



International Civil Aviation Organization

**ICAO/WMO ASIA/PACIFIC METEOROLOGY/AIR TRAFFIC
MANAGEMENT (MET/ATM) SEMINAR**

Fukuoka, Japan, 24 – 26 January 2011

Discussion Topic 1: Brief review of the organization of Air Traffic Management (ATM) and Meteorological (MET) Services by the States:

- 2) **Current and proposed organizational frameworks and consultative mechanisms (e.g. process of developing new MET unit to provide services for ATM)**

WEATHER BRIEFING FOR ACC (AREA CONTROL CENTER) CONTROLLERS

(Presented by Republic of Korea)

SUMMARY

Instead of MET unit in ATM, the weather briefing for ACC controllers in Korea will be presented.

1. INTRODUCTION

1.1 KAMA(Korea Aviation Meteorological Agency) was founded in July 2007 as an executive agency under KMA(Korea Meteorological Administration) to produce aeronautical meteorological products for service to users in support of safe, efficient and economical air navigation.

1.2 KAMA is acutely aware of the need to produce and provide user-tailored meteorological products. At present, no meteorological unit is available within ATM, and KAMA doesn't have sufficient staff for secondment to ACC; instead, KAMA arranges for its meteorologists to visit ACC for weather briefings to ATM controllers at ACC, which is just at a distance of 10 minutes on foot or 2 minutes by car from KAMA



2. WEATHER BRIEFING FOR ACC CONTROLLERS.

2.1 KAMA provides weather briefings 4 times a day before the start of each shift, i.e., at 07:00, 09:00, 13:30, and 17:30 (LST). The briefings address the present weather at each domestic airport and issued warnings, forecasts for the day and the day after based on weather charts, distribution of clouds, cloud top heights, and movement and development of cloud bands over the Korean peninsula based on satellite imagery, and distribution of precipitation echoes, echo top heights, and movement trends based on radar images.

2.2 And then, KAMA staff describes forecasted wind information based on WINTEM chart for high level from 18,000 to 38,000 ft which is mainly used for aviations over and around the peninsula. He/She also shows mid-level SIGWX chart for 10,000-25,000 feet to explain expected turbulence and icing -prone regions as well as hazardous weather events such as thunderstorms and CBs when such events are anticipated. Especially, this chart is created 4 times a day by the senior meteorologist who is responsible for meteorological information within the Incheon Flight Information Region (FIR) in KAMA. The briefings conclude with discussion of significant weather at higher altitudes (25,000-45,000 ft) based on SIGWX charts.

2.3 Because these weather briefings are conducted immediately before controllers start their shift, they help controllers better understand the weather conditions in the FIR by providing the latest information on ongoing or expected significant weather phenomena, and contribute to safer and more efficient ATM operations by increasing controllers' responsiveness to such events.

2.4 In addition, controllers request pilots flying over their area to submit PIREP. Approximately 20-40 PIREPs are collected every day from all the sections. KAMA has entered this information into a dedicated database, which helps verify the "Area Hazardous Weather Prediction System" currently in operation. The database is especially useful in improving the numerical model on parameters such as icing and turbulence, where PIREPs are the only source for information, and is of considerable help in improving the performance and accuracy of AHWPS.

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to note the information provided on this paper.
