

International Civil Aviation Organization

FOURTEENTH MEETING OF THE ASIA/PACIFIC METEOROLOGICAL INFORMATION EXCHANGE WORKING GROUP (MET/IE WG/14)

Bangkok, Thailand, 7 – 9 March 2016

Agenda Item Conjoint C2: SIGMET and (volcanic ash and tropical cyclone) advisory information (including SIGMET tests)

MONTHLY VONA ISSUANCE DRILL BETWEEN PHIVOLCS AND VAAC TOKYO

(Presented by Japan)

SUMMARY

This paper presents a monthly VONA issuance drill between the Philippine Institute of Volcanology and Seismology (PHIVOLCS) and the Volcanic Ash Advisory Center (VAAC) Tokyo, aiming at the mastery in Volcano Observatory Notices for Aviation (VONA) creation and dissemination in all the volcano observatories of PHIVOLCS that leads to a more-timely VAA issuance as well as the periodical communication test.

1. INTRODUCTION

- 1.1 According to the List of Volcanoes of the World for VAAC Use composed by the Smithsonian Institute as a service to the International Civil Aviation Organization (ICAO), fifty volcanoes are in the Philippines. Among them, two volcanoes of Bulusan and Kanlaon emitted ash plumes high in the air enough to affect aviation operations in 2015.
- 1.2 The Philippine Institute of Volcanology and Seismology (PHIVOLCS) is in charge of providing a Volcano Observatory Notices for Aviation (VONA) for the volcanoes in the Philippines to relevant organizations. As more than half of the Philippines is located in VAAC Tokyo's area of responsibility, PHIVOLCS also provides VONAs to VAAC Tokyo.
- 1.3 VONA is one of the information sources for VAACs and timely VONA issuances from volcano observatories are crucial for aviation safety including prompt VAA provisions. However, some volcano observatories, even some of those in PHIVOLCS that has six volcano observatories in it, have seldom opportunity of creating VONAs, while it is not surprising if a volcano erupts all of a sudden.

Therefore, PHIVOLCS and VAAC Tokyo had a discussion on this matter and started 1.4 a monthly VONA issuance drill in June 2014. Unfortunately, a severe typhoon hit some of the branch offices of PHIVOLCs soon after the first drill and in addition, Mayon Volcano raised the attention of the public late in the year due to its increased volcanic activity, the monthly drill was postponed for a while. PHIVOLCS and VAAC Tokyo resumed the drill in July 2015 and have been conducting drills with two volcano observatories every month.

2. **DISCUSSION**

- 2.1 PHIVOLCS's standard operating procedures (SOP) for VONA issuances require VONAs to be disseminated within 10 minutes after the detection of an eruption. The aim of the drill is to have all the staffs of the six volcano observatories in PHIVOLCS get accustomed to the procedures as well as to check the communication settings periodically.
- 2.2 In order not to let only a certain staff, who will be on duty at a drill, prepare for the drill, the date and time of each drill is settled only between the chief of the Volcano Monitoring and Eruption Prediction Division of PHIVOLCS and the manager of VAAC Tokyo. When the date/time comes, VAAC Tokyo makes a phone call directly to a selected volcano observatory and asks an operator in charge to start the drill. The monthly drill is conducted with two volcano observatories every month so that more staffs can experience VONA issuances.
- 2.3 Also, in order not to cause an impact on the real aviation operations, the test VONA is disseminated only to VAAC Tokyo following PHIVOLCS's SOP, with a word "TEST" in it.
- 2.4 After each drill, VAAC Tokyo creates a brief report describing the time required for the dissemination. If some troubles occur during the drill, those are also commented in the report. The report is submitted to the chief and the chief takes actions to enhance the performance as necessary.
- 2.5 At the beginning, not everybody was sure how to create a VONA. However, the performance has become much higher only in a few months. The drill also revealed a minor error in a certain setting on VAAC Tokyo's side which has already been fixed.
- 2.6 In this way, the monthly drill has shown a great success in enhancing the performance of PHIVOLCS and VAAC Tokyo. The two organizations will continue this collaborative effort.

3. **ACTION BY THE MEETING**

3.1 The meeting is invited to note the information contained in this paper and provide comments