



ICAO

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Seventh Meeting of the ICAO Asia/Pacific Search and Rescue Working Group (APSAR/WG/7)

Video Teleconference, 24 – 27 May 2022

Agenda Item 4: Asia/Pacific and inter-regional SAR planning, coordination and cooperation

BASARNAS-CAAM SAREX

(Presented by Indonesia and Malaysia)

SUMMARY

This paper presents information on the conducting and outcome of Search and Rescue Exercise (SAREX) between the Indonesia SAR Leading Agency, National Search and Rescue Agency of Republic Indonesia (BASARNAS) and the Malaysian Aeronautical SAR Leading Agency, Civil Aviation Authority of Malaysia (CAAM).

1. INTRODUCTION

1.1 SAR cooperation between Malaysia and Indonesia was established through the SAR Working Group Malaysia-Indonesia (SAR MALINDO) under special arrangements of Malaysia-Indonesia General Border Committee.

1.2 In 2020, this cooperation was further enhanced through discussions and agreement between both State's Aeronautical SAR Agency, to establish BASARNAS-CAAM Aeronautical SAR Working Group (BASARNAS-CAAM ASWG) in accordance with the signed SAR Operational Letter of Agreement.

1.3 The purpose of BASARNAS-CAAM ASWG establishment is to comprehensively address Aeronautical SAR issues as well as deliberate on best practices and develop constructive solutions to ensure Joint SAR Operation within/between Indonesia Search and Rescue Regions (SRR), and Malaysia's Kuala Lumpur and Kota Kinabalu SRRs can be promptly initiated and executed effectively utilizing SAR resources made available by both States.

2. DISCUSSION

SAREX BASARNAS-CAAM 2/2021

2.1 SAREX BASARNAS-CAAM 2/2021 was conducted via Video Teleconference from 7th to 8th December 2021 and was officiated by Datuk Capt. Chester Voo Chee Soon, CEO of CAAM together with Marsekal Madya TNI Hendri Alfiandi, Head of BASARNAS.

2.2 The Level II/Table-Top SAREX was conducted between Air Traffic Service Units and SAR facilities, i.e Makassar Air Traffic Service Centre (MATSC), Indonesia Rescue Coordination Centre (RCC) and Tarakan Rescue sub-center (RSC) from Indonesia dan Kota Kinabalu Air Traffic Control Centre (KK ATCC) and Kota Kinabalu Aeronautical Rescue Coordination Centre (KK ARCC) from Malaysia. The SAREX participants were also from various SAR supporting agencies of Indonesia and Malaysia.

2.3 The SAREX programs conducted in both States were as follows:

- a) SAREX Briefing (D-1) : 07/12/2021; 0200UTC
- b) Communication Check (D-1) : 07/12/2021; 0400-0500UTC
- c) SAREX (D-Day) : 08/12/2021; 0200-0600UTC
- d) Debrief (D-Day) : 08/12/2021; 0800UTC



Figure 1: SAREX Official Opening on 08/12/2021

Exercise scenario



Figure 2: 9MSRX Flight Track and MAYDAY position

2.4 The SAREX scenario was an ATR72-600, a chartered flight call sign 9MSRX with 40 persons on board (5 crews, 35 passengers) departed from Kota Kinabalu International Airport, Malaysia to Sultan Aji Muhammad Sulaiman Sepinggan Airport, Balikpapan Indonesia via Tawau and Tarakan. Passing Tawau, 9MSRX deviated left of track due to weather and after 5 minutes, the pilot reported ‘MAYDAY’ due to engine failure, unable to maintain height and making a left turn for an emergency landing at Tawau Airport. Kota Kinabalu ATC immediately declared ‘DETRESFA’ on 9MSRX. Kota Kinabalu and Tawau ATC failed to re-establish contact with 9MSRX. KK ATCC Watch Manager activated the KK ARCC.

2.5 Kota Kinabalu ATC informed Ujung Pandang ATC of 9MSRX incident and SAR activation by KK ARCC.

2.6 9MSRX flight progress and scenario injection was transmitted by KK ATC through active working position from KK ATCC to Ujung Pandang ATC, based on the exercise timeline under the guidance of the Malaysia Exercise Controller.

Simulated SRUs

2.7 The simulated SRUs used in the SAREX were as follows:

- a) From Indonesia:
 - i. Two (2) vessels from BASARNAS Tarakan for surface search.
 - ii. One (1) helicopter and one (1) B737-200 from Indonesia Air Force for air search.
- b) From Malaysia:
 - i. One (1) vessel from Malaysia Maritime Enforcement Agency for surface search.
 - ii. One (1) helicopter and one (1) CN235 from Royal Malaysian Air Force for air search.
 - iii. One (1) helicopter from Fire and Rescue Department of Malaysia for air search.

2.8 Officers from the relevant agencies were appointed as Exercise Controllers and some of them were assigned to perform the functions as the SRU’s Captain or Commander. On-scene coordination and the performance of communications was tested between the SRUs and KK ARCC and/or Tarakan RSC by utilizing Group Call, Zoom platform.

Exercise Duration and Key Performance Indication

2.9 Exercise Controllers from both States agreed that the SAREX was to be concluded within 4 hours and the following guidelines were used to monitor Players (ATC, KK ARCC, Indonesia RCC and Tarakan RSC) action.

- a) First five (5) minutes for KK ATCC to initiate activation of KK ARCC according to the procedures and notify Indonesian ATSU.
- b) First ten (10) minutes for Ujung Pandang ATSU and/or MATSC to notify Indonesia RCC.
- c) First thirty (30) minutes for KK ARCC and Indonesia RCC/Tarakan RSC to receive and exchange incident information.
- d) Two (2) hours for planning and coordination process of joint SAR operation between Indonesia and Malaysia.
- e) One (1) hour for the execute rescue operations.
- f) Thirty (30) minutes for termination joint SAR operation.

2.10 Verification of Players actions during the SAREX was checked by the Exercise Recorder for the debrief session.

SAREX De-brief – Lesson Learnt

2.11 Both SMCs from Indonesia and Malaysia provided a brief on their operation whilst Chief Exercise Controllers provided the observation for all involved. The recommendations and lessons learnt were as follows:

- a) Actions by Kota Kinabalu ATC, Ujung Pandang ATC and Tarakan ATC were according to the procedures and process of conveying the initial incident information to the SAR units were good.
- b) The requirement for the ATS units to send ‘live’ AFTN messages gave an impact on the exercise and opportunity to test the Alerting Services.
- c) It is paramount to increase knowledge and understanding of officers in the Search and Rescue Regions, and Territorial Waters of Malaysia-Indonesia.
- d) Preliminary coordination between Indonesia RCC/RSC and Malaysia RCC was conducted according to established procedures.
- e) Information between both States should be accurate, whereby the respective RCC/RSC should improve on the frequency of coordination and information sharing to avoid miscommunication and wrong information exchanged.
- f) All events or documentation in Local Time must be coordinated and documented together in UTC format to avoid confusion of time differences in both States.
- g) The Foreign Asset Entry Clearance Procedure to Indonesia had been successfully implemented. However, the time for the Diplomatic Clearance application process needs to be improved. SAR Officers need to be proficient with the forms used.
- h) The use of Zoom platform, Group Call for Malaysian and Indonesian SRUs to simulate SAR operations had enhanced the understanding of RCC/RSC communications officers and SRU’s Captains or Commanders in conducting joint SAR operations.

Conclusion

2.12 The SAREX BASARNAS-CAAM 2/2021 was a success. All objectives were met and the recommendation will be tested in the next SAREX, which will be between Pontianak RSC and Kuching ARSC in Q4/2022.

2.13 Indonesia and Malaysia agreed to conduct a mutual training program for the RCC/RSC SAR Officers; Online Briefing regarding Indonesia and Malaysia SAR systems to improve the understanding of each State’s SAR organization, systems, and procedures.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper; and
- b) consider the methodology, recommendation and lessons learnt from this SAREX which could possibly be shared with other States for mutual benefits.
- c) discuss any relevant matters as appropriate.

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SAREX BASARNAS-CAAM 2/2021 Snapshots



Kota Kinabalu ARCC



Indonesia RCC



Tarakan RSC