AIRCRAFT ACCIDENT

PRELIMINARY REPORT

A 05/25

Air Accident Investigation Bureau (AAIB)

Ministry of Transport, Malaysia

Accident Involving Airbus Helicopter AS355N,
Registration 9M-PHG, at Sungai Pulai, Gelang Patah, Johor
on 10 July 2025

Air Accident Investigation Bureau
Ministry of Transport
No.26, Jalan Tun Hussein, Precinct 4
Federal Government Administrative Centre
62100 PUTRAJAYA
Phone: +603-8892 1072
Fax: +603-8888 0163
E-mail: AAIB@mot.gov.my
Website: http://www.mot.gov.my/en

Issued on 13 August 2025
MOT.(S).600-5/4/104

AIR ACCIDENT INVESTIGATION BUREAU (AAIB)
MALAYSIA

PRELIMINARY REPORT NO: A 05/25

OPERATOR	**: ROYAL MALAYSIAN POLICE**
AIRCRAFT TYPE	**: AIRBUS HELICOPTER AS355N**
STATE OF REGISTRATION	**: FRANCE**
REGISTRATION	**: 9M-PHG**
PLACE OF OCCURRENCE	**: SUNGAI PULAI, GELANG PATAH, JOHOR**
DATE AND TIME	**: 10 JULY 2025 AT 1015 LT (0215 UTC)**

This preliminary report contains statement of facts which have been determined up to the time of issue only. It must be regarded as tentative, and is subject to alteration or correction if additional evidence becomes available.

This investigation is carried out to determine the circumstances and causes of the accident with a view to the preservation of life and the avoidance of accident or incident in the future. It is not the purpose of this investigation to apportion blame or liability (Annex 13 to the Chicago Convention and Civil Aviation Regulations 2016).

INTRODUCTION

The Air Accident Investigation Bureau of Malaysia

The Air Accident Investigation Bureau (AAIB) is the air accident investigation authority in Malaysia and is responsible to the Minister of Transport. Its mission is to promote aviation safety through the conduct of independent and objective investigations into air accidents and serious incidents.

The AAIB also conducts investigation into incidents when the occurrence shows evidence to have safety concerns.

The AAIB conducts investigations in accordance with the Annex 13 to the Chicago Convention and Civil Aviation Regulations of Malaysia 2016. The AAIB adheres to the International Civil Aviation Organisation's (ICAO's) stated objective, which is as follows:

"The sole objective of the investigation of an accident or incident shall be the prevention of accident and incident. It is not the purpose of this activity to apportion blame or liability".

Accordingly, it is inappropriate that AAIB reports should be used to assign fault or blame or determine liability, since neither the investigation nor the reporting process has been undertaken for that purpose.

Unless otherwise indicated, recommendations in this report are addressed to the investigating or regulatory authorities of the State having responsibility for the matters with which the recommendations are concerned. It is for those authorities to decide what action is to be taken.

AIRCRAFT ACCIDENT/SERIOUS INCIDENT REPORT

Aircraft Type	**: AIRBUS HELICOPTER**
Model	**: AS355N**
Owner	**: ROYAL MALAYSIAN POLICE**
Nationality	**: FRANCE**
Year of Manufacture	**: 1996**
Aircraft Registration	**: 9M-PHG**
Serial Number	**: 5620**
State of Registration	**: MALAYSIA**
Place and State of Occurrence	**: SUNGAI PULAI, NEAR MALAYSIAN MARITIME ENFORCEMENT AGENCY (MMEA) JETTY, GELANG PATAH, JOHOR, MALAYSIA.**
Date and Time of Occurrence	**: 10 JULY 2025 at 1015 LT (0215 UTC)**

*** Note: All times in this report are Local Time (LT) unless stated otherwise. LT is Coordinated Universal Time (UTC) + 8 hours.**

TABLE OF CONTENTS

ABBREVIATIONS

AAIB	Air Accident Investigation Bureau
AD	Airworthiness Directives
AMO	Approved Maintenance Organisation
APMM	Malaysian Maritime Enforcement Agency
ATC	Air Traffic Controller
CAAM	Civil Aviation Authority of Malaysia
CAR	Civil Aviation Regulations of Malaysia
CAS	Caution Administration System
CPL	Commercial Pilot License
C of A	Certificate of Airworthiness
C of R	Certificate of Registration
CRS	Certificate of Release to Service
CVFDR	Cockpit Voice Flight Data Recorder
CVR	Cockpit Voice Recorder
EGR	Engine Ground Run
FDR	Flight Data Recorder
FTX	Field Training Exercise
ICAO	International Civil Aviation Organisation
LLA	Layang-Layang Aerospace Sdn. Bhd.
LT	Local Time
MITSATOM	Multilateral Nuclear Security Detection Exercise
MMEA	Malaysian Maritime Enforcement Agency
MOR	Mandatory Occurrence Reporting
MRO	maintenance, repair, and overhaul
PGU	*Pasukan Gerakan Udara*
PIC	Pilot in Command
RMP	Royal Malaysia Police
SB	Service Bulletins
Sdn. Bhd.	Sendirian Berhad
UTC	Coordinated Universal Time
VMC	Visual Meteorological Conditions

SYNOPSIS

On 10 July 2025, at approximately 02:25 UTC, a Royal Malaysia Police (RMP) Airbus Helicopters AS355N Écureuil II, registration 9M-PHG, serial number 5620, operated by the *Pasukan Gerakan Udara* (PGU) Subang unit, was involved in an accident during an aerial demonstration conducted as part of the Field Training Exercise (FTX) for the Multilateral Nuclear Security Detection Exercise (MITSATOM 2025). On board the helicopter were five persons, comprising three crew members (two pilots and one air crew) and two police personnel from the Tanjung Kupang Police Station.

The aircraft departed from Tanjung Kupang Police Station under visual meteorological conditions (VMC) to participate in the aerial display near Muara Laut Jetty, Sungai Pulai, as part of MITSATOM 2025's operational scenarios. The planned demonstration involved coordinated manoeuvres simulating operational deployments with participating maritime vessels.

During the final manoeuvre, the helicopter pitched up, executed a 180-degree steep turn and descended toward the water. The aircraft impacted the water within the designated exercise zone, near the Malaysian Maritime Enforcement Agency (MMEA) Muara Laut Jetty in Sungai Pulai, Gelang Patah, Johor. The impact resulted in substantial structural damage and the main fuselage subsequently sank.

All five occupants were rescued by nearby vessels and transported to Hospital Sultanah Aminah, Johor Bahru, with serious injuries. Loose components recovered from the site were preserved for investigation purposes. The main wreckage which remained submerged in the river for seven days, was later recovered.

The aircraft operator submitted a Mandatory Occurrence Report (MOR) to the Civil Aviation Authority of Malaysia (CAAM) and the Air Accident Investigation Bureau, Malaysia (AAIB). The AAIB investigation team was deployed on 10 July 2025 and is currently investigating to determine the cause of the accident in accordance with ICAO Annex 13 protocols.

1.0 FACTUAL INFORMATION

1.1 History of the Flight

An RMP Airbus Helicopters AS355N Écureuil II (registration 9M-PHG, serial number 5620), operated by the PGU Subang unit, was tasked with conducting an aerial demonstration as part of the FTX for the MITSATOM 2025, held from 8 July to the culminating event on 10 July 2025. The demonstration took place near the MMEA Muara Laut Jetty, Sungai Pulai, Gelang Patah, Johor.

The planned flight profile involved coordinated aerial manoeuvres simulating operational deployment scenarios in support of the exercise, forming the concluding segment of the display sequence. A partial rehearsal was conducted on 8 July, followed by two full rehearsals on 9 July 2025.

On 10 July 2025, the helicopter departed Tanjung Kupang Police Station under visual meteorological conditions (VMC) and proceeded to the designated demonstration area over Sungai Pulai. The aircraft executed a series of pre-planned manoeuvres, including low-level passes and coordinated positioning with participating vessels.

At approximately 0225 UTC, during the final phase of the display, the helicopter pitched up, executed a 180-degree steep turn, and descended in preparation for the concluding manoeuvre. For reasons yet to be determined, the aircraft impacted the water surface within the exercise zone. The impact caused substantial structural damage to the fuselage, resulting in the detachment of several panels and components which were subsequently recovered by police personnel. The main fuselage sank rapidly with only minor debris remaining visible.

The helicopter was carrying five occupants: two pilots, one air crew member and two police officers. All were promptly rescued by nearby vessels participating in the exercise and slight delay to transfer to Hospital Sultanah Aminah, Johor Bahru for medical treatment due to no ambulance physically present at exercise area.

Loose components recovered from the site have been preserved for investigation. The main wreckage which remained submerged for seven days, was later salvaged. The

cause of the accident is yet to be determined and the AAIB is investigating in accordance with ICAO Annex 13.

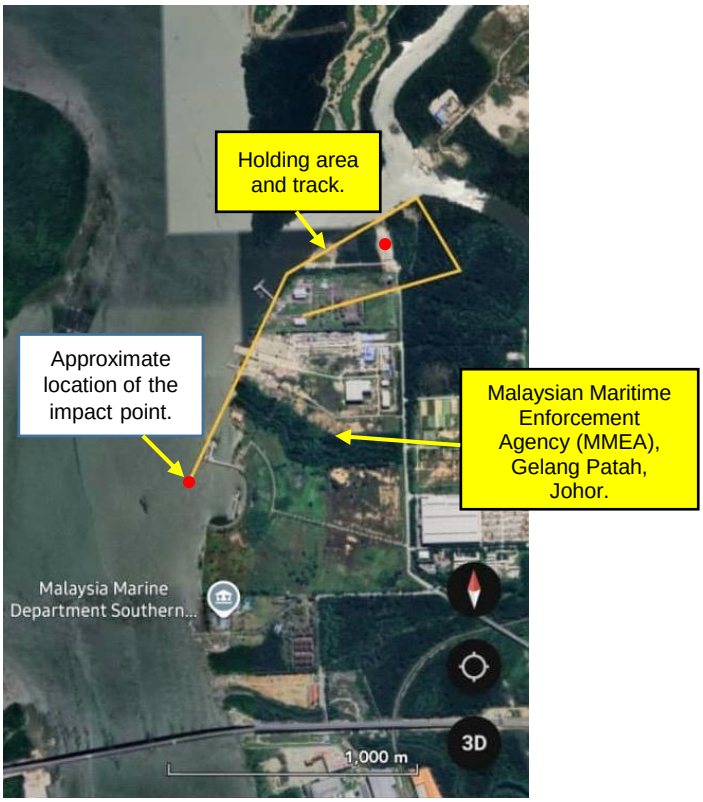


Figure 1: Aircraft Location of The Impact Point.
(Source: Google Earth)

1.2 Injuries to Persons

Injuries	Crew	Passengers	Others	Total
Fatal	NIL	NIL	NIL	NIL
Serious	03	02	NIL	05
Minor/None	NIL	NIL	NIL	NIL

1.3 Damage to Aircraft

A general visual inspection was carried out to assess and identify the damage to the aircraft after the salvage operations. The helicopter was destroyed due to impact on water and can be seen in **Appendix A.**

1.4 Other Damage

No damage was sustained to any objects other than the aircraft.

1.5 Personnel Information

1.5.1 Pilot 1

Status	Pilot in Command (PIC)
Nationality	Malaysian
Age	46 years old
Gender	Male
License Type	CPL 5806/H
License Validity	Valid until 28 February 2026
Aircraft Rating	AS355N
Instrument Rating	Nil
Total Hours on Type	1430.0 hrs
Total Flying Hours	1525.5 hrs
Rest Period Since Last Flight	More than 12 hours
Medical Certificate Class	1
Medical Expiry Date	17 February 2026

1.5.2 Pilot 2

Status	Co-Pilot
Nationality	Malaysian
Age	46 years old
Gender	Male
License Type	CPL 3577/H
License Validity	Valid until 30 June 2026
Aircraft Rating	AW139 and AS355N
Instrument Rating	Valid until 30 Nov 2025 (AW139)
Total Hours on Type	1716.4 hours
Total Flying Hours	2120.0 hrs

Rest Period Since Last Flight	More than 12 hours
Medical Certificate Class	1
Medical Expiry Date	16 June 2026

1.6 Aircraft Information

Aircraft Type	Airbus Helicopter
Manufacturer	Airbus
Year of Manufacturer	1996
Owner	Royal Malaysia Police (PDRM)
Registration No.	9M-PHG
Aircraft Serial No.	5620
C of A Expiry Date	01 February 2026
C of R Expiry Date	15 June 2026

The aircraft is in active flying, clocking a total of 7895.0 hours prior to the accident. It has a valid registration and Certificate of Airworthiness (C of A) has been maintained in compliance with the regulations. The maintenance records indicated that the aircraft is equipped and maintained in accordance with existing regulations and approved procedures.

1.7 Meteorological Information

The weather was reported to be cloudy with cloud base at 1500 feet during the time of accident took place. Nevertheless, the weather conditions on that day did not contribute to the occurrence of the event.

1.8 Aids to Navigation

Not applicable.

1.9 Communications

All communication frequencies were operating normally.

1.10 Aerodrome Information

The flight operation was not conducted within the aerodrome vicinity. Therefore, there is no specific information regarding the area of operation. The accident happened in an area named Muara Laut Jetty of the MMEA in Sungai Pulai, Gelang Patah, Johor (broken yellow line) and it is located within the vicinity of MMEA Gelang Patah (thick yellow line).

Figure 2: Malaysian Maritime Enforcement Agency (MMEA) in Sungai Pulai, Gelang Patah, Johor.
(Source: Google Earth)

1.10.1 Safety Observations of vicinity of MMEA Gelang Patah

The Muara Laut Jetty area is located within the Sungai Pulai waterway in Gelang Patah, Johor. It is a mixed-use maritime zone accommodating both operational and training activities of the MMEA and other government agencies. At the time of the accident, the area was serving as the focal point for the FTX in support of the MITSATOM 2025.

The operational environment was characterised by:

1. **Proximity to Maritime Traffic**: Several MMEA vessels, RMP marine units and participating foreign vessels were positioned in close proximity to the demonstration zone as part of the exercise scenario. Movements were coordinated but the waterway remained active with multiple craft operating within a confined area.

2. **Physical Constraints**: The waterway at the jetty area is relatively narrow, with limited over-water manoeuvring space for low-altitude helicopter operations. The presence of moored vessels, floating platforms and jetty structures further reduced available clearance.

3. **Surface Conditions**: Tidal influence in Sungai Pulai can produce variable water currents and surface patterns, potentially affecting pilot depth perception during low-level flight over water. At the time of the accident, tidal flow was present but within normal operational limits.

4. **Spectator and Participant Presence**: The jetty and adjacent shore areas hosted exercise observers, support personnel and security staff. Vessel-based personnel were stationed on deck to observe and participate in the exercise, creating the need for strict airspace and waterway coordination.

5. **Meteorological Conditions**: Weather in the area was reported as VMC, with sufficient daylight visibility for safe operations. No significant meteorological hazards such as rain, very low cloud or strong wind were reported.

6. **Medical Cover**: No medical ambulance was on standby at the exercise area.

1.11 Flight Recorders

The aircraft is not equipped with a Cockpit Voice and Flight Data Recorder (CVFDR).

1.12 Wreckage and Impact Information

The accident site was located within the Sungai Pulai waterway, approximately 150 metres southwest of the Muara Laut Jetty, MMEA Gelang Patah base, Johor. The surrounding area is a tidal river channel with an average width of 250–300 metres, bounded by mangrove shoreline to the north and south.

The helicopter's final flight path during the demonstration brought it over the river, aligned roughly east–west, at low altitude. The impact occurred during the concluding manoeuvre with the aircraft in forward flight, pitch up and descending.

The main fuselage struck the water surface at a shallow angle and forward speed, creating a primary impact depression in the water. Due to the fluid nature of the surface, no lasting "impression" marks remained but debris dispersion and floating panel locations indicated the point of initial contact.

Upon impact, the helicopter's structure sustained substantial damage:

1. Several seats, fuselage panels and composite fairings were detached and recovered floating within a 30 to 40 metre radius of the primary impact point.

2. The main wreckage sank almost immediately after impact and came to rest fully submerged at an estimated depth of between 14 and 17 metres, depending on tidal conditions (low tide to high tide).

3. Recovered debris included seats, fuselage skin panels, access hatches and minor fairing components. The main airframe was recovered during salvage operations.

1.13 Medical and Pathological Information.

Following the accident, both pilots were transported to Hospital Sultanah Aminah, Johor Bahru, where they received immediate medical treatment, including the administration of medication. Due to the urgency of the medical intervention, the

standard post-accident toxicology screening was inadvertently not performed. As a result, no toxicology data or associated laboratory results are available for inclusion in this investigation report.

No other relevant post-accident medical findings have been reported to the investigation team.

1.14 Fire

There was no evidence of fire before or after the impact.

1.15 Survival Aspects

To be included in Final Report.

1.16 Tests and Research

To be included in Final Report.

1.17 Organisational and Management Information

1.17.1 Aircraft Operator

PGU serves as the dedicated air operations unit of the RMP, responsible for delivering aerial support in law enforcement, security operations, surveillance and special missions across Malaysia. PGU operates a mixed fleet of fixed-wing aircraft and helicopters from multiple strategically located bases nationwide with its headquarters situated at PGU Subang, Selangor.

At the time of the occurrence, helicopter 9M-PHG was assigned to the PGU Subang unit but was temporarily deployed to operate from the Tanjung Kupang Police Station in support of the MITSATOM 2025, an FTX coordinated under the *Jabatan Tenaga Atom.*

PGU's operations are conducted in accordance with the Civil Aviation Regulations of Malaysia (CAR 2016) where applicable, complemented by the RMP's internal operational directives and manufacturer-recommended procedures. Maintenance of PGU aircraft is undertaken by Layang-Layang Aerospace Sdn. Bhd. (LLA), an

Approved Maintenance Organisation (AMO), in full compliance with regulatory requirements and manufacturer specifications.

1.17.2 Maintenance Operator

LLA serves as the appointed Maintenance, Repair and Overhaul (MRO) organisation responsible for the continued airworthiness of helicopter 9M-PHG under the operational control of PGU. As an AMO, LLA's role and responsibilities include:

i. .Scheduled Maintenance – Performing inspections, servicing and component replacements at intervals prescribed by the aircraft manufacturer, the Civil Aviation Regulations of Malaysia (CAR 2016) and the approved maintenance programme.

ii. Unscheduled Maintenance – Addressing technical defects, rectifications and troubleshooting activities arising from operational use to ensure the aircraft is returned to service in a safe and airworthy condition.

iii. Regulatory Compliance – Ensuring all maintenance activities are executed in accordance with Malaysian Civil Aviation Authority (CAAM) requirements, applicable Airworthiness Directives (ADs), Service Bulletins (SBs), and manufacturer's instructions.

iv. Record Keeping – Maintaining complete, accurate and up-to-date maintenance records, including work orders, logbooks and inspection reports to establish traceability and demonstrate regulatory compliance.

v. Airworthiness Release – Certifying the aircraft as serviceable and airworthy upon completion of maintenance tasks through the issuance of a Certificate of Release to Service (CRS) by appropriately licensed personnel.

vi. Coordination with Operator – Liaising with PGU to schedule maintenance events, provide technical recommendations and ensure that operational availability requirements are met without compromising safety.

Through these responsibilities, LLA ensures that 9M-PHG remains airworthy, compliant with all regulatory standards and fit for operational deployment.

1.18 Additional Information

To be included in Final Report.

1.19 Useful or Effective Investigation Techniques

To be included in Final Report.

2.0 ANALYSIS

To be included in Final Report.

3.0 CONCLUSION

3.1 Findings

The preliminary findings of the investigation are as follows:

3.1.1 Pilot

i) Both pilots were qualified in accordance with existing regulations.

ii) Both pilots were medically fit and adequately rested to operate the flight.

iii) Toxicology screening for substance abuse and blood alcohol content analyses were not conducted.

iv) Both pilots reported no abnormalities or malfunctions of the helicopter on the day of the occurrence.

3.1.2 Aircraft

i) The aircraft was actively engaged in flying operations with no significant or major defects reported.

ii) The aircraft was maintained in compliance with applicable regulations and approved maintenance procedures.

iii) The aircraft has a valid C of A and has been maintained in compliance with the regulations.

iv) The maintenance records indicated that the aircraft is equipped and maintained in accordance with existing regulations and approved procedures.

3.1.3 Maintenance Operator

The maintenance operator, LLA, is a CAAM-approved MRO organisation. LLA is authorised to provide comprehensive aircraft and component maintenance, as well as airworthiness-related services.

3.1.4 Additional findings shall be included in the Final Report.

3.2 Probable Cause

To be included in Final Report.

4.0 IMMEDIATE SAFETY ACTIONS

i) PGU shall ensure coordination and comprehensive briefing is given to participating agencies in joint exercises by event organiser, highlighting operational hazards and safe display practices when involving aerial components.

ii) PGU shall ensure the presence of a dedicated medical standby unit comprising an ambulance and qualified personnel on site throughout the duration of all future exercises.

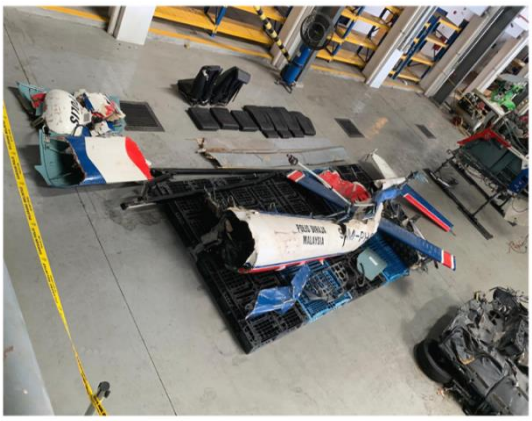
iii) Other safety recommendations will be included in the Final Report.

Investigator-in-charge
AAIB
Ministry of Transport, Malaysia

APPENDIX A

DAMAGE ASSESSMENT

**DEBRIS (SEATS, FUSELAGE PANELS AND COMPOSITE FAIRINGS)
DETACHED AND RECOVERED FLOATING WITHIN
30 TO 40 METRE RADIUS OF THE PRIMARY IMPACT POINT**



WRECKAGE SALVAGED FROM SUNGAI PULAI ON 17 JULY 2025

FLIGHT INSTRUMENT PANEL RECOVERED FROM SUNGAI PULAI ON 17 JULY 2025