

**54th CONFERENCE OF
DIRECTORS GENERAL OF CIVIL AVIATION
ASIA AND PACIFIC REGIONS**

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**AGENDA ITEM 3: AVIATION SAFETY AND
AIR NAVIGATION**

**DEVELOPMENT OF REMOTELY AERODROME FLIGHT
INFORMATION SERVICES PROCEDURES WITHIN
INDONESIA AIRSPACE**

(Presented by Indonesia)

INFORMATION PAPER

SUMMARY

Indonesia has more than six hundreds airports and airstrip within its territory. The air traffic services provided to the aircraft depend on the size and complexity of the traffic. Sixty six medium to large airport are provided with Aerodrome Control Tower services, and the smaller aerodrome are provided with Aerodrome Flight Information Services. Since many of small aerodrome facing some problem regarding human resources issue, security issue, isolated area issue, and any other significant issue, DGCA of Indonesia in cooperation with Air Navigation Provider (Airnav Indonesia) now are on going to develop procedures regarding remotely Aerodrome Flight Information Services. The main objective to develop this procedures is to improve the safety within small and isolated aerodrome

DEVELOPMENT OF REMOTELY AERODROME FLIGHT INFORMATION SERVICES PROCEDURES WITHIN INDONESIA AIRSPACE

1. INTRODUCTION

1.1 The Aviation System Block Upgrade (ASBU) module B1-RATS (Remotely ATS), set forth many benefits by introducing remotely ATS with utilization of new procedures and technology on visual surveillance

1.2 Indonesia has more than six hundreds airports and airstrip within its territory. The air traffic services provided to the aircraft depend on the size and complexity of the traffic. Sixty six medium to large aerodrome are provided with Aerodrome Control Tower services, and the smaller aerodrome are provided with Aerodrome Flight Information Services.

1.3 Many of small aerodrome facing some problem regarding human resources issue, security issue, isolated area issue, and any other significant issue.

2. DISCUSSION

2.1 To improve air navigation safety and efficiency within small aerodrome DGCA Indonesia in cooperation with Air Navigation Provider (Airnav Indonesia) now are on going to develop procedures regarding remotely Aerodrome Flight Information Services

2.2 Since remotely AFIS plan introduced, DGCA Indonesia and Airnav Indonesia intensively discuss the implementation plan of remotely AFIS. And based on discussion the time frame for implementation plan are as follow

- a) 2017 1st semester, review of relevant regulation and procedures;
- b) 2017 2nd semester, personal training and provision and installation of facilities for pilot project;
- c) 2018 1st semester, trial, shadow operation, safety assessment and certification;
- d) 2018 2nd semester, Full implementation.

2.3 When remotely AFIS implemented, air – ground communication services for some small aerodrome (AFIS Aerodrome) will be provided by relevant AFIS Center (AFIS Center might be Flight Services Station or other AFIS Aerodrome). One AFIS Center can serve one or more remote Aerodrome (based on ASBU module B1-RATS named Single method or multiple method)

2.4 AFIS Center providing flight information service for IFR/VFR aircraft by radio communication which provide information necessary for the safe of aircraft operation at or around the aerodrome. Airspace is designated as class G with lateral limit is 5 nautical miles from aerodrome reference point and vertical limit is from ground to 4000 feet above ground level.

2.5 The basic elements of information provided by the center are as follows :

- a) The most suitable runway to be used;
- b) Meteorological information;
- c) Aerodrome information;
- d) Traffic information;
- e) Any other information necessary for the safe operation of aircraft.

2.6 The implementation of remotely AFIS divided in to two methods, the first one is Procedural Method and the second one is Facilities Method. Procedural Method means that the implementation of remotely AFIS will be based on procedures only that provide entry and exit procedures to aircraft within an aerodrome. Surveillance facilities will not be provided. This method mainly will be implemented in small aerodrome with electrical problem and security issue.

2.7 To ensure that the remotely AFIS procedures can be smoothly implemented, Pilot project are now being developed, this project will be assessed and evaluated continuously based on implementation plan.

2.8 As mentioned above that one of the objective of this project is to improve safety within small aerodrome, DGCA Indonesia and Airnav Indonesia for the first step has developed some criteria to an aerodrome that can be provided with remotely services. The criteria are :

- a) No significant weather condition issue within remote aerodromes;
- b) No significant traffic movement (less than 6 movement in a day or less than 2 movement in an hour)
- c) Electrical issue within remote aerodromes (limited electrical resources)

2.9 Based on criteria as mentioned in 2.8, sample of the pilot projects are shown as follows:

- a) Single method with facilities (Bali FSS as Center and Pagerungan as remote aerodrome)

Bali FSS will provide air ground communication service to aircraft operating within vicinity of aerodrome Pagerungan aerodrome. Ground surveillance facilities (High Definition CCTV) will be installed at Pagerungan aerodrome so that Bali FSS can monitor real time situation of manouevering area at Pagerungan Aerodrome.

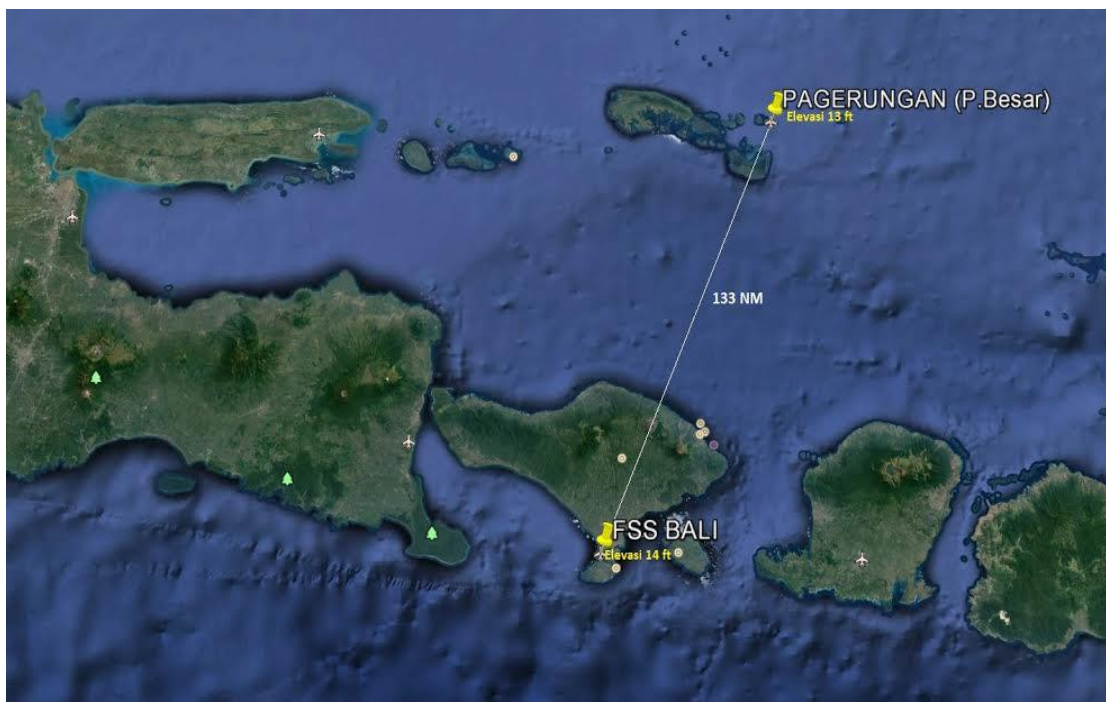


Figure 1. Single Method (Bali – Pagerungan)

- b) Multiple method with procedures only (Masamba as Center and Seko, Rampi, Bua as Remote Aerodromes)

Masamba AFIS will provide air ground communication service to aircraft operating within vicinity of aerodrome Seko, Rampi, Bua Aerodromes. Procedures to entry and exit the aerodromes will be provided. Manoeuvring area situation will be monitored by close coordination with aerodrome operator personnel.



Figure 2. Multiple Method (Masamba AFIS – BUA AFIS, SEKO AFIS, and RAMPI AFIS)

3. ACTION BY THE CONFERENCE

3.1 The Conference is invited to:

- a) Noted information contained in this paper; and
- b) Share any information and experience regarding the implementation of remotely Air Traffic Services specially Remotely Aerodrome Flight Information Services.

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