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

MALAYSIA-INDONESIA SEARCH AND RESCUE EXERCISE (SAREX MALINDO) 42/2023

(Presented by Indonesia and Malaysia)

SUMMARY

This paper presents the outcomes of the Malaysia-Indonesia Search and Rescue Exercise (SAREX MALINDO) 42/2023, held from 3rd to 5th October 2023, organised by the Kuching Aeronautical Rescue Sub-Centre (ARSC) and Pontianak RSC.

1. INTRODUCTION

1.1 The Search and Rescue (SAR) Working Group Malaysia-Indonesia (SAR MALINDO) was formed to address aeronautical and maritime SAR issues and develop effective solutions, aiming to ensure seamless joint SAR operations within the Search and Rescue Region (SRR) designated for Indonesia and Malaysia. The group's principal goal is to share best practices and make optimal use of both states' SAR resources.

1.2 SAREX MALINDO is held annually and alternately between the two States' Rescue Coordination Centre (RCC) and/or RSC, which involves aeronautical and maritime scenarios for SAR operations training.

1.3 The SAREX MALINDO 42/2023, held in 2023, focused on an aeronautical scenario, with the Civil Aviation Authority of Malaysia (CAAM) and the National SAR Agency of Indonesia (BASARNAS) leading the exercise/operations.

2. DISCUSSION

SAREX MALINDO 42/2023

2.1 SAREX MALINDO 42/2023, a Level II and Level III exercise took place from 3rd to 5th October 2023 involving participants from:

- a) Indonesia – consists of 150 participants, from:
 - i) Air Traffic Service Unit (ATSU): Jakarta Air Traffic Service Centre (JATSC) and Pontianak ATSU;
 - ii) SAR Unit: Indonesia Rescue Coordination Centre (RCC), Pontianak RSC; and
 - iii) Local SAR agencies from Entikong, West Kalimantan, Indonesia.

- b) Malaysia – consists of 200 participants, from:
- ATSU: Kuching Air Traffic Control Centre (KCH ATCC);
 - Kuching ARSC; and
 - Local SAR agencies from Kuching, Malaysia.
- c) Foreign observers – 2 participants from Singapore.

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

NO	DATE	DETAILS
1.	(D-2) 02/10/2023	Communication Check (ATSU and SAR Units)
2.	(D-1) 03/10/2023	<ul style="list-style-type: none">SAREX MALINDO 42/2023 Opening (Hybrid)SAREX Mass Briefing (At respective States)Tabletop Exercise (TTX) – Dialogue (Hybrid)
3.	(D-day) 04/10/2023	Field Exercise (FTX) – Indonesia and Malaysia
4.	(D+1) 05/10/2023	SAREX Debrief – Hybrid

SAREX Official Opening

2.3 The SAREX MALINDO 42/2023 opening ceremony was held in a hybrid format on 3rd October 2023, at 0130 UTC. Physical attendance was conducted at the Raia Hotel and Convention Centre in Kuching, Malaysia, with Indonesian delegates joining by video teleconference (Zoom Meeting).

2.4 The SAREX MALINDO 42/2023 was officiated by Mr. Suresh A/L V.B Menon, Director of Air Navigation Services Operations Division, CAAM, as the Head of Delegation of MALINDO Malaysia, along with Mr. TNI Rear Admiral Ribut Eko Suyatno, S.E, M.M., Deputy for Search and Rescue Operation and Preparedness BASARNAS, as the Head of Delegation of MALINDO Indonesia.

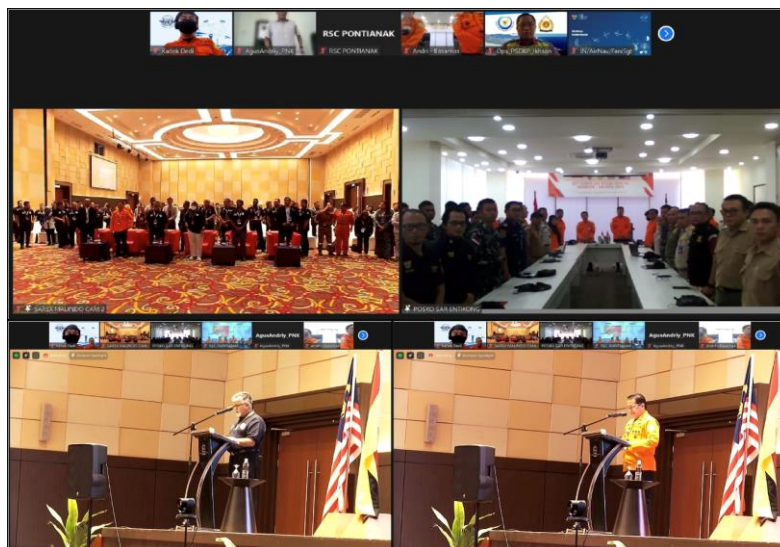


Figure 1: SAREX MALINDO 42/2023 Opening Ceremony

2.5 SAREX MALINDO 42/2023 Mass Briefing was conducted to ensure that all participants were adequately informed about the requirements for the Level II and Level III exercises, while also providing explanations about the Indonesian and Malaysian SAR systems and arrangements. The briefing covered administrative matters, meteorology, and methodology for evaluators' assessment.

Exercise Scenario

2.6 A chartered flight, aircraft type DHC6, callsign PK-SRX with 10 persons on board (2 crew members and 8 passengers), departed from Supadio International Airport in Pontianak, Kalimantan, bound for Kuching International Airport in Sarawak. The planned flight route was via PNK R455 PAPSA VKG, with a cruising altitude of 9,000 feet and an estimated flight time of 40 minutes.

2.7 PK-SRX requested a right deviation due to adverse weather conditions on the left side of the flight path, and the aircraft disappeared from the radar monitor as it approached the Jakarta and Kota Kinabalu Flight Information Regions (FIRs) boundary. Despite attempts by Pontianak Approach (APP) to contact PK-SRX, there was no reply, and efforts to re-establish communication with the aircraft proved unsuccessful.

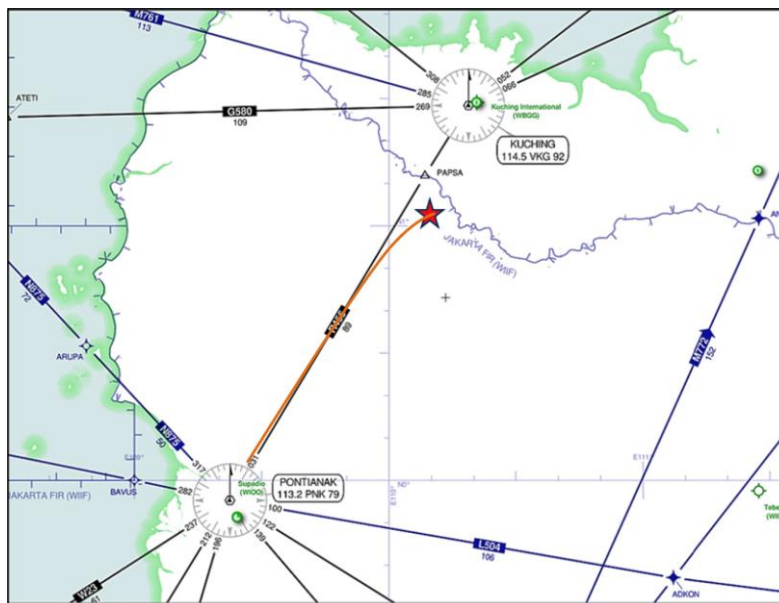


Figure 2: Last Known Position (LKP) of PK-SRX

Tabletop Exercise (TTX) - Dialogue

2.8 The TTX-Dialogue took place in the afternoon of 3rd October 2023. It was conducted in a hybrid mode, seamlessly integrating both physical attendance and teleconferencing to facilitate participation from all involved parties simultaneously. The three (3) facilitators were from CAAM (Malaysia), AirNav Indonesia, and BASARNAS (Indonesia).

2.9 The “Players” included members from ATSUs, RCC/RSCs, and SAR Unit (SRU) Responder/SAR agencies from both States. The setup for TTX-Dialogue is detailed below.

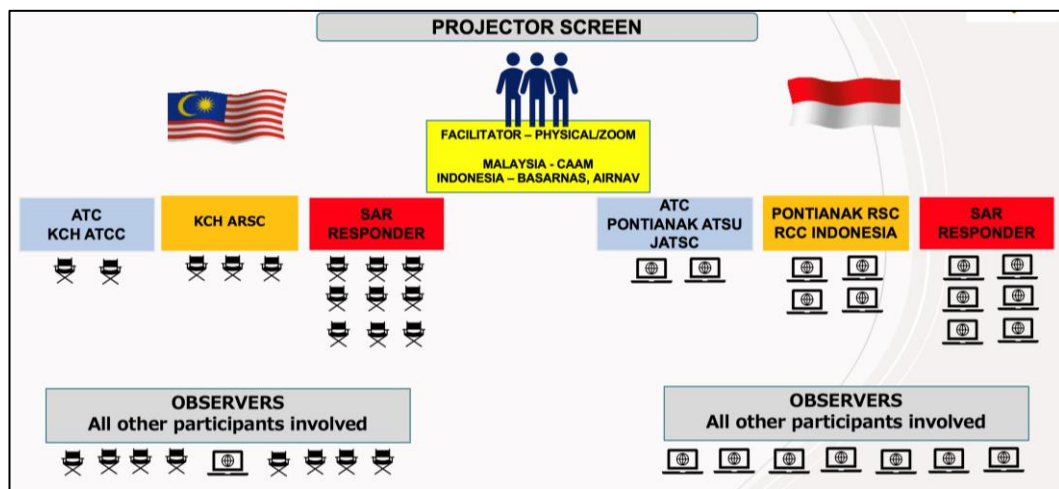


Figure 3: TTX-Dialogue Setup

2.10 The exercise encompassed four (4) modes of timeline, detailed as follows:

- a) Mode 1: First Incident Information and Declaration
 - i) ATC alerting actions: declaration of Emergency Phase and AFTN Messages.
 - ii) Incident notification to the relevant ATSU/SAR Authority/Other parties/States.
 - iii) Upgrade of Emergency/SAR Phase.
- b) Mode 2: RCC/RSC Actions and Responder
 - i) Action by Indonesia's RCC/RSC.
 - ii) Action by Malaysia's ARSC.
 - iii) Action by Indonesia and Malaysia SAR agencies upon receiving the information.
 - iv) The location of the incident occurs between the borders of Indonesia and Malaysia SRRs. Who leads the SAR operation?
- c) Mode 3: SAR Operation
 - i) Compromise search area and joint SAR Plan.
 - ii) Communication plan: On-Scene Coordinator (OSC) appointment (air and land).
 - iii) Diplomatic clearance requirement, procedure and process.
 - iv) Survivors rescued via land and air: Update of information and coordination process with Indonesia and Malaysia medical teams.
- d) Mode 4: SAR Termination and Investigation
 - i) Process of SAR operation termination. How and which State leads the coordination?
 - ii) Investigation Stage: Responsible State and how it will be conducted.

2.11 The objective of the TTX-Dialog session was to facilitate discussion among the “Players” from Malaysia and Indonesia, with a series of injections to enhance understanding of procedures and the conduct of joint SAR operations between States.

2.12 It served as a rehearsal of an emergency similar to the Field Exercise scenario in a low-stress and interactive environment. Throughout the exercise, participants from Indonesia and Malaysia encountered decision points or injections where new information was introduced, or the situation evolved. These decision points prompted participants to consider their options, make decisions, and assess the potential consequences of their actions.

Field Training Exercise (FTX)

2.13 The FTX was held on 4th October 2023, utilising the scenario played during the TTX. Both States agreed that the exercise would conclude within 5 hours, with specific timeline and guidelines used to monitor the actions of the “Players”. The Exercise Recorder, assisted by the Exercise Controllers, verified the actions of the “Players” during the exercise, which would be discussed during the debriefing session.

2.14 The SRUs involved in the FTX were as follows:

a) From Indonesia:

- i) One (1) ATR 42-300 from the Ministry of Marine Affairs and Fisheries for air search; and
- ii) Land SAR and medical team from BASARNAS, and local agencies from Entikong.

b) From Malaysia:

- i) One (1) helicopter from the Royal Malaysia Police (RMP) for air search;
- ii) One (1) helicopter from the Fire and Rescue Department of Malaysia (FRDM) for air search and rescue; and
- iii) Land SAR and medical team of local agencies from Kuching.

2.15 The aircraft survivors were portrayed by 8 BASARNAS personnel and 2 mannequins. Personal Locator Beacon (PLB) was activated at the crash site to simulate COSPAS-SARSAT Alert Message actions.

2.16 Live telecast (using Zoom Meeting) from Pontianak ATC, KCH ATCC ATC, Indonesia RCC, Posko SAR Entikong, Kuching ARSC, and the “crash site”, along with the Google Sheet of the 'Exercise Plan and Injects' from Exercise Recorders (Indonesia and Malaysia), were made available to the Evaluators and Observers.

2.17 PK-SRX SAR Operation terminated at 0632 UTC, on 4th October 2023, with:

- a) Nine (9) survivors were rescued by Indonesia Land SRUs; eight (8) individuals with major/minor injuries underwent medical treatment, while one (1) individual was declared deceased.
- b) One (1) survivor with major injuries was airlifted by Malaysia Air SRU; and returned to Kuching International Airport to be transported to Kuching Hospital via ambulance for medical treatment.

SAREX Debrief – Lesson Learnt

2.18 The debrief for SAREX MALINDO 42/2023 was held on 5th October 2023, at 0100 UTC in Kuching, Sarawak, Malaysia, with participants from Malaysia and Indonesia attending both physically and via video teleconferencing.

2.19 During the debrief, both SMCs from Indonesia and Malaysia provided briefings on their SAR operations, while the Chief Exercise Controllers addressed the observations and complied with Evaluators/Observers' comments for the FTX. The recommendations and lessons learned were as follows:

- a) Conducting a TTX before FTX enhanced participants' understanding of Joint SAR Operations, incorporating various administrative instructions and standard operating procedures.
- b) The implementation of the Quick Response (QR) methodology facilitated participant attendance, reference document access, evaluation, and daily event feedback, aiding the Secretariat in assessing exercise outcomes.
- c) Utilizing the Zoom Meeting platform for live feed for ATSU, RCC/RSC, and “crash site” provided SAREX participants with insight into the activation process and SAR operation progress, enabling Evaluators/Observers to submit observations and evaluations directly.
- d) The adoption of Google Sheets by Indonesia and Malaysia Exercise Controllers for SAREX planning and progress tracking ensured smooth operation and facilitated teamwork, irrespective of EXCONs' physical locations.
- e) Alerting actions by Pontianak ATC, JATSC, and KCH ATCC adhered to procedures, with JATSC transmitting AFTN messages to KCH ATCC as required.
- f) Coordination processes and event documentation were conducted in UTC format, reducing errors in reporting.
- g) SMCs are encouraged to establish a single search area to optimize asset deployment and coverage efficiency.

Conclusion

2.20 SAREX MALINDO 42/2023 was deemed successful by both Indonesia and Malaysia. The exercise's methodology, recommendations, and lessons learned are expected to deepen the understanding of each State's SAR organisation, systems, and procedures.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

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

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SAREX MALINDO 42/2023 Snapshots



Day 1_SAREX MALINDO 42/2023 Opening Ceremony



Day 2_FTX - Kuching ARSC

Day 2_FTX - Posko SAR Entikong



Day 2_FTX – “Crash Site” (Indonesia)



Day 2_Live Telecast of RCC Indonesia, Posko SAR Entikong, Kuching ARSC & “Crash Site” for Exercise Controllers, Evaluators & Observers



Day 3_SAREX Debrief (Hybrid) at CAAM Sarawak Office, Malaysia