advisories for the region. The map includes a legend for different types of ash advisories and a scale for proximity to volcanic eruptions.
Monitor the formation, movement and degradation of tropical cyclones

Advisories support the issuance of SIGMET on these events by the respective MWOs
Aerodrome warnings

Give concise information of meteorological conditions that could adversely affect aircraft on the ground, including parked aircraft, and the aerodrome facilities and services.

Aerodrome warnings should relate to the occurrence or expected occurrence of:
- tropical cyclone, thunderstorm, hail, snow, freezing precipitation, hoar frost or rime, sandstorm, dust-storm, rising sand or dust, strong surface wind and gusts, squall, frost, volcanic ash, tsunami, volcanic ash deposition, toxic chemicals, and other phenomena as agreed locally.

Validity periods of not more than 24 hours.
Wind shear warnings and alerts

- Prepared for aerodromes where wind shear is considered a factor

- Disseminated within the aerodrome in accordance with local arrangements

- Wind shear conditions are normally associated with:
  - thunderstorms, microbursts, funnel cloud (tornado or waterspout), and gust fronts, frontal surfaces,
  - strong surface winds coupled with local topography; sea breeze fronts, mountain waves (including low-level rotors in the terminal area) and low-level temperature inversions
**SIGMET and OPMET**

- Significant Meteorological Conditions and Operational Meteorological Information

- SIGMET information is issued by a MWO for its associated FIR and/or CTA / OPMET is issued by aerodrome meteorological offices

- Messages that describe the location of specified en-route weather phenomena which may affect the safety of aircraft operations

- SIGMETs are required to be issued whenever thunderstorms, turbulence, icing, mountain waves, volcanic ash clouds, tropical cyclones and radioactive clouds occur or are expected to occur

- OPMET information, including METAR/SPECI and TAF, provide information on the observed occurrence of specified meteorological conditions at the aerodrome:
  - surface wind, visibility, weather, cloud, temperature and atmospheric pressure
ICAO Doc 7192, *Training Manual - Part F1 – Meteorology for Air Traffic Controllers and Pilots*

ICAO Doc 8896, *Manual of Aeronautical Meteorological Practice*


ICAO Doc 9377, *Manual on Coordination between Air Traffic Services, Aeronautical Information Services and Aeronautical Meteorological Services*

ICAO Doc 9691, *Manual on Volcanic Ash, Radioactive Material and Toxic Chemical Clouds*

ICAO Doc 9766, *Handbook on the International Airways Volcano Watch – Operational Procedures and Contact List*

ICAO Doc 9817, *Manual on Low Level Wind Shear*

ICAO Doc 9855, *Guidelines on the Use of the Public Internet for Aeronautical Applications*


