

UAS INTEGRATION IN NATIONAL & HIGH SEAS AIRSPACE

CURRENT AND FUTURE UAS REGULATIONS IN MALAYSIA

06 NOVEMBER 2025

Agenda



- Current Regulatory Activities
- Challenges & Opportunities
- Currently Under Development
- Legal Basis
 - Current
 - New
- Segregated Airspace in KL FIR and KK FIR

Current Regulatory Activities



AUTHORISATION TO FLY (ATF)



**Aerial
Surveillance**



R&D



**Drone
Light Show**



**Low
Risk**

REMOTE PILOT TRAINING ORGANISATION (RPTO)

**Low / Med.
Risk**



**Ground
School**



**Pre-Flight
Briefing**



**Practical
Test**

AGRICULTURAL WORK CERTIFICATE



**Precision
Farming**



**Crop
Spraying**



**Agri Produced
Transfer**



**Medium
Risk**



**Medium
Risk**

SPECIAL UAS PROJECT



**Nested
Drone**



**BVLOS
Survey**



**Parcel
Delivery**

Current Regulatory Activities



AUTHORISATION TO FLY (ATF)

Purpose of Operations

- Mapping
- Aerial Photo / Video
- Surveillance
- Inspection
- Demonstration
- R&D
- Recreational

Risk Mitigations

- VLOS
- EVLOS (w/AO)
- < 400 ft. **AMSL** or **AGL**
- Hazard Identification
- UAS Segregated Airspace (**Controlled** & **Uncontrolled**)

Low
Risk



REMOTE PILOT TRAINING ORGANISATION (RPTO)

Low / Med.
Risk



6 RPTO's

**RCoC-B &
EVLOS & Agri. Modules**

>3500 Remote Pilots

AGRICULTURAL WORK CERTIFICATE



Johor



Selangor



Kedah

**Pesticides & Fertilizer
Dispensation**



Medium
Risk

50,000 Hectares

Palm Oil & Paddy Plantation



Medium
Risk



SPECIAL UAS PROJECT

**BVLOS
Flight**

**19 Nested
Drone Sites**

**2000 KM++
Gas Pipeline**



Sarawak



Sabah

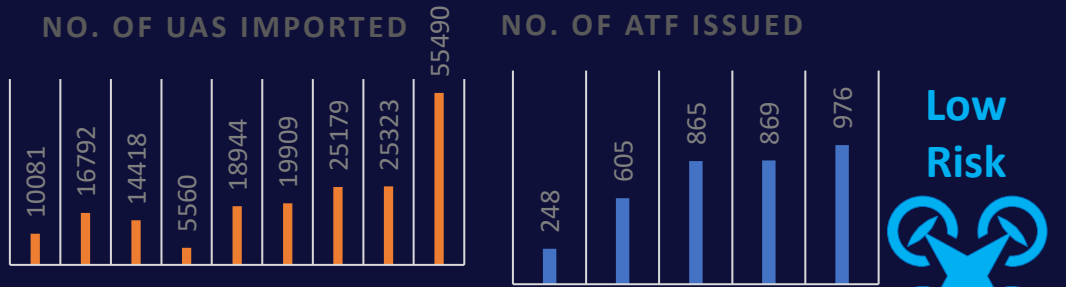
**Offshore Platform
Delivery (Coming Soon)**

**Shore-to-Ship
Supplies Delivery**

Challenges & Opportunities



AUTHORISATION TO FLY (ATF)



Open Cat. & UAS TMS (2026)

AGRICULTURAL WORK CERTIFICATE



Medium Risk

RCoC-AL (Agri. Light) &
Operational Declaration
Private Operators
(Specific Cat.) (2026)

REMOTE PILOT TRAINING ORGANISATION (RPTO)

**Open Category Competency
(2026)**

**Specific Category Competency
READY!!!**

**Certified Category Competency
(2027)**

Low / Med.
Risk



SPECIAL UAS PROJECT



Medium Risk

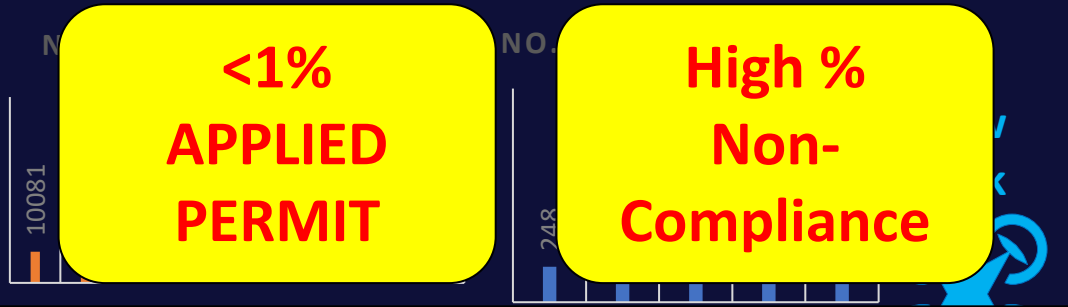
**SORA
2.0**

Time
Resources
Experience

Challenges & Opportunities



AUTHORISATION TO FLY (ATF)



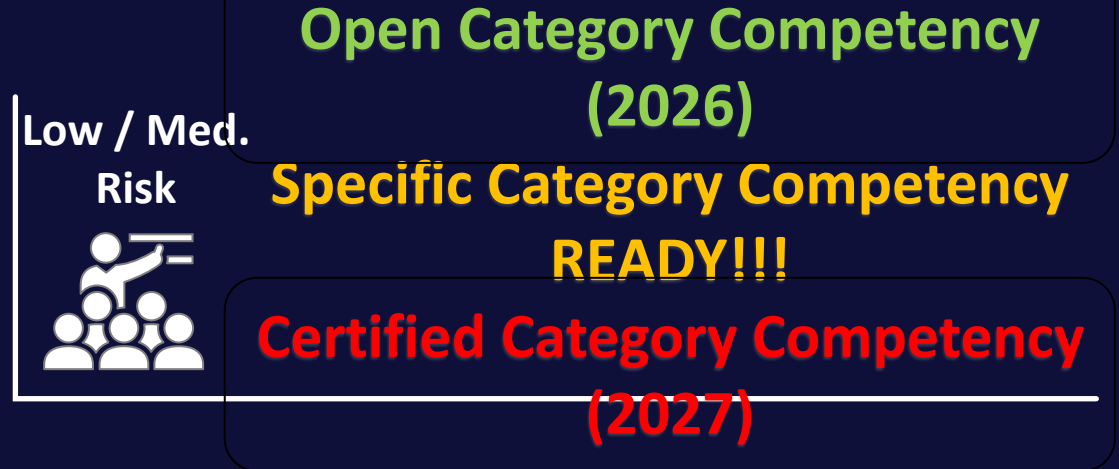
Open Cat. & UAS TMS (2026)

AGRICULTURAL WORK CERTIFICATE



RCoC-AL (Agri. Light) &
Operational Declaration
Private Operators
(Specific Cat.) (2026)

REMOTE PILOT TRAINING ORGANISATION (RPTO)



Medium

SPECIAL UAS PROJECT

SORA Time
Resources

Operational Approval Pre-Defined RA (PDRA)
(2026)

Operational Declaration Standard Scenario
(STS) (2026)

Currently Under Development



OPEN CATEGORY

Sub-cat.	UA Class	Limitations	Compt. Cert.	Approval
A1	C0, C1	VLOS, within UAS segregated airspace, max. 400 ft. AGL	A1 / A3	Yes, except toys
A2	C2		A2	Yes
A3	C3, C4		A1 / A3	Yes

Low Risk



SPECIFIC CATEGORY

STS PDRA

SORA 2.5

Medium Risk



P-UAW

C-UAW

Require Operational Approval or Declaration
Competency Cert.: RCoC-B + Module 1 or 2

Standard Scenario STS – 01 :
VLOS within Controlled Airspace
Standard Scenario STS – 02 :
BVLOS with Airspace Observers

CERTIFIED CATEGORY

- RPAS Certification (A8)
- Operator Certification (A6)
- Remote Pilot License (A1)
- Other Annexes :
(A2,A7,A10,A11,A13,A14,A15,A17)

AAM / UAM

Uncrewed eVTOL

- Passenger
- Cargo



High Risk

Urban • Cross Border • High Seas Airspace

Sandbox Initiative : AAM ConOps
2026 - 2030

CAR 2016 : 5 REGS (Current)
CAR 2025 : 36 REGS (Future)
CAR 2027 : ++ Certified REGS



Unmanned Airspace

UAS TRAFFIC MANAGEMENT SYSTEM (UAS TMS)

- U1 : Registration (2026)
- U2 : Approval Services (2026)
- U3 : DTI (2027)
- U4 : ATM / UTM Integration (2030)



UAS Segregated Airspace

<6KM : No fly zone (CTR)
<15KM : 300 ft. AMSL (CTR / TMA)
>15KM : 400 ft. AMSL (CTR / TMA)
Uncontrolled: 400 ft. AGL



Current Legal Basis (2016 - 2025)



AUTHORISATION TO FLY (ATF)

REG. 140 - UAS

REG. 141 - Aerial work involving UAS

REG. 142 - Small unmanned aircraft

REG. 143 - Small unmanned surveillance aircraft

REG. 144 - UAS of more than 20 KG



REMOTE PILOT TRAINING ORGANISATION (RPTO)

Low / Med. Risk **Civil Aviation Directive 6011 Part I
Remote Pilot Training Organisation
(CAD RPTO)**



AGRICULTURAL WORK CERTIFICATE

**Civil Aviation Directive 6011 Part II
Agricultural UAS Operations
(CAD AGRI)**



SPECIAL UAS PROJECT

**Civil Aviation Directive 6011 Part V
Special UAS Project
(CAD SUP)**

Civil Aviation Regulations 2016 (Part XVI)

New Legal Basis (2026)



PART II UNMANNED AIRCRAFT OPERATIONS

- Reg. 3 Categories of unmanned aircraft operation
- Reg. 4 Open category
- Reg. 5 Specific category **Certified category (2027)**
- Reg. 6 Unmanned aircraft operator
- Reg. 7 Remote pilot
- Reg. 8 Unmanned aircraft
- Reg. 9 Unmanned aircraft remote identification
- Reg. 10 Exhibition of flying and/or static display of UA



PART III APPROVED TRAINING ORGANISATION

- Reg. 11 Approved training organisation
- Reg. 12 Authorised examiner
- Reg. 13 Instruction in flying unmanned aircraft



PART IV UNMANNED AIRCRAFT IN FLIGHT



- Reg. 14 Unmanned aircraft traffic management system
- Reg. 15 Unmanned aircraft geographical area
- Reg. 16 Common information services
- Reg. 17 Rules of the air

OTHER RELATED REGULATIONS



- Part V Munitions of War and Carriage of DG
- Part VI Documents and Records
- Part VII Safety Management
- Part VIII General

Civil Aviation Regulations (Unmanned Aircraft Operations) 202X

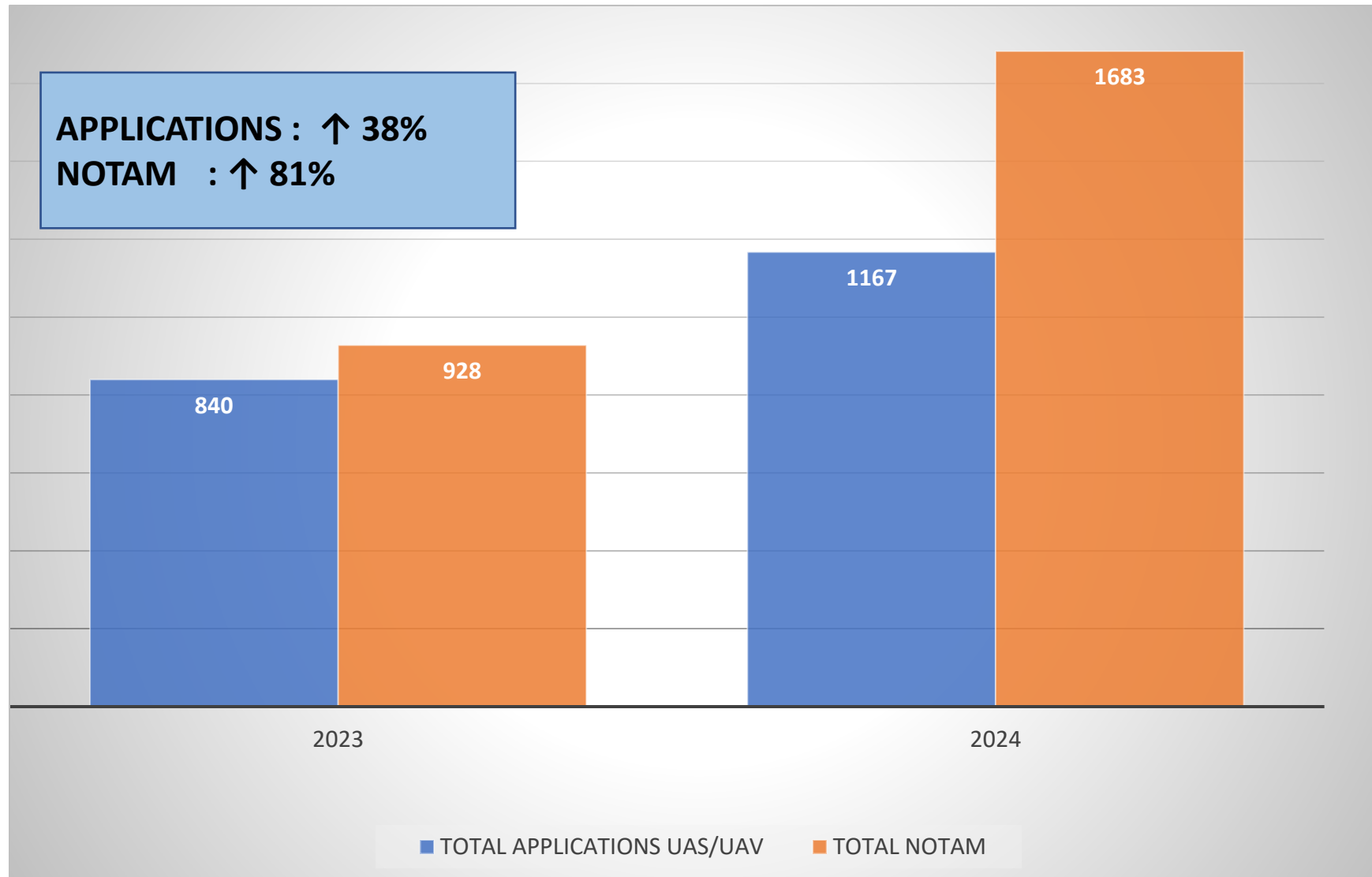
SEGREGATED AIRSPACE KUALA LUMPUR AND KOTA KINABALU FIR



KL FIR AND KK FIR



Statistics of NOTAM Issued Related to UAS/UAV Activities by CAAM



LEGAL FRAMEWORK



- 1. CIVIL AVIATION ACT 2016**
- 2. ICAO MODEL UAS REGULATION PART 101**
- 3. CAD 6011 Part II**
- 4. CAD 2 – RULES OF THE AIR**



WHAT IS SEGREGATED AIRSPACE?



ICAO ANNEX 11 (AIR TRAFFIC SERVICES)

- Airspace of specified dimensions allocated for the exclusive use of a specific user(s)

4.1 Operator's Responsibilities

- n) All operations must be conducted below 400 feet above ground level (AGL) and at a distance of not closer than 50 meters to persons, vessels, vehicles and structures uninvolved to the operations.
- o) All operations must be conducted beyond 9.26km from an aerodrome and only in Class G airspace.

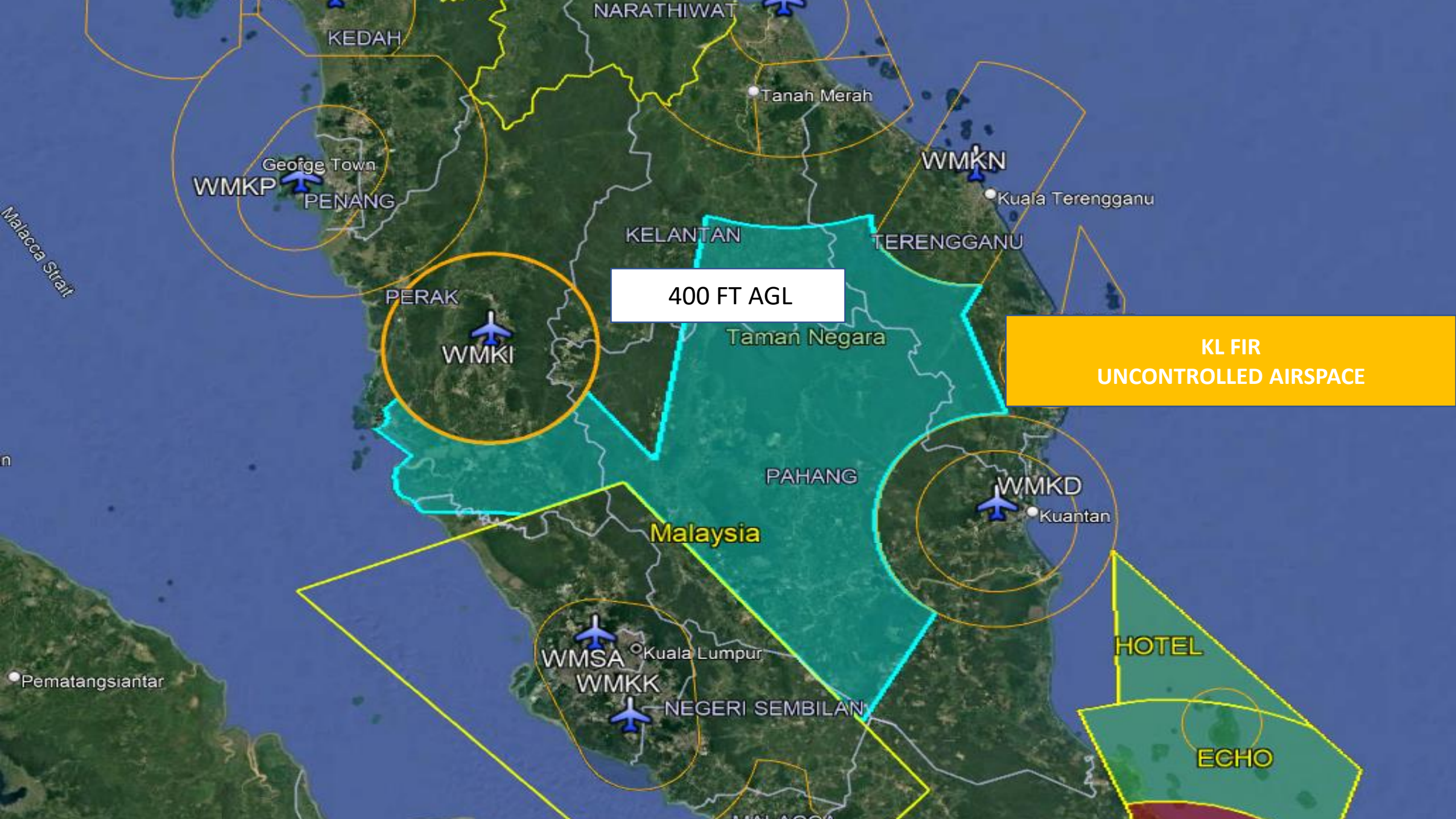


SUPPLEMENTARY OPERATIONS INSTRUCTION

Instruction No:	SOI 17/2025	Effective Date:	01/09/2025
Status:	New Issue	Expiry Date:	Until Incorporated In MATS Volume 1 (Part 17 Chapter 6) or New Instruction Is Issued

SEGREGATED AIRSPACE FOR UNMANNED AIRCRAFT SYSTEM (UAS)

OPERATIONS IN KUALA LUMPUR FIR AND KOTA KINABALU FIR



400 FT AGL

KL FIR
UNCONTROLLED AIRSPACE

Malaysia

HOTEL

ECHO

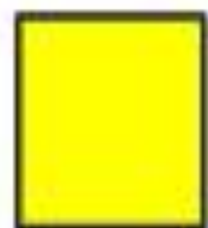
KK FIR
UNCONTROLLED AIRSPACE

400 FT AGL

UAS SEGREGATED AIRSPACE - CONTROL AIRSPACE



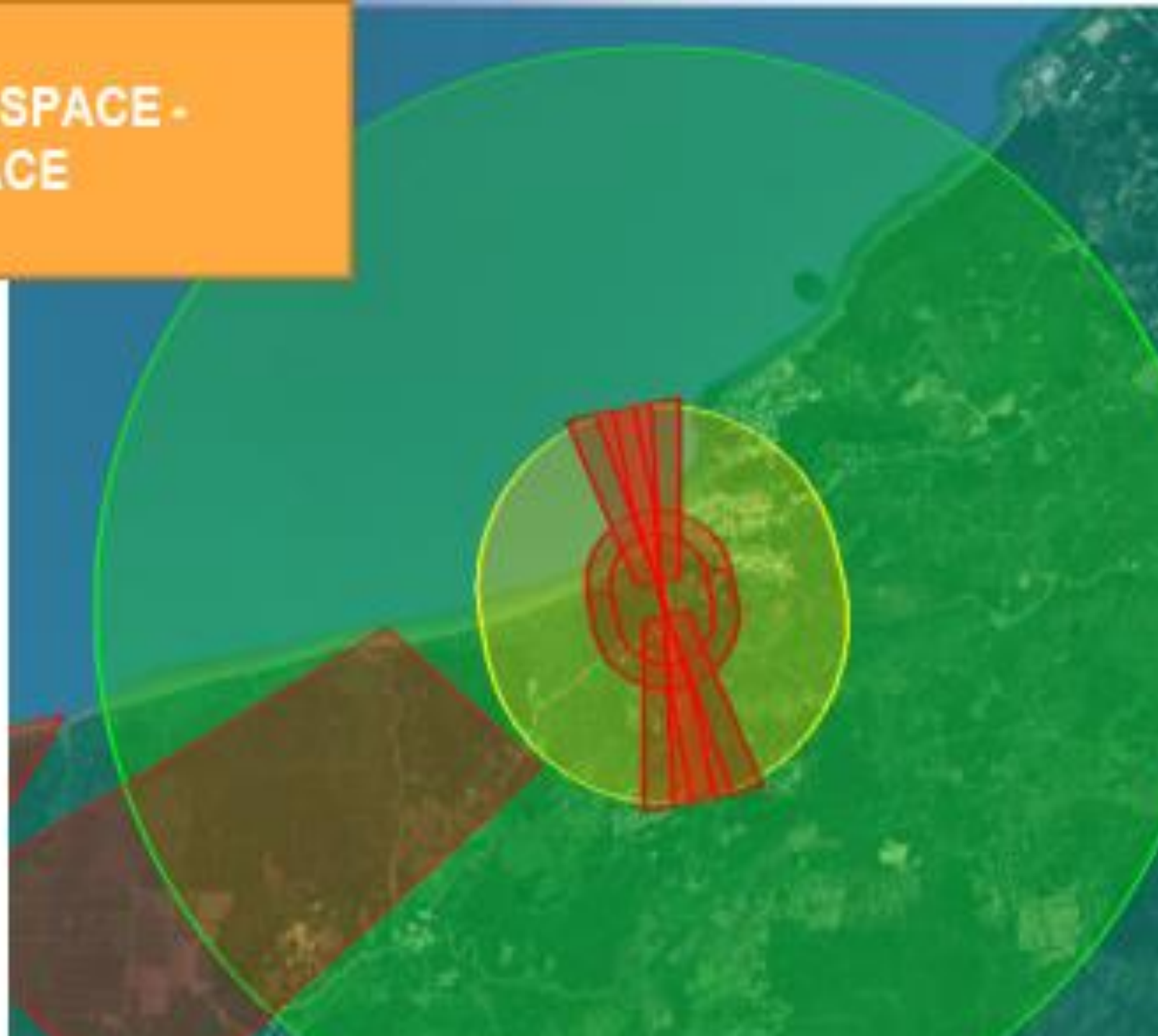
Conditional approval
with NOTAM



300ft AMSL and
below without
NOTAM



400ft AMSL and
below without
NOTAM



NOTAM

300 FT AMSL

400 FT AMSL

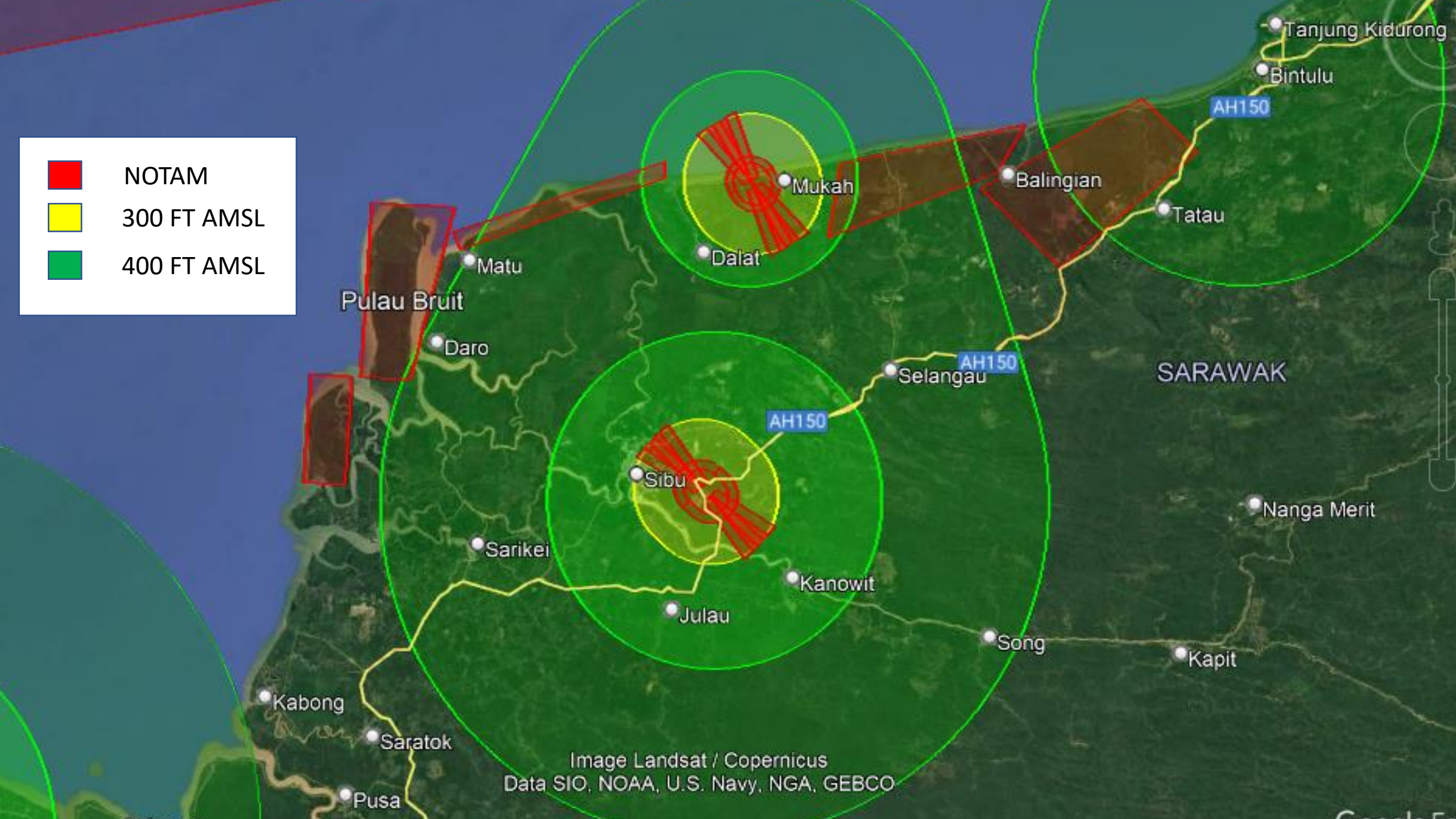
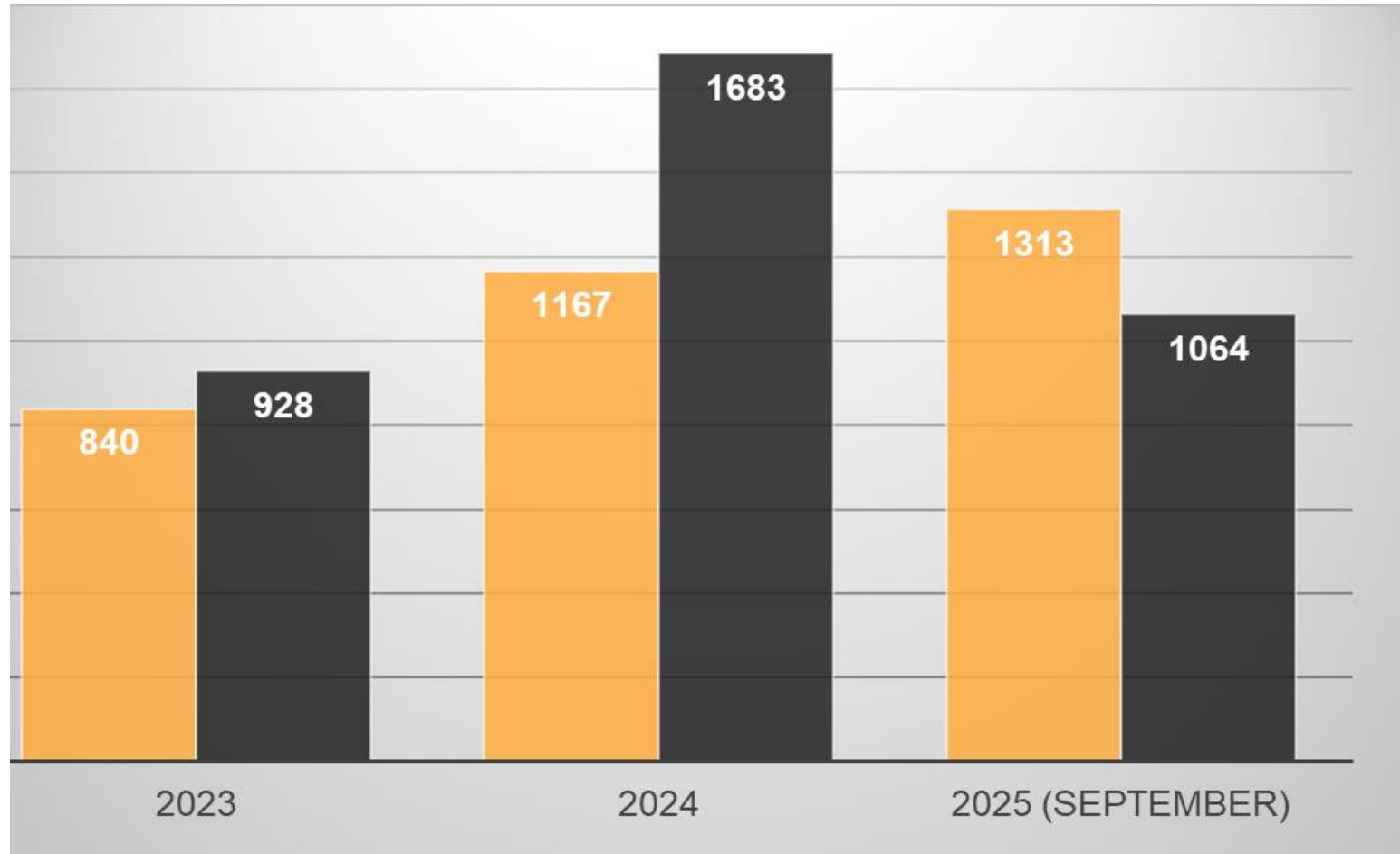


Image Landsat / Copernicus
Data SIO, NOAA, U.S. Navy, NGA, GEBCO

UAS Applications Processed and NOTAMs Published



Total Application



Total NOTAM

Thank You

Questions & Answers